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DRAFT
Stonebridge Subdivision Project
Initial Study/Mitigated Negative Declaration
2220 Fulton Road
City of Santa Rosa, Sonoma County, California

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Table of Contents

Acronyms and Abbreviations vii

Section 1: Introduction 1
1.1 - Purpose 1
1.2 - Project Location 1
1.3 - Environmental Setting 1
1.3.1 - Existing Land Use and Zoning 2
1.4 - Project Description 2
1.4.1 - Demolition and Removal 15
1.4.2 - Land Uses 15
1.4.3 - Project Schedule and Phasing 17
1.4.4 - Proposed Land Use Designation and Zoning 17
1.5 - Required Discretionary Approvals 18
1.6 - Intended Uses of this Document 18

Section 2: Environmental Checklist and Environmental Evaluation 23
1. Aesthetics 25
2. Agriculture and Forestry Resources 33
3. Air Quality 37
4. Biological Resources 62
5. Cultural Resources 79
6. Energy 85
7. Geology and Soils 89
8. Greenhouse Gas Emissions 95
9. Hazards and Hazardous Materials 112
10. Hydrology and Water Quality 117
11. Land Use and Planning 124
12. Mineral Resources 133
13. Noise 135
14. Population and Housing 144
15. Public Services 147
16. Recreation 152
17. Transportation 154
18. Tribal Cultural Resources 180
19. Utilities and Service Systems 183
20. Wildfire 189
21. Mandatory Findings of Significance 192

Section 3: List of Preparers 195

Appendix A: Air Quality and Greenhouse Gas Emissions Supporting Information
A.1 - CalEEMod Output
A.2 - Construction Health Risk Assessment Files
A.3 - Additional Air Quality and Greenhouse Gas Emissions Supporting Information

Appendix B: Biological Resources Supporting Information
B.1 - Biological Resources Analysis
B.2 - USACE Jurisdictional Determination Verification Letter
B.3 - Waters of the State Jurisdictional Delineation Map

B.4 - Tree Preservation and Mitigation Report
B.5 - CNDDB Search Results
B.6 - CNPS Inventory Results

Appendix C: Cultural Resources Supporting Information
C.1 - Archeological Resources Report
C.2 - Historic Resources Evaluation
C.3 - Tribal Consultation

Appendix D: Energy Resources Supporting Information

Appendix E: Paleontological Records Search

Appendix F: Phase I Environmental Site Assessment

Appendix G: Noise Supporting Information

Appendix H: Traffic Impact Study

List of Tables

Table 1: Project Components 2
Table 2: Proposed Setbacks 16
Table 3: Project Parking 16
Table 4: Thresholds of Significance 39
Table 5: Project Consistency with Applicable Clean Air Plan Control Measures 42
Table 6: Conceptual Construction Schedule 46
Table 7: Average Daily Construction Emissions (Unmitigated) 47
Table 8: Annual Operational Emissions (Unmitigated) 48
Table 9: Daily Operational Emissions (Unmitigated) 48
Table 10: Project DPM Construction Emissions (Unmitigated) 51
Table 11: Exposure Assumptions for Cancer Risk 52
Table 12: Project Construction Health Risks and Hazards (Unmitigated) 53
Table 13: Project Construction Health Risks and Hazards (Mitigated) 54
Table 14: Summary of the Cumulative Health Impacts at the Maximum Impacted Receptor during Construction 55
Table 15: Summary of the Health Impacts at the Project Site during Project Operations 57
Table 16: Odor Screening Distances 59
Table 17: Summary of Odor Complaint Records 60
Table 18: Construction Greenhouse Gas Emissions 96
Table 19: City of Santa Rosa Climate Action Plan Consistency with Elements of a Qualified Greenhouse Gas Reduction Strategy 99
Table 20: Consistency with Santa Rosa's Climate Action Plan New Development Checklist 101

Table 21: Consistency with the City of Santa Rosa Climate Action Plan 105
Table 22: Consistency with SB 32 2017 Scoping Plan Update 109
Table 23: Groundwater Volume Pumped (AFY) 119
Table 24: Traffic Noise Model Results Summary 127
Table 25: Traffic Noise Increase Summary 140
Table 26: Collision Rates at the Study Intersections 158
Table 27: Bicycle Facility Summary 161
Table 28: Intersection Level of Service Criteria 163
Table 29: Trip Generation Summary 164
Table 30: Trip Distribution Assumptions 165
Table 31: Existing and Existing Plus Project Peak-hour Intersection Level of Service 166
Table 32: Baseline and Baseline Plus Project Peak-hour Intersection Level of Service 167
Table 33: Projected Water Supply and Demand Dry Water Year Comparison 184
Table 34: Landfill Facility Detail 185

List of Exhibits

Exhibit 1: Regional Location Map 3
Exhibit 2: Local Vicinity Map, Aerial Base 5
Exhibit 3: Existing Conditions 7
Exhibit 4: Existing General Plan Land Use Designation 9
Exhibit 5: Existing Zoning Designation 11
Exhibit 6: Site Plan 13
Exhibit 7: West Parcel Residential Development 19
Exhibit 8: Occupied and Suitable Burke's Goldfields Habitat 21
Exhibit 9: Project Conceptual Design 31
Exhibit 10: Closest Known Occurrence of California Tiger Salamander to Project Site 71
Exhibit 11: Wetland Impacts and Preservation 73
Exhibit 12: Sound Wall Location Map 131
Exhibit 13: Study Area and Existing Lane Configurations 155
Exhibit 14: Existing Traffic Volumes 159
Exhibit 15: Project Traffic Volumes and Trip Distribution 171
Exhibit 16: Existing Plus Project Traffic Volumes 173
Exhibit 17: Baseline Traffic Volumes 175
Exhibit 18: Baseline Plus Project Traffic Volumes 177

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ACRONYMS AND ABBREVIATIONS

µg/m^3	micrograms per cubic meter
°F	degrees Fahrenheit
°C	degrees Celsius (Centigrade)
AAF	age-specific adjustment factor
AB	Assembly Bill
ABAG	Association of Bay Area Governments
ACM	asbestos-containing materials
ADA	Americans with Disabilities Act
ADT	Average Daily Traffic
AEP	Association of Environmental Professionals
AFY	acre-feet per year
APN	Assessor's Parcel Number
AQP	air quality plan
ARB	California Air Resources Board
ASF	age sensitivity factor
AT	averaging time
BAAQMD	Bay Area Air Quality Management District
BMP	Best Management Practice
BRA	Biological Resources Analysis
CA-MUTCD	California Manual on Uniform Traffic Control Devices
Cal/EPA	California Environmental Protection Agency
CalEEMod	California Emissions Estimator Model
CAL FIRE	California Department of Forestry and Fire Protection
CALGreen	California Green Building Standards Code
Caltrans	California Department of Transportation
CBC	California Building Standards Code
CDF	California Department of Finance
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CNPSEI	California Native Plant Society Electronic Survey

CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CPF	cancer potency factor
CRHR	California Register of Historical Resources
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel
DBR	daily breathing rate
DPM	diesel particulate matter
DPR	Department of Parks and Recreation
DPS	Distinct Population Segment
DU	dwelling unit
DU/acre	dwelling unit per acre
DWR	California Department of Water Resources
ED	Exposure Duration
EF	Exposure Frequency
EPA	United States Environmental Protection Agency
ESA	Environmental Site Assessment
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FTA	Federal Transit Administration
GHG	greenhouse gas
GIS	Geographic Information System
GPCD	gallons per capita per day
GPD	gallons per day
HRA	Health Risk Assessment
HRE	Historic Resources Evaluation
in/sec	inch per second
IS/MND	Initial Study/Mitigated Negative Declaration
kBTU	kilo-British Thermal Unit
kWh	kilowatt-hour
L_{dn}	day/night average sound level
L_{eq}	equivalent continuous sound level
L_{max}	maximum noise/sound level

LHMP	Local Hazard Mitigation Plan
LID	Low Impact Development
L_{max}	maximum instantaneous noise level
LOS	Level of Service
LRA	Local Responsibility Area
M&A	Monk & Associates
MBTA	Migratory Bird Treaty Act
mgd	million gallons per day
MIR	Maximum Impacted Sensitive Receptor
MLD	most likely descendant
MM	Mitigation Measure
mph	miles per hour
MRZ	Mineral Resource Zone
MS4	Municipal Separate Storm Sewer System
MSA	Metropolitan Statistical Area
MSL	mean sea level
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NO_2	nitrogen dioxide
NO_X	oxides of nitrogen
NPDES	National Pollution Discharge Elimination System
NRCS	Natural Resource Conservation Service
NRHP	National Register of Historic Places
NWIC	Northwest Information Center
OEHHA	California Office of Environmental Health Hazards Assessment
OHP	California Office of Historic Preservation
OPR	Governor's Office of Planning and Research
PD	Planned Development
PG&E	Pacific Gas and Electric Company
PM_{10}	particulate matter, including dust, 10 micrometers or less in diameter
$PM_{2.5}$	particulate matter, including dust, 2.5 micrometers or less in diameter
ppm	parts per million
PPV	peak particle velocity
PRC	Public Resources Code
REL	Reference Exposure Level
RHNA	Regional Housing Needs Assessment
rms	root mean square

ROG	reactive organic gases
RPS	renewables portfolio standard
RWQCB	Regional Water Quality Control Board
Sonoma Water	Sonoma County Water Agency
SMARA	California Surface Mining and Reclamation Act
SO_2	sulfur dioxide
SO_X	sulfur oxide
SR	State Route
SRA	State Responsibility Area
SRFD	Santa Rosa Fire Department
SRPD	Santa Rosa Police Department
SUSMP	Standard Urban Storm Water Mitigation Plan
SWITRS	Statewide Integrated Traffic Records System
SWPPP	Storm Water Pollution Prevention Plan
TAC	toxic air contaminant
TAH	time at home factor
TCR	Tribal Cultural Resource
TIS	Traffic Impact Study
UGB	Urban Growth Boundary
USACE	United States Army Corp of Engineers
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UWMP	Urban Water Management Plan
VMT	vehicle miles traveled
VOC	volatile organic compound
WBWG	Western Bat Working Group
WELO	Water Efficient Landscape Ordinance
WUI	Wildland-Urban Interface
WWTP	Wastewater Treatment Plant

SECTION 1: INTRODUCTION

1.1 - Purpose

The purpose of this Draft Initial Study/Mitigated Negative Declaration (Draft IS/MND) is to identify any potential environmental impacts from implementation of the Stonebridge Subdivision Project (proposed project) in the City of Santa Rosa, California. Pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15367, the City of Santa Rosa is the Lead Agency in the preparation of this Draft IS/MND and any additional environmental documentation required for the proposed project. The City has discretionary authority over the project. The intended use of this document is to identify potential environmental impacts that would occur from implementation of the proposed project and to provide the basis for input from public agencies, organizations, and interested members of the public.

The remainder of this section provides a brief description of the project location and the characteristics of the proposed project. Section 2 includes an environmental checklist giving an overview of the potential impacts that may result from project implementation and elaborates on the information contained in the environmental checklist, along with justification for the responses provided in the environmental checklist.

1.2 - Project Location

The project site is located in the City of Santa Rosa, in Sonoma County, California (Exhibit 1). The project site is located in the northwest area of the City adjacent to Fulton Road. The project site is bound by Fulton Road (west), low-density residential homes (north), existing Woodbridge Reserve (northeast), rural residential ranchettes[1] (east), and medium low-density residential homes (south) (Exhibit 2). The project site consists of Assessor's Parcel Number (APN) 034-030-070 (2220 Fulton Road). Specifically, the project site is located on the *Sebastopol, California* United States Geological Survey (USGS) 7.5-minute Topographical Quadrangle, Township 7 North, Range 8 West, Section 5 Mount Diablo Base Meridian (Approximately Latitude 38° North 28' 30.83" and Longitude 122° West 46' 4.15").

1.3 - Environmental Setting

The 28.6-acre project site consists of undeveloped land with one existing single-family home and related outbuildings on the southwest corner of the site (Exhibit 3). To the west of Fulton Road is unincorporated Sonoma County land developed with very low-density residential uses. Adjacent to the project site, Fulton Road demarcates the City of Santa Rosa's western Urban Growth Boundary (UGB). A single-family home on Fulton Road, single-family homes as part of the existing Woodbridge subdivision, and the Woodbridge Reserve are located directly north of the project site and form the northern boundary. Jack London Elementary School and Jack London School Park are located approximately 0.2 mile north of the project site. Rural residential ranchettes and undeveloped land is located east of the project site. Multiple-family homes are also located directly south of the

[1] The developments to the east of the project site are older housing stock than the developments to the north of the project site.

project site. The Northwestern Pacific Railroad corridor is located approximately 0.5 mile to the northeast. The site is essentially flat and ranges in elevation from a maximum of 142 feet to a minimum of 139 feet above mean sea level (MSL). Habitats on the project site are upland, non-native annual grassland with interspersed seasonal wetlands.

The project site contains 6.31 acres of seasonal wetlands. The project site is known to contain two special-status plant species including Burke's goldfields (*Lasthenia burkei*) and Lobb's buttercup (*Ranunculus lobbii*). The project site contains 32 trees of various species including valley oak (*Quercus lobata*), coast redwood (*Sequoia sempervirens*), weeping willow (*Salix babylonica*), flowering pear (*Pyrus calleryana*), black walnut (*Juglans nigra*), silver maple (*Acer saccharinum*), plum (*Prunus cerasifera*), apple (*Malus domestica*), Deodar cedar (*Cedrus deodara*), honey locust (*Gleditsia triancanthos*), red gum eucalyptus (*Eucalyptus camaldulensis*), and Italian stone pine (*Pinus pinea*).[2]

1.3.1 - Existing Land Use and Zoning

The project site is designated Low Density Residential by the Santa Rosa General Plan 2035 (Exhibit 4) and Planned Development (PD 04-007-SR) by the Santa Rosa Zoning Map (Exhibit 5). The Low-Density Residential designation is intended for detached single-family residential development at a density between 2.0 to 8.0 dwelling units (DU) per gross acre.[3] The Planned Development (PD) zoning designation is intended to implement all types of General Plan land use classifications.

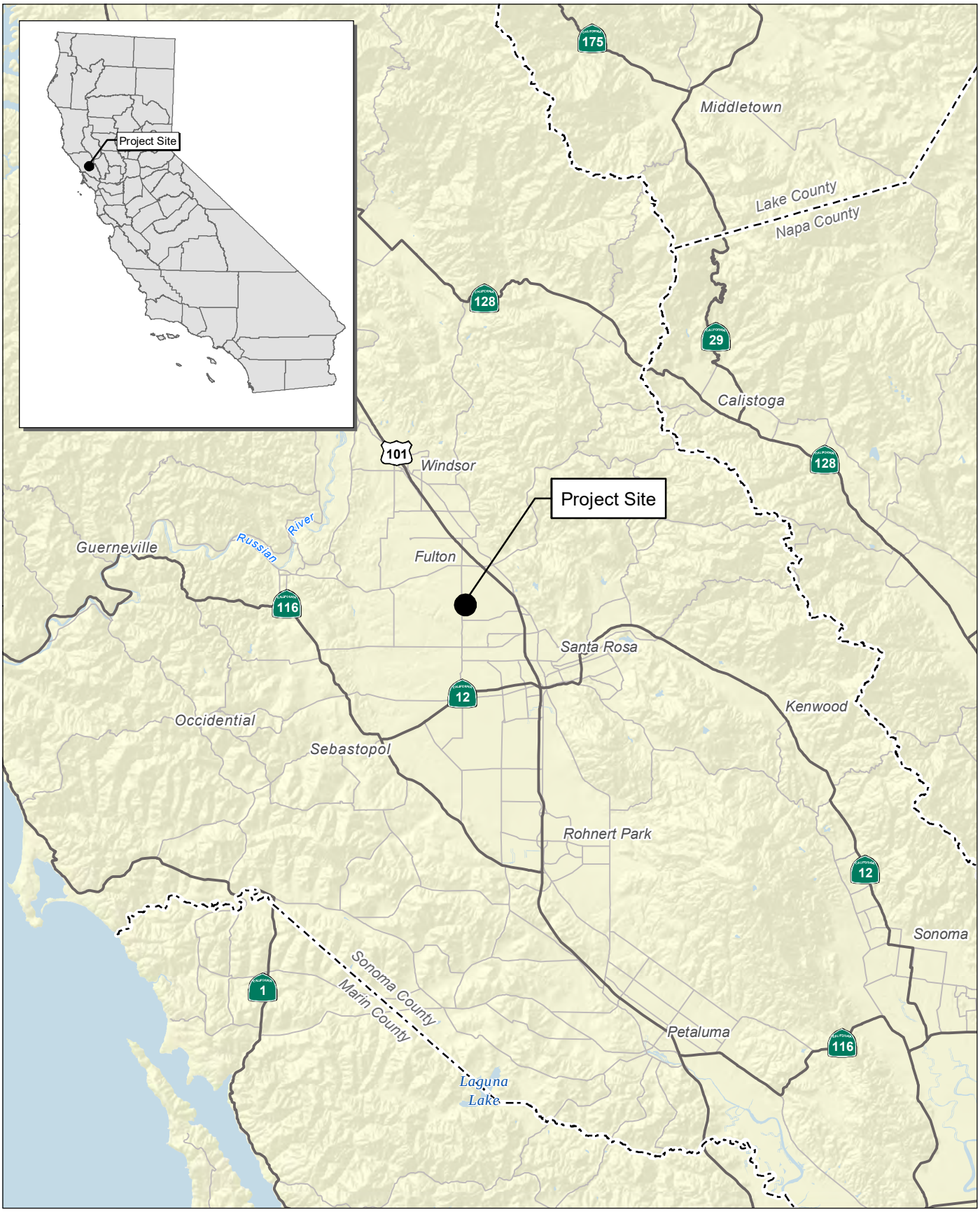
1.4 - Project Description

As shown in Exhibit 6, the proposed project would consist of two subdivided parcels: Parcel 1 (West Parcel) and Parcel 2 (East Parcel). The 14.6-acre West Parcel would contain 105 single-family residential units (7.19 DU per acre [DU/acre]) with related roadways, parking spaces, and stormwater treatment area. The 105 residential units would include five pairs of attached single-family units on lots 32/33, 34/35, 68/69, 70/71, and 97/98. These single-family attached homes would be price-restricted to be affordable to moderate-income households. No development would occur on the 14.0-acre East Parcel. The total project density would be 3.7 DU/acre. The 14.0-acre East Parcel would act as on-site mitigation by preserving and enhancing existing wetlands and creating new wetlands for the benefit of Burke's goldfields, a State and federally listed endangered species. The two parcels would be separated by a project roadway and fencing. Table 1 provides a summary of the project components.

Table 1: Project Components

Project Portion	Acreage	Description
West Parcel	14.60	105 Single-family residential units
Stormwater Treatment Facility	0.45 (included as part of the total West Parcel acreage)	Biofiltration basin for treatment of stormwater prior to off-site release
East Parcel	14.0	Existing, enhanced, and new wetland habitat for Burke's goldfields
Total	28.6	—
Source: Civil Design Consultants, Inc., 2019.		

[2] Horticultural Associates. 2019. Tree Preservation and Mitigation Report, 2220 Fulton Road. May 2019.
[3] City of Santa Rosa. 2009. Santa Rosa General Plan 2035, page 2-9. Website: https://srcity.org/DocumentCenter/View/24327/Santa-Rosa-General-Plan-2035-PDF---July-2019. Accessed March 10, 2020.



Source: Census 2000 Data, The CaSIL

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5 2.5 0 5 Miles

Exhibit 1
Regional Location Map

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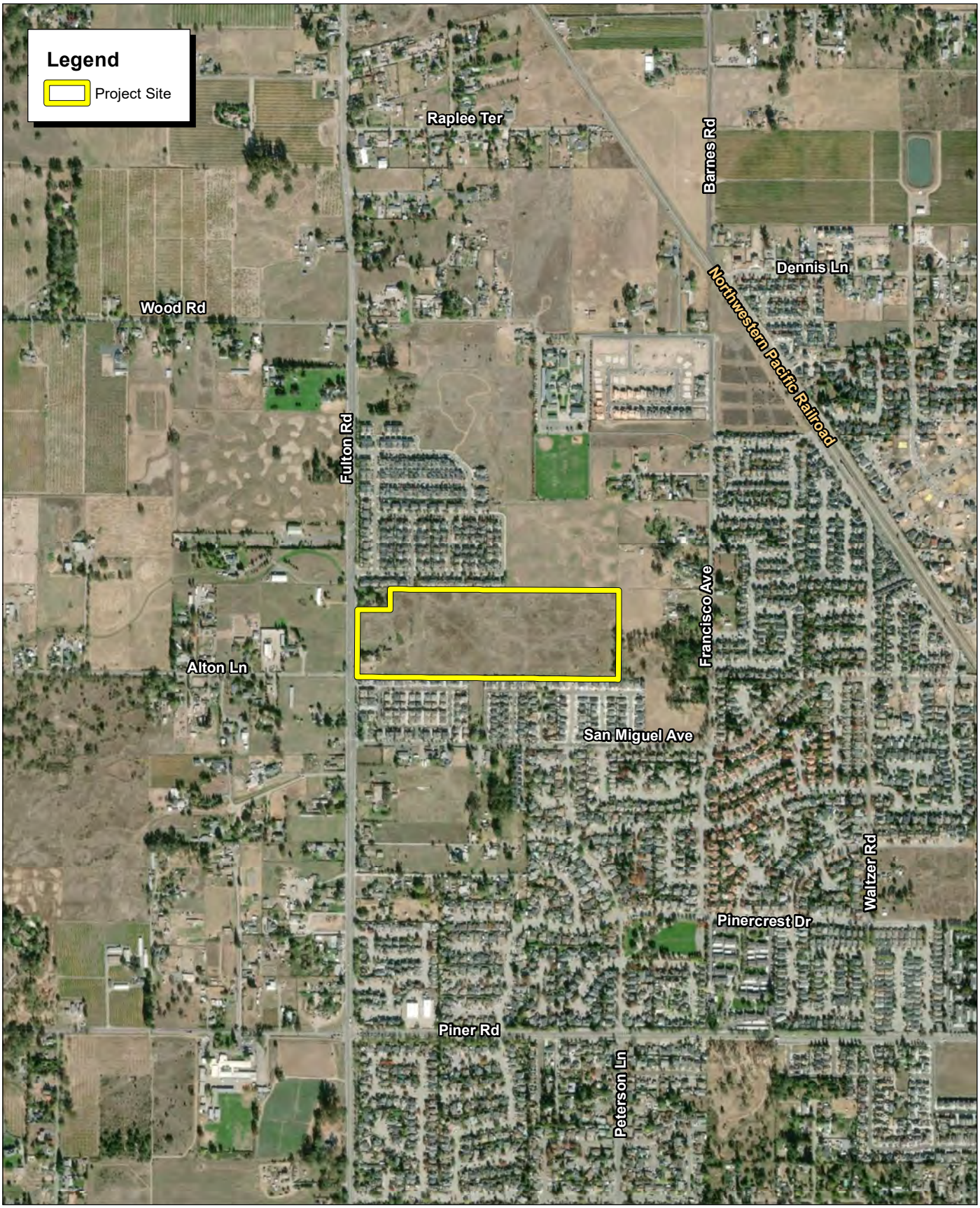

Source: ESRI Aerial Imagery.

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1,000 500 0 1,000 Feet

Exhibit 2
Local Vicinity Map
Aerial Base

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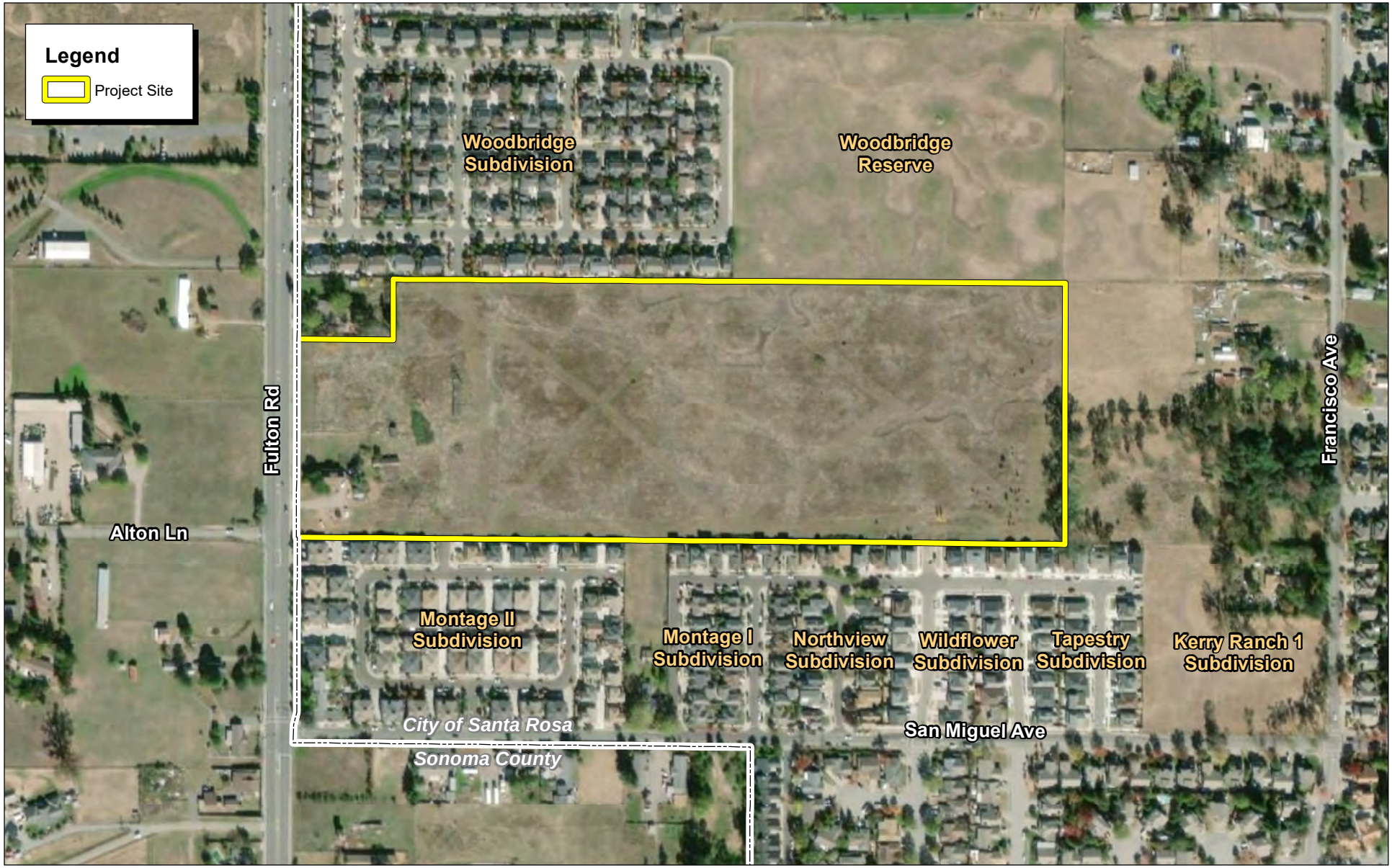

Source: ESRI Aerial Imagery.

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350 175 0 350
Feet

Exhibit 3
Existing Conditions

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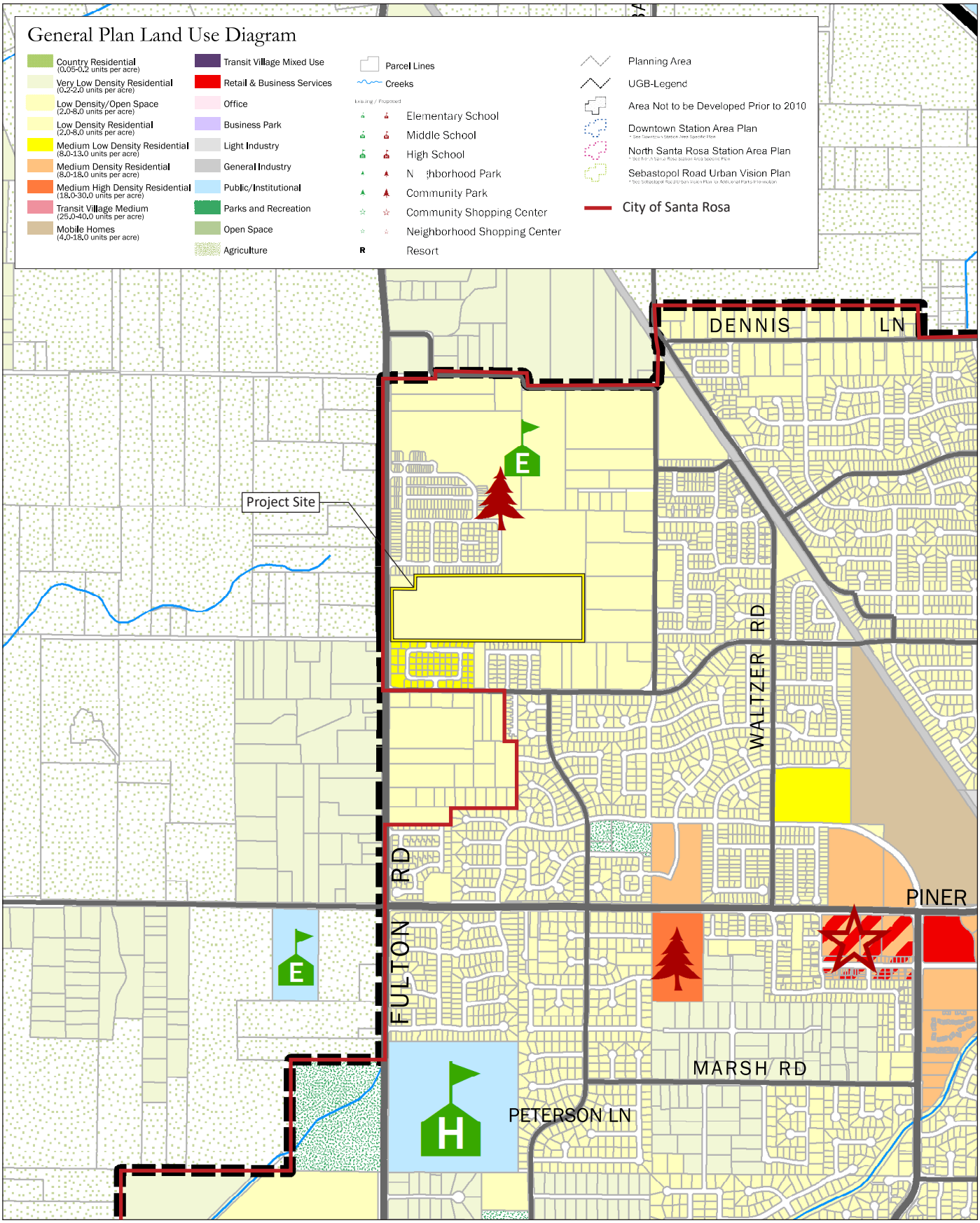

Source: City of Santa Rosa General Plan Land Use Map, March 2016.

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Exhibit 4
Existing General Plan Land Use Designation

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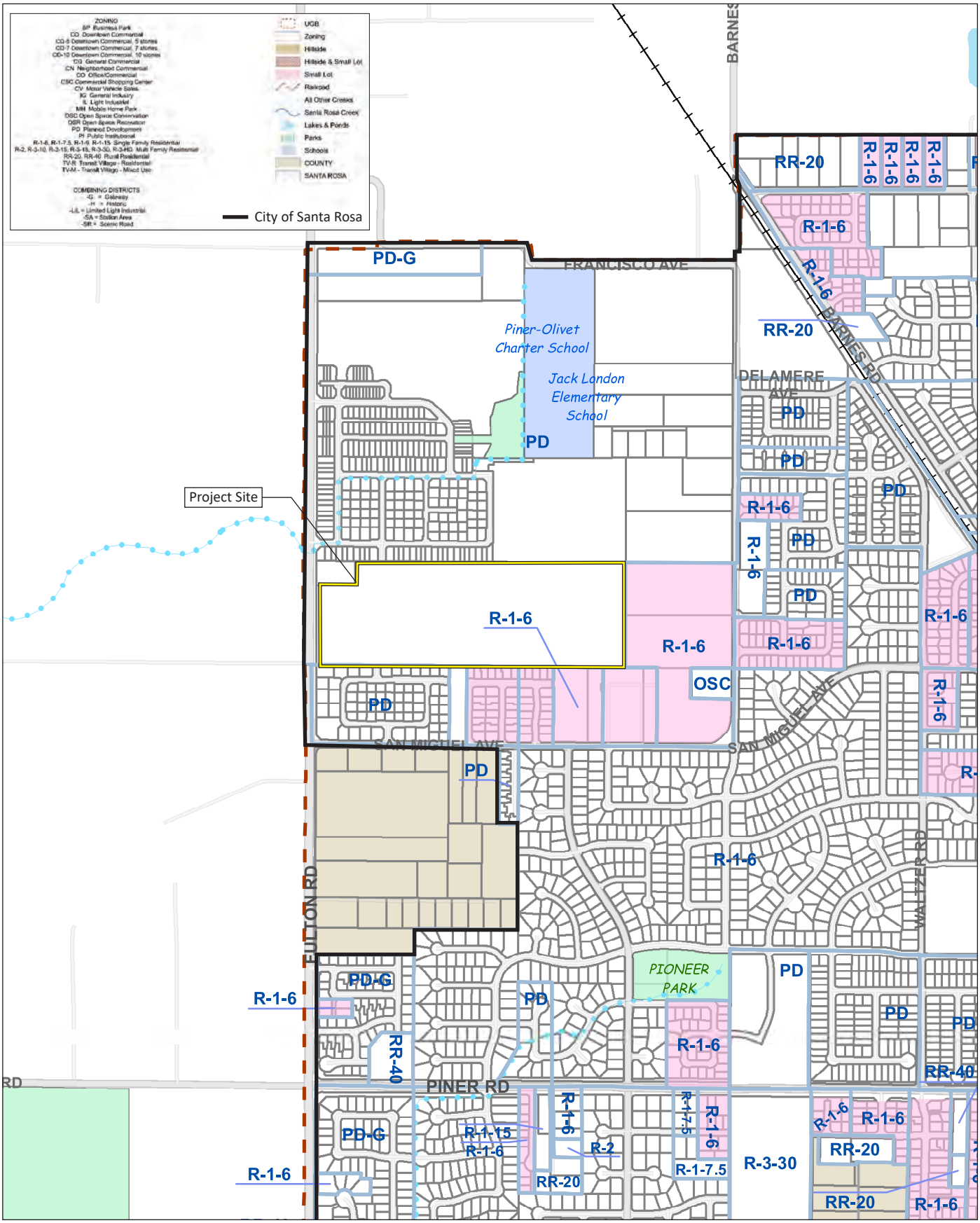

Source: City of Santa Rosa Zoning Map, August 2015.

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Exhibit 5
Existing Zoning Designation

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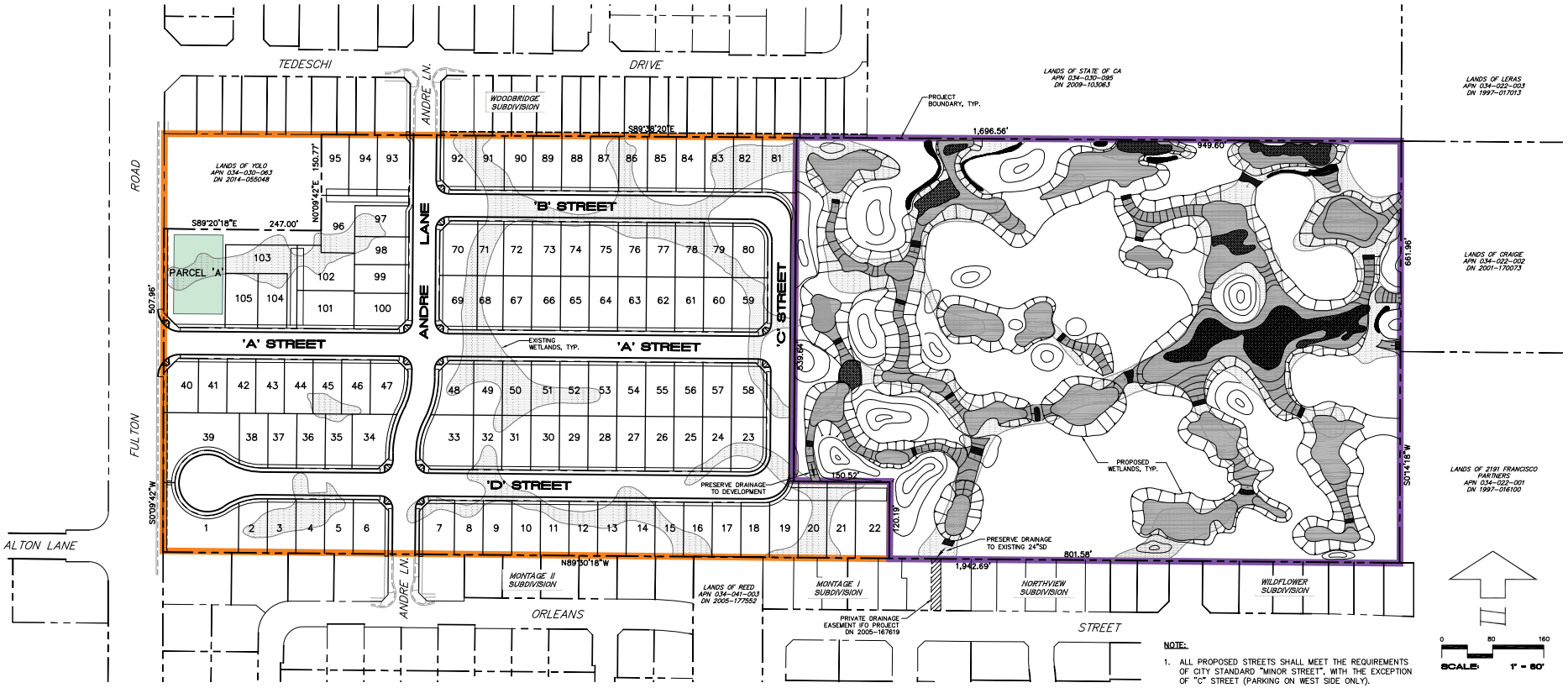

Source: Civil Design Consultants, Inc., November 26, 2019.

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Exhibit 6
Site Plan

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Wetlands Enhancement and Creation

The United States Army Corps of Engineers (USACE) verified 6.31 acres of seasonal wetlands on the project site. The proposed project would result in the fill of 2.52 acres of seasonal wetlands. In addition, 0.13-acre of seasonal wetlands would be permanently filled within the East Parcel as necessary to enhance the functions and services of wetlands within the East Parcel (total = 2.65 acres of permanent fill). Specifically, wetland hydrology that currently pools against the adjacent development's retaining walls will be recontoured into a naturalistic vernal pool configuration and this would require filling 0.13-acre of the 3.79 acres of wetlands that currently occur within the East Parcel. Finally, 0.484-acre of existing seasonal wetland in the East Parcel that currently supports Burke's goldfields will be avoided/protected during the implementation of the wetland creation/enhancement project.

To meet the USACE policy of "no net loss," approximately 1.766 acres of new wetlands are proposed to be created in existing upland habitats in the East Parcel. In addition, the project applicant will purchase 0.89-acre of wetland credits from a USACE (and Regional Water Quality Control Board [RWQCB]) approved Wetland Mitigation Bank. The total creation plus purchase of credit, totals 2.65 acres and meets the USACE no net loss policy or 1:1 impact to mitigation ratio.

In addition, approximately 3.267 acres of existing wetland in the East Parcel will be recontoured (enhanced) to improve hydrology and functions such that the enhanced wetlands will promote/support colonization by the State and federally listed vernal pool plant Burke's goldfields. Within the East Parcel, wetlands that are not occupied by Burke's goldfields would be enhanced to provide conditions that promote establishment of Burke's goldfield colonies. In total, after the enhancement, the East Parcel that currently supports 3.79 acres of wetlands will be able to support 5.52 acres of enhanced wetlands. Enhancing 3.267 acres of wetlands exceeds a 1:1 impact to mitigation ratio. Thus, the proposed project would enhance 3.267 acres (which exceeds 1:1 impacts to enhancement ratio). All together the proposed project would exceed a 2:1 overall replacement/enhancement to impact ratio.

1.4.1 - Demolition and Removal

The proposed project would demolish the existing 1,824-square-foot single-family home and related outbuildings in the southwest portion of the project site in preparation for grading. A total of 10 trees would be removed from the West Parcel.[4]

1.4.2 - Land Uses

West Parcel

The proposed project would develop 105 single-family residential units on the 14.6-acre West Parcel (Exhibit 7). The residential units would be 2-stories with a maximum height of 35 feet. To accommodate this development, 2.52 acres of existing wetlands in the West Parcel would be filled.

[4] Horticultural Associates. 2019. Tree Preservation and Mitigation Report, 2220 Fulton Road. Page 2.

Project housing would be composed of six different plans with an average lot size of 4,203 square feet. The six different plans would exhibit a mixture of farmhouse, traditional and craftsman architectural styles. The proposed setbacks are summarized in Table 2.

Table 2: Proposed Setbacks

Project Component	Setback[a]
Porch	7.5 feet
Building—Front	10 feet
Building—Rear	15 feet
Build—Side	0 or 4 feet
Garage—Front	19 feet

Note:
[a] Setbacks measured from back of sidewalk or property line, whichever is most restrictive.
Source: Civil Design Consultants, Inc., 2019.

Parking

As summarized in Table 3, the proposed project would provide 140 on-street spaces, 210 garage covered spaces, and 210 uncovered driveway spaces within the West Parcel. In total, the proposed project would provide 560 parking spaces with an average of 5.3 spaces per unit. Each garage would contain parking for two vehicles.

Table 3: Project Parking

Parking Type	Number
On-street	140
Garage (Covered)	210
Driveway (Uncovered)	210
Total	560
Total Per Unit	5.3

Source: Civil Design Consultants, Inc., 2019.

Circulation

Primary vehicular access to the project site would be provided from Fulton Road. Two secondary points of access would be provided via an extension of Andre Lane. One access point would be provided from the Woodbridge subdivision to the north and the second access point would be provided via Orleans Street from the Montage II subdivision to the south (see Exhibit 6). Within the project area, the circulation plan would include a hierarchy of minor streets. Most of the streets would include a 6-foot-wide planter/parkway strip behind the curbs on both sides of the right-of-way and a 5-foot-wide sidewalk behind the planter strip.

Utilities

Water and Wastewater

The proposed project would connect 12-inch water lines and 8-inch sanitary sewer lines to existing 12-inch water and sanitary sewer lines located within Fulton Road. Water and wastewater services would be provided by the City of Santa Rosa.

Storm Drainage

The proposed project would include a stormwater treatment facility in the northwest corner of the project site. The proposed project would include new stormwater drainage lines of various diameters within the project site that would convey all project stormwater to the new treatment area. The treatment area would consist of a stormwater biofiltration basin where stormwater would be treated using Best Management Practices (BMPs) before being discharged off-site to the existing storm drain system in Fulton Road and ultimately to the Laguna de Santa Rosa flow control facility.

Electricity, Natural Gas, and Telecommunications

The proposed project would be served with electricity generated by Sonoma Clean Power and delivered by Pacific Gas and Electric (PG&E). Natural gas services would be provided by PG&E. Local telephone service would be provided by AT&T and cable television would be provided by Comcast.

East Parcel

The 14.0-acre East Parcel contains habitat that supports Burke's goldfields, a federally and State listed endangered species (Exhibit 8). The entire 14.0-acre East Parcel would be preserved in perpetuity including the enhancements of the East Parcel's wetlands and special-status species habitat (described above). The East Parcel is intended to become part of a local larger preservation area that includes the 12.6-acre Woodbridge Reserve to the north and the proposed 4.2-acre Kerry II & III preserve to the east.

1.4.3 - Project Schedule and Phasing

The proposed project would likely be developed over a 3- to 5-year period, within as many as seven project phases. Approximately 15 to 30 houses would be constructed in each phase, and each phase is estimated to take 1 to 2 years to construct and sell. The proposed project could begin construction as soon as 12 months after receiving project approvals. As such, full build-out is anticipated to occur between 2023 and 2028. For the purposes of this analysis, and to provide a worst-case scenario, it is assumed that construction would occur over 2.5 years starting in 2021 and ending in 2023.

1.4.4 - Proposed Land Use Designation and Zoning

At 3.7 units/acre, the proposed project would conform with the existing Low-Density Residential designation. The existing PD zoning allows flexibility with respect to use, building types, lot size, and open space, while ensuring the proposed project complies with Santa Rosa General Plan 2035 and requirements as set forth in the Santa Rosa City Code. The proposed project would maintain the existing Low-Density Residential land use designation and PD zoning. The proposed project qualifies as a residential small lot subdivision (Chapter 20-42.140 of the Santa Rosa City Code) and would require a Conditional Use Permit pursuant to Chapter 20-42.140, Sections (C), (D), and (E). In

addition, the proposed project would adhere to the site planning and project design standards pursuant to Chapter 20-42.140, Section (F).[5]

1.5 - Required Discretionary Approvals

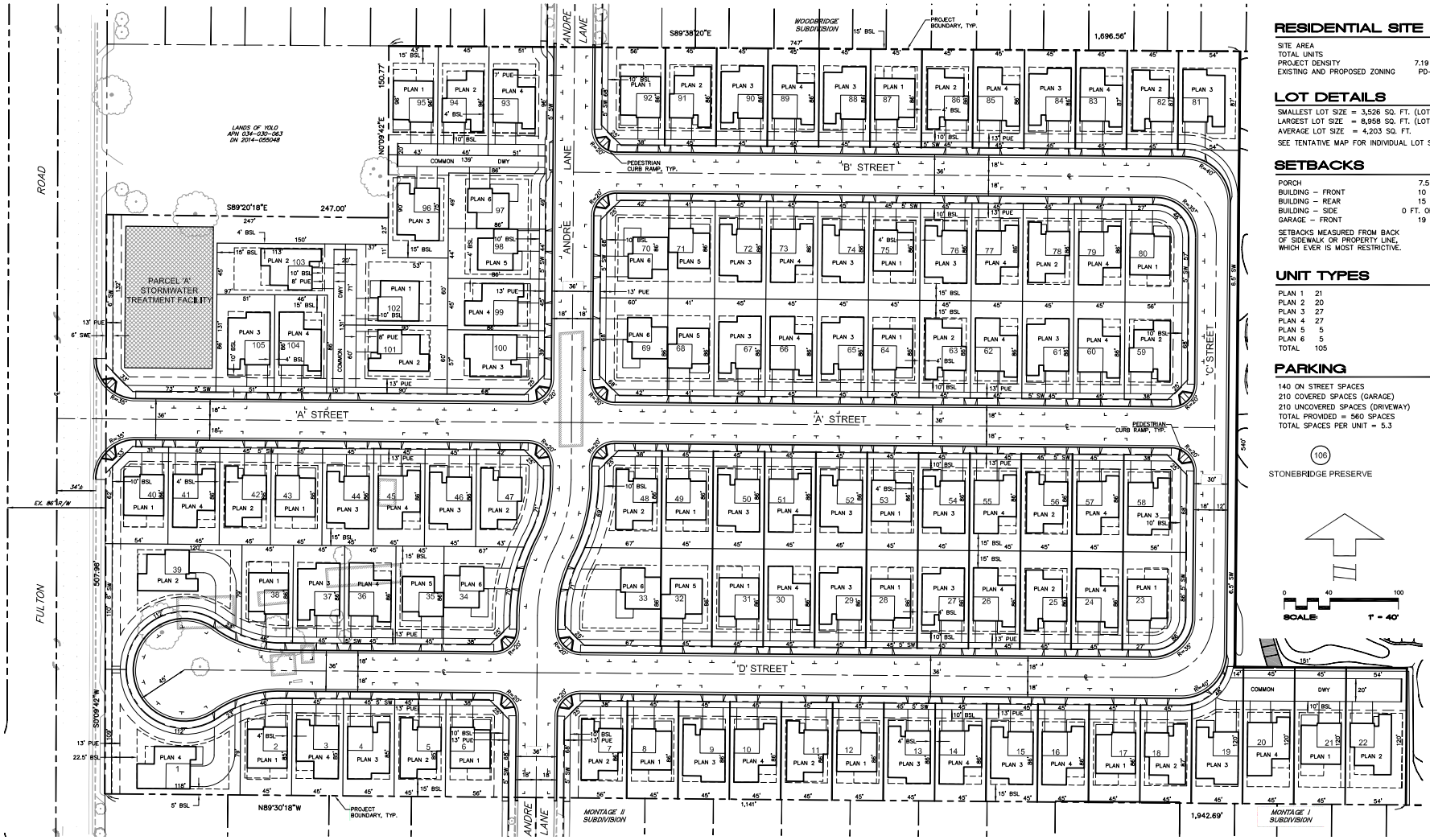
- Conditional Use Permit (City of Santa Rosa)
- Tentative Subdivision Map (City of Santa Rosa)
- Biological Opinion and Incidental Take Authorization (United States Department of Fish and Wildlife Service)
- Section 404 Permit (United States Army Corps of Engineers)
- Incidental Take Permit (California Department of Fish and Wildlife)
- Section 401 Certification (North Coast Regional Water Quality Control Board)

1.6 - Intended Uses of this Document

This Draft IS/MND has been prepared to identify potential environmental impacts that would occur from implementation of the proposed project. This document will also serve as a basis for soliciting comments and input from members of the public and public agencies regarding the proposed project. The Draft IS/MND will be circulated for a minimum of 30 days, during which period comments concerning the analysis contained in the Draft IS/MND should be sent to:

Kristinae Toomians, Senior Planner
Planning and Economic Development
100 Santa Rosa Avenue, Room 3
Santa Rosa, CA 95404
Phone: 707.543.4692
Email: ktoomains@srcity.org

[5] City of Santa Rosa. no date. Santa Rosa City Code, Chapter 20-42.140 Residential small lot subdivisions, Sections (B), (C), (D), and (F). Website: http://qcode.us/codes/santarosa/view.php?topic=20-4-20_42-20_42_140&frames=on. Accessed October 3, 2018.



Source: Civil Design Consultants, Inc., August 13, 2019.

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Exhibit 7
West Parcel Residential Development

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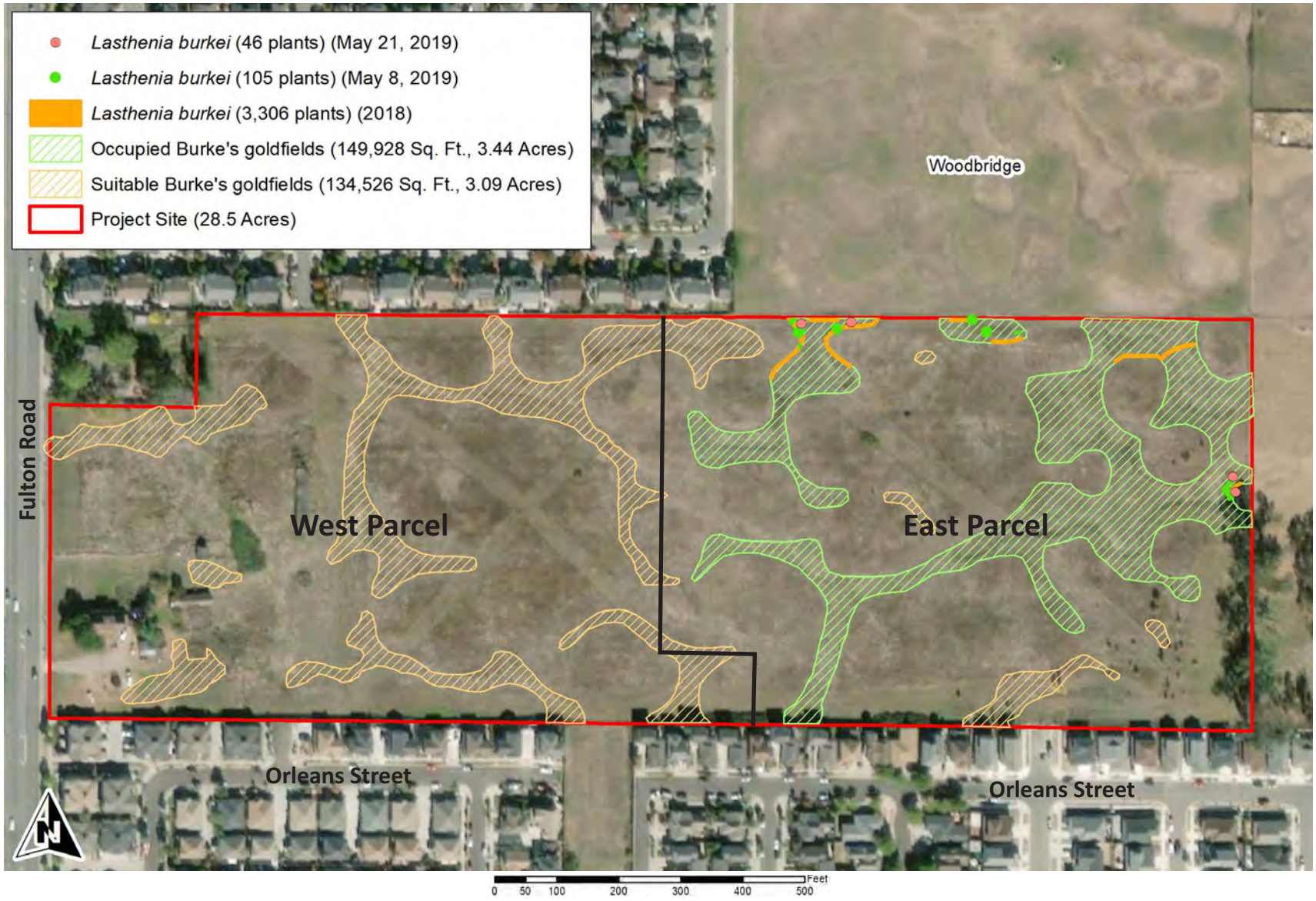

Source: Monk & Associates, June 18, 2019.

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Exhibit 8
Occupied and Suitable Burke's Goldfields Habitat

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SECTION 2: ENVIRONMENTAL CHECKLIST AND ENVIRONMENTAL EVALUATION

Environmental Factors Potentially Affected					
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.					
☐	Aesthetics	☐	Agriculture and Forestry Resources	☒	Air Quality
☒	Biological Resources	☒	Cultural Resources	☐	Energy
☒	Geology/Soils	☒	Greenhouse Gas Emissions	☒	Hazards/Hazardous Materials
☐	Hydrology/Water Quality	☒	Land Use/Planning	☐	Mineral Resources
☒	Noise	☐	Population/Housing	☐	Public Services
☐	Recreation	☒	Transportation	☒	Tribal Cultural Resources
☐	Utilities/Services Systems	☐	Wildfire	☒	Mandatory Findings of Significance

Environmental Determination

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measure based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Date: 05/26/2020 Signed: Kristinae L. Toomians

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Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
1. Aesthetics *Except as provided in Public Resources Code Section 21099, would the project:*				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a State Scenic Highway?	☐	☐	☐	☒
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Environmental Evaluation

Setting

This section provides a description of existing visual conditions at and near the project site and an assessment of changes to those conditions that would occur from implementation of the proposed project. Review of the Santa Rosa General Plan 2035 (General Plan) provides a basis for the description and analysis in this section.

A proposed project's effect on the visual environment is generally defined in the following terms: (i) a project's physical characteristics and potential visibility, (ii) the extent to which the project's presence would change the perceived visual character and quality of the environment where it would be located, and (iii) the expected level of sensitivity that the viewing public may have in areas where project facilities would alter existing views.

The aesthetic quality of a community is composed of visual resources, which are physical features that make up the visible landscape, including land, water, vegetation, and the built environment (e.g., buildings, roadways, and structures).

Visual Setting

The General Plan Urban Design Element identifies the qualities that make Santa Rosa a unique city. The major topics included are downtown, major city entries, neighborhood design, and hillside

development. The General Plan Urban Design Element identifies the following scenic resources by major topic within the City:

- **Downtown**. Downtown Santa Rosa is generally bound by College Avenue on the north, Brookwood Avenue on the east, Santa Rosa Creek/Sonoma Avenue on the south, and the North Western Pacific Railroad tracks on the west. Mixed office and retail uses are focused within the downtown core, surrounding Old Courthouse Square, and extending both east and west along Third and Fourth Streets. Santa Rosa Plaza, an indoor mall, is located between Old Courthouse Square and Highway 101. Railroad Square, west of Highway 101, features retail, services, and hotel use.
- **Major City Entries**. An east-west highway through western Santa Rosa, State Route 12 (SR-12) known locally as Sonoma Highway (a regional/arterial street) east of Farmers Lane. City entries occur at the UGB in the east (North Melita Road intersection) and west (Fulton Road).
- **Neighborhood Design**. Santa Rosa's diverse neighborhoods offer an array of housing choices. Historic neighborhoods of Victorian cottages and California bungalows contrast dramatically with recent large-scale master planned developments. Some of the most fragile neighborhoods are the rural enclaves with farmhouses, fields, barns, and outbuildings. Urban Design policies attempt to preserve the special character of older neighborhoods while ensuring that new development establishes a sense of neighborhood.
- **Hillside Development**. Santa Rosa is framed by the Sonoma Mountain foothills that are prominently visible from many locations in the flatland areas of the City. The City wishes to retain these views and the natural character of the unbuilt hills by regulating development that might occur on them. The Sugarloaf Ridge is defined in the General Plan as a protected ridgeline and shown in Figure 7-3 of the General Plan. The General Plan includes goals and policies that protect ridgelines and limit ridgeline development.

The existing visual character of the surrounding area generally consists of low to medium density neighborhoods (see Exhibit 3). The existing visual character of the project site is mostly defined by grassland. The project site is relatively flat, aside from areas where depressional wetland habitat is present. The southwestern portion of the project site is developed with an existing single-family home and related outbuildings. A number of ornamental trees, and fruit and nut trees can be found scattered around the project site mostly along the western and eastern edges of the site.

The City of Santa Rosa designates major highways and regional roadways in the City that offer visually pleasing experiences. In addition, the City also designates scenic roads because of their natural setting or historical and cultural features. A scenic road is defined as a highway, road, drive, or street that, in addition to its transportation function, provides opportunities for the enjoyment of natural and human-made scenic resources. Scenic roads direct views to areas of exceptional beauty, natural resources or landmarks, or historic or cultural interest.[6] The following roadways are located near the project site and are designated in the General Plan as scenic roads:

[6] City of Santa Rosa. 2009. Santa Rosa General Plan 2035. Draft Environmental Impact Report, page 4.K-2.

- **Guerneville Road-Piner Road-Hall Road/West Third Street:** Regional/arterial streets that carry regional traffic into Santa Rosa from the west. City entries along these roadways occur at the UGB, which is generally located at Fulton Road. These roadways are located approximately 1.50 miles south of the project site (0.49 mile and 2.52 miles south of the project site, respectively).
- **Mendocino Avenue/Old Redwood Highway-Fulton Road-Calistoga Road:** Regional/arterial streets that carry traffic from the northern edge of the UGB into the City. City entries occur at the UGB, generally north of Hopper Avenue for Old Redwood Highway and Fulton Road. Mendocino Avenue/Old Redwood Highway and Calistoga Road are approximately 1.70 miles and 5.81 miles east of the project site, respectively. Fulton Road is adjacent to the project site to the west, and Calistoga Road is over 5 miles to the northeast of the project site.

Lighting and Glare

Sources of daytime glare include direct beam sunlight and reflections from windows, architectural coatings, glass, and other reflective surfaces. Nighttime illumination and associated glare are generally divided into two sources: stationary and mobile. Stationary sources include structure lighting and decorative landscaping, lighted signs, solar panels, and streetlights. Mobile sources are primarily headlights from motor vehicles.

The project site is located in an urbanized area with existing lighting. The areas to the north and south of the project site contain residences and existing light and glare from urban infrastructure such as roads, windows, and lighting. The area to the east of the project site is sparsely developed and contains minimal lighting. Directly adjacent to the west of the project site is Fulton Road, which contains street lighting.

Chapter 20-30.080 of the City Code establishes standards for lighting. Standards include a maximum height of 14 feet for outdoor lighting. Light fixtures shall be shielded or recessed to reduce light spillage onto adjoining properties. Each light fixture shall be directed downward and away from adjoining properties and public rights-of-way, so that no on-site light fixture directly illuminates an area off the site. No lighting on private property is permitted to produce an illumination level greater than 1 foot-candle on any property within a residential zoning district except on the site of the light source.

Would the project:

a) Have a substantial adverse effect on a scenic vista?

Less than significant impact. As described previously, the project site is located near two designated scenic roadways, including the directly adjacent Fulton Road from which views of the Sonoma Mountain foothills can be seen to the east. Views of the foothills as seen from the project frontage along Fulton Road would be mostly obstructed as a result of the proposed project, with the exception of a view corridor provided by Street A, consistent with General Plan Policy UD-A-1. However, public views from Fulton Road are primarily from moving vehicles and are, therefore, fleeting and short in duration. Therefore, the level of sensitivity and perceived change would be low. Furthermore, the project's single-family homes would be consistent with allowable on-site land uses

and development regulations including the 35-foot building height maximum, ensuring consistency with surrounding residential development. In summary, project development would not significantly affect a scenic vista or designated scenic road. Therefore, impacts would be less than significant.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a State Scenic Highway?

No impact. The closest California Department of Transportation (Caltrans) "Eligible" State Scenic Highway is a portion of the Sonoma Highway that is 4.25 miles southeast of the project site. The closest officially designated State Scenic Highway is a portion of the Sonoma Highway that is 8.6 miles southeast of the project site.[7] The project site is not visible from either roadway. Therefore, no impacts would occur.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less than significant impact. The project site is located within an urbanized area in the northwest portion of the City of Santa Rosa, adjacent to the UGB. As detailed previously, the project site is surrounded by single and multi-family residential homes to the north, south, and east. In addition, the project site is adjacent to Fulton Road, which is a main arterial road that runs north to south through the City and County. The project site is designated Low Density Residential (Exhibit 4) and zoned Planned Development (PD 04-007-SR) by the Santa Rosa Zoning Map (Exhibit 5). These designations allow for 2.0 to 8.0 DU/acre.

The project's density would be 3.7 DU/acre, which is consistent with the Low-Density Residential designation and PD zoning. The project proposes single-family homes with a maximum height of 35 feet, which would obstruct views of surrounding hillsides from Fulton Road to the east directly along the project frontage. However, the proposed project would maintain a view corridor along Street A, from which foothill views would be visible from Fulton Road, consistent with General Plan Policy UD-A-1. As previously discussed, the level of sensitivity and perceived change would be low in respect to this change in view. As shown in Exhibit 9, the proposed project would be designed to include four different architectural designs for the single-family homes, which would create development with visual interest consistent with General Plan Policy UD-F-4. Therefore, the proposed project would not conflict with applicable zoning or regulations governing scenic quality in an urbanized area and impacts would be less than significant.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less than significant impact. New sources of light associated with the proposed project include interior lighting and exterior lighting for the structures and for decorative landscaping. Additionally,

[7] California Department of Transportation (Caltrans). 2014. Scenic Highways 2014. Website: https://databasin.org/maps/new#datasets=1b669cbb6b5341019625153f524ecd57. Accessed July 22, 2019.

internal streets constructed as part of the project would include street lighting. The project would also provide solar panels on the residential homes. Therefore, the proposed project would create new sources of light and glare compared to existing conditions.

The City would review the proposed project for consistency with General Plan policies and design guidelines intended to reduce daytime glare and nighttime lighting. In addition, during design review, the City would ensure the project's proposed exterior lighting complies with Santa Rosa Municipal Code Chapter 20-30.080. The lighting standards contained in Chapter 20-30.080 of the Municipal Code would prevent lighting from spilling off-site and limit light heights to a maximum of 14 feet tall. Consistency with the Municipal Code would ensure lighting impacts from the proposed project would be reduced to the maximum extent practicable.

Project related traffic would increase mobile sources of light due to headlights. However, nighttime automobile headlight lighting impacts would be intermittent and limited to adjacent streets with existing streetlights. Therefore, impacts from light and glare would be less than significant.

Mitigation Measures

None.

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Source: Hunt Hale Jones, Architecture/Planning/Interiors, June 27, 2019.

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Exhibit 9
Project Conceptual Design

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Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2. Agriculture and Forestry Resources *In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the State's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:*				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☒	☐
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☒	☐

Environmental Evaluation

Setting

Agricultural Resources

The California Department of Conservation Farmland Mapping and Monitoring Program (FMMP) was established by the State Legislature in 1982 to assess the location, quality, and quantity of agricultural lands and conversion of these lands over time. The FMMP has established five farmland categories:

- Prime Farmland is farmland with the best combination of physical and chemical features able to sustain long-term agricultural production. This land must have been used for irrigated agricultural production at some time during the last 4 years before the mapping date and have the ability to store moisture in soil well.
- Farmland of Statewide Importance is similar to Prime Farmland but contains greater slopes and a lesser ability to store soil moisture.
- Unique Farmland is usually irrigated but may include non-irrigated orchards or vineyards as found in some climate zones in California. This land must still have been cropped some time during 4 years prior to the mapping date.
- Farmland of Local Importance is important to the local agricultural economy as determined by each county's board of supervisors and local advisory committee.
- Grazing Land is land on which the existing vegetation is suited to the grazing livestock. This category was developed in cooperation with the California Cattlemen's Association, University of California Cooperative Extension, and other groups interested in the extent of grazing activities.

The FMMP classifies the project site as "Farmland of Local Importance" and most of its surroundings as "Urban and Build-up Land." There is no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance located within the vicinity. The project site is not zoned for agricultural uses.

The Williamson Act, classified in 1965 as the California Land Conversation Act, allows local governments to enter into contracts with private landowners, offering tax incentives in exchange for an agreement that the land will remain undeveloped or related open space use only for a period of 10 years. There are currently no properties under Williamson contract located on the project site or within the surrounding area.[8]

Forest Resources

CEQA requires the evaluation of forest and timber resources where those resources are present; however, the project site is located within a residential area of Santa Rosa, and there is no forest land as described in Public Resources Code Section 12220(g), timberland as defined by Public Resources Code Section 4526, or property zoned for Timberland Production as defined by Government Code Section 51104(g) on the site or in its vicinity.

Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

[8] County of Sonoma Permit and Resource Management Department. 2019. Williamson Act 2019 Calendar Year. Website: https://sonomacounty.ca.gov/PRMD/Administration/GIS/Map-Gallery/. Accessed March 25, 2020.

Less than significant impact. As described previously, while the adjacent area is classified as "Urban and Built-Up Land," the project site is classified as "Farmland of Local Importance."[9] Farmlands of Local Importance are "lands which are classified as having the capability for producing locally important crops such as grapes, corn, etc., but may not be planted at the present time."[10] However, there is no on-site cultivation and there is no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance located within the project area. Therefore, development of the project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. No impact would occur.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No impact. The General Plan Land Use Diagram designates the project site as Low Density Residential, which indicates the City anticipates the development of residential land uses on this site.[11] There are currently no properties under Williamson contract located on the project site or surrounding area.[12] As such, there would be no impacts relating to conflicts with an existing zoning for agricultural use or a Williamson Act contract.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

No impact. The project site is in an urban area of Santa Rosa that does not meet the State's definitions of forest land and timberland. Therefore, the project would not conflict with existing zoning for forest land, timberland, or timberland zoned for timberland production. No impact would occur.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No impact. As described previously, the project site is located in an urbanized area and does not qualify as forest land as defined by the State. Therefore, the project would not result in the loss of or conversion of forest land to a non-forest use. No impact would occur.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

Less than significant impact. All areas surrounding the project site are classified as "Farmland of Local Importance" or "Urban and Build-up Land." As stated previously, Farmland of Local Importance is classified as having capacity to yield locally important crops but may not be cultivated at the present time. Implementation of the project would convert the project site from Farmland of Local Importance to Urban and Built-Up Land. However, the General Plan designates the site as Low

[9] California Department of Conservation. 2018. Sonoma County Important Farmland 2016.
[10] California Department of Conservation. 2018. Sonoma County Important Farmland 2016.
[11] City of Santa Rosa. 2009. Santa Rosa General Plan 2035. General Plan Land Use Diagram. Website: https://srcity.org/DocumentCenter/View/24996/General-Plan-Land-Use-Diagram-PDF---July-2019. Accessed March 10, 2020.
[12] County of Sonoma Permit and Resource Management Department. 2019. Williamson Act 2019 Calendar Year. Website: https://sonomacounty.ca.gov/PRMD/Administration/GIS/Map-Gallery/. Accessed March 25, 2020.

Density Residential, which indicates the City anticipates urban development on the project site.[13] Additionally, there is no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance located within the project site or surrounding areas. Therefore, impacts related to conversion of Farmland or forest land to a non-agricultural or non-forest use would be less than significant.

Mitigation Measures

None.

[13] City of Santa Rosa. 2009. Santa Rosa General Plan 2035. General Plan Land Use Diagram. Website: https://srcity.org/DocumentCenter/View/24996/General-Plan-Land-Use-Diagram-PDF---July-2019. Accessed March 10, 2020.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
3. Air Quality *Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.* *Would the project:*				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☒	☐	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard?	☐	☒	☐	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
d) Result in other emissions (such as those leading to odors or) adversely affecting a substantial number of people?	☐	☐	☒	☐

Environmental Evaluation

Setting

Air pollutants relevant to the CEQA checklist questions for Air Quality are briefly described below.

- Ozone is a gas that is formed when reactive organic gases (ROG) and oxides of nitrogen (NO_X)—both byproducts of internal combustion engine exhaust—undergo slow photochemical reactions in the presence of sunlight. Ozone concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are conducive to its formation. Heath effects can include, but are not limited to irritated respiratory system, reduced lung function, and aggravated chronic lung diseases.
- ROG, or volatile organic compounds (VOCs), are defined as any compound of carbon—excluding carbon monoxide (CO), carbon dioxide (CO_2), carbonic acid, metallic carbides or carbonates, and ammonium carbonate—that participates in atmospheric photochemical reactions. Although there are slight differences in the definition of ROG and VOCs, the two terms are often used interchangeably.
- Nitrogen dioxide (NO_2) forms quickly from NO_X emissions. Health effects from NO_2 can include the following: potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; contribution to atmospheric discoloration; increased visits to hospital for respiratory illnesses.

- CO is a colorless, odorless gas produced by the incomplete combustion of fuels. CO concentrations tend to be the highest during the winter morning, with little to no wind, when surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines—unlike ozone—and motor vehicles operating at slow speeds are a primary source of CO in the Sonoma County region, the highest ambient CO concentrations are generally found near congested transportation corridors and intersections. Potential health effects from CO depends on exposure and can include slight headaches; nausea; aggravation of angina pectoris (chest pain) and other aspects of coronary heart disease; decreased exercise tolerance in persons with peripheral vascular disease and lung disease; impairment of central nervous system functions; possible increased risk to fetuses; or death.
- Sulfur dioxide (SO_2) is a colorless, pungent gas. At levels greater than 0.5 parts per million (ppm), the gas has a strong odor, similar to rotten eggs. Sulfur oxides (SO_X) include SO_2 and sulfur trioxide. Sulfuric acid is formed from sulfur dioxide, which can lead to acid deposition and can harm natural resources and materials. Although SO_2 concentrations have been reduced to levels well below state and federal standards, further reductions are desirable because SO_2 is a precursor to sulfate and PM_{10}.
- Respirable Particulate Matter (PM_{10}) and Fine Particulate Matter ($PM_{2.5}$) consist of extremely small, suspended particles or droplets 10 microns and 2.5 microns or smaller in diameter. Some sources of particulate matter, like pollen and windstorms, are naturally occurring. However, in populated areas, most particulate matter is caused by road dust, diesel soot, combustion products, abrasion of tires and brakes, and construction activities. Health effects from short-term exposure (hours/days) can include the following: irrigation of the eyes, nose, throat; coughing; phlegm; chest tightness; shortness of breath; aggravate existing lung disease, causing asthma attacks and acute bronchitis; those with heart disease can suffer heart attacks and arrhythmias. Health effects from long-term exposure can include the following: reduced lung function; chronic bronchitis; changes in lung morphology; or death.
- Toxic air contaminants (TACs) refer to a diverse group of air pollutants that can affect human health but have not had ambient air quality standards established for them. Diesel particulate matter (DPM) is a toxic air contaminant that is emitted from construction equipment and diesel fueled vehicles and trucks. Some short-term (acute) effects of DPM exposure include eye, nose, throat, and lung irritation, coughs, headaches, light-headedness, and nausea. Studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems. Human studies on the carcinogenicity of DPM demonstrate an increased risk of lung cancer, although the increased risk cannot be clearly attributed to diesel exhaust exposure.

The project site is located in the San Francisco Bay Area Air Basin (Air Basin), where air quality is regulated by the Bay Area Air Quality Management District (BAAQMD). Where available, the significance criteria established or recommended by the BAAQMD were used to make determinations related to the CEQA Appendix G checklist's air quality impact questions. In accordance with CEQA Guidelines Section 15064.7 (Thresholds of Significance), the City exercises its own discretion to use the significance thresholds in the BAAQMD CEQA thresholds based on substantial evidence contained in the BAAQMD's record for adoption of the thresholds (which is relied on and incorporated herein).

Accordingly, the assessment of the project's air quality impacts uses the thresholds and methodologies from the BAAQMD May 2017 CEQA Air Quality Guidelines to determine the potential impacts of the project on the existing environment.[14] The significance thresholds used in this analysis are based on the BAAQMD standards and as set forth in Table 4 below. In developing thresholds of significance for air pollutants, the BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions.

Table 4: Thresholds of Significance

Pollutant	Construction Thresholds Average Daily Emissions	Operational Thresholds	
		Average Daily Emissions	Annual Average Emissions
Criteria Air Pollutants			
VOC (or ROG)	54 pounds/day	54 pounds/day	10 tons/year
NO_X	54 pounds/day	54 pounds/day	10 tons/year
PM_{10}	82 pounds/day	82 pounds/day	15 tons/year
$PM_{2.5}$	54 pounds/day	54 pounds/day	10 tons/year
CO	Not Applicable	9.0 ppm (8-hour average) or 20.0 ppm (1-hour average)	
Fugitive Dust	Construction Dust Ordinance or other Best Management Practices	Not Applicable	
Health Risks and Hazards for New Sources			
Excess Cancer Risk	10 per one million	10 per one million	
Chronic or Acute Hazard Index	1.0	1.0	
Incremental annual average $PM_{2.5}$	0.3 µg/m^3	0.3 µg/m^3	
Health Risks and Hazards for Sensitive Receptors (Cumulative from All Sources within 1,000-Foot Zone of Influence) and Cumulative Thresholds for New Sources			
Excess Cancer Risk	100 per 1 million		
Chronic Hazard Index	10.0		
Annual Average $PM_{2.5}$	0.8 µg/m^3		

Notes:
µg/m3 = micrograms per cubic meter
CO = carbon monoxide
NO_X = oxides of nitrogen
ppm = parts per million
ROG = reactive organic gases
VOC = volatile organic compounds
PM_{10} = particulate matter, including dust, 10 micrometers or less in diameter
$PM_{2.5}$ =particulate matter, including dust, 2.5 micrometers or less in diameter
Source: Bay Area Air Quality Management District (BAAQMD). 2017. California Environmental Quality Act Air Quality Guidelines. May. Website: http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed December 10, 2019.

[14] Bay Area Air Quality Management District (BAAQMD). 2017. California Environmental Quality Act Air Quality Guidelines. May. Website: http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed March 10, 2020.

Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less than significant impact with mitigation incorporated. The project site is located in the Air Basin, where air quality is regulated by the BAAQMD. Attainment status for a pollutant is determined for the Air Basin based on standards set by the United States Environmental Protection Agency (EPA) or California Environmental Protection Agency (Cal/EPA) for federal and State, respectively. The Air Basin is designated nonattainment for 1-hour ozone (State), 8-hour ozone (State and federal), 24-hour PM_{10} (State), annual PM_{10} (State), annual $PM_{2.5}$ (State), and 24-hour $PM_{2.5}$ (federal).[15]

To address regional air quality standards, the BAAQMD has adopted several air quality policies and plans, the most recent of which is the 2017 Clean Air Plan.[16] The 2017 Clean Air Plan was adopted in April of 2017 and serves as the regional air quality plan (AQP) for the Air Basin for attaining federal ambient air quality standards. The primary goals of the 2017 Clean Air Plan are to protect public health and protect the climate. The 2017 Clean Air Plan acknowledges that the BAAQMD's two stated goals of protection are closely related. As such, the 2017 Clean Air Plan identifies a wide range of control measures intended to decrease both criteria pollutants[17] and greenhouse gases (GHGs).[18] In September 2010, the BAAQMD adopted their final Bay Area 2010 Clean Air Plan, which became the most recent ozone plan for the Air Basin. The 2010 Clean Air Plan identifies how the Air Basin would achieve compliance with the State 1-hour air quality standard for ozone, and how the region will reduce ozone transport from the Air Basin to other basins downwind. The 2017 Clean Air Plan updates the BAAQMD 2010 Clean Air Plan, pursuant to air quality planning requirements defined in the California Health and Safety Code.

The 2017 Clean Air Plan also accounts for projections of population growth provided by the Association of Bay Area Governments (ABAG) and vehicle miles traveled (VMT) provided by the Metropolitan Transportation Commission and identifies strategies to bring regional emissions into compliance with federal and State air quality standards. A project would conflict with or obstruct implementation of the 2017 Clean Air Plan if it would result in substantial new regional emissions not foreseen in the air quality planning process.

The BAAQMD does not provide a numerical threshold of significance for project-level consistency analysis with AQPs. Therefore, the following criteria will be used for determining a project's consistency with the AQP.

- **Criterion 1:** Does the project support the primary goals of the AQP?

[15] Bay Area Air Quality Management District (BAAQMD). 2017. Air Quality Standards and Attainment Status. Last updated January 2017. Website: https://www.baaqmd.gov/about-air-quality/research-and-data/air-quality-standards-and-attainment-status. Accessed January 8, 2020.

[16] Bay Area Air Quality Management District (BAAQMD). 2017. Final 2017 Clean Air Plan. April 19. Website: http://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans. Accessed November 25, 2019.

[17] The EPA has established National Ambient Air Quality Standards (NAAQS) for six of the most common air pollutants—carbon monoxide, lead, ground-level ozone, particulate matter, nitrogen dioxide, and sulfur dioxide—known as "criteria" air pollutants (or simply "criteria pollutants").

[18] A greenhouse gas is any gaseous compound in the atmosphere that is capable of absorbing infrared radiation, thereby trapping and holding heat in the atmosphere. By increasing the heat in the atmosphere, greenhouse gases are responsible for the greenhouse effect, which ultimately leads to global warming.

- **Criterion 2:** Does the project include applicable control measures from the AQP?
- **Criterion 3:** Does the project disrupt or hinder implementation of any AQP control measures?

Criterion 1

The primary goals of the 2017 Clean Air Plan, the current AQP to date, are to:

- Attain air quality standards;
- Reduce population exposure to unhealthy air and protecting public health in the Bay Area; and
- Reduce greenhouse gas emissions and protect the climate.

A measure for determining if the project supports the primary goals of the AQP is if the project would not result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the air quality plans. The development of the AQP is based, in part, on the land use general plan determinations of the various cities and counties that constitute the Air Basin. The project site is designated Low Density Residential by the General Plan (Exhibit 4) and Planned Development (PD 04-007-SR) by the Santa Rosa Zoning Map (Exhibit 5). The Low Density Residential designation is intended for detached single-family residential development at a density between 2.0 to 8.0 DU per gross acre.[19] At 3.7 DU/acre, the proposed project would conform with the existing Low Density Residential designation. Therefore, emissions related to development of the project site were included in growth forecasts for the current AQP.

The proposed project would develop 105 single-family residential units. The Traffic Impact Study (TIS) prepared for the project evaluated 120 single-family residential units for analysis of traffic-related impacts.[20] To be consistent with the project-specific TIS, total trips generated by 120 units were used to estimate emissions presented in the air quality analysis.[21] Consistent with the Project Description (Section 1.4), all other assumptions and analysis for air quality assume 105 single-family residential units. The proposed project is consistent with the project site's existing zoning and General Plan land use designation and traffic generated by the proposed project would be included in the traffic volumes projected in the General Plan and subsequent air quality plan. Because the proposed project would not increase the VMT generated by the project site compared to the assumptions used in the AQP, it is reasonable to conclude that the project would comply with the goals and development assumptions in the applicable AQP.

Criterion 2

The 2017 Clean Air Plan contains 85 control measures aimed at reducing air pollutants and GHGs at the local, regional, and global levels. Along with the traditional stationary, area, mobile source, and transportation control measures, the 2017 Clean Air Plan contains a number of control measures designed to protect the climate and promote mixed use, compact development to reduce vehicle emissions and exposure to pollutants from stationary and mobile sources. The 2017 Clean Air Plan

[19] City of Santa Rosa. 2009. Santa Rosa General Plan 2035, pages 2-9. Website: https://srcity.org/DocumentCenter/View/24327/Santa-Rosa-General-Plan-2035-PDF---July-2019. Accessed November 25, 2019.
[20] W-Trans. 2019. Traffic Impact Study for the 2220 Fulton Road Project. October 22.
[21] Ibid.

also includes an account of the implementation status of control measures identified in the 2010 Clean Air Plan.

Table 5 lists the Clean Air Plan policies relevant to the proposed project and evaluates the project's consistency with the policies. As shown below, the project would be consistent with applicable measures.

Table 5: Project Consistency with Applicable Clean Air Plan Control Measures

Control Measure	Project Consistency
Stationary Control Measures	
SS29: Asphaltic Concrete	**Consistent.** Paving activities associated with the proposed project would be required to utilize asphalt that does not exceed BAAQMD emission standards.
SS36: Particulate Matter from Trackout	**Consistent.** Mud and dirt that may be tracked out onto the nearby public roads during construction activities shall be removed promptly by the contractor based on BAAQMD's requirements. Mitigation Measure (MM) AIR-1, identified under Impact 3(b), would implement BMPs recommended by the BAAQMD for particulate matter (PM) dust emissions during construction.
SS38: Fugitive Dust	**Consistent.** Material stockpiling and track out during grading activities shall utilize BMPs recommended by the BAAQMD to minimize the creation of fugitive PM dust. MM AIR-1, identified under Impact 3(b), would require the BMPs recommended by the BAAQMD for fugitive PM dust emissions to be implemented during construction.
Transportation Control Measures	
TR9: Bicycle and Pedestrian Access Facilities	**Consistent.** The proposed project would comply with TR9 by providing pedestrian connectivity within the West Parcel and from the West Parcel to surrounding land uses. There are sidewalks along Fulton Road and plans for a connected sidewalk network throughout the project site.
Buildings Control Measures	
BL1: Green Buildings	**Consistent.** The proposed project would comply with the latest energy efficiency standards, California Green Building Standards Code (CALGreen), and would incorporate applicable energy efficiency features designed to reduce project energy consumption. Details related to applicable energy efficiency features are described in more detail in Impact 6, Energy.

Table 5 (cont.): Project Consistency with Applicable Clean Air Plan Control Measures

Control Measure	Project Consistency
BL2: Decarbonize Buildings	**Consistent.** The proposed project would comply with the latest energy efficiency standards (such as CALGreen) and incorporate applicable energy efficiency features designed to reduce project energy consumption.
BL4: Urban Heat Island Mitigation	**Consistent.** The proposed project would incorporate landscaping throughout the West Parcel. The proposed project would provide landscaping in accordance with City standards that would serve to reduce the urban heat island effect and would include the planting of shade trees.
Energy Control Measures	
EN2: Decrease Energy Use	**Consistent.** The project applicant would be required to conform to the energy efficiency requirements of CALGreen, also known as Title 24, which was adopted in order to meet an Executive order in the Green Building Initiative to improve the energy efficiency of buildings through aggressive standards. Specifically, new development must implement the requirements of the most recent Building Energy Efficiency Standards, which would be the Title 24 standards in effect at the time that building permits are obtained. The 2019 Building Efficiency Standards went into effect on January 1, 2020.
Natural and Working Lands Control Measures	
NW2: Urban Tree Planting	**Consistent.** The proposed project would incorporate landscaping throughout the West Parcel. The proposed project would provide landscaping in accordance with City standards that would serve to reduce the urban heat island effect and would include the planting of shade trees.
Source of control measures: Bay Area Air Quality Management District (BAAQMD). 2017. Final 2017 Clean Air Plan. April 19. Website: http://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans. Accessed November 25, 2019.	

In summary, the proposed project would not conflict with any applicable measures under the 2017 Clean Air Plan after the implementation of Mitigation Measure (MM) AIR-1 (described in more detail in Impact 3(b)); therefore, the proposed project would be consistent with Criterion 2 after incorporation of mitigation.

Criterion 3

The proposed project would not preclude extension of a transit line or bike path, propose excessive parking beyond parking requirements, or otherwise create an impediment or disruption to

implementation of any AQP control measures. As shown in Table 5 above, the proposed project would incorporate several AQP control measures as project design features. Therefore, the proposed project would not disrupt or hinder implementation of any AQP control measures and is consistent with Criterion 3.

Summary

The proposed project would be consistent with all three criteria after the incorporation of MM AIR-1. Thus, the proposed project would not conflict with the 2017 Clean Air Plan. Therefore, impacts associated with conflicting with or obstructing implementation of the 2017 Clean Air Plan would be less than significant with mitigation.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard?

Less than significant impact with mitigation incorporated. This impact is related to the cumulative effect of a project's regional criteria pollutant emissions. As discussed in Impact 3(a), the region is designated nonattainment for the federal and State ozone standards, the State PM_{10} standards, and the federal and State $PM_{2.5}$ standards. Potential impacts would result in exceedances of State or federal standards for NO_X or particulate matter (PM_{10} and $PM_{2.5}$). ROG emissions must also be evaluated because of their participation in the formation of airborne ozone.

By its nature, air pollution is largely a cumulative impact resulting from emissions generated over a large geographic region. The nonattainment status of regional pollutants is a result of past and present development within the Air Basin, and this regional impact is a cumulative impact. In other words, new development projects (such as the proposed project) within the Air Basin would contribute to this impact only on a cumulative basis. No single project would be sufficient in size, by itself, to result in nonattainment of regional air quality standards. Instead, a project's emissions may be individually limited, but cumulatively considerable when taken in combination with past, present, and future development projects.

The cumulative analysis focuses on whether a specific project would result in cumulatively considerable emissions. According to Section 15064(h)(4) of the CEQA Guidelines, the existence of significant cumulative impacts caused by other projects alone does not constitute substantial evidence that the project's incremental effects would be cumulatively considerable. Rather, the determination of cumulative air quality impacts for construction and operational emissions is based on whether the project would result in regional emissions that exceed the BAAQMD regional thresholds of significance for construction and operations on a project level. The thresholds of significance represent the allowable amount of emissions each project can generate without generating a cumulatively considerable contribution to regional air quality impacts. Therefore, a project that would not exceed the BAAQMD thresholds of significance on the project level would also not be considered to result in a cumulatively considerable contribution to regional air quality impacts.

The project's construction and operational emissions, which include both on- and off-site emissions, are evaluated separately below. Construction and operational emissions generated by the proposed project were estimated using the California Emissions Estimator Model (CalEEMod) version 2016.3.2.

A detailed description of the assumptions used to estimate emissions and the complete CalEEMod output files are contained in Appendix A.

Construction Emissions

During construction, site grading and other earth moving activities would generate fugitive dust (PM_{10} and $PM_{2.5}$). The majority of this fugitive PM dust would remain localized and be deposited near the project site. However, given the earthmoving activities associated with the proposed project and construction activities in general, there is a potential for impacts related to fugitive PM dust unless control measures are implemented to reduce the emissions from this source. Operation of the off-road construction equipment and on-road vehicle trips would also generate exhaust-related criteria air pollutant emissions as discussed in more detail below.

Construction Fugitive Dust PM_{10} and $PM_{2.5}$

The BAAQMD does not recommend a numerical threshold for fugitive PM dust. Instead, the BAAQMD bases the determination of significance for fugitive PM dust on a consideration of the control measures to be implemented. If all appropriate emission control measures recommended by the BAAQMD are implemented for a project, then fugitive PM dust emissions during construction are considered to be properly mitigated and thus less-than-significant. During construction activities, the air pollution control measures, as outlined in MM AIR-1, shall be implemented to reduce fugitive PM dust during construction of the proposed project. With incorporation of this mitigation measure, short-term construction impacts associated with the generation of fugitive PM dust would be less than significant.

Construction Air Pollutant Emissions: ROG, NO_X, Exhaust PM_{10}, and Exhaust $PM_{2.5}$

As previously discussed, CalEEMod version 2016.3.2 was used to estimate the project's construction emissions. CalEEMod provides a consistent platform for estimating construction and operational emissions from a wide variety of land use projects and is the model recommended by the BAAQMD for estimating project emissions. Estimated construction emissions are compared with the applicable thresholds of significance established by the BAAQMD to assess ROG, NO_X, exhaust PM_{10}, and exhaust $PM_{2.5}$ construction emissions to determine significance for this criterion.

For the purpose of this analysis, construction of the proposed project was assumed to begin in April 2021 and conclude in October 2023. The proposed project is anticipated to be built in five phases, with earth-moving activities occurring for the entire site in the first phase. If the construction schedule is delayed and starts later than April 2021, construction emissions would likely decrease because of improvements in emissions and equipment technology, more stringent regulatory requirements, and turnover of older equipment from the fleet. The assumed construction schedule is provided in Table 6.

Table 6: Conceptual Construction Schedule

Construction Activity	Conceptual Construction Schedule		Working Days Per Week	Total Working Days
	Start Date	End Date		
Phase 1: Site Work for the Entire Site Area to be Developed, Paving of Internal Streets/On-street Parking Areas, and Construction Activities Related to the Stormwater Treatment Facility				
Demolition	4/1/2021	4/28/2021	5	20
Site Preparation	4/29/2021	5/12/2021	5	10
Grading	5/13/2021	6/23/2021	5	30
Stormwater Treatment Facility	5/13/2021	9/29/2021	5	100
Paving	6/24/2021	9/29/2021	5	70
Phase 1 Home Construction: Building Construction of Homes 1-21				
Building Construction	9/30/2021	8/3/2022	5	220
Paving	8/4/2022	8/17/2022	5	10
Architectural Coating	8/18/2022	8/31/2022	5	10
Phase 2 Home Construction: Building Construction of Homes 22-42				
Building Construction	4/13/2021	2/14/2022	5	220
Paving	2/15/2022	2/28/2022	5	10
Architectural Coating	3/1/2022	3/14/2022	5	10
Phase 3 Home Construction: Building Construction of Homes 43-63				
Building Construction	10/25/2021	8/26/2022	5	220
Paving	8/27/2022	9/9/2022	5	10
Architectural Coating	9/10/2022	9/23/2022	5	10
Phase 4 Home Construction: Building Construction of Homes 64-84				
Building Construction	5/6/2022	3/9/2023	5	220
Paving	3/10/2023	3/23/2023	5	10
Architectural Coating	3/24/2023	4/6/2023	5	10
Phase 5 Home Construction: Building Construction of Homes 85-105				
Building Construction	11/17/2022	9/20/2023	5	220
Paving	9/21/2023	10/4/2023	5	10
Architectural Coating	10/5/2023	10/18/2023	5	10
Source: Appendix A.				

The CalEEMod default schedule for building construction was extended by 660 days to match the anticipated construction schedule provided by the project applicant. Because the expected schedule and the default schedule differ, the equipment in the building construction phase was adjusted to retain the default horsepower-hours. The duration of construction activity and associated

equipment represent a reasonable approximation of the expected construction fleet as required by CEQA Guidelines. Complete construction assumptions are included in Appendix A.

The calculations of pollutant emissions from the construction equipment account for the type of equipment, horsepower and load factors of the equipment, along with the duration of use. Average daily construction emissions are compared with the significance thresholds in Table 7.

Table 7: Average Daily Construction Emissions (Unmitigated)

Parameter	Air Pollutants			
	ROG	NO_X	PM_{10} (Exhaust)	$PM_{2.5}$ (Exhaust)
Construction Emissions—2021 (tons/year)	0.48	4.43	0.19	0.18
Construction Emissions—2022 (tons/year)	1.25	1.96	0.10	0.09
Construction Emissions—2023 (tons/year)	0.78	0.80	0.04	0.04
Total Construction Emissions (tons/year)	*2.51*	*7.20*	*0.33*	*0.31*
Total Emissions (lbs/year)	5,010	14,404	652	611
Average Daily Emissions (lbs/day)[1]	**7.53**	**21.66**	**0.98**	**0.92**
Significance Threshold (lbs/day)	**54**	**54**	**82**	**54**
Exceeds Significance Threshold?	**No**	**No**	**No**	**No**

Notes:
[1] Calculated by dividing the total number of pounds by the total 665 working days of construction for the duration of construction (2021-2023).
Calculations use unrounded totals. Totals may not sum due to rounding.
lbs = pounds ROG = reactive organic gases NO_X = oxides of nitrogen
PM_{10} = particulate matter 10 microns in diameter
$PM_{2.5}$ = particulate matter 2.5 microns in diameter
Source of thresholds: Bay Area Air Quality Management District (BAAQMD). 2017. California Environmental Quality Act Air Quality Guidelines. May. Website: http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed June 24, 2019.
Source of emissions: CalEEMod Output (see Appendix A).

As shown in Table 7, the construction emissions from all construction activities are below the recommended thresholds of significance; therefore, construction of the proposed project would have a less-than-significant impact with respect to emissions of ROG, NO_X, exhaust PM_{10}, and exhaust $PM_{2.5}$. As previously discussed, the proposed project would implement MM AIR-1, which includes BMPs recommended by the BAAQMD, to reduce potential impacts related to fugitive PM dust emissions from use of the construction equipment. Therefore, project construction would have a less-than-significant cumulative impact after implementation of mitigation.

Operational Emissions

Operational Air Pollutant Emissions: ROG, NO_X, PM_{10}, $PM_{2.5}$

As previously discussed, the pollutants of concern include ROG, NO_X, PM_{10}, and $PM_{2.5}$. The project operational emissions for the respective pollutants were calculated using CalEEMod version 2016.3.2. Operational emissions were estimated for the year 2023, which is the earliest year when all homes could be occupied. The proposed project's long-term operational emissions were compared with the BAAQMD's operational thresholds of significance to evaluate potential impacts. The estimated annual emissions from project operations are presented in Table 8 and maximum daily emissions are presented in Table 9.

Table 8: Annual Operational Emissions (Unmitigated)

Emissions Source	Tons per Year			
	ROG	NO_X	PM_{10}	$PM_{2.5}$
Area	1.21	0.01	0.00	0.00
Energy	0.02	0.14	0.01	0.01
Mobile (Motor Vehicles)	0.31	1.52	0.01	0.01
Estimated Annual Emissions	*1.54*	*1.67*	*0.03*	*0.03*
Existing Annual Emissions[1]	(0.01)	(0.01)	(0.01)	(0.00)
Estimated Net Emissions	**1.53**	**1.65**	**0.02**	**0.03**
Thresholds of Significance	**10**	**10**	**15**	**10**
Exceeds Significance Threshold?	**No**	**No**	**No**	**No**

Notes:
Calculations use unrounded totals. Totals may not sum due to rounding.
[1] Existing emissions from the project site were subtracted from the proposed project's emissions to calculate the net change in long-term operational emissions, which were then compared with the BAAQMD's thresholds of significance.
ROG = reactive organic gases NO_X = oxides of nitrogen
PM_{10} = particulate matter 10 microns or less in diameter
$PM_{2.5}$ = particulate matter 2.5 microns or less in diameter
Source: CalEEMod output (see Appendix A).

Table 9: Daily Operational Emissions (Unmitigated)

Emissions Source	Pounds per Day			
	ROG	NO_X	PM_{10}	$PM_{2.5}$
Area	6.78	0.10	0.05	0.05
Energy	0.09	0.77	0.06	0.06
Mobile (Motor Vehicles)	1.94	8.52	5.63	1.55
Estimated Daily Emissions	*8.81*	*9.39*	*5.74*	*1.66*
Existing Daily Emissions[1]	(0.06)	(0.07)	(0.05)	(0.01)

Table 9 (cont.): Daily Operational Emissions (Unmitigated)

Emissions Source	Pounds per Day			
	ROG	NO_X	PM_{10}	$PM_{2.5}$
Estimated Net Daily Emissions	**8.75**	**9.32**	**5.69**	**1.65**
Thresholds of Significance	**54**	**54**	**82**	**54**
Exceeds Significance Threshold?	**No**	**No**	**No**	**No**

Notes:
Calculations use unrounded totals. Totals may not sum due to rounding.
[1] Existing emissions from the project site were subtracted from the proposed project's emissions to calculate the net change in long-term operational emissions, which were then compared with the BAAQMD's thresholds of significance.
ROG = reactive organic gases NO_X = oxides of nitrogen
PM_{10} = particulate matter 10 microns or less in diameter
$PM_{2.5}$ = particulate matter 2.5 microns or less in diameter
The highest daily project emissions occurred in the winter run for NO_X, PM_{10}, and $PM_{2.5}$. The highest ROG emissions occurred in the summer run.
Calculations use unrounded results.
Source: CalEEMod output (see Appendix A).

As shown in Table 8 and Table 9, the proposed project would not result in operational-related air pollutants or precursors that would exceed the BAAQMD's thresholds of significance, indicating that ongoing project operations would not be considered to have the potential to generate a significant quantity of air pollutants. Therefore, project operations would have a less than significant cumulative impact.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than significant impact with mitigation incorporated. A sensitive receptor is defined by the BAAQMD as the following: "[f]acilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples include schools, hospitals, and residential areas." Existing sensitive receptors located closest to the project site in each direction are listed below.

- Existing multi-family residences spanning the length of the project site's southern boundary. The four residences located immediately east of Fulton Road are the closest off-site sensitive receptors, located approximately 8 feet south of the project site.
- Existing multi-family residences spanning the length of the project site's northern boundary; the closest of these is the multi-family residence located on the southwest corner of Tedeschi Drive and Andre Lane, approximately 20 feet north of the project site.
- A single-family residence located approximately 430 feet west of the project site.
- A single-family residence located approximately 1,330 feet east of the project site.

As a residential development project, the proposed project itself would be considered a sensitive receptor once operational. Most emissions during construction are generated during the site preparation and grading phases when heavy equipment is used to prepare the land for construction. Grading activities and site preparation activities for the West and East Parcels would occur in the first phase of construction and generate the greatest amount of emissions during construction. These grading and site preparation emissions for the West and East Parcels would not overlap with project operation. Earliest home occupancy is expected to occur in August 2022. Therefore, operations and occupancy of the proposed single-family homes could overlap with construction activities that would occur from August 2022 to October 2023, when all intensive site preparation and grading has been completed. Construction activities during this time would primarily include home building, paving, painting, and landscaping. Limited amounts of diesel equipment are used during home construction, which would not contribute substantially to the health risk during construction. Therefore, for the purposes of the Health Risk Assessment (HRA), sensitive receptors associated with future residences were not included as part of the construction HRA.

The following four criteria were applied to determine the significance of project emissions to sensitive receptors:

- **Criterion 1:** Construction of the project would not result in an exceedance of the health risk significance thresholds.
- **Criterion 2:** The cumulative health impact would not result in an exceedance of the cumulative health risk significance thresholds.
- **Criterion 3:** Operation of the project would not result in an exceedance of the health risk significance thresholds.
- **Criterion 4:** A CO hotspot assessment must demonstrate that the project would not result in the development of a CO hotspot that would cause an exceedance of the CO ambient air quality standards.

Criterion 1: Project Construction Toxic Air Pollutants

An assessment was made of the potential health impacts to surrounding sensitive receptors resulting from the proposed project's TAC emissions during construction. A summary of the assessment is provided below, while the detailed assessment is provided Appendix A.

DPM has been identified by the California Air Resources Board (ARB) as a carcinogen. Major sources of DPM include diesel-fueled off-road construction equipment, heavy-duty delivery trucks, and a portion of construction worker vehicles.

Estimation of Construction DPM Emissions

Construction DPM emissions (represented as $PM_{2.5}$ exhaust) were estimated using CalEEMod version 2016.3.2, as described under the discussion for Impact 3(b). The total construction duration was assumed to last approximately 2.5 years. The construction DPM emissions were assumed to be distributed over the project area with a working schedule of 8 hours per day and 5 days per week. Emissions modeled during the 8-hour workday were averaged over the entire day to model a 24-

hour-per-day average emission rate. The adjusted emissions were used to calculate average concentrations throughout the entire construction duration.

Construction exhaust emissions of DPM, prior to the implementation of mitigation, are shown in Table 10.

Table 10: Project DPM Construction Emissions (Unmitigated)

Parameter	On-site DPM(1) (as $PM_{2.5}$ Exhaust) (tons/year)	Off-site DPM(1),(2) (as $PM_{2.5}$ Exhaust) (tons/year)	Total DPM (tons/year)
Total Construction Emissions (Unmitigated)	0.9061	0.0008	0.9069

Notes:
(1) Emissions modeled for 8 hours each day were adjusted using a factor of 3 to correct for an average 24-hour per day exposure period.
(2) The off-site emissions are estimated for four construction vehicle travel routes within approximately 1,000 feet of the project site (each modeled route is between 0.60 mile and 0.71 mile).
Source: Appendix A.

Estimation of Cancer Risks

The California Office of Environmental Health Hazards Assessment (OEHHA) is the lead State agency for the assessment of health risks posed by environmental contaminants.[22] The OEHHA and BAAQMD have developed guidelines for estimating cancer risks that provide adjustment factors that emphasize the increased sensitivities and susceptibility of young children to exposures to TACs.[23,24] These adjustment factors include age-sensitivity weighting factors, age-specific daily breathing rates, and age-specific time-at-home factors. The recommended method for the estimation of cancer risk is shown in the equations below with the cancer risk adjustment factors provided in Table 11 for several types of sensitive/residential receptors (infant, child, and adult).

$$\text{Cancer Risk} = C_{DPM} \times \text{Inhalation Exposure Factor} \qquad \text{(EQ-1)}$$

Where:

Cancer Risk = Total individual excess cancer risk defined as the cancer risk a hypothetical individual faces if exposed to carcinogenic emissions from a particular source for specified exposure durations; this risk is defined as an excess risk because it is above and beyond the background cancer risk to the population; cancer risk is expressed in terms of risk per million exposed individuals.

[22] California Office of Environmental Health Hazard Assessment (OEHHA). 2020. What We Do. Website: https://oehha.ca.gov/about/what-we-do. Accessed January 8, 2020.
[23] Bay Area Air Quality Management District (BAAQMD). 2016. Air Toxics NSR [New Source Review] Program Health Risk Assessment (HRA) Guidelines. Website: http://www.baaqmd.gov/~/media/files/planning-and-research/rules-and-regs/workshops/2016/reg-2-5/hra-guidelines_clean_jan_2016-pdf.pdf?la=en. Accessed December 10, 2019.
[24] Office of Environmental Health Hazard Assessment (OEHHA). 2015. Air Toxics Hot Spots Project Risk Assessment Guidelines: The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. February. Website: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf. Accessed December 10, 2019.

C_{DPM} = Period average DPM air concentration calculated from the air dispersion model in $\mu g/m^3$

Inhalation is the most important exposure pathway to impact human health from DPM and the inhalation exposure factor is defined as follows:

Inhalation Exposure Factor = CPF x EF x ED x DBR x AAF/AT (EQ-2)

Where:

CPF = Inhalation cancer potency factor for the TAC: 1.1 (mg/kg-day)-1 for DPM
EF = Exposure Frequency (days/year)
ED = Exposure Duration (years of construction)
AAF = set of age-specific adjustment factors that include age sensitivity factors (ASF), daily breathing rate (DBR), and time at home factors (TAH)—see Table 11.
AT = Averaging time period over which exposure is averaged (days)

The OEHHA-recommended values for the various cancer risk parameters, shown in EQ-2, above, are provided in Table 11.

Table 11: Exposure Assumptions for Cancer Risk

Receptor Type	Exposure Frequency		Exposure Duration (years)	Age Sensitivity Factors (ASF)	Time at Home Factor (TAH) (%)	Daily Breathing Rate (DBR) [(1)] (L/kg-day)
	Hours/day	Days/year				
Sensitive/Residential—Infant						
3rd Trimester	24	350	0.25	10	85	361
0 to <1 year	24	350	1.00	10	85	1,090
1 to <2 years	24	350	1.00	10	85	1,090
2 to <3 years	24	350	0.30	3	72	631
Sensitive Receptor—Child						
3 to 16 years	24	350	2.55	3	72	572
Sensitive Receptor—Adult						
> 16 years	24	350	2.55	1	73	261

Notes:
(1) The daily breathing rates recommended by the BAAQMD for sensitive/residential receptors assume the 95th percentile breathing rates for all individuals less than 2 years of age and 80th percentile breathing rates for all older individuals.
(L/kg-day) = liters per kilogram body weight per day
Sources: Appendix A.
Bay Area Air Quality Management District (BAAQMD). 2016. Air Toxics NSR [New Source Review] Program Health Risk Assessment (HRA) Guidelines. Website: http://www.baaqmd.gov/~/media/files/planning-and-research/rules-and-regs/workshops/2016/reg-2-5/hra-guidelines_clean_jan_2016-pdf.pdf?la=en. Accessed December 10, 2019.
Office of Environmental Health Hazard Assessment (OEHHA). 2015. Air Toxics Hot Spots Project Risk Assessment Guidelines: The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. February. Website: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf. Accessed December 10, 2019.

Estimation of Non-cancer Chronic Hazards

An evaluation of the potential non-cancer effects of chronic chemical exposures was also conducted. Adverse health effects are evaluated by comparing the annual receptor concentration of each chemical compound with the appropriate Reference Exposure Level (REL). Available RELs promulgated by the OEHHA were used for the assessment.

Risk characterization for non-cancer health hazards from TACs is expressed as a hazard index. The Hazard Index is a ratio of the predicted concentration of the project's emissions to a concentration considered acceptable to public health professionals (i.e., REL).

The hazard index assumes that chronic sub-threshold exposures adversely affect a specific organ or organ system (toxicological endpoint). For each discrete chemical exposure, target organs presented in regulatory guidance were used. To calculate the hazard index, each chemical concentration or dose is divided by the appropriate toxicity reference exposure level. For compounds affecting the same toxicological endpoint, this ratio is summed. Where the total equals or exceeds 1, a health hazard is presumed to exist. For purposes of this assessment, the TAC of concern is DPM for which the OEHHA has defined a reference exposure limit for DPM of 5 micrograms per cubic meter ($\mu g/m^3$). The principal toxicological endpoint assumed in this assessment was through inhalation.

Estimation of Health Risks and Hazards from Project Construction

The estimated health and hazard impacts from construction emissions at the Maximum Impacted Sensitive Receptor (MIR) are provided in Table 12. The estimates shown in Table 12 and Table 13 include application of BMPs recommended by the BAAQMD, as required by MM AIR-1. It should be noted that inclusion of MM AIR-1 only reduces $PM_{2.5}$ total and not $PM_{2.5}$ exhaust.

Table 12: Project Construction Health Risks and Hazards (Unmitigated)

Health Impact Metric	Cancer Risk (risk per million)	Chronic Non-Cancer Hazard Index[(1)]	Annual $PM_{2.5}$ Concentration ($\mu g/m^3$)
Risks and Hazards at the MIR: Infant[(2)]	34.03	0.023	0.133
Risks and Hazards at the MIR: Child[(2)]	7.57	0.023	0.133
Risks and Hazards at the MIR: Adult[(2)]	0.84	0.023	0.133
BAAQMD Significance Threshold	**10.0**	**1.0**	**0.3**
Exceeds Individual Source Threshold?	**Yes**	**No**	**No**

Notes:
MIR = Maximum Impacted Sensitive Receptor
1 Chronic non-cancer hazard index was estimated by dividing the annual average DPM concentration (as $PM_{2.5}$ exhaust) by the REL of 5 $\mu g/m^3$
2 The MIR is a single-family home located approximately 26 feet north of the project site, on the south side of Tedeschi Drive. The MIR is the discrete point where pollutant concentrations were the highest out of all the modeled sensitive receptors. Therefore, the MIR is not necessarily the closest sensitive receptor to the project site. .
Source: Appendix A.

As shown in Table 12, construction of the proposed project would exceed the applicable BAAQMD thresholds for one of the three health impact metrics prior to the application of mitigation beyond that required by MM AIR-1. Specifically, the DPM concentration during construction of the proposed project would exceed the applicable cancer risk significance threshold at the MIR for the infant scenario. This would represent a potentially significant construction TAC exposure impact. Therefore, additional mitigation is required to reduce the impact during the construction period.

MM AIR-2 requires the project applicant and/or construction contractor to provide documentation to the City of Santa Rosa that all off-road diesel-powered construction equipment greater than 50 horsepower meets EPA or ARB Tier IV Final off-road emissions standards. Table 13 shows the health risks and non-cancer hazard index for construction with implementation of Tier IV Final mitigation, as required by MM AIR-2.

Table 13: Project Construction Health Risks and Hazards (Mitigated)

Health Impact Metric	Cancer Risk (risk per million)	Chronic Non-Cancer Hazard Index(1)	Annual $PM_{2.5}$ Concentration ($\mu g/m^3$)
Risks and Hazards at the MIR: Infant(2)	9.03	0.006	0.031
Risks and Hazards at the MIR: Child(2)	2.01	0.006	0.031
Risks and Hazards at the MIR: Adult(2)	0.22	0.006	0.031
BAAQMD Significance Threshold	**10.0**	**1.0**	**0.3**
Exceeds Individual Source Threshold?	**No**	**No**	**No**

Notes:
MIR = maximum impacted sensitive receptor
1 Chronic non-cancer hazard index was estimated by dividing the annual average DPM concentration (as $PM_{2.5}$ exhaust) by the REL of 5 $\mu g/m^3$.
2 The MIR is a single-family home located approximately 26 feet north of the project site, on the south side of Tedeschi Drive .
Source: Appendix A.

As noted in Table 13, the project's construction-related health risks would not exceed any applicable BAAQMD significance threshold after the incorporation of MM AIR-1 and MM AIR-2; therefore, project-related emissions would not result in significant health impacts to nearby sensitive receptors during construction.

Criterion 2: Cumulative Health Risk Assessment

The BAAQMD recommends assessing the potential cumulative impacts from sources of TACs within 1,000 feet of a project. For a project-level analysis, the BAAQMD provides three tools for use in screening potential sources of TACs. These tools are:

- **Surface Street Screening Tables.** The BAAQMD pre-calculated potential cancer risks and $PM_{2.5}$ concentration increases for each county within their jurisdiction for roadways that meet BAAQMD "major roadway" criteria of 10,000 vehicles or 1,000 trucks per day. Risks are

assessed by roadway volume, roadway direction, and distance to sensitive receptors.[25] Fulton Road, located adjacent to the project site, is considered a major roadway.[26]

- **Freeway Screening Analysis Tool**. The BAAQMD prepared a Google Earth file that contains pre-estimated cancer risk, hazard index, and $PM_{2.5}$ concentration increases for highways within the Bay Area. Risks are provided by roadway link and are estimated based on direction and distance to the sensitive receptor. There are no freeways located within 1,000 feet of the project site.[27]
- **Stationary Source Risk and Hazard Screening Tools**. The BAAQMD prepared a Google Earth file that contains the locations of all stationary sources within the Bay Area that have BAAQMD operating permits.[28] The BAAQMD has also prepared a Geographic Information System (GIS) tool with the location of permitted sources, which has been updated more recently than the previously mentioned Google Earth tool.[29] For each emissions source, the BAAQMD provides conservative estimates of cancer risk, non-cancer hazards, and $PM_{2.5}$ concentrations. Using information from both the Google Earth file and the GIS tool, there are no existing stationary sources located within approximately 1,000 feet of the project site.

Cumulative Health Risk Assessment at the Maximum Impacted Receptor

A cumulative HRA was performed that examined the cumulative impacts of the project's construction emissions and sources of TAC emissions within 1,000 feet of the project. Based on the analysis presented within this impact analysis (Impact 3(c)), Criterion 1, the MIR was determined to be a single-family home located approximately 26 feet north of the project site, on the south side of Tedeschi Drive (see Table 12 and Table 13). Therefore, the cumulative health impacts on this maximally impacted receptor (from project construction) were estimated.

The cumulative health risk results are summarized at the MIR during project construction in Table 14.

Table 14: Summary of the Cumulative Health Impacts at the Maximum Impacted Receptor during Construction

Source	Source Type	Distance from MIR(1) (feet)	Cancer Risk (per million)	Chronic HI	$PM_{2.5}$ Concentration ($\mu g/m^3$)
Project					
Construction (Unmitigated)	Diesel Construction Equipment	26	34.03	0.023	0.133

[25] Bay Area Air Quality Management District (BAAQMD). 2015. Roadway Screening Analysis Calculator. Website: http://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/ceqa-tools. Accessed November 11, 2019.
[26] County of Sonoma. 2019. Traffic Surveys. Website: https://sonomacounty.ca.gov/TPW/Roads/Services/Traffic-Engineering/Traffic-Surveys/. Accessed December 2, 2019.
[27] Bay Area Air Quality Management District (BAAQMD). 2011. Highway Screening-Analysis Tool—Sonoma County. April 28. Website: http://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/ceqa-tools. Accessed November 11, 2019.
[28] Bay Area Air Quality Management District (BAAQMD). 2012. Stationary Source Screening Analysis Tool—Marin_Sonoma_2012. Website: http://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/ceqa-tools. Accessed November 11, 2019.
[29] Bay Area Air Quality Management District (BAAQMD). 2017. Permitted Stationary Sources Risk and Hazards. Permitted Stationary Sources Risk and Hazards. Website: https://baaqmd.maps.arcgis.com/apps/webappviewer/index.html?id=2387ae674013413f987b1071715daa65. Accessed November 11, 2019.

Table 14 (cont.): Summary of the Cumulative Health Impacts at the Maximum Impacted Receptor during Construction

Source	Source Type	Distance from MIR[1] (feet)	Cancer Risk (per million)	Chronic HI	$PM_{2.5}$ Concentration ($\mu g/m^3$)
Construction (Mitigated)	Diesel Construction Equipment	26	9.03	0.006	0.031
Existing Roadways					
Local Road[2]	Fulton Road	10	23.98	N/A	0.453
Cumulative Health Risks from Project Construction and Existing TAC Sources					
Cumulative Total with Project Construction (Unmitigated)			**58.01**	**0.023**	**0.586**
BAAQMD's Cumulative Thresholds of Significance			**100**	**10**	**0.8**
Threshold Exceedance?			**No**	**No**	**No**

Notes:
[1] The maximum impacted sensitive receptor is a single-family home located approximately 26 feet north of the project site, on the south side of Tedeschi Drive.
[2] The cancer risk calculated estimated using the BAAQMD Roadway Screening Analysis Calculator was adjusted by a correction factor of 1.3744 to incorporate the latest OEHHA guidance. Source of 1.3744 correction factor: BAAQMD recommendation confirmed through personal communication with BAAQMD Environmental Planner, Areana Flores, on January 8, 2020.
BAAQMD = Bay Area Air Quality Management District
MIR = maximum impacted receptor
N/A = not available
Source: Appendix A.

As noted in Table 14, the cumulative impacts from the project construction and existing sources of TACs would be less than the BAAQMD's cumulative thresholds of significance. Thus, the cumulative health risk impacts from project construction would be less than significant.

Cumulative HRA at the Project Site During Operations

The project would locate new sensitive receptors (residents) that could be subject to existing sources of TACs at the project site. However, the California Supreme Court concluded in *California Building Industry Association v. BAAQMD* that agencies subject to CEQA are not required to analyze the impact of existing environmental conditions on a project's future users or residents. Although impacts from existing sources of TAC emissions on sensitive receptors on the project site are not subject to CEQA, the BAAQMD recommends assessing the potential cumulative impacts from sources of TACs within 1,000 feet of a project when siting new sensitive land uses. Therefore, for informational purposes and in the spirit of CEQA's full disclosure, the potential TAC risks to the project's future residents were analyzed. The BAAQMD's various screening tools, which quantify health risks from existing stationary and permitted sources, were used to estimate the health risks (associated with TAC sources within 1,000 feet of the project site) on future residents within the proposed project.

The cumulative health risk results are summarized at project buildout in Table 15.

Table 15: Summary of the Health Impacts at the Project Site during Project Operations

Source	Source Name/Source Type	Distance from Project Site (feet)	Cancer Risk (per million)	Chronic Hazard Index	$PM_{2.5}$ Concentration ($\mu g/m^3$)
Existing Roadways					
Local Road[(1)]	Fulton Road	10	23.98	N/A	0.453
Project-level Health Risks					
Maximum Individual Source			**23.98**	**0.0**	**0.453**
BAAQMD Project-level Thresholds of Significance			**10**	**1**	**0.3**
Threshold Exceedance?			**Yes**	**No**	**No**
Cumulative Health Risks					
Cumulative Total			**23.98**	**0.0**	**0.453**
BAAQMD Cumulative Thresholds of Significance			**100**	**10**	**0.8**
Threshold Exceedance?			**No**	**No**	**No**

Notes:
(1) The cancer risk calculated estimated using the BAAQMD Roadway Screening Analysis Calculator was adjusted by a correction factor of 1.3744 to incorporate the latest OEHHA guidance. Source of 1.3744 correction factor: BAAQMD recommendation confirmed through personal communication with BAAQMD Environmental Planner, Areana Flores, on January 8, 2020.
BAAQMD = Bay Area Air Quality Management District
N/A = not available
Source: Appendix A.

As shown in Table 15, the cumulative health impacts to the future on-site residents from existing TAC emission sources located within 1,000 feet of the project would not exceed the BAAQMD's cumulative health significance thresholds; however, TACs from a single source (Fulton Road) would exceed the BAAQMD's project-level health significance thresholds. As previously discussed, this analysis was included for informational purposes.

Criterion 3: Project-Specific Operation Toxic Air Pollutants

The proposed project would develop 105 single-family residences and would not generate substantial on-site TAC emissions during operation. Residential land uses are not land uses that are typically associated with TAC emissions and the proposed project does not include any features that would include more than usual TAC emission. As described in the TIS, the project is expected to generate a net increase of 1,124 daily vehicle trips per.[30] The proposed project would primarily generate trips associated with residents, visitors, employees, and customers traveling to and from the project site. The daily travel trips to and from the project site would primarily be generated by passenger vehicles. Because nearly all passenger vehicles are gasoline-combusted, the proposed project would not

[30] Bay Area Air Quality Management District (BAAQMD). 2017. Permitted Stationary Sources Risk and Hazards. Permitted Stationary Sources Risk and Hazards. Website: https://baaqmd.maps.arcgis.com/apps/webappviewer/index.html?id=2387ae674013413f987b1071715daa65. Accessed November 11, 2019.

generate significant amount of DPM emissions during operation. Therefore, the proposed project would not result in significant health impacts to nearby sensitive receptors during operation.

Criterion 4: CO Hotspot

Localized high levels of CO (CO hotspot) are associated with traffic congestion and idling or slow-moving vehicles. The BAAQMD recommends a screening analysis to determine if a project's operation has the potential to contribute to a CO hotspot. The screening criteria identify when site-specific CO dispersion modeling is not necessary. The project would result in a less than significant impact to air quality for local CO if the following screening criteria are met:

- **Screening Criterion 1**: The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans.
- **Screening Criterion 2:** The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
- **Screening Criterion 3:** The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

The project-specific TIS identified peak-hour traffic volumes for nine intersections affected by the project. [31] As discussed above, the proposed project is consistent with the existing zoning and General Plan land use designations and therefore is not anticipated to generate trip volumes or land use types that the existing roadway network or applicable congestion management plan has not accounted for. As identified in the TIS, the maximum peak-hour intersection volume would occur at the Fulton Road/San Miguel Road intersection in the Baseline Plus Project scenario during the PM peak-hour. The estimated volume at the Fulton Road/San Miguel Road intersection under this scenario is 3,116 PM peak-hour trips. This level of peak-hour trips is substantially less than BAAQMD's second and third screening criteria of 44,000 vehicles per hour and 24,000 vehicles per hour respectively. Lastly, the proposed project would not be located in a vertically- or horizontally-limited mixing zone. The proposed project would not result in an increase of traffic volumes at affected intersections to more than 44,000 vehicles per hour and would not increase traffic volumes at affected intersections to more than 24,000 where vertical or horizontal mixing is substantially limited; accordingly, the proposed project is consistent with the screening criteria. The proposed project's impact related to air quality for local CO emissions would be less than significant.

d) Result in other emission (such as those leading to odors) adversely affecting a substantial number of people?

Less than significant impact. As stated in the BAAQMD 2017 Air Quality Guidelines, odors are generally regarded as an annoyance rather than a health hazard and the ability to detect odors varies considerably among the populations and overall is subjective.

[31] W-Trans. 2019. Traffic Impact Study for 2220 Fulton Road Project. October 22.

Odors can cause a variety of responses. The impact of an odor often results from interacting factors such as frequency (how often), intensity (strength), duration (time), offensiveness (unpleasantness), location, and sensory perception. Two circumstances have the potential to cause odor impacts:

1) A source of odors is proposed to be located near existing or planned receptors; or
2) A receptor land use is proposed near an existing or planned source of odor.

The BAAQMD does not have a recommended odor threshold for construction activities. However, the BAAQMD recommends screening criteria that are based on distance between types of sources known to generate odor and the receptor. For projects within the screening distances, the BAAQMD has the following threshold for project operations:

> An odor source with five (5) or more confirmed complaints per year averaged over three years is considered to have a significant impact on receptors within the screening distance shown in Table 3-3 [of the BAAQMD's CEQA Guidelines].

Projects that would site an odor source or a receptor farther than the applicable screening distance, shown in Table 16 below, would not likely result in a significant odor impact.

Table 16: Odor Screening Distances

Land Use/Type of Operation	Project Screening Distance
Wastewater Treatment Plant	2 miles
Wastewater Pumping Facilities	1 mile
Sanitary Landfill	2 miles
Transfer Station	1 mile
Composting Facility	1 mile
Petroleum Refinery	2 miles
Asphalt Batch Plant	2 miles
Chemical Manufacturing	2 miles
Fiberglass Manufacturing	1 mile
Painting/Coating Operations	1 mile
Rendering Plant	2 miles
Coffee Roaster	1 mile
Food Processing Facility	1 mile
Confined Animal Facility/Feed Lot/Dairy	1 mile
Green Waste and Recycling Operations	1 mile
Source: BAAQMD 2017.	

Project Construction

Diesel exhaust and VOCs would be emitted during construction of the proposed project, which are objectionable to some; however, emissions would disperse rapidly from the project site and therefore would not create objectionable odors affecting a substantial number of people. As such, construction odor impacts would be less than significant.

Project Operation

Project as an Odor Generator

Land uses typically associated with odors include wastewater treatment facilities, waste-disposal facilities, or agricultural operations. The project involves the construction and operation of a single-family residential development and does not contain land uses typically associated with objectionable odors. During operation of the project, odors would primarily consist of vehicles traveling to and from the site. These occurrences would not produce significant odors; therefore, operational impacts would be less than significant.

Project as a Sensitive Receptor

The project involves the construction and operation of a single-family residential development and would have the potential to place sensitive receptors (residents) near existing or planned sources of odors during project operations. The project site is not located within the vicinity of agricultural operations (e.g., dairies, feedlots, etc.), landfills, asphalt batch plants, chemical manufacturing, or recycling centers; however, the project site is located within the project screening distances for one potential source of odor, as defined in Table 16. A public records request (No. 2019-09-0301) was filed with the BAAQMD to obtain the most recent 3-year odor complaint history for the potential odor generators within the vicinity of the project site; the information obtained from the public records request is summarized in Table 17.

Table 17: Summary of Odor Complaint Records

Name of Facility	Location	Land Use/Type of Operation	Number of Complaints Over Most Recent 3-year Period[1]	Average Number of Complaints per Year	Distance from the Project Site
Pagnano's Automotive	2815 Alton Lane, Santa Rosa, CA 95403	Painting/Coating Operations	0	0	0.54 mile west of the project site

Note:
[1] August 2016–September 2019

Based on the responses from the BAAQMD, there are no land uses within the screening distances shown in Table 3-3 of the BAAQMD's guidance that have received five or more confirmed complaints per year for any recent 3-year period. For the facility outlined in Table 17, there are existing residential uses located closer to this facility than the proposed project. Therefore, the uses in the vicinity of the project would not cause substantial odor impacts to the project. The proposed project would not place odor sensitive receptors near an existing or planned source of odor affecting a substantial number of people. Therefore, operational odor impacts in terms of the project site as an odor sensitive receptor would be less than significant.

Mitigation Measures

MM AIR-1 During construction activities, the following Best Management Practices (BMPs) shall be implemented:

- Exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.
- All roadways, driveways, and sidewalks shall be paved as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- A publicly visible sign shall be posted with the telephone number and person to contact at the City regarding dust complaints. This person shall respond and take corrective action within 48 hours of a complaint or issue notification. The Bay Area Air Quality Management District (BAAQMD) phone number shall also be visible to ensure compliance with applicable regulations.

MM AIR-2 During construction activities, all off-road equipment with engines greater than 50 horsepower shall meet either the United States Environmental Protection Agency (EPA) or California Air Resources Board (ARB) Tier IV Final off-road emission standards. The construction contractor shall maintain records concerning its efforts to comply with this requirement, including equipment lists. Off-road equipment descriptions and information may include but are not limited to equipment type, equipment manufacturer, equipment identification number, engine model year, engine certification (Tier rating), horsepower, and engine serial number.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
4. Biological Resources *Would the project:*				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?	☐	☒	☐	☐

Environmental Evaluation

Setting

This section evaluates potential effects on biological resources that may result from project implementation. The analysis is based on the following reference materials provided in Appendix B:

- Site specific Biological Resources Analysis (BRA) prepared on February 25, 2020, by Monk & Associates, Inc.
- USACE Jurisdictional Delineation Verification Letter, dated March 9, 2016.

- USACE Waters of the State Jurisdictional Wetland Delineation Map, dated March 7, 2016.
- Tree Preservation and Mitigation Report prepared on May 9, 2019, by John C. Meserve at Horticultural Associates.
- Results from the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) and California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California database searches.

Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less than significant impact with mitigation incorporated. For the purpose of this analysis, special-status species are plants and animals that are legally protected under the California and Federal Endangered Species Acts (CESA and FESA, respectively) or other regulations, and species that are considered rare by the scientific community (for example, the CNPS). Special-status species are defined as:

- Plants and animals that are listed or proposed for listing as threatened or endangered under the CESA (Fish and Game Code § 2050 *et seq*.; 14 California Code of Regulations [CCR] § 670.1 et seq.) or the FESA (50 Code of Federal Regulations [CFR] 17.12 for plants; 50 CFR 17.11 for animals; various notices in the Federal Register [FR] for proposed species);
- Plants and animals that are candidates for possible future listing as threatened or endangered under the FESA (50 CFR 17; FR Vol. 64, No. 205, pages 57533-57547, October 25, 1999); and under the CESA (California Fish and Game Code § 2068);
- Plants and animals that meet the definition of endangered, rare, or threatened under CEQA (14 CCR § 15380) that may include species not found on either State or Federal Endangered Species lists;
- Plants occurring on Ranks 1A, 1B, 2A, 2B, 3, and 4 of CNPS Electronic Inventory (CNPS).[32] The CDFW recognizes that Ranks 1A, 1B, 2A and 2B of the CNPS inventory contain plants that, in the majority of cases, would qualify for State listing, and CDFW requests their inclusion in Environmental Impact Reports (EIRs). Plants occurring on CNPS Ranks 3 and 4 are "plants about which more information is necessary," and "plants of limited distribution," respectively.[33] Such plants may be included as special-status species on a case by case basis due to local significance or recent biological information; under the CEQA review process only CNPS Rank 1 and 2 species are considered since these are the only CNPS species that meet CEQA's definition of "rare" or "endangered." Impacts to Rank 3 and 4 species are not regarded as significant pursuant to CEQA;

[32] CNPS (California Native Plant Society). 2001. Inventory of rare and endangered plants of California (sixth editions). Rare plant scientific advisory committee, David P. Tibor, convening editor, California Native Plant Society. Sacramento, CA. X+338 pps.
[33] Ibid.

- Migratory nongame birds of management concern listed by United States Fish and Wildlife Service (USFWS) (Migratory Nongame Birds of Management Concern in the United States: The list 1995; Office of Migratory Bird Management; Washington D.C.; Sept. 1995);
- Animals that are designated as "species of special concern" by CDFW (2019);
- Animal species that are “fully protected” in California (Fish and Game Codes 3511, 4700, 5050, and 5515), and
- Bat species that are designated on the Western Bat Working Group’s (WBWG) Regional Bat Species Priority Matrix as: “RED OR HIGH.” This priority is justified by the WBWG as follows:

> “Based on available information on distribution, status, ecology, and known threats, this designation should result in these bat species being considered the highest priority for funding, planning, and conservation actions. Information about status and threats to most species could result in effective conservation actions being implemented should a commitment to management exist. These species are imperiled or are at high risk of imperilment.”

The project site is relatively flat, except for where depressional wetland habitat is present. The habitat on the project site is upland annual grasslands and seasonal wetlands. The western portions of the project site contain characteristics of land that has been developed or disturbed in several areas, including existing occupied buildings, impervious gravel parking areas, previous agricultural activity, and disturbed soils. Much of the project site is covered by a series of seasonal wetlands, which extend into the Woodbridge Reserve parcel northeast of the project site (Exhibit 3). The remainder of vegetation found on the project site consists of upland annual grasslands, dominated by non-native grasses. A number of ornamental trees, and fruit and nut trees can be found scattered around the project site mostly along the western and eastern edges of the site. Two special-status plant species and one special-status wildlife species were evaluated for their potential to occur on the project site, based on their ecology and regional occurrences within USGS *Sebastopol, California* 7.5-minute quadrangle, as discussed below.

Special-status Plant Species

A plant’s potential to occur on the project site was based on presence of suitable habitats, soil types, and occurrences recorded by the CNPS’ Inventory of Rare and Endangered Plants of California or CNDDB within the Sebastopol quadrangle, and as recorded in the BRA.[34] Forty special-status plant species have been recorded with potential to occur within the project site based on the CNDDB and CNPS *Inventory of Rare and Endangered Plants of California* database searches, but because of previous development and current disturbances at the project site, most of these species are unlikely to occur.

The wetlands in the East Parcel are dominated by native plant species such as California semaphore grass (*Pleuropogon californicus*), meadow barley (*Hordeum brachyantherum*), smooth goldfields

[34] Monk & Associates Environmental Consultants. 2020. Biological Resources Analysis, 2220 Fulton Road, City of Santa Rosa, California. Walnut Creek, CA. February 25.

(*Lasthenia glaberrima*), and coyote thistle (*Eryngium aristulatum*). Non-native wetland species also occur such as curly dock (*Rumex crispus*), pennyroyal (*Mentha pulegium*), and Italian rye grass (*Festuca perennis*). The upland grasslands on the West Parcel are dominated by non-native plant species such as slender oats (*Avena barbata*), hare barley (*Hordeum murinum* ssp. *leporinum*), subterranean clover (*Trifolium subterraneum*), vernal grass (*Anthoxanthum aristatum*), perennial ryegrass, six-weeks fescue (*Festuca bromoides*), soft chess (*Bromus hordeaceus*), shamrock clover (*Trifolium dubium*), and several species of vetch (*Vicia* sp.).

The project site has undergone multiple years of special-status plant surveys exceeding USACE, CDFW, and United States Fish and Wildlife Service (USFWS) policies that require 2 years of special-status plant surveys in the Santa Rosa Plain prior to the time a project is permitted to impact seasonal wetlands. Special-status plant surveys were conducted by Laurence P. Stromberg, PhD in 2015, 2016, 2017, and 2019. Monk & Associates Biologists also conducted special-status plant surveys on the project site in 2019.

Only two special-status plants were identified on the project site during all years of special-status plant surveys: Burke's goldfields and Lobb's buttercup. Burke's goldfields, a federal and state listed endangered plant species, is discussed below. Lobb's buttercup is only a CNPS Rank 4 plant without a CESA or FESA status. CNPS Rank 4 plants are not protected pursuant to CEQA and this plant is not discussed further.

Burke's Goldfields

A small number of Burke's goldfields were found in isolated pools within the proposed East Parcel (Exhibit 8). Burke's goldfield is a federally- and State-listed endangered species that is protected under FESA and CESA, respectively.

Wetlands where Burke's goldfields occur within the proposed East Parcel are hydrologically isolated from the seasonal wetlands on the western portion of the project site by a naturally occurring watershed break. The residential subdivision component (the West Parcel) of the proposed project would occur in a separate micro-watershed than the proposed East Parcel to avoid impacting endangered plants. Because the Burke's goldfield colonies (consisting of 0.484 acre) only occur within the proposed East Parcel and because these pools would not be directly impacted by proposed wetland enhancement/creation in the East Parcel (as described in the Project Description), there would be no direct project impacts to occupied Burke's goldfield pools. Rather, wetlands that would be impacted (by both development and wetland enhancement) are regarded as impacting "suitable" vernal pool (rare plant) habitat.

Approximately 2.65 acres of "suitable" vernal pool (rare plant) habitat would be impacted by the proposed project (2.52 acres would be permanently filled to facilitate housing construction on the West Parcel and 0.13-acre would be permanently filled on the East Parcel to enhance the functions and services of wetlands within the East Parcel). As detailed in the USFWS's *Programmatic Biological Opinion for U.S. Army Corps of Engineers Permitted Projects that Affect the California Tiger Salamander and Three Endangered Plant Species on the Santa Rosa Plain, California,* projects are required to mitigate impacts to suitable vernal pool habitat via preservation of vernal pool habitats. This impact would be mitigated to a less than significant level based on proposed wetlands

preservation/restoration, creation, and enhancement as detailed in the Project Description. In pre-application meetings with the USFWS and CDFW, these agencies agreed that the proposed mitigation plan for the proposed project meets their criteria for Burke's goldfields mitigation on the Santa Rosa Plain. Pursuant to MM BIO-1a, a mitigation compliance report shall be submitted to the City planning staff or staff Biologist at least 30 days prior to breaking ground.

The plan to create and enhance Burke's goldfields habitat would require collection of seeds from a property or properties that support healthy donor colonies of Burke's goldfields. The CDFW owns Woodbridge Reserve and will own the Alton Lane Mitigation Site in the near future. Since seeds are proposed to be collected in spring of 2021 for use in the East Parcel, the CDFW would have to permit collection of Burke's goldfield seeds from one of these sites, or other site(s) designated by the CDFW. Harvesting seeds, if carefully executed, would not result in significant impacts to donor populations. As detailed in MM BIO-1a, the project applicant would apply to the CDFW for an Incidental Take Permit pursuant to Section 2081 of the California Fish and Game Code. Wetland enhancement and creation in the East Parcel is expected to increase seasonal wetland functions and values. The proposed project's establishment of a new Burke's goldfields preserve would increase the Santa Rosa Plain population of Burke's goldfields, in keeping with the 2016 USFWS Recovery Plan for the Santa Rosa Plain[35] and CDFW's objectives for promotion of endangered vernal pool plants on the Santa Rosa Plain. None of the sparse occurrences of Burke's goldfields in the East Parcel would be impacted during enhancement of wetlands within the East Parcel.

Special-status Wildlife Species

Because of the disturbed nature of the project site and previous agricultural uses coupled with an absence of suitable habitat, few special-status wildlife species have the potential to occur within the project site boundaries. No special-status animals have ever been mapped on or adjacent to the project site. According to CDFW CNDDB records, a total of three special-status animal species are known to occur in the region of the project site. Two of these species, the western pond turtle (*Actinemys marmorata*) and the Coho salmon (*Oncorhynchus kisutch*), do not have the potential to occur on the project site because of an absence of stream channels, drainages, or other permanent aquatic habitat. As such, only California tiger salamander (*Ambystoma californiense*) was evaluated for potential to occur on the project site. This species is discussed below.

California Tiger Salamander

The project site falls within the known range of the Sonoma County Distinct Population Segment (DPS) of the California tiger salamander. This DPS is federally listed as endangered and State-listed as threatened and therefore is protected pursuant to FESA and CESA, respectively. The project site also lies within USFWS designated Critical Habitat for this species. While the USFWS does not require mitigation for impacts to Critical Habitat, the USFWS must consider whether impacts to Critical Habitat would preclude recovery of the species prior to the time it can authorize Incidental Take for proposed projects.[36]

[35] United States Fish and Wildlife Service (USFWS). 2016. Recovery Plan for the Santa Rosa Plain. Website: https://www.amphibians.org/wp-content/uploads/2019/04/USFWS-Recovery-Plan-for-the-Santa-Rosa-Plain.pdf. Accessed January 21, 2020.

[36] G. Monk personal communication with J. Hanni of the USFWS, October 2019.

Migration/Dispersal Habitat

The closest known record of breeding California tiger salamanders to the project site is at the Alton Lane Mitigation Site located approximately 2,230 feet west and on the other side of Fulton Road (Exhibit 10). The USFWS's 2007 *Programmatic Biological Opinion* for the Santa Rosa Plain requires a 1:1 mitigation ratio for a project that is greater than 2,200 feet and within 1.3 miles of a known California tiger salamander breeding site. Thus, the proposed project would result in a potentially significant impact to California tiger salamander dispersal/migration habitat.

Breeding and Over-Summering Habitat

Based upon the multitude of California tiger salamander studies conducted over many years on properties immediately adjacent to or near the project site, all with negative findings, and the absence of CNDDB records for California tiger salamander east of Fulton Road and north of Santa Rosa Creek, Monk & Associates concluded that project implementation is unlikely to result in any impacts to California tiger salamander, either to occupied habitat or to individual California tiger salamanders,[37] and there is no expectation that the proposed project would result in "take" of California tiger salamander. However, the CDFW requested that a full "Protocol" California tiger salamander study be completed pursuant to the "*Interim guidance on-site assessment and field surveys for determining presence or a negative finding of the California tiger salamander.*"[38] A Protocol California tiger salamander study includes an upland survey (aka "winter pitfall trapping study") and two spring larval breeding pool surveys to prove absence of California tiger salamander on a project site.

One year of spring larval surveys was completed in spring 2019 on the project site per protocol and was negative for California tiger salamander larvae. The winter pitfall trapping study was initiated in October 2019 and was completed on March 15, 2020 per protocol. The upland drift fence survey had negative findings (that is, no adult or juvenile California tiger salamanders were identified on the project site) after greater than 30 survey nights (in comparison, the Alton Lane Mitigation Site drift fence/pitfall trapping array, which is only 2,230 feet northwest of the project site, captured over 790 California tiger salamanders during the same survey period (D. Cook, pers. comm. with G. Monk).[39] The second larval survey will be complete by May 15, 2020. The completion of the Protocol California tiger salamander study will provide data that will either support or refute a conclusion that California tiger salamander are unlikely to occur on the project site. Until the Protocol California tiger salamander study is complete and California tiger salamander has been determined conclusively to be absent, impacts to California tiger salamander are regarded as potentially significant. If California tiger salamanders are found during the course of the surveys, pursuant to MM BIO-1b, the project applicant would be required to obtain an Incidental Take Authorization from the CDFW and the Biological Opinion prepared by the USFWS would also include conditions for the proposed project to ensure the recovery of this species. Additionally, MM BIO-1b would require wetland creation/enhancement to provide habitat mitigation at a 3:1 replacement ratio. The project applicant would be responsible for meeting the habitat mitigation requirements as set forth by the 2016 USFWS Recovery Plan for the

[37] California Natural Diversity Database (CNDDB). 2019. RareFind 5. Computer printout for special-status species within a 3-mile radius of the project site.

[38] United States Fish and Wildlife Service (USFWS). 2003. Interim guidance on site assessment and field surveys for determining presence or a negative finding of the California tiger salamander. Website: https://www.fws.gov/ventura/docs/species/protocols/cts/catigersalamander_survey-protocols.pdf. Accessed January 21, 2020.

[39] David Cook. Consulting Wildlife Biologist. Personal communication: phone call with G. Monk. March 16, 2020.

Santa Rosa Plain.[40] Implementation of MM BIO-1b would reduce impacts to breeding and over-summering habitat for the California tiger salamander to a less than significant level.

Nesting Birds

The project site and its adjacent areas contain mature trees that support potential habitat for bird species protected under the Migratory Bird Treaty Act (MBTA) and their eggs and young (protected under California Fish and Game Code Sections 3503 and 3503.5). These species include white-tailed kite (*Elanus leucurus*), red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), and common song birds (passerine birds). Construction activities could disturb nesting and breeding birds in trees within and around the construction site. Potential impacts on special-status and migratory birds that could result from construction and operation of the proposed project include destruction of eggs or occupied nests, mortality of young, and abandonment of nests with eggs or young birds prior to fledging. If MBTA protected species are present, impacts to these species would be significant. MM BIO-1c would require preconstruction surveys and alternating construction activities to avoid disturbance of any active nests and prevent take of individuals roosting in trees, which would reduce impacts to migratory and nesting birds and raptors protected under the MBTA to less than significant.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

No impact. There is no riparian habitat or sensitive natural community on the project site that has been identified in local or regional plans, policies, regulations, or by the CDFW or USFWS. Therefore, the proposed project would have no impact on any riparian habitat or other sensitive natural community.

c) Have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less than significant impact with mitigation incorporated. The USACE issued an Approved Jurisdictional Determination (Appendix B) in 2016, verifying the presence of 6.31 acres of waters of the United States (specifically seasonal wetlands) on the project site. The proposed project would permanently impact 2.52 acres of seasonal wetlands on the West Parcel. In addition, 0.13-acre of seasonal wetlands would be permanently impacted within the East Parcel as necessary to enhance functions and services of wetlands resulting in the permanent loss of 2.65 acres of seasonal wetlands (Exhibit 11). These impacts are potentially significant. As discussed in the Project Description and described in MM BIO-1d, in total, after the wetland enhancement, the East Parcel that currently supports 3.79 acres of wetlands would be able to support 5.52 acres of enhanced wetlands. All together the proposed project would exceed a 2:1 overall replacement/enhancement to impacts ratio (5.52 replaced/enhanced: 2.65 acre permanently impacted = approximately 2.1:1) and impacts would be less than significant with mitigation incorporated.

[40] United States Fish and Wildlife Service (USFWS). 2016. Recovery Plan for the Santa Rosa Plain. Website: https://www.amphibians.org/wp-content/uploads/2019/04/USFWS-Recovery-Plan-for-the-Santa-Rosa-Plain.pdf. Accessed January 21, 2020.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?

Less than significant impact. The project site is an open grassland/seasonal wetland mosaic habitat surrounded by developed properties to the north, south, and east. Though there are some small parcels to the northeast and east that are either designated open space (Woodbridge Reserve) or currently undeveloped (Kerry Ranch parcels), these properties abut already developed lands and do not provide a large swath of contiguous, open land to serve as a wildlife movement corridor. To the immediate west of the project site is Fulton Road, a heavily travelled and highly trafficked road which is an impediment to wildlife movements and removes any wildlife corridor function/value to wildlife originating west of the project site. Therefore, the proposed project would not interfere substantially with movement of fish or wildlife.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No impact. The City of Santa Rosa Municipal Code Ordinance No. 17-24 covers tree alteration, removal, relocation, and necessary permits and provides a definition for heritage trees. None of the trees on-site meet the City's definition of a "heritage tree." The coast live oak (*Quercus agrifolia*), which is the one tree on-site that could qualify as a heritage tree, is less than 18 inches in diameter at breast height and would not qualify as a heritage tree. Similarly, according to the Tree Ordinance Section 17-24.030, impacts to the existing landscape trees would not require a permit. The eucalyptus trees on-site are a non-native, invasive species and though not mentioned specifically in the City's Tree Ordinance, they would not be protected. In addition, there are no designated protected trees or street trees on the project site. Therefore, there would be no impact.

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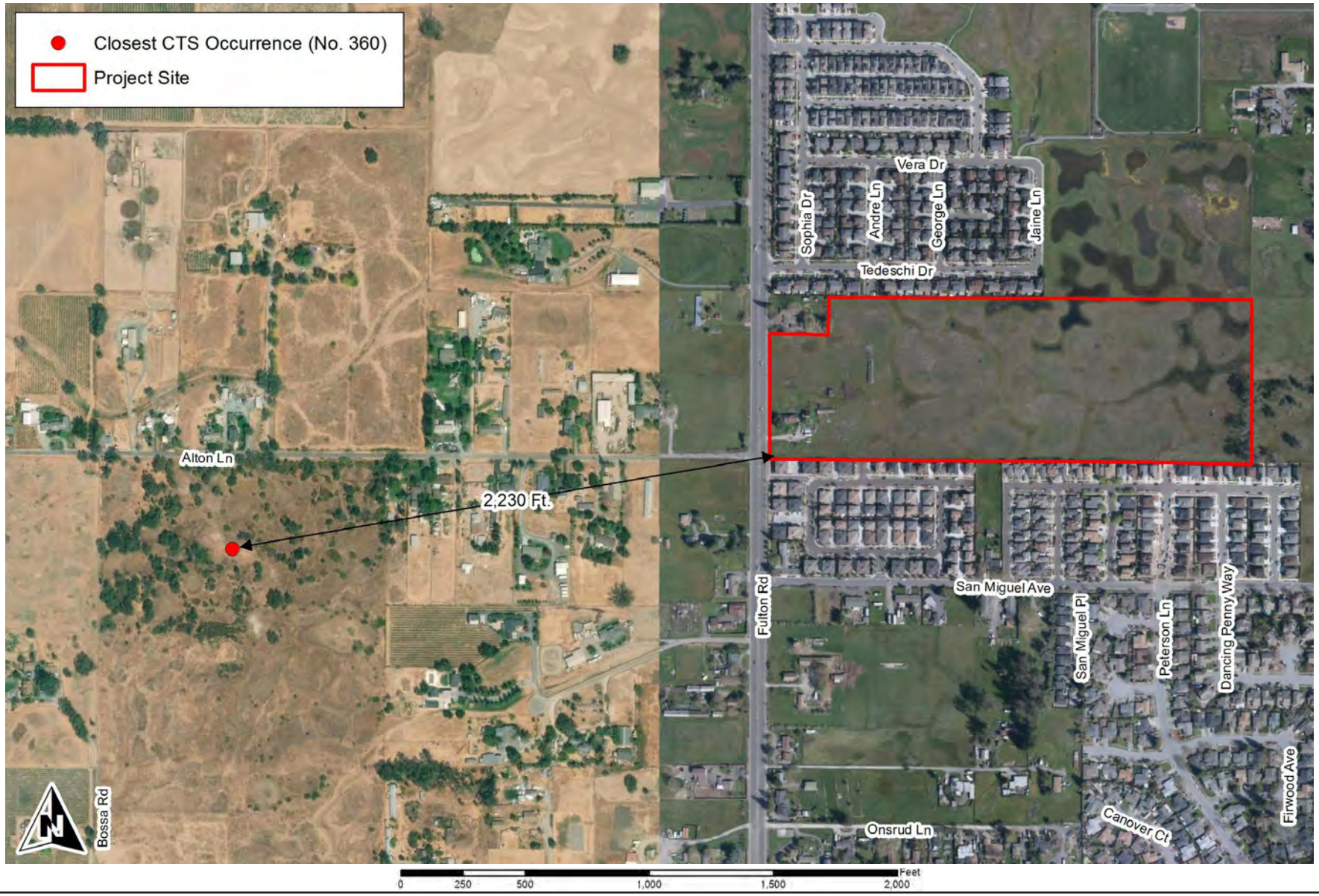

Source: Monk & Associates, November 19, 2019.

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Exhibit 10
Closest Known Occurrence of
California Tiger Salamander to Project Site

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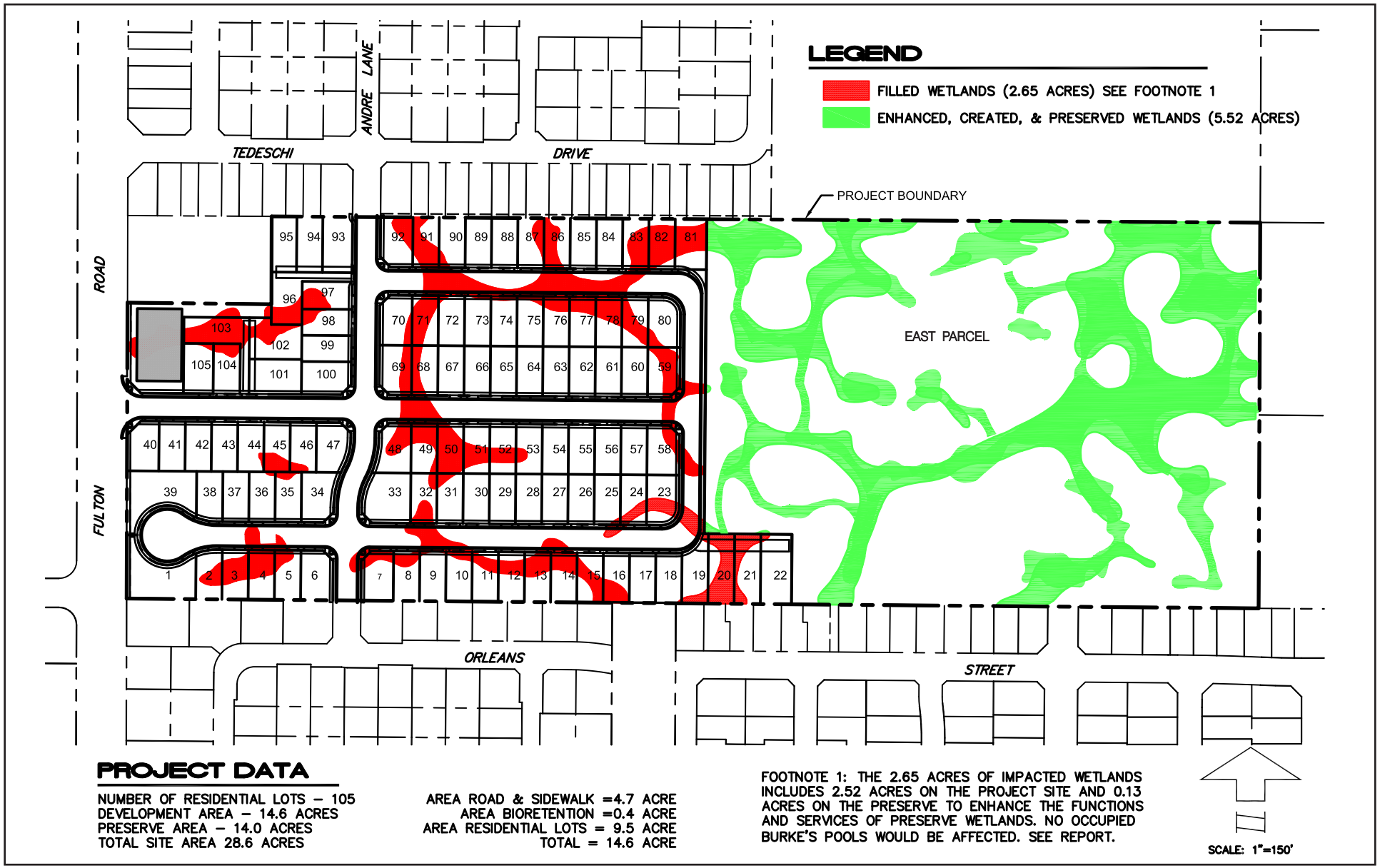

Source: Civil Design Consultants, Inc., July 2019.

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Exhibit 11
Wetland Impacts and Preservation

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f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?

Less than significant impact with mitigation incorporated. There are no Habitat Conservation Plans or Natural Community Conservation Plans in force in the City of Santa Rosa. However, the proposed project does lie within the boundaries of the Santa Rosa Plain Conservation Strategy (the Strategy). The Strategy covers California tiger salamander and four endangered plant species: Burke's goldfields, Sonoma sunshine (*Blennosperma bakeri*), Sebastopol meadowfoam (*Limnanthes vinculans*), and many-flowered navarretia (*Navarretia leucocephala* ssp. plieantha)(listed plants). The purpose of the Strategy is to:

- Establish a long-term conservation program sufficient to mitigate potential adverse effects of future development on the Santa Rosa Plain, and to conserve and contribute to the recovery of the listed species and the conservation of their sensitive habitat;
- To accomplish the preceding [goal] in a fashion that protects stakeholders' (both public and private) land use interests, and
- To support issuance of an authorization for incidental take of California tiger salamander and listed plants that may occur over the course of carrying gout a broad range of activities on the Santa Rosa Plain.[41]

As discussed in Impact 4(a), a small number of Burke's goldfields were found in isolated pools within the East Parcel and the project site lies within USFWS designated Critical Habitat for California tiger salamander. Therefore, the proposed project could impact species protected by the Strategy. The proposed project would include wetlands preservation/restoration, creation, and enhancement to preserve and promote the establishment of Burke's goldfield colonies (as detailed in Section 1.4, Project Description). In addition, the proposed project would implement MM BIO-1a, MM BIO-1b, and MM BIO-1d, which would reduce potential impacts to these species to less than significant. Therefore, the proposed project would not conflict with the provisions of the Strategy, and impacts would be less than significant with mitigation.

Mitigation Measures

MM BIO-1a **Prepare Rare Plant Mitigation Compliance Report and Obtain California Department of Fish and Wildlife Incidental Take Permit Prior to Initiating Construction**

A mitigation compliance report shall be submitted to the City Planning Staff or Staff Biologist at least 30 days prior to breaking ground on the residential subdivision portion of the proposed project. The report shall detail progress made towards implementation of vernal pool creation/enhancement. Provided mitigation is well underway or adequate security has been provided and approved by the City, the City may approve commencement of the development portion of the project thereafter.

[41] United States Fish and Wildlife Service (USFWS). 2005. Santa Rosa Plain Conservation Strategy. Website: https://www.fws.gov/sacramento/es/Recovery-Planning/Santa-Rosa/santa-rosa-strategy.php. Accessed January 17, 2020.

The project applicant shall apply to the California Department of Fish and Wildlife (CDFW) for an Incidental Take Permit (ITP) pursuant to Section 2081(a) of the California Fish and Game Code that allows collection of Burke's goldfield seeds. The ITP must be obtained prior to the start of wetland creation/enhancement. Per a Seed Collection Plan prepared by L. Stromberg for the proposed Stonebridge Preserve, Burke's goldfield seeds shall be collected from several possible source populations that the CDFW may designate, including the Alton Lane Mitigation Site and/or Woodbridge Reserve.

MM BIO-1b Obtain Permits and Mitigate for Loss of Habitat as Stipulated by Resource Agencies for Potential Impacts to California Tiger Salamander Habitat

Positive Survey Results: If the Protocol Survey demonstrates that the project site is occupied by California tiger salamander then:

1. The project applicant would obtain a California Endangered Species Act (CESA) 2081(b) Incidental Take Permit from the California Department of Fish and Wildlife (CDFW) and the Biological Opinion prepared by the United States Fish and Wildlife Service (USFWS) would also include conditions for the proposed project to ensure the recovery of the species. Any conditions in these permits/authorizations shall be implemented by the applicant prior to grading the project site.
2. The project applicant shall also obtain a Section 404 permit from the United States Army Corp of Engineers (USACE) for discharge of fill or dredged material to waters of the United States (pursuant to MM BIO-1d). Under Section 7 of the Federal Endangered Species Act (FESA), the USACE is required to consult with the USFWS. Under Section 7, the USFWS shall prepare a Biological Opinion that provides FESA Incidental Take authorization for the proposed project. The Biological Opinion shall impose mitigation requirements for potential impacts to California tiger salamander migration/dispersal habitat and suitable rare plant habitat. These requirements will become conditions of the USACE permit. The project applicant shall implement applicable USACE permit conditions including the conditions in the USFWS Biological Opinion.
3. Consistent with mitigation requirements imposed by the CDFW and USFWS for impacts to occupied habitat, mitigation shall be implemented at a 3:1 replacement to impact ratio (i.e., 3 acres of occupied California tiger salamander habitat shall be preserved in perpetuity for each acre of impact from the proposed project). Establishment of the 14-acre East Parcel preserve shall be allowed to constitute a pro rata acreage share of this California tiger salamander mitigation requirement. The remainder of mitigation shall be met by purchasing mitigation credits at a USFWS-approved mitigation bank within the Alton Lane California Tiger Salamander Management Area (see Figure 12 of the Biological Resources Analysis). After approved credits are purchased, proof of purchase shall be provided to the City of Santa Rosa, CDFW, and USFWS prior to the time that grading may commence on the project site.

Negative Survey Results: If the Protocol Survey confirms that California tiger salamander are not present on the project site, the project applicant shall provide mitigation for California tiger salamander dispersal/migration habitat at a 1:1 ratio (i.e., 1 acre of preservation for each acre of development—or a pro rata share thereof) in accordance with the USFWS Programmatic Biological Opinion for the Santa Rosa Plain. Establishment of the East Parcel shall constitute this California tiger salamander mitigation requirement. The proposed 14-acre East Parcel would meet the 1:1 mitigation requirement.

MM BIO-1c Avoid Active Nesting Birds During Construction

If construction or tree removal is proposed during the nesting season for local avian species (typically February 1 through August 31), a focused survey for active nests of raptors, waterfowl (including ducks), and passerine birds within and in the vicinity of the project site (no less than 200 feet outside the project boundaries, where possible) shall be conducted by a qualified Biologist within 15 days of commencing earth-movement, construction or tree removal. Two surveys shall be conducted, at least 1 week apart, with the second survey occurring no more than 2 days prior to tree removal. If no active nests are found, tree removal or construction activities may proceed.

If an active nest is located during pre-construction surveys, a qualified Biologist shall establish a temporary protective nest buffer around the nest(s). The nest buffer should be staked with orange construction fencing. The buffer must be of sufficient size to protect the nesting site from construction-related disturbance and shall be established by a qualified Ornithologist or Biologist with extensive experience working with nesting birds near and on construction sites. Typically, adequate nesting buffers are 50 feet from the nest site or nest tree dripline for passerine birds or waterfowl and up to 300 feet for sensitive nesting birds and several raptor species known to nest in the region of the project site. If the nesting bird or raptor is listed by the California Department of Fish and Wildlife (CDFW), this agency shall be notified regarding the status of the nest.

No construction or earth-moving activity shall occur within any established nest protection buffer prior to September 1 unless it is determined by a qualified Ornithologist/Biologist that the young have fledged (left the nest) and have attained sufficient flight skills to avoid project construction zones, or that the nesting cycle is otherwise complete. In the region of the project site, most species complete nesting by mid-July. This date can be significantly earlier or later and would have to be determined by a qualified Biologist. At the end of the nesting cycle, as determined by a qualified Biologist, temporary nesting buffers may be removed, and construction may commence in established nesting buffers without further regard for buffered nest site(s).

MM BIO-1d Obtain a Section 404 Permit from the United States Army Corps of Engineers (USACE) for Impacts to waters of the United States and a Section 401 Water Quality Certification for Impacts to waters of the State

The project applicant shall obtain a Section 404 permit from the USACE and Section 401 permit from the Regional Water Quality Control Board (RWQCB) for discharge of fill or dredged material to waters of the United States and state. The proposed project shall compensate for the loss of 2.65 acres of waters of the United States and State at a 2:1 mitigation ratio, or as otherwise required by the USACE and RWQCB to achieve no net loss of wetlands.

The project applicant proposes to construct, enhance, and avoid a total of 5.52 acres of wetlands in the East Parcel. This will be accomplished by creating a total of 1.766 acres of new wetlands, as well as enhancing 3.267 acres of degraded wetlands and avoiding 0.484-acre of existing wetlands within the East Parcel (this enhancement and creation is shown on Exhibit 11). To meet the USACE "no net loss" policy, the project applicant will also purchase 0.89-acre of wetland mitigation credit from the Hazel Mitigation Bank or another USACE and RWQCB-approved wetland mitigation bank in order to meet the USACE and RWQCB not net loss policies. Taken together this mitigation will exceed a 2:1 overall replacement/enhancement to impacts ratio.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
5. Cultural Resources *Would the project:*				
a) Cause a substantial adverse change in the significance of a historical resource as pursuant to Section 15064.5?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

Environmental Evaluation

Setting

This section describes the existing cultural resources setting and potential effects from project implementation on the project site and its surrounding area. Descriptions and analysis in this section are based on information provided by the Archeological Resources Study prepared by Tom Origer & Associates, dated March 28, 2019; a Historic Resources Evaluation (HRE) prepared by Daly & Associates in February 2020, California Native American Heritage Commission (NAHC); Northwest Information Center (NWIC); National Register of Historic Places (NRHP); California Register of Historical Resources (CRHR); California Historical Landmarks list; California Points of Historical Interest list; California Historical Resources Inventory; and a pedestrian survey of the site conducted by Tom Origer & Associates. The NWIC records search results, NAHC and Tribal correspondence, and Archeological Resources Study are provided in Appendix C.

Northwest Information Center

Julia Franco of Tom Origer & Associates reviewed the archaeological site base maps and records, survey reports, and other materials on file at the NWIC on February 25, 2019 (NWIC File 18-1609). The library and project files at Tom Origer & Associates and various on-line databases were also reviewed. The purpose of this review was to access existing cultural resource survey reports, archaeological site records, and historic maps and evaluate whether any previously documented prehistoric or historic archaeological sites, architectural resources, cultural landscapes, or other resources exist within or near the project area.

Results from the NWIC indicate that 30 reports are on file within a 0.5-mile radius of the project area and three of these studies were conducted adjacent to the project site. Six resources have been recorded within 0.5 mile of the project site. All six of the resources recorded within 0.5 mile of the project site are historic-era resources and would not extend into the project site. There are no

resources located on the project site. A records search map identifying the project boundaries and 0.5-mile search radius along with relevant records search results may be found in Appendix C.

Native American Heritage Commission and Tribal Outreach

Tom Origer & Associates sent a request to the NAHC to determine whether any sacred sites are listed on its Sacred Lands File within the project area and the names of Native American individuals and groups that would be appropriate to contact regarding the proposed project. Letters were also sent to the following groups:

- Cloverdale Rancheria of Pomo Indians of California
- Dry Creek Rancheria of Pomo Indians
- Federated Indians of Graton Rancheria
- Kashia Band of Pomo Indians of the Stewarts Point Rancheria
- Lytton Rancheria of California
- Middletown Rancheria of Pomo Indians of California
- Mishewal-Wappo Tribe of Alexander Valley

This outreach represents notification regarding the proposed project and provides Tribes an opportunity for comment. A letter was received via email from Ryan Peterson, Administrative Assistant for the Middletown Rancheria Tribal Historic Preservation Department, on March 12, 2019. The Middletown Rancheria of Pomo Indians of California had no comment at this time, but if evidence of human habitation is found they request that work stop immediately and that they be notified.

A response was received on March 12, 2019, from Brenda Tomaras of Tomaras & Ogas, LLP, representative of the Lytton Rancheria of California. Ms. Tomaras stated that the Tribe has no specific information about the project but that the land does fall within their traditional Pomo territory. Ms. Tomaras further stated that artifacts and sites may be encountered during project construction and they will be consulting with the appropriate lead agency.

A response was received on March 12, 2019, from Dino Franklin, Chairman of the Kashia Band of Pomo Indians of the Stewarts Point Rancheria. Chairman Franklin stated that he was unable to comment on the proposed project and deferred to Lytton Rancheria of California or the Federated Indians of Graton Rancheria.

A response was received on March 25, 2019, from Buffy McQuillen, Tribal Historic Preservation Officer for the Federated Indians of Graton Rancheria. Ms. McQuillen stated that the project area is within the Tribe's ancestral territory and there may be tribal cultural resource impacts. Ms. McQuillen requested the results of the cultural resources study and the recommendations made based on those results.

No other responses have been received as of the date of this report. The NAHC and tribal contact efforts are available in Appendix C.

Site Visit and Field Survey

A surface field survey of the project site was conducted on March 14 and 30, 2019. The purpose of this survey was to locate any signs of potentially significant historic or prehistoric cultural deposits that could be affected by development. Surface examination consisted of walking in 15-meter transects using hoes as needed to expose the ground surface and examining soils from rodent burrows. In addition to the surface survey, three auger borings were excavated using a 4-inch diameter barrel auger to examine subsurface soils.

Historic Resources Evaluation

Daly & Associates conducted a survey of the project site to provide a historic evaluation of the built-environment. Architectural Historian, Pamela Daly, conducted an intensive-level field survey on December 16, 2019. The fieldwork consisted of inspecting the extant built-environment resources located on the project site and observing the overall interrelationship of the structure and surrounding landscape to determine if there is evidence of a historical resource.

A house and six outbuildings are located within the project site. County records indicate that the house was constructed in 1930 and has not previously been evaluated for historic significance.[42] Properties over 50 years in age are considered potentially eligible for listing in the NRHP, CRHR, or local listings of historic resources and, consequently, could be considered historic resources under CEQA Guidelines. The buildings were evaluated relative to the following four CRHR eligibility criteria, which are based on NRHP Standards A–D.

- **Criterion A: Event.** It is associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.
- **Criterion B: Person.** It is associated with the lives of persons important to local, California, or national history.
- **Criterion C: Architecture.** It embodies the distinctive characteristics of a type, period, or method of construction that represents the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.
- **Criterion D: Information Potential.** It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation.

All of the buildings were evaluated by Daly & Associates for potential historic significance and eligibility for the CRHR pursuant to Criterion 1-4. The HRE determined that the house and associated outbuildings were constructed in 1930 by Joseph and Mary Memeo as a home farm. There is no evidence that the subject property was associated with any persons or events from when the area south of Fulton Station was first settled in the 1870s, or with the agricultural history of Sonoma County. The dwelling and outbuildings on the project site present no unique design or technology that would cause them (individually or collectively) to be considered an advancement in the history

[42] Tom Origer & Associates. 2019. Archeological Resources Study, page 15.

of egg or chicken ranches. The project site was improved in 1930 but does not appear to have the capacity to convey any historic association to the history of Santa Rosa or Sonoma County of the 1930s. While the project site does not appear to have met the criteria to be determined a historic property for listing in the NRHP, it has maintained sufficient levels of physical integrity for its history to be evaluated for significance. A copy of the HRE including building descriptions and Department of Parks and Recreation (DPR) recordation forms may be found in Appendix C.

Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as pursuant to Section 15064.5?

Less than significant impact with mitigation incorporated. The project site is not significant under Criterion A of the NRHP. The house was constructed in 1929-1930 on land that had not been improved until that time, possibly due to the natural wetlands that comprise a majority of the East Parcel. Joseph Memeo appears to have established a poultry and egg ranch on his land and dry-farmed the wetlands when possible. Historic aerial photographs present evidence that these activities continued into the 1980s. Research did not reveal that the Joseph Memeo ranch contributed to the history of poultry-keeping in the area of Fulton or Santa Rosa, or with any events that made a significant contribution to the agricultural history of the region or Sonoma County. As a result, the project site is not eligible for listing in the NRHP under Criterion A.

Research did not uncover any substantial contributions by persons residing at the property important to the history of the local area, Santa Rosa, or Sonoma County. As a result, the buildings on the project site have not been found to be directly associated with any persons important to the history of Santa Rosa, California, or the United States and does is not significant under Criterion B of the NRHP.

The residence and outbuildings on the project site were constructed almost 60 years after the land had been sold in 1868 as excess railroad lands by the General Land Office. The residence is not a significant or exceptional example of a Craftsman style house, and the outbuildings are those that would have been constructed to support a home-based egg and chicken ranch. The residence and outbuildings are not the product of the work of a master craftsman or engineer and do not possess high artistic value. The outbuildings do not embody any distinctive or rare characteristics of method of construction. As a result, the buildings on the project site are not eligible for listing under Criterion C as a resource significant to the history of Santa Rosa, California, or the United Sates.

The project site does not appear to have the capacity to yield information important to the prehistory or history of Santa Rosa, Sonoma County, or California. The buildings on the project site are not eligible for listing in the NRHP under Criterion D.

The buildings on the project site are not eligible for listing in the NRHP under Criterion A-D.

While unlikely, subsurface construction activities always have the potential to damage or destroy previously undiscovered historic resources such as wood, stone, foundations, and other structural remains; debris-filled wells or privies; and deposits of wood, glass, ceramic, and other refuse, if encountered. This would represent a potentially significant impact related to historic resources.

Implementation of MM CUL-1, which requires all work within 100 feet of a find to cease, would ensure that this potential impact is reduced to a less than significant level.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Less than significant impact with mitigation incorporated. The results of the NWIC records search show that 30 cultural resources lie within 0.5 mile of the project site. However, there are no known archeological resources on-site. Furthermore, the field survey did not find archeological resource indicators on the project site or in the auger borings. Additionally, the Archeological Resources Study determined that based on the project site's geology, historical hydrology, and other factors, the possibility for buried archeological resources to occur is very low.

As with historical resources, it is possible that earthmoving activities associated with project construction could encounter previously undiscovered archaeological resources. Archaeological resources can include but are not limited to stone, bone, wood, or shell artifacts or features, including hearths and structural elements. Damage or destruction of these resources would be a potentially significant impact. Implementation of MM CUL-1 would ensure that this potential impact is reduced to a less than significant level.

c) Disturb any human remains, including those interred outside of formal cemeteries?

Less than significant impact with mitigation incorporated. No human remains or cemeteries are known to exist within or near the project site. Although human remains within the project site are unlikely, there is always the possibility that earthmoving activities associated with project construction could potentially damage or destroy previously undiscovered human remains. This would be a potentially significant impact.

In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5, Health and Safety Code Section 7050.5, and Public Resources Code Sections 5097.94 and 5097.98 must be followed. MM CUL-2 further specifies the procedures to follow in the event human remains are uncovered. Along with compliance with these guidelines and statutes, implementation of this mitigation would reduce potential impacts related to human remains to a less than significant level.

Mitigation Measures

MM CUL-1 In the event a potentially significant cultural resource is encountered during subsurface earthwork activities, all construction activities within a 100-foot radius of the find shall cease, the City shall be notified of the find, and workers shall avoid altering the materials until an Archaeologist who meets the Secretary of Interior's Professional Qualification Standards for archaeology has evaluated the situation. The project applicant shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. Potentially significant cultural resources consist of but are not limited to stone, bone, glass, ceramics, fossils, wood, or shell artifacts, or features including hearths, structural

remains, or historic dumpsites. The Archaeologist, in consultation with the appropriate Tribe, shall make recommendations concerning appropriate measures that will be implemented to protect the resource, including but not limited to excavation and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. Any previously undiscovered resources found during construction within the project site shall be recorded on appropriate Department of Parks and Recreation (DPR) 523 forms and will be submitted to the City of Santa Rosa, the NWIC, and the State Historic Preservation Office (OHP), if required.

MM CUL-2 In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5; Health and Safety Code Section 7050.5; Public Resources Code Section 5097.94 and Section 5097.98 must be followed. If during the course of project development there is accidental discovery or recognition of any human remains, the following steps shall be taken:

1. There shall be no further excavation or disturbance within 100 feet of the remains until the County Coroner is contacted to determine if the remains are Native American and if an investigation of the cause of death is required. If the Coroner determines the remains to be Native American, the Coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the most likely descendant (MLD) of the deceased Native American. The MLD may make recommendations to the landowner or the person responsible for the excavation work within 48 hours, for appropriate treatment and disposition of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98.
2. Where the following conditions occur, the landowner or his or her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the MLD or on the project site in a location not subject to further subsurface disturbance:
   - The NAHC is unable to identify an MLD or the MLD failed to make a recommendation within 48 hours after being notified by the commission.
   - The descendant identified fails to make a recommendation.
   - The landowner or his authorized representative rejects the recommendation of the descendant, and mediation by the NAHC fails to provide measures acceptable to the landowner.

Additionally, California Public Resources Code Section 15064.5 requires the following relative to Native American Remains:

When an initial study identifies the existence of, or the probable likelihood of, Native American Remains within a project, a lead agency shall work with the appropriate Native Americans as identified by the NAHC as provided in Public Resources Code Section 5097.98. The project applicant may develop a plan for treating or disposing of, with appropriate dignity, the human remains and any items associated with Native American Burials with the appropriate Native Americans as identified by the NAHC.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
6. Energy *Would the project:*				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

Environmental Evaluation

Would the project:

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less than significant impact. A discussion of the project's energy use is presented below. Energy use consumed by the proposed project was estimated and includes natural gas, electricity, and fuel consumption for the proposed project. Energy calculations are included as part of Appendix D of this Draft IS/MND.

Construction

During construction, the proposed project would result in energy consumption through the combustion of fossil fuels in construction vehicles, worker commute vehicles, and construction equipment, and the use of electricity for temporary buildings, lighting, and other sources. No natural gas would be utilized as part of construction. Fossil fuels used for construction vehicles and other energy-consuming equipment would be used during site demolition, site preparation, grading, paving, and building construction. The types of equipment could include gasoline- and diesel-powered construction and transportation equipment, including trucks, bulldozers, frontend loaders, forklifts, and cranes. Other equipment could include construction lighting, field services (office trailers), and electrically driven equipment such as pumps and other tools.

Based on CalEEMod estimates for the proposed project, (see modeling output files in Appendix A), construction-related vehicle trips and construction equipment usage would consume an estimated 117,975 gallons of diesel and gasoline combined during the construction phase (Appendix D). Construction assumptions used to estimate energy consumption for the proposed project were consistent with those used to estimate air quality related emissions and are included in Appendix A. The complete calculations for the project's construction energy consumption are included in Appendix D.

Limitations on idling of vehicles and equipment and requirements that equipment be properly maintained would result in fuel savings. California Code of Regulations Title 13, Sections 2449(d)(3) and 2485 limit idling from both on-road and off-road diesel-powered equipment and are enforced by the ARB. In addition, given the cost of fuel, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction.

Other equipment could include construction lighting, field services (office trailers), and electrically driven equipment such as pumps and other tools. Single-wide mobile office trailers, which are commonly used in construction staging areas, generally range in size from 160 square feet to 720 square feet. A typical 720-square-foot office trailer would consume approximately 32,885 kilowatt-hour (kWh) during the 31-month construction phase (Appendix D). The City of Santa Rosa has established standard conditions of project approval that limit hours of construction to between the hours of 7:00 a.m. and 7:00 p.m. on weekdays, and between 8:00 a.m. and 6:00 p.m. on Saturdays; no construction is permitted on Sundays and holidays. As on-site construction activities would be restricted to these hours, it is anticipated that the use of construction lighting would also be similarly limited. Because of the temporary nature of construction and the financial incentives for developers and contractors to implement efficient energy use, the construction phase of the proposed project would not result in wasteful, inefficient, and unnecessary consumption of energy. Therefore, the construction-related impact related to fuel and electricity consumption would be less than significant.

Operation

Electricity and Natural Gas

Building operations for the proposed project would involve energy consumption for multiple purposes including, but not limited to, building heating and cooling, refrigeration, lighting (indoor and outdoor), and appliances. Based on CalEEMod estimates for the proposed project, long-term operations would consume approximately 849,510 kWh of electricity per year and an estimated 3,051,830 kilo-British Thermal Unit (kBTU) of natural gas per year (Appendix D). Current on-site operational energy use from existing land uses include an estimated 8,091 kWh of electricity and an estimated 29,065 kBTU of natural gas on an annual basis. After netting out existing uses, the proposed project would consume 841,419 kWh of electricity and 3,022,765 kBTU of natural gas per year above existing conditions. However, the proposed project would achieve net zero electricity through a combination of on-site solar and the purchase of renewable electricity to comply with the City of Santa Rosa Climate Action Plan (City's CAP), Action 1.1.3, which requires new developments after 2020 to utilize net zero electricity.[43] The proposed project would be designed and constructed in accordance with the City's CAP, City of Santa Rosa's CALGreen Requirements, and CALGreen 2020 Tier 1 Standards, which are based on the State's Title 24 energy efficiency standards.

CALGreen Requirements include building, electricity, and water conservation energy saving measures that are required to be completed as part of the building permitting process.[44] Title 24 standards include a broad set of energy conservation requirements that apply to the structural, mechanical,

[43] City of Santa Rosa. 2012. City of Santa Rosa Climate Action Plan. Website: https://srcity.org/DocumentCenter/View/10762. Accessed December 5, 2019.

[44] City of Santa Rosa. 2017. City of Santa Rosa Residential 2016 CALGreen+Tier 1 Checklist. February. Website: https://srcity.org/DocumentCenter/View/15211/2016-CALGreen-Checklist-New-Residential. Accessed December 5, 2019.

electrical, and plumbing systems in a building. For example, the Title 24 Lighting Power Density requirements define the maximum wattage of lighting that can be used in a building based on its square footage. Compliance with Title 24 standards would help reduce the amount of energy required for lighting, water heating, and heating and air conditioning in buildings and promote energy conservation. Energy- and water-efficient design measures for the proposed project would include the incorporation of solar power design, water-efficient landscaping, and high-efficiency lighting and appliances. These standards are widely regarded as the most advanced energy efficiency standards and compliance with Title 24 standards would ensure that operational energy consumption would not result in the use of energy in a wasteful or inefficient manner. Therefore, the operational impact related to building electricity and natural gas consumption would be less than significant.

Fuel

Long-term operational energy consumption would also occur from fuel combustion associated with daily vehicle trips. Fuel consumption would be primarily related to vehicle use by residents and visitors. Based on CalEEMod estimates, vehicle trips associated with the project would result in 2.6 million VMT and consume an estimated 100,857 gallons of gasoline and diesel combined on an annual basis.[45] Estimated operational vehicle trips from land uses currently occupying the project site result in 21,542 VMT and consume an estimated 830 gallons of fuel (gasoline and diesel combined) annually.[46] Therefore, the proposed project would result in net increase of 2,595,128 VMT and 100,827 gallons of annual fuel consumption (gasoline and diesel combined).

Bike lanes are located along Fulton Road and Piner Road and would serve the project site and connect the proposed project to other land uses. The proposed project would be within 4 miles of two regional routes of travel, which would reduce resident's travel distance to major freeways. For these reasons, transportation fuel consumption would not result in a significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during long-term operations. Therefore, the operational impact related to vehicle fuel consumption would be less than significant.

b) Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?

Less than significant impact. A discussion of the project's potential to conflict with or obstruct a State or local plan for renewable energy or energy efficiency is presented below.

Construction

As described above, construction activities would involve energy consumption in various forms and would be limited by California regulations such as California Code of Regulations Title 13, Sections 2449(d)(3) and 2485 which limit idling from both on-road and off-road diesel-powered equipment and are enforced by the ARB. The proposed project would be required to comply with these regulations. There are no renewable energy standards applicable to construction activities for the

[45] Based on the 2,616,670 annual VMT consistent with CalEEMod output (Appendix A) and an average fuel consumption determined using Emission Factors Model (EMFAC) 2014 factors for Sonoma County in the 2023 calendar. Website: https://www.arb.ca.gov/emfac/2014/. Accessed December 6, 2019.

[46] Based on the 21,542 annual VMT consistent with CalEEMod output (Appendix A) and an average fuel consumption determined using EMFAC 2014 factors for Sonoma County in the 2023 calendar year. Source of EMFAC Factors: California Air Resources Board (ARB). 2014. EMFAC 2014 Web Database, Sonoma County. Website: https://www.arb.ca.gov/emfac/2014/. Accessed December 6, 2019.

proposed project. Thus, it is anticipated that construction of the proposed project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing energy use or increasing the use of renewable energy. Therefore, impacts would be less than significant.

Operation

Additionally, California's Renewables Portfolio Standard (RPS) requires that 33 percent of electricity retail sales be served be renewable energy sources by 2020. PG&E would provide the delivery of electricity to the project through the existing grid, while Sonoma Clean Power would provide the electric generation service. Sonoma Clean Power's power mix as of 2018 includes 42 percent large hydroelectric, 49 percent renewable, and 9 percent general system power. Sonoma Clean Power's renewable energy resource mix is comprised of 42 percent large hydro, 22.7 percent wind, 7.6 percent solar, 17.7 percent geothermal, 9.4 percent CAISO system power, and 0.6 percent biomass and biowaste, as well as an EverGreen option for 100 percent local renewable service.[47] Senate Bill (SB) 32 mandates a Statewide GHG emissions reduction goal to 40 percent below 1990 levels by the year 2030. Sonoma Clean Power's current power mix already exceeds State requirements for 2020. Therefore, the proposed project would receive electricity from a utility company that meets California's RPS requirements as well as the State requirements for 2020.

In addition, the proposed homes would be designed and constructed in accordance with the State's Title 24 energy efficiency standards and would include rooftop solar. To comply with the City's CAP, Action 1.1.3, which requires new developments after 2020 to utilize zero net electricity, future residents will be required to purchase electricity through PG&E's Solar Choice Program that allows for the purchase and use of 100 percent renewable solar energy.[48] Thus, the proposed project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing energy use or increasing the use of renewable energy. Therefore, operational energy efficiency and renewable energy standards consistency impacts would be less than significant.

Mitigation Measures

None.

[47] Sonoma Clean Power. 2019. About Us. Website: https://sonomacleanpower.org/power-sources. Accessed January 16, 2020.
[48] Ibid.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
7. Geology and Soils *Would the project:*				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☒	☐	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☒	☐	☐
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☒	☐	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☒	☐	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

Environmental Evaluation

Setting

Descriptions and analysis in this section are based on the General Plan and General Plan EIR as well as a Paleontological Records Search prepared by Kenneth L. Finger, PhD, on August 14, 2019 (provided in Appendix E).

The project site is within the boundaries of Santa Rosa, California in Sonoma County. The City of Santa Rosa lies within the Coast Ranges, which are composed of marine sedimentary deposits and volcanic rocks. The Coast Ranges, located between the Pacific Ocean and the Sacramento and San Joaquin Valleys, go as far north as the Oregon border with California, and south to the Santa Ynez Mountains near Santa Barbara.[49] Santa Rosa is within the northern part of the Coast Ranges that are comprised of greywacke, shale, greenstone, basalt, chert, gravel, silt, clays, mudstones, and sandstone rock types.[50] Gently sloping alluvial plains, upland foothills, and low valleys characterize the topography of Santa Rosa.[51] According to the United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS), the soil types of the project site are Clear Lake clay and Huichica loam 0 to 2 percent slopes, 2 to 9 percent slopes, and 0 to 5 percent slopes.[52] Clear Lake clay is poorly draining, negligible to high runoff, and slow to very slow permeability.[53] Huichica loam is imperfectly draining, runoff is slow, and permeability is moderately slow to very slow.[54]

The City of Santa Rosa is in the San Francisco Bay Area, a seismically active region. The City is approximately 8 miles southeast of the Maacama Fault Zone, lies adjacent to the Rodgers Creek Fault Zone, and is 20 miles northeast of the San Andreas Fault Zone.[55] The Maacama Fault Zone is a system capable of producing a maximum magnitude 7.1 earthquake. The project site is not located in an Alquist-Priolo Earthquake Fault Zone. The Rodgers Creek and San Andreas Fault Zones are two active faults that are responsible for major earthquakes in the last 150 years.[56] The closest Aquist-Priolo Earthquake Fault Zones are the Healdsburg, Mark West Springs, and Santa Rosa zones.[57] The General Plan EIR identifies strong seismic ground shaking from faults near the City of Santa Rosa as a potentially significant impact for the City.[58] The liquefaction susceptibility level in the City of Santa Rosa is rated moderate.[59] The project site is not located in an area susceptible to landslide occurrence.[60]

The project site is located in a paleontological region with 10 known Pleistocene vertebrate localities with recorded recovered fossils and eleven Pliocene vertebrate localities. The project site is not located on geologic formations or near geologic formations that have yielded paleontological resources.[61]

Would the project:

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[49] City of Santa Rosa. 2009. Santa Rosa General Plan 2035. Draft Environmental Impact Report.
[50] Ibid.
[51] Ibid.
[52] United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS). 2019. Soil Survey. Website: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx?aoicoords=((-122.76966%2038.47581,-122.76966%2038.47443,-122.76282%2038.47445,-122.76289%2038.47624,-122.76875%2038.47623,-122.76873%2038.47582,-122.76966%2038.47581)). Accessed August 15, 2019.
[53] United States Department of Agriculture (USDA). 2018. National Cooperative Soil Survey. Clear Lake. Website: https://soilseries.sc.egov.usda.gov/OSD_Docs/C/CLEAR_LAKE.html. Accessed August 16, 2019.
[54] United States Department of Agriculture (USDA). 2018. National Cooperative Soil Survey. Huichica. Website https://soilseries.sc.egov.usda.gov/OSD_Docs/H/HUICHICA.html. Accessed August 16, 2019.
[55] City of Santa Rosa. 2009. Santa Rosa General Plan 2035. Draft Environmental Impact Report.
[56] Ibid.
[57] California Department of Conservation. 2019. Regulatory Maps. Website: https://maps.conservation.ca.gov/cgs/informationwarehouse/regulatorymaps/. Accessed August 15, 2019.
[58] City of Santa Rosa. 2009. Santa Rosa General Plan 2035. Draft Environmental Impact Report.
[59] United States Geological Survey (USGS). Maps of Quaternary Deposits and Liquefaction Susceptibility in the Central San Francisco Bay Region, California. 2006.
[60] County of Sonoma Permit and Resource Management Department. 2016. Sonoma County Hazard Mitigation Plan: Landslide Susceptibility. Website: https://sonomacounty.ca.gov/PRMD/Long-Range-Plans/Hazard-Mitigation/Landslide-Hazard-Areas/. Accessed August 16, 2019.
[61] Finger, Kenneth L. PhD. Consulting Paleontologist. Personal communication: letter. August 14, 2019.

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

No impact. As stated, the project site is not located within or on an Alquist-Priolo Earthquake Fault Zone as determined by the California Department of Conservation, Geologic Survey Regulator Maps.[62] The nearest fault zones to the project site, approximately 8 miles from Santa Rosa, are the Maacama and Rodgers Creek Fault Zones.[63] A fault does not run through the project site and the nearest fault is approximately 4 miles east. These distances preclude the possible exposure to fault rupture. Thus, no impact would occur.

ii) Strong seismic ground shaking?

Less than significant impact with mitigation incorporated. The project site could experience severe seismic ground shaking similar to other parts of the Bay Area. Strong seismic ground shaking from the Maacama and Rodgers Creek Faults could result in structural failure and collapse of structures, or cause non-structural building elements to collapse, presenting a hazard to building occupants, a potentially significant impact.

The proposed project would be subject to the most recent California Building Standards Code (CBC) requirements for reducing seismic hazards. In addition, implementation of MM GEO-1 would ensure the project design and construction plans follow recommendations contained in a project site specific design-level geotechnical report prepared for the project by a licensed Professional Engineer. Recommendations could include details on proper excavation methods, fill material, slab-on-grade requirements, or other seismic design parameters consistent with the most recent CBC. Therefore, impacts would be less than significant with mitigation incorporated.

iii) Seismic-related ground failure, including liquefaction?

Less than significant impact with mitigation incorporated. The project site is in an area with moderate liquefaction potential. As such, the seismic-related ground failure impacts would be potentially significant. Implementation of MM GEO-1 would require the applicant to submit a project site-specific design-level geotechnical report for review and approval prior to issuance of a grading or building permit and to include the resulting recommendations in the construction, grading, and development plans. In addition, a licensed Professional Engineer shall design all soil engineering recommendations and structural foundations. Implementation of MM GEO-1 would ensure design and construction plans account for and address any potentially significant impacts related to liquefaction. Therefore, impacts would be less than significant with mitigation incorporated.

[62] California Department of Conservation. 2019. Regulatory Maps. Website:https://maps.conservation.ca.gov/cgs/informationwarehouse/regulatorymaps/. Accessed August 15, 2019.
[63] City of Santa Rosa. 2009. Santa Rosa General Plan 2035. Draft Environmental Impact Report.

iv) Landslides?

No impact. Landslides typically occur on slopes or areas surrounded by steep slopes. The project site is generally flat, containing elevations of approximately 138 to 142 feet above MSL.[64] The surrounding area is characterized by level, urbanized land and vacant rangeland. The probability for landslides to affect the project site is extremely low. Thus, no impact would occur.

b) Result in substantial soil erosion or the loss of topsoil?

Less than significant impact. Project construction would include clearing, grading, excavation, and other earthmoving activities. These activities would expose surface soils to wind and precipitation, which could cause soil erosion and loss of topsoil. Projects that disturb one or more acres of soil are required to obtain the General Permit for Discharges of Stormwater Associated with Construction Activity (Construction General Permit), issued by the State Water Resources Control Board (State Water Board). The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP must list BMPs the proposed project will implement to control erosion and prevent the conveyance of sediments off-site. Implementation of the conditions of the Construction General Permit would reduce erosion impacts resulting from project construction to less than significant levels.

Upon completion of construction, the West Parcel would be developed stormwater system designed to accommodate runoff from impervious surfaces, thereby minimizing potential erosion risk. The East Parcel would mostly remain unaltered grasslands and wetlands. Santa Rosa City Code Chapter 19-64 Grading and Erosion Control contains erosion control requirements for new construction and development projects to minimize sediment in stormwater runoff and minimize erosive processes. Adherence with the applicable requirements of the Construction General Permit and the Santa Rosa City Code would ensure impacts would be less than significant.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Less than significant impact with mitigation incorporated. As discussed under Impacts 7 (a)(i),(ii),(iii), and (iv), the proposed project could experience structural failures and liquefaction due to seismic ground shaking from regional faults or improperly built structures. Implementation of MM-GEO 1, requiring review and approval of a project specific, design-level geotechnical report prior to issuance of grading or building permit, would ensure that proper recommendations are included in the project design and construction plans and that the project complies with the most recent edition of the CBC. As such, implementation of MM GEO-1 would reduce impacts to less than significant.

[64] Basics Environmental, Inc. 2019. Phase I Environmental Site Assessment Report, 2220 Fulton Road, Santa Rosa, California, March.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Less than significant impact with mitigation incorporated. Soils within the project site include Clear Lake clay and Huichica loam. According to the USDA, Clear Lake clay soils are categorized as very plastic, referring to the soil type's ability to be easily molded or continuously deformed by various pressures or physical processes. Clear Lake clay soils are slow to very slow in permeability and poorly draining.[65] Huichica loam ranges from slightly to very plastic between depths of 0-30 inches and is non-plastic at depths greater than 30 inches. Huichica loam permeability is very to moderately slow and characterized as imperfectly draining.[66] These soils have the potential to expand, compress, or deform because of the poor permeability and plastic qualities leading to building and roadway structural and foundational failures. These qualities could present potentially significant impacts related to soil expansion.

MM GEO-1 would ensure the project applicant submits a project site-specific design-level geotechnical report prepared by a licensed Professional Engineer for review and approval prior to issuance of a grading or building permit. The geotechnical report would evaluate the project site's soils and determine the required construction and development plans details needed to reduce impacts from expansive soil conditions. As a result, impacts would be less than significant with mitigation incorporated.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No impact. The project does not propose the use of septic tanks on-site. The proposed project would connect to the City's wastewater system and would comply with applicable wastewater requirements outlined in Impact 18, Utilities, of this Draft IS/MND. As such, no impacts would occur.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than significant impact with mitigation incorporated. The project site is entirely on Pilocene beds of the Huichica and Glen Ellen Formations (QT). Glen Ellen and Huichica formations are continental deposits that could contain significant paleontological resources. A Paleontological Records Search of Sonoma County revealed 10 Pleistocene vertebrate species and 11 Pliocene plant species fossil types have been recovered within the county. However, the Pleistocene vertebrate localities fossils are not recovered from Huichica or Glen Ellen formations and recovery of Pliocene plant localities are not mapped for the vicinity of the project site.[67] In addition, a localized Paleontological Records Search of the project site revealed no significant paleontological resources recorded from the Huichica or Glen Ellen formations within the area. Therefore, paleontological

[65] United States Department of Agriculture (USDA). 2018. National Cooperative Soil Survey. Clear Lake. Website: https://soilseries.sc.egov.usda.gov/OSD_Docs/C/CLEAR_LAKE.html. Accessed August 16, 2019

[66] United States Department of Agriculture (USDA). 2018. National Cooperative Soil Survey. Huichica. Website https://soilseries.sc.egov.usda.gov/OSD_Docs/H/HUICHICA.html. Accessed August 16, 2019.

[67] Finger, Kenneth L. PhD. Consulting Paleontologist. Personal communication: letter. August 14, 2019.

monitoring is not recommended.[68] Although unlikely, excavation during construction could unearth paleontological resources, a potentially significant impact. Implementation of MM GEO-2 would ensure a professional Paleontologist would educate construction crews on how to identify fossils and the correct procedure to follow if paleontological resources are found. Therefore, impacts would be less than significant with mitigation incorporated.

Mitigation Measures

MM GEO-1 Prior to issuance of grading or building permits, the project applicant shall submit a design-level geotechnical report that provides geotechnical recommendations for the project based on adequate subsurface exploration, laboratory testing, and engineering analysis. In addition, the project applicant shall submit plans to the City of Santa Rosa for review and approval demonstrating project compliance with the latest adopted edition of the California Building Standards Code (CBC) seismic requirements and the recommendations of the design-level geotechnical report. A licensed Professional Engineer shall design all soil engineering recommendations and structural foundations. The final project plans shall incorporate the recommendations from the approved, design-level geotechnical report. A licensed Geotechnical Engineer or Certified Engineering Geologist shall supervise all on-site soil engineering activities.

MM GEO-2 Prior to issuance of grading or building permits, the project applicant and City shall ensure a professional Paleontologist has trained the construction crew on how to recognize fossils and the procedure to follow in the event paleontological resources are discovered.

[68] Finger, Kenneth L. PhD. Consulting Paleontologist. Personal communication: letter. August 14, 2019.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
8. Greenhouse Gas Emissions *Would the project:*				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☒	☐	☐
b) Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☒	☐	☐

Environmental Evaluation

Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less than significant impact with mitigation incorporated. Both construction and operational activities have the potential to generate GHG emissions. The proposed project would generate GHG emissions during temporary (short-term) construction activities such as demolition, site preparation and grading, running of construction equipment engines, movement of on-site heavy-duty construction vehicles, hauling of materials to and from the project site, asphalt paving, and construction worker motor vehicle trips.

Long-term, operational GHG emissions would result from project-generated vehicular traffic, on-site combustion of natural gas for space and water heating, operation of any landscaping equipment, off-site generation of electrical power over the life of the proposed project, the energy required to convey water to and wastewater from the project site, and the emissions associated with the hauling and disposal of solid waste from the project site.

The 2017 BAAQMD Thresholds contain the following for project-related GHGs:

> For land use development projects (including residential, commercial, industrial, and public land uses and facilities), (1) the threshold is compliance with a qualified GHG Reduction Strategy; or (2) annual emissions less than 1,100 metric tons per year of carbon dioxide equivalent (CO_2e); or (3) 4.6 metric tons CO_2e/service population/year (residents + employees).

It should be noted that the BAAQMD's thresholds of significance were established based on meeting the 2020 GHG targets set forth in the Assembly Bill (AB) 32 Scoping Plan.

The BAAQMD has not yet updated their recommended GHG emissions thresholds to address target reductions past year 2020. However, consistent with current State directives (AB 32 and AB 398), the updated target requires an additional 40 percent reduction in GHG emissions by year 2030. Applied to the BAAQMD quantitative thresholds based on 2020 AB 32 GHG reduction goals, this would equate to 660 metric tons (MT) CO_2e per year by year 2030 or 2.6 MT CO_2e per year per service population by year 2030.

Qualified GHG Strategies remain an appropriate threshold if the project's full buildout year falls within the time horizon covered within a Qualified GHG Strategy and if the Qualified GHG Reduction Strategy demonstrates compliance with post-2020 GHG reduction goals. The City of Santa Rosa calculated GHG emissions reductions with implementation of the City's CAP not just for comparison to the 2020 targets, but also out to year 2035 to be consistent with the planning horizon of the General Plan. As summarized on page ES-7 of the City's CAP, implementation of the measures of the City's CAP are expected to decrease GHG emissions to 2.3 MT CO_2e per person per year by year 2035.[69] While this timeframe is 5 years after the assumed 2030 target threshold, the City's CAP notes that with a reduction to 2.9 MT CO2e per person per year in 2020 with assumed steady reductions over time, it can be concluded that emissions would be below 2.6 MT CO2e per person per year (or a 40 percent reduction below 2020 thresholds) by year 2030.[70]

Project Construction

The proposed project would emit GHG emissions during construction from off-road equipment, worker vehicles, and material delivery and/or hauling. Detailed construction assumptions are provided in Appendix A. The BAAQMD does not presently provide a construction-related GHG generation threshold but recommends that construction-generated GHGs be quantified and disclosed. Total GHG emissions generated during all phases of construction were combined and are presented in Table 18.

Table 18: Construction Greenhouse Gas Emissions

Construction Phase	MT CO_2e per year[1]
Demolition—2021	36
Site Preparation—2021	17
Grading—2021	90
Paving—2021	74
Paving—2022	25
Paving—2023	17
Building Construction—2021	561

[69] City of Santa Rosa Community Development. 2012. Climate Action Plan: City of Santa Rosa. Website: https://srcity.org/DocumentCenter/View/10762/Climate-Action-Plan-PDF?bidId=. Accessed: May 26, 2020. June 5.
[70] Ibid.

Table 18 (cont): Construction Greenhouse Gas Emissions

Construction Phase	MT CO_2e per year[1]
Building Construction—2022	288
Building Construction—2023	122
Architectural Coating—2022	4
Architectural Coating—2023	3
Total Construction Emissions	**1,237**
Emissions Amortized Over 30 Years[1]	**41**

Notes:
MT CO_2e = metric tons of carbon dioxide equivalent
[1] Emissions are rounded to the nearest whole number
[2] Construction GHG emissions are amortized over the 30-year lifetime of the project.
Source: CalEEMod Output (Appendix A).

As shown in Table 18, construction of the proposed project is estimated to generate approximately 1,237 MT CO_2e over the entire project construction duration. As discussed above, neither the City of Santa Rosa nor the BAAQMD have an adopted thresholds of significance for construction-related GHG emissions. Because construction would be temporary and would not result in a permanent increase in emissions, the proposed project would not interfere with the implementation of AB 32 or Senate Bill (SB) 32.

Project Operation

Operational or long-term emissions occur over the life of a project. The major sources for operational GHG emissions include:

- **Motor Vehicles:** These emissions refer to exhaust related GHG emissions from the cars and trucks that would travel to and from the project site. Vehicle trips associated with project operations would primarily include resident and visitor trips to and from the proposed single-family residential project. Trip generation rates used in estimating mobile-source emissions were consistent with those presented in the traffic analysis prepared for the project by W-Trans.[71] The combined trip generation potential is estimated to result in an average of 1,124 trips per day based on the projected trips from residents and visitors. The TIS[72] considered 120 single-family residential units (as opposed to 105 units) for analysis. To be consistent with the TIS,[73] total trips generated by 120 units (i.e. 1,124 trips) is used for the GHG analysis. Apart from the total trips generated by the proposed project, all other assumptions and analysis for construction and operational GHG emissions for the proposed project are based on 105 single-family residential units.

[71] W-Trans. 2019. Traffic Impact Study for 2220 Fulton Road Project. October 22.
[72] Ibid.
[73] Ibid.

- **Natural Gas:** These emissions refer to the GHG emissions that occur when natural gas is burned on the project site for heating water, space heating, dryers, stoves, or other uses.
- **Indirect Electricity:** These emissions refer to those generated by off-site power plants to supply electricity required for the proposed project. PG&E is a utility providing electricity and natural gas service to Sonoma County. The proposed project would receive natural gas through PG&E. The proposed project would be served with electricity generated by Sonoma Clean Power and delivered by PG&E. GHG emissions from energy consumption were calculated using PG&E's electricity intensity factors for CO_2, N_2O, and CH_4. The proposed project would include solar panels that that would generate on-site renewable energy; reductions for solar were accounted for in estimating the project's generation of operational GHG emissions in compliance with Title 24 minimum requirements for single-family residences.[74]
- **Water Transport:** These emissions refer to those associated with the electricity required to transport and treat the water to be used on the project site.
- **Waste:** These emissions refer to the GHG emissions produced by decomposing waste generated by the project.

The City's CAP follows both the State CEQA Guidelines and BAAQMD's Guidelines by incorporating the standard elements of a Qualified GHG Reduction Strategy. Standard elements of a Qualified GHG Reduction Strategy include measures or a group of measures (including performance standards) that demonstrate with substantial evidence that if implemented on a project-by-project basis would collectively achieve specified emissions levels.

Establishing consistency with a qualified GHG Reduction Strategy (per CEQA Guidelines § 15183.5) is an appropriate approach to determine significance for individual projects and is one of the three recommended BAAQMD thresholds previously discussed. This approach allows lead agencies to analyze and mitigate the significant effects of GHG emissions at a programmatic level to reduce GHG emissions, so that later individual development projects may tier from the prior analysis to determine significance. Appendix D of the City's CAP describes in detail how the City's CAP was developed to satisfy the requirements of the BAAQMD's guidelines on the standard elements of a Qualified GHG Reduction Strategy, with the intent to allow future development projects to determine that a project has a less than significant impact on GHG emissions as long as it is in compliance with the City's CAP. These standard elements of a Qualified GHG Reduction Strategy and the of incorporation of each element into the City's CAP, are provided in Table 19.

[74] California Energy Commission (CEC). 2018. 2019 Title 24, Part 6, Building Energy Efficiency Standards Rulemaking. April. Website: https://efiling.energy.ca.gov/GetDocument.aspx?tn=223257-3. Accessed December 10, 2019.

Table 19: City of Santa Rosa Climate Action Plan Consistency with Elements of a Qualified Greenhouse Gas Reduction Strategy

Standard Elements of a Qualified GHG Reduction Strategy	The City of Santa Rosa Climate Action Plan's Incorporation of Elements of a Qualified GHG Reduction Strategy
Quantify GHG emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic range.	**Incorporated.** The CAP consists of a city-wide GHG emissions inventory, which separates activities that generate GHG emissions into sectors including vehicle transportation, building energy usage, water delivery systems and others. The CAP incudes existing and projected GHG emission for the defined geographic range of the City of Santa Rosa. "Business-as-usual GHG forecast" (status quo before state, regional, and local reduction efforts are taken into consideration) GHG emissions are included in the CAP for years 2007, 2015, 2020, and 2035.
Establish a level, based on substantial evidence below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable.	**Incorporated.** The City, in coordination with the Climate Protection Campaign, Sonoma County, and the other nine municipalities in Sonoma County, established one of the most aggressive GHG reduction targets in the state and nation by committing to reduce GHG emissions 25 percent below 1990 levels by 2015. The CAP demonstrates that the City would meet this reduction goal by 2020 with implementation of measures in the CAP. Furthermore, this goal exceeds the requirements of the AB 32 2020 reduction targets. With implementation of the reduction measures a total of 558,090 MT CO_2e is expected to be reduced in the City of Santa Rosa by 2020. The CAP includes calculated GHG emission reductions with implementation of the CAP not just for comparison to the 2020 targets but also out to year 2035, to be consistent with the planning horizon of the General Plan. As summarized on page ES-7 of the CAP, implementation of the measures of the Santa Rosa CAP are expected to decrease GHG emissions to 2.3 MT CO_2e per person per year by year 2035.
Identify and analyze the GHG emissions resulting from specific actions or categories of actions anticipated within the geographic area.	**Incorporated.** As previously mentioned, the CAP demonstrates that the City would GHG emissions 25 percent below 1990 levels by year 2020. The CAP includes calculated GHG emission reductions with implementation of the CAP not just for comparison to the 2020 targets but also out to year 2035, to be consistent with the planning horizon of the General Plan. As summarized on page ES-7 of the CAP, implementation of the measures of the Santa Rosa CAP are expected to decrease GHG emissions to 2.3 MT CO_2e per person per year by year 2035. In addition, the CAP states that its reduction measures build on previous efforts (particularly the Climate Protection Campaign's Community CAP). In addition, the measures offer a diverse mix of regulatory and incentive-based programs for both new and existing development.

Table 19 (cont.): Santa Rosas Climate Action Plan Consistency with Elements of a Qualified Greenhouse Gas Reduction Strategy

Standard Elements of a Qualified GHG Reduction Strategy	The City of Santa Rosa Climate Action Plan's Incorporation of Elements of a Qualified GHG Reduction Strategy
Specify measures or a group of measures, including performance standards that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level.	**Incorporated.** As explained on page ES-9 of the CAP, the CAP includes an implementation chapter and implementation matrix with details specific to each measure. Details described in the matrix include the following for individual measures: the responsible department, the implementation timeframe, and co-benefits. The CAP intended for this implementation matrix to be used to monitor the City's progress toward implementing the goals and policies included in the CAP. At the project level, the CAP includes a New Development Checklist for individual development projects to fill out to demonstrate compliance with the CAP.
Monitor the plan's progress.	**Incorporated.** As previously explained, the CAP includes an implementation matrix that will be used to monitor the City's progress toward implementing the goals and policies included in the CAP. The plans for implementation and monitoring are further explained on page D-9 of the CAP. The CAP indicates that it plans for staff to coordinate City Green Team meetings, track implementation of GHG reduction strategies and progress toward GHG reduction targets, and prepare annual reports to the City Council on CAP implementation and progress. The City has actively implemented and continues to actively implement GHG reduction measures from the community-wide CAP (City's CAP) appliable to this project and the Municipal Operations Climate Action Plan (Municipal CAP), with goals and policies related to GHG emissions produced by municipal activities and developments, to reduce local GHG emissions to meet state, regional, and local reduction targets. These actions are documented on "Climate Action Planning in Santa Rosa."[75] In February 2019, the Santa Rosa City Council designated implementation of the City's CAP as a Tier One Council priority. A Climate Action Subcommittee was formed in 2019 to provide guidance and oversight of the implementation of the Municipal CAP and the City's CAP with a goal of reducing the local GHG emissions and ensuring long-term sustainability and resilience from climate change and its effects.

[75] City of Santa Rosa. no date. Climate Action Planning in Santa Rosa. Website: https://srcity.org/1634/Climate-Action-Planning. Accessed: May 26, 2020.

Table 19 (cont.): Santa Rosas Climate Action Plan Consistency with Elements of a Qualified Greenhouse Gas Reduction Strategy

Standard Elements of a Qualified GHG Reduction Strategy	The City of Santa Rosa Climate Action Plan's Incorporation of Elements of a Qualified GHG Reduction Strategy
Adopt the GHG reduction strategy in a public process following environmental review.	**Incorporated.** The City's CAP was adopted on June 5, 2012 and was adopted as a GHG reduction strategy in a public process following environmental review.
Source of City's CAP: City of Santa Rosa. 2012. City of Santa Rosa Climate Action Plan. Website: https://srcity.org/DocumentCenter/View/10762. Accessed May 26, 2020. June 5.	

As detailed in Table 19, the City's CAP remains a Qualified GHG Reduction Strategy and demonstrates that it would meet the anticipated State 2030 GHG emissions reductions targets. If the proposed project can demonstrate consistency with the City's CAP, its impacts related to GHG emission by year 2030 would be considered less than significant and fully consistent with State GHG emissions reduction requirements, with *no need to quantify project-specific emission*. This is consistent with BAAQMD guidelines related to the analysis of projects and accounts for the anticipated updates to BAAQMD's 2030 GHG targets.

To ensure new development projects comply with the City's CAP, the City developed the New Development Checklist. The proposed project's compliance with the New Development Checklist is shown in Table 20. Measures denoted with an asterisk are required in all new development projects. As shown in the table, the proposed project would comply with all applicable requirements.

Table 20: Consistency with Santa Rosa's Climate Action Plan New Development Checklist

New Development Checklist Measures	Project Consistency
Required Measures	
1.1.1: Comply with CALGreen Tier 1 standards*	**Complies.** The proposed project would implement required green building strategies to comply with Tier 1 CALGreen standards. The proposed project includes sustainability design features that support the Green Building Strategy.[1]
1.1.3: After 2020, all new development will utilize zero net electricity*	**Complies.** The proposed project would be required to comply with California's Building Energy Efficiency Standards.[1]
1.3.1: Install real-time energy monitors to track energy use*	**Complies.** The proposed project would be built to comply with all regulations.
1.4.2: Comply with the City's tree preservation ordinance*	**Complies.** The proposed project's landscaping plan contains multiple trees, particularly along the project's proposed roadways. For all proposed tree removal, the proposed project would be required to comply with the City's tree preservation ordinance.[2]

Table 20 (cont.): Consistency with Santa Rosa's Climate Action Plan New Development Checklist

New Development Checklist Measures	Project Consistency
1.4.3: Provide public & private trees in compliance with the Zoning Code*	**Complies.** The proposed project would be required to comply with the City's Zoning Code.
1.5: Install new sidewalks and paving with high solar reflectivity materials*	**Complies.** The proposed project would be required to construct paved areas in accordance with City standards.
4.1.2: Install bicycle parking consistent with regulations*	**Complies.** The proposed project would include private garages for each single-family residence and would therefore meet bicycle-parking requirements.[3]
4.3.5: Encourage new employers of 50+ to provide subsidized transit passes*	**Not applicable.** The proposed project is a residential development and would not have new employees.
5.2.1: Provide alternative fuels at new refueling stations*	**Not applicable.** The proposed project would not include refueling stations.
6.1.3: Increase diversion of construction waste*	**Complies.** The proposed project would be required to comply with existing regulations.
7.1.1: Reduce potable water use for outdoor landscaping*	**Complies.** The proposed project would conform to the City's WELO and other outdoor water efficiency requirements.
7.1.3: Use water meters which track real-time water use*	**Complies.** The proposed project would include water meters in accordance with City standards.
7.3.2: Meet on-site meter separation requirements in locations with current or future recycled water capabilities*	**Not applicable.** The proposed project is not located in an area with meter separation requirements. If applicable, the proposed project would comply.
9.1.3: Install low water use landscapes*	**Complies.** The proposed project would conform to the City's WELO, which requires low water use landscape designs.[4]
9.2.1: Minimize construction equipment idling time to 5 minutes or less*	**Complies.** The proposed project would ensure that construction equipment idling time is minimized to 5 minutes or less.
9.2.2: Maintain construction equipment per manufacturer's specs*	**Complies.** The proposed project would maintain construction equipment per manufacturer's specs.
9.2.3: Limit GHG construction equipment emissions by using electrified equipment or alternative fuels*	**Not applicable.** Emissions from construction equipment would be limited by MM AIR-1 and MM AIR-2 (see Impact 3, Air Quality).
Voluntary Measures	
2.1.3: Pre-wire and pre-plumb for solar thermal or PV systems	**Complies.** The proposed project would include solar photovoltaic systems.
3.1.2: Support implementation of station plans and corridor plans	**Complies.** The project site is located northwest of the North Santa Rosa Station Area Specific Plan (the project site is located approximately 1.23 miles northeast of the North Santa Rosa Station Area's northwestern boundary).[5] The proposed project would not impede the implementation of this nearby plan or any other station

Table 20 (cont.): Consistency with Santa Rosa's Climate Action Plan New Development Checklist

New Development Checklist Measures	Project Consistency
	or corridor plan.
3.2.1: Provide on-site services such as ATMs or dry cleaning to site users	**Not applicable.** The proposed project is a residential development and would not include a commercial component.
3.2.2: Improve non-vehicular network to promote walking, biking	**Complies.** The proposed project would add sidewalks and planter strips to promote walking and connectivity to other land uses and the existing biking network.
3.2.3: Support mixed-use, higher-density development near services	**Not proposed.** This is a voluntary measure that is not proposed at this time. The proposed project complies with the applicable land use and zoning
3.3.1: Provide affordable housing near transit	**Not proposed.** This is a voluntary measure that is not proposed at this time.
3.5.1: Unbundle parking from property cost	**Not proposed** This is a voluntary measure that is not proposed at this time.
3.6.1: Install calming features to improve pedestrian/bike experience	**Complies.** The proposed project would install planters between traffic and pedestrians to provide traffic-calming features to improve pedestrian/bike experience.
4.1.1: Implement the Bicycle and Pedestrian Master Plan	**Not proposed.** This is a voluntary measure that is not proposed at this time.
4.1.3: Provide bicycle safety training to residents, employees, motorists	**Not proposed.** This is a voluntary measure that is not proposed at this time.
4.2.2: Provide safe spaces to wait for bus arrival	**Not applicable.** There is not a bus stop or public transit stop on the project site.
4.3.2: Work with large employers to provide rideshare programs	**Not applicable.** The proposed project is a residential development and would not have employees.
4.3.3: Consider expanding employee programs promoting transit use	
4.3.4: Provide awards for employee use of alternative commute options	
4.3.7: Provide space for additional park-and-ride lots	**Not proposed.** This is a voluntary measure that is not proposed at this time.
4.5.1: Include facilities for employees that promote telecommuting	**Not applicable.** The proposed project is a residential development and does not have employees.
5.1.2: Install electric vehicle charging equipment	**Complies.** The proposed project would install electric vehicle charging equipment.
8.1.3: Establish community gardens and urban farms	**Not proposed.** This is a voluntary measure that is not proposed at this time.
9.1.2: Provide outdoor electrical outlets for charging lawn equipment	**Complies.** The proposed project would provide electrical outlets for charging lawn equipment.

Table 20 (cont.): Consistency with Santa Rosa's Climate Action Plan New Development Checklist

New Development Checklist Measures	Project Consistency
Notes: * Measures denoted with an asterisk are required in all new development projects. Source of policy and project requirements: [1] California Energy Commission (CEC). 2019. Building Energy Efficiency Standards—Title 24. Website: https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards. Accessed December 6, 2019. [2] City of Santa Rosa. 2017. Santa Rosa City Code Sections 20-23.030. Website: https://srcity.org/DocumentCenter/View/16148/DRAFT-City-of-Santa-Rosa-Cannabis-Regulations-June-30-2017?bidId=. Accessed December 6, 2019. [3] City of Santa Rosa. 2019. Santa Rosa Municipal Code, Chapter 19-08. Website: https://qcode.us/codes/santarosa/. Accessed December 6, 2019. [4] City of Santa Rosa. 2019. Santa Rosa City Code, Chapter 14-30 Water Efficient Landscape. Website: https://qcode.us/codes/santarosa/. Accessed December 6, 2019. [5] City of Santa Rosa. 2019. 4.10 North Santa Rosa Station Area Specific Plan. Website: https://srcity.org/DocumentCenter/View/3047/Design-Guidelines-410-North-Santa-Rosa-Station-Area-Specific-Plan-PDF. Accessed December 6, 2019. City of Santa Rosa. 2012. City of Santa Rosa Climate Action Plan, Appendix B: CAP New Development Checklist. Website: https://srcity.org/DocumentCenter/View/10762. Accessed December 6, 2019.	

According to the City of Santa Rosa's Planning Department, an updated New Development Checklist is currently being developed;[76] however, because it has not yet been officially adopted by the City, this IS/MND evaluates the proposed project with respect to the existing New Development Checklist provided in the City's June 5, 2012 CAP. MM GHG-1 would ensure the proposed project would incorporate measures appliable at the time building permits are issued. Therefore, with implementation of MM GHG-1, the proposed project would comply with a qualified GHG Reduction Strategy and would not result in a significant generation of GHG emissions after incorporation of mitigation.

b) Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less than significant impact with mitigation incorporated. Significance for this impact is determined by project compliance with (1) the City's CAP and (2) the ARB adopted 2017 Climate Change Scoping Plan Update. Project compliance with the policies and requirements included in the City's CAP are presented in Table 21. As shown in the table, the proposed project would comply with all applicable requirements.

It is acknowledged that the City's CAP's planning horizon of 2020 has passed; however, as described under Impact 8(a), implementation of the measures included in the City's CAP are expected to decrease GHG emissions to 2.3 MT CO_2e per person per year by year 2035, [77] and it can be concluded that emissions would be below 2.6 MT CO2e per person per year (or a 40 percent reduction below 2020 thresholds) by year 2030. The actions and measures from the City's CAP are still applicable to the proposed project and are evaluated below.

[76] Monet Sheikhali, City Planner, City of Santa Rosa and Susie Murray, Senior Planner, City of Santa Rosa. Personal communication (phone calls and emails) with Kimber Johnson, Air Quality Scientist, FirstCarbon Solutions. September 2019.

[77] City of Santa Rosa Community Development. 2012. Climate Action Plan: City of Santa Rosa. Website: https://srcity.org/DocumentCenter/View/10762/Climate-Action-Plan-PDF?bidId=. Accessed: May 26, 2020. June 5.

Table 21: Consistency with the City of Santa Rosa Climate Action Plan

Measure	Action Item	Project Compliance
Energy Efficiency in Existing Buildings: Facilitate energy efficiency upgrades and retrofits in existing commercial, residential, and industrial buildings by connecting residents and businesses with technical and financial assistance.	Connect businesses and residents with voluntary programs that provide free or low-cost energy efficiency audits and financing assistance for energy efficient appliances.	**Complies.** The proposed project is a new development project, and therefore the voluntary programs that provide free or low-cost energy efficiency audits and financing assistance for energy efficient appliances in existing buildings would not be applicable. However, the proposed project would comply with the latest energy efficiency standards and incorporate applicable energy efficiency features designed to reduce project energy consumption.[1]
	Work with the Sonoma County Energy Independence Program to offer low-interest financing and technical assistance to property owners for energy efficiency retrofits.	**Not applicable.** The proposed project is a new development project and would not include retrofits.
Smart Meter Utilization: Encourage existing development and require new development to utilize PG&E's Smart Meter system to facilitate energy and cost savings.	Require new construction and major remodels to install real-time energy monitors that allow building users to track their current energy use.	**Complies.** The proposed project would be built to comply with all regulations.
Cool Roofs and Pavements: Require new sidewalks, crosswalks, and parking lots to be made of cool paving materials with a high solar reflectivity.	Adopt an ordinance that requires and specifies cool paving materials for new parking lots, sidewalks, roofs, and crosswalks and integrates Low Impact Development (LID) guidelines for new construction and Capital Improvement Projects.	**Complies.** The proposed project would be required to construct paved areas in accordance with General Plan Policy H-G-2.[2]
	Ensure the cool roof and paving ordinance includes cool roof specifications which allow for green or living roofs and address energy installations on historic structures consistent with the Secretary of Interior's Rehabilitation Standards. Allow darker-color roofs when they meet cool roof standards.	**Complies.** The proposed project would comply with Title 24, which requires new buildings to be made of cool paving materials and be "solar ready."[1] The 2019 Title 24 Energy Efficiency Standards are scheduled to go into effect on January 1, 2020. The 2019 Title 24 Standards also require solar panels to be included in all new single-family residential developments.

Table 21 (cont.): Consistency with the Santa Rosa Climate Action Plan

Measure	Action Item	Project Compliance
Tree Planting and Urban Forestry: Plant and maintain trees on private property, streets, and open space areas.	Require new development to supply an adequate number of street trees and private trees.	**Complies.** The landscape plan includes the planting of multiple trees, particularly along the project's proposed roadways. For the proposed tree, the proposed project would be required to comply with the Santa Rosa City Code, Title 17 (17-24.030)[3] for the proposed tree removal.
Energy-Efficient Appliances: Facilitate the efficient use of energy for appliances in residential, commercial, and industrial buildings.	Seek funding sources to develop a rebate program for residents and businesses to exchange inefficient appliances with Energy Star-certified models.	**Complies.** Implementation of the proposed project would not preclude future residents from exchanging any inefficient appliances with Energy Star verified models. Moreover, all appliances would meet the latest Title 24 efficiency requirements.[1]
Appliance Electrification: Encourage residents and businesses to switch natural-gas-powered appliances to electric power, where appropriate.	Utilize the energy-efficient appliance rebate program to facilitate the replacement of natural gas equipment with electric-powered equipment.	**Complies.** Implementation of the proposed project would not preclude future residents from exchanging any inefficient appliances with Energy Star verified models. Moreover, all appliances would meet the latest Title 24 efficiency requirements.[1]
	Identify opportunities to implement additional programs that will switch appliances from natural gas to electricity.	**Not applicable.** The proposed project is a new development.
Water Conservation: Continue to require and incentivize water conservation.	Require new development to reduce potable water use in accordance with the Tier 1 standards of CALGreen.	**Complies.** The proposed project would implement required green building strategies to comply with Tier 1 CALGreen standards. The proposed project includes sustainability design features (such as installing low-flow toilets and low-flow showers) that support the Green Building Strategy.[1]

Table 21 (cont.): Consistency with the Santa Rosa Climate Action Plan

Measure	Action Item	Project Compliance
	Continue and expand water conservation efforts including water-efficient landscaping, rainwater harvesting, and high-efficiency appliance and fixture installations.	**Complies.** The proposed project would conform to the City's Water Efficient Landscape Ordinance (WELO)[4] and the California Green Building Standards Code.[1]
	Replace water meters in Santa Rosa with meters that allow residents and businesses to track real-time water use through the City's online web application.	**Complies.** The proposed project would include water meters in accordance with City standards.
	Encourage existing development and require new development to utilize smart water meters to facilitate water and cost savings.	**Complies.** The proposed project would utilize smart meters.
Lawn and Garden Activity: Encourage the use of electrified and higher-efficiency lawn and garden equipment.	Support the BAAQMD's efforts to re-establish a voluntary exchange program for residential lawn mowers and backpack-style leaf blowers.	**Not applicable.** This measure applies to government agencies and not individual development projects.
	Encourage new buildings to provide electrical outlets on the exterior in an accessible location to charge electric-powered lawn and garden equipment.	**Complies.** The proposed project would provide electrical outlets in accessible areas to be used for landscaping equipment per the requirements of the City Code.
	Encourage the replacement of existing high-maintenance and high-water use landscapes with low water use vegetation to reduce the need for gas-powered lawn and garden equipment.	**Complies.** The proposed project would conform to the City's WELO and other outdoor water efficiency requirements.[4]
Construction Emissions: Reduce emissions from heavy-duty construction equipment by limiting idling and utilizing cleaner fuels, equipment, and vehicles.	Minimize idling times either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes or less (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations). Provide clear signage at all access points to remind employees of idling restrictions.	**Complies.** As required by MM AIR-1, signage would be posted at the project site throughout the duration of the construction period to require employees to comply with idling restrictions.
	Construction equipment shall be maintained in accordance with manufacturer's specifications.	**Complies.** All project-related construction equipment shall be maintained in accordance with manufacturer's specifications and pursuant to BAAQMD requirements for all projects.
	Work with project applicants to limit GHG emissions from	**Not proposed.** As required by MM AIR-2, the

Table 21 (cont.): Consistency with the Santa Rosa Climate Action Plan

Measure	Action Item	Project Compliance
	construction equipment by selecting one of the following measures, at a minimum, as appropriate to the construction project: a. Substitute electrified equipment for diesel- and gasoline-powered equipment where practical. b. Use alternative fuels for construction equipment on-site, where feasible, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane, or biodiesel. c. Avoid the use of on-site generators by connecting to grid electricity or utilizing solar-powered equipment.	proposed project would implement measures to reduce potential exposure of DPM and $PM_{2.5}$ emissions to sensitive receptors located near the project site. All project-related off-road construction equipment in excess of 50 horsepower used on-site by the developer or contractors during all phases of construction shall be equipped with engines meeting the EPA Tier IV Final off-road engine emission standards.

Source of policy and project requirements:

[1] California Energy Commission (CEC). 2019. 2019 Building Energy Efficiency Standards. Website: https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency. Accessed December 6, 2019.

[2] City of Santa Rosa. 2009. Santa Rosa General Plan 2035. November 3. Website: https://srcity.org/DocumentCenter/View/24327/Santa-Rosa-General-Plan-2035-PDF---July-2019. Accessed December 6, 2019.

[3] City of Santa Rosa. 2019. Santa Rosa City Code, Chapter 17-24 Trees. Website: https://qcode.us/codes/santarosa/view.php?topic=17-17_24-iii-17_24_030&frames=on. Accessed December 6, 2019

[4] City of Santa Rosa. 2019. Santa Rosa City Code, Chapter 14-30 Water Efficient Landscape. Website: https://qcode.us/codes/santarosa/. Accessed December 6, 2019.

City of Santa Rosa. 2012. City of Santa Rosa Climate Action Plan. Website: https://srcity.org/DocumentCenter/View/10762. Accessed December 6, 2019.

Santa Rosa Climate Action Plan New Development Checklist

To ensure new development projects comply with the Santa Rosa CAP, the City of Santa Rosa developed the New Development Checklist as described in Impact 8(a). As shown in Table 20, the proposed project would comply with all applicable requirements. As discussed in Impact 8(a), MM GHG-1 is required to ensure the proposed project would incorporate measures from the New Development Checklist that is in place at the time building permits are issued.

SB 32 2017 Scoping Plan Update

The 2017 Climate Change Scoping Plan Update addressing the SB 32 targets was adopted on December 14, 2017.[78] Table 22 provides an analysis of the proposed project's consistency with the 2017 Scoping Plan Update measures. As shown in Table 22, these measures are more focused at the statewide implementation level and are not as applicable to local, project-level developments. Nevertheless, this analysis provides a description of each measure and if the measures are applicable to the proposed project.

Table 22: Consistency with SB 32 2017 Scoping Plan Update

2017 Scoping Plan Update Reduction Measure	Project Consistency
SB 350: 50 Percent Renewable Mandate. Utilities subject to the legislation will be required to increase their renewable energy mix from 33 percent in 2020 to 50 percent in 2030.	**Not applicable.** This measure would apply to utilities and not to individual development projects. The proposed project would purchase electricity from PG&E subject to the SB 350 Renewable Mandate.
SB 350: Double Building Energy Efficiency by 2030. This is equivalent to a 20 percent reduction from 2014 building energy usage compared to current projected 2030 levels.	**Not applicable.** This measure applies to existing buildings. The proposed project proposes to demolish existing buildings on the project site and construct new residential buildings.
Low Carbon Fuel Standard. This measure requires fuel providers to meet an 18 percent reduction in carbon content by 2030.	**Not applicable.** This is a Statewide measure that cannot be implemented by a project applicant or lead agency. However, vehicles accessing the proposed building at the project site would be benefit from the standards.
Mobile Source Strategy (Cleaner Technology and Fuels Scenario). Vehicle manufacturers will be required to meet existing regulations mandated by the LEV III and Heavy-Duty Vehicle programs. The strategy includes a goal of having 4.2 million Zero Emission Vehicles (ZEVs) on the road by 2030 and increasing numbers of ZEV trucks and buses.	**Not applicable.** This measure is not applicable to the proposed project; however, vehicles accessing the single-family residences at the project site would benefit from the increased availability of cleaner technology and fuels.

[78] California Air Resources Board (ARB). 2017. The 2017 Climate Change Scoping Plan Update, the Proposed Strategy for Achieving California's 2030 Greenhouse Gas Target. January 17. Website: https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf. Accessed March 10, 2020.

Table 22 (cont.): Consistency with SB 32 2017 Scoping Plan Update

2017 Scoping Plan Update Reduction Measure	Project Consistency
Sustainable Freight Action Plan. The plan's target is to improve freight system efficiency 25 percent by increasing the value of goods and services produced from the freight sector, relative to the amount of carbon that it produces by 2030. This would be achieved by deploying over 100,000 freight vehicles and equipment capable of zero emission operation and maximize near-zero emission freight vehicles and equipment powered by renewable energy by 2030.	**Not applicable.** This measure applies to owners and operators of trucks and freight operations. The proposed project is residential and would not support truck and freight operations. It is expected that deliveries throughout the State would be made with an increasing number of ZEV delivery trucks, including deliveries that would be made to future residents.
Short-Lived Climate Pollutant (SLCP) Reduction Strategy. The strategy requires the reduction of SLCPs by 40 percent from 2013 levels by 2030 and the reduction of black carbon by 50 percent from 2013 levels by 2030.	**Complies.** Consistent with BAAQMD Regulation 6, Rule 3, no wood-burning devices are proposed as part of the project. Natural gas hearths produce very little black carbon compared to wood-burning fireplace; therefore, the proposed project would not include major sources of black carbon.
SB 375 Sustainable Communities Strategies. Requires Regional Transportation Plans to include a sustainable communities strategy for reduction of per capita VMT.	**Not applicable.** The proposed project does not include the development of a Regional Transportation Plan.
Post-2020 Cap-and-Trade Program. The Post 2020 Cap-and-Trade Program continues the existing program for another 10 years. The Cap-and-Trade Program applies to large industrial sources such as power plants, refineries, and cement manufacturers.	**Not applicable.** The proposed project is not a major source and is not targeted by the cap-and-trade system regulations. Therefore, this measure does not apply to the proposed project.
Natural and Working Lands Action Plan. The ARB is working in coordination with several other agencies at the federal, State, and local levels, stakeholders, and with the public, to develop measures as outlined in the Scoping Plan Update and the governor's Executive Order B-30-15 to reduce GHG emissions and to cultivate net carbon sequestration potential for California's natural and working land.	**Not applicable.** The proposed project that is in an urbanized area and would not be considered natural or working lands. The East Parcel will remain undeveloped to support seasonal wetlands.
Source of ARB 2017 Scoping Plan Update Reduction Measures: California Air Resources Board (ARB). 2017. California's 2017 Climate Change Scoping Plan. November. Website: https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf. Accessed December 6, 2019.	

Conclusion

Project consistency with the goals, policies, and actions set forth in the City's CAP ensures that the proposed project would not impede or interfere with the City's goals or the goal to achieve the AB 32 state-recommended reduction targets. The proposed project is consistent with the applicable local plans, policies, and regulations included in the City's CAP and would not conflict with the provisions of any other State or regional plan, policy or regulation of an agency adopted for the

purpose of reducing GHG emissions. Furthermore, as shown in Table 22, implementation of the proposed project would not conflict with the reduction measures proposed in SB 32. In addition, the applicable measures included in the City's CAP, as shown in Table 21, are included as part of the proposed project design and would reduce project-related GHG emissions. To ensure compliance and consistency with the City's CAP, MM GHG-1 requires that the project applicant submit a completed New Development Checklist prior to the issuance of building permits. Thus, with implementation of MM GHG-1, the proposed project would not conflict with any applicable plan, policy or regulation of an agency adopted to reduce the emissions of GHGs. Therefore, the GHG emissions reduction plan consistency impact would be less than significant with mitigation.

Mitigation Measures

MM GHG-1 Prior to issuance of building permits, the applicant shall prepare and submit a CAP New Development Checklist for the proposed project to the City of Santa Rosa, to demonstrate to the City's satisfaction that the proposed project would be constructed and operated to be consistent with measures required in the applicable CAP Development Checklist in effect at that time.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
9. Hazards and Hazardous Materials *Would the project:*				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☒	☐	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

Environmental Evaluation

Setting

The analysis in this section is based on the site-specific Phase I Environmental Site Assessment (Phase I ESA) prepared by D.M. Jacobson and Sons, Inc. on March 21, 2019, which is provided in Appendix F.

Hazards analyzed in this section include hazardous materials, hazards related to proximity to airport and airstrip operations, and wildfires. Hazardous materials, as defined by the California Code of Regulations, are substances with certain physical properties that could pose a substantial present or

future hazard to human health or the environment when improperly handled, disposed, or otherwise managed. Hazardous materials are grouped into the following four categories, based on their properties:

- Toxic—causes human health effects
- Ignitable—has the ability to burn
- Corrosive—causes severe burns or damage to materials
- Reactive—causes explosions or generates toxic gases

A hazardous waste is any hazardous material that is discarded, abandoned, or slated to be recycled. The criteria that define a material as hazardous also define a waste as hazardous. If improperly handled, hazardous materials and hazardous waste can result in public health hazards if released into the soil or groundwater or through airborne releases in vapors, fumes, or dust. Soil and groundwater having concentrations of hazardous constituents higher than specific regulatory levels must be handled and disposed of as hazardous waste when excavated or pumped from an aquifer. California Code of Regulations, Title 22, Sections 66261.20–24 contain technical descriptions of toxic characteristics that could cause soil or groundwater to be classified as hazardous waste.

The Phase I ESA determined that the existing single-family and associated outbuildings were constructed prior to 1978 and as a result, asbestos-containing materials (ACMs) and lead-based paint could be present.

To address airport safety hazards, Sonoma County has prepared a Comprehensive Airport Land Use Plan that identifies the location of airports in the county, and established spheres of influence, where more stringent planning regulations and restrictions apply. The nearest airport to the project site is the Charles M. Shultz Sonoma County Airport, roughly 2.6 miles to the northwest.

The City of Santa Rosa has prepared an Emergency Operations Plan that identifies the City's emergency planning, organization and response policies, and procedures.[79] The City has also prepared a Local Hazard Mitigation Plan (LHMP) to address various types of hazards. The LHMP identifies the capabilities, resources, information, strategies for risk reduction, and critical facilities, and provides a set of strategies to reduce vulnerability to disaster through education and outreach programs, the development of partnerships, and implementation of actions to reduce the severity of impacts from a disaster.[80]

The California Department of Forestry and Fire Protection (CAL FIRE) prepares maps of Fire Hazard Severity Zone Maps for State Responsibility Area (SRA) lands and separate Very High Fire Hazard Severity Zone Maps for Local Responsibility Area (LRA) lands that are used to develop recommendations for cities and planning. The project is not located within a CAL FIRE designated High Fire Hazard Severity Zone in an SRA or a Very High Fire Hazard Zone in an LRA.[81] The project site

[79] City of Santa Rosa. 2017. City of Santa Rosa Emergency Operations Plan. Website: https://srcity.org/DocumentCenter/View/16434/Emergency-Operation-Plan. Accessed March 26, 2019.
[80] City of Santa Rosa. 2016. City of Santa Rosa Local Hazard Mitigation Plan. Website: https://srcity.org/DocumentCenter/View/3982/Local-Hazard-Mitigation-Plan-Draft-PDF?bidId=. Accessed March 26, 2019.
[81] California Department of Forestry and Fire Protection (CAL FIRE). 2008. Very High Fire Hazard Severity Zones in LRA. Website: http://frap.fire.ca.gov/webdata/maps/sonoma/fhszl_map.49.pdf. Accessed March 26, 2019.

is not within the Wildland-Urban Interface (WUI) Zone according to the Fire Hazard Zones figure in the General Plan. The WUI Zone encompasses four types of fire hazard zones: moderate, high, very high, and mutual threat. Approximately 30 percent of Santa Rosa is located within the WUI Zone.[82]

Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less than significant impact. Residential development typically does not involve the regular use, storage, transport, or disposal of significant amounts of hazardous materials. However, project construction and operation would involve the minor routine transport and handling of minimal quantities of hazardous substances such as diesel fuels, lubricants, aerosols, solvents, asphalt, pesticides, and fertilizers. Handling and transportation of these materials could result in the exposure of workers or residents to hazardous materials. However, the proposed project would not create a significant hazard to the public or the environment because hazardous substances would not be used, stored, or transported in sufficient quantities to create a significant hazard to the public. Furthermore, project construction and operation would comply with applicable federal, state, and local laws pertaining to the safe handling and transport of hazardous materials. Therefore, impacts would be less than significant.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less than significant impact with mitigation incorporated. As described in Impact 9(a), the proposed project would involve the minor use of hazardous materials typically required during construction, such as diesel fuel and other motor lubricants. Contractors would comply with applicable federal, State, and local laws pertaining to the safe handling and transport of hazardous materials, which would minimize potential spill occurrences. Spills that may occur during construction activities would likely be minimal and potential adverse effects would be localized. Plans and specifications typically require contractors to clean up any spills of hazardous materials immediately.

Based on historical references reviewed, the subject site has been listed as being occupied by agricultural grazing (early 1950s), private residences (1950-present), and Kane and Donald Plumbing (early 1980). The Phase I ESA determined that there was no evidence of the use of hazardous materials associated with the previous uses and it does not appear that pesticides were stored, mixed, or disposed of on-site. In addition, it did not appear that underground or aboveground fuel tanks, equipment storage, repair, or maintenance was located on-site. Because of the passage of more than 50 years since the subject site was utilized as agricultural land, the probability of pesticides or herbicides within the soil or groundwater is low. The Phase I ESA concluded that there was no obvious evidence of recognized environmental connection with the project site and no further investigation is warranted.

[82] City of Santa Rosa. 2009. Santa Rosa General Plan 2035, Figure 12-5.

The Phase I ESA determined that given the age of the existing structures on the property, it is possible that asbestos-containing materials and lead-based paint may exist within the structures. Removal of existing on-site buildings during construction could potentially create a significant hazard to the construction workers and nearby residents. This represents a potentially significant impact.

Implementation of MM HAZ-1 would require the applicant to conduct asbestos and lead paint surveys prior to demolition activities and would also require that any hazardous materials are safely removed and disposed of in accordance with State standards. Implementation of MM HAZ-1 would ensure impacts are reduced to a less-than-significant level.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less than significant impact with mitigation incorporated. The project site is located 0.22 mile south of the Jack London Elementary School. As described in Impact 9(a), the proposed project would involve the minor use of hazardous materials typically required during construction, such as diesel fuel and other motor lubricants. As a result, the proposed project would involve the handling of small amounts of hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school.

As described under Impacts 9(a) and 9(b), the proposed project would be required to comply with applicable federal, State, and local laws pertaining to the safe handling and transport of hazardous materials, which would minimize potential spill occurrences. Spills that may occur during construction activities would likely be minimal and potentially adverse effects would be localized. As described under Impact 9(b), demolition of the existing structures could release asbestos and lead into the local environment, which would be a potentially significant impact. MM HAZ-1 would require removal of these structures in accordance with regulations applicable to the abatement of asbestos-containing materials and lead-based paint. As such, a less than significant impact would occur with mitigation incorporated.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No impact. The Phase I ESA prepared for the proposed project reviewed regulatory agency records and reviewed local, State, and federal regulatory agency lists, including the State Water Board GeoTracker and Department of Toxic Substances Control Envirostor websites, to determine the presence of on-site hazardous materials. The Phase I ESA determined the project site is not listed on a hazardous materials site compiled pursuant to Government Code Section 65962.5. As such, no impact would occur.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No impact. The project site does not fall within the sphere of influence of the Sonoma County Airport or any other airport.[83] Given the distance of the project site from local airports and applicable air traffic and safety regulations, the proposed project would result in no impact with respect to air safety hazards.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less than significant impact. The LHMP designates emergency evacuation routes, including U.S. 101, Sonoma Highway, and Fountaingrove Parkway-Mission Boulevard. The project site is located adjacent to Fulton Road and, as a result, would not interfere with evacuation along these routes. Additionally, the project does not propose permanent road closures or lane narrowing that would impact an emergency response plan or evacuation plan. As a result, the proposed project would not conflict with an adopted emergency response plan or emergency evacuation plan. Therefore, impacts would be less than significant.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Less than significant impact. As discussed previously, the project site is not located within a CAL FIRE designated High Fire Hazard Severity Zone in an SRA, a Very High Fire Hazard Zone in an LRA, or a WUI Zone as shown in the General Plan. The proposed project would be consistent with the most recent version of the California Fire Code and Building Code and all roadways would be a minimum of 20 feet wide to allow for fire apparatus access. In addition, as discussed in Impact 19(a), the proposed project would be served by adequate water supplies during normal, dry, and multiple dry years, which would provide sufficient water in the event that fire protection services are required. Impacts would be less than significant.

Mitigation Measures

MM HAZ-1 Conduct Asbestos Containing Materials and Lead Based Paint Surveys Prior to Demolition

Prior to the issuance of demolition permits for the existing residence and associated outbuildings, the project applicant shall retain a licensed abatement professional to conduct asbestos and lead paint surveys. These surveys shall be conducted prior to the disturbance or removal of any suspect asbestos-containing materials and lead-based paint, and these materials shall be characterized for asbestos and lead by a reliable method. All activities involving asbestos-containing materials and lead-based paint shall be conducted in accordance with governmental regulations, and all removal shall be conducted by properly licensed abatement professionals.

[83] Sonoma County Airport Land Use Commission. 2016. Sonoma County Airport Safety Zones, Exhibit C4.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
10. Hydrology and Water Quality *Would the project:*				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐
(i) result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	☒	☐
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
(iv) impede or redirect flood flows?	☐	☐	☐	☒
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

Environmental Evaluation

Setting

Surface Water Quality

Several regulations at various jurisdictional levels protect water resources and quality. At the federal level, the Clean Water Act (CWA) is the primary federal law that governs and authorizes water quality control. Section 303 of the CWA requires states to adopt water quality standards for all surface waters of the United States. The CWA establishes the National Pollutant Discharge Elimination System (NPDES)

permit program to regulate municipal and industrial discharge, including those from municipal storm sewer systems, which require Municipal Separate Storm Sewer System (MS4) permits.

At the State level, the Porter-Cologne Water Quality Control Act 1969 (Porter-Cologne Act) oversees California's water quality control. The Porter-Cologne Act is California's statutory authority for the protection of water quality. Under the Porter-Cologne Act, the State must adopt water quality policies, plans, and objectives that protect the State's waters for the use and enjoyment of the people. Regional authority for planning, permitting, and enforcement is delegated to the nine RWQCBs.[84]

At the regional level, the North Coast RWQCB serves Del Norte, Glenn, Humboldt, Lake, Marin, Mendocino, Modoc, Siskiyou, Sonoma, and Trinity Counties. The City of Santa Rosa's current NPDES stormwater permit (Order No. R1-2009-0050) regulates both stormwater and non-stormwater discharges from public and private projects into the Santa Rosa municipal storm drain system. The permit requires a minimum set of BMPs to be implemented at all construction sites, as well as permanent stormwater Low Impact Development (LID) BMPs.[85]

Stormwater Runoff

At the local level, the General Plan outlines strategies to reduce and manage stormwater runoff. The Storm Water Pollution Prevention Plan (SWPPP) includes a description of BMPs to prevent the discharge of silt and sediment from point and non-point sources into receiving waters. The SWPPP aims to minimize the discharge of pollutants during construction, which includes, but is not limited to activities such as: clearing, grading, demolition, excavation, construction of new structures, and reconstruction of existing facilities involving removal and replacement that results in soil disturbance. The City's Standard Urban Stormwater Mitigation Plan (SUSMP) requires projects to design and implement post-development measures to reduce the potential stormwater impacts to local drainages.[86]

Groundwater Supply/Recharge

The City of Santa Rosa is located within the Laguna de Santa Rosa Watershed, in the confluence of the Santa Rosa, Bennett, and Rincon Valleys. The City of Santa Rosa has three sources of water supply: entitlements from the Sonoma County Water Agency (Sonoma Water), six groundwater wells, and recycled water. Sonoma Water receives its water supply from the Russian River while groundwater wells extract from the Santa Rosa Plain Subbasin. The Santa Rosa Plain Subbasin is not adjudicated nor has it been identified by the California Department of Water Resources (DWR) as overdrafted nor anticipated to become overdrafted.[87] Table 23 summarizes the amount of groundwater that was pumped from the Santa Rosa Valley Basin between the 2011 and 2015. The Santa Rosa Subregional Water Reuse System produces recycled water for the City's residents and business.[88]

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[84] California Wetlands Information System. 2002. Summary of the Porter-Cologne Water Quality Control Act. Website: http://resources.ca.gov/wetlands/permitting/Porter_summary.html. Accessed January 22, 2020.

[85] California Regional Water Quality Control Board (RWQCB), North Coast Region. 2009. Order No. R1-2009-0050, Waste Discharge Requirements for the City of Santa Rosa. Website: https://www.waterboards.ca.gov/northcoast/board_decisions/adopted_orders/pdf/2009/091014_09_0050_PERMIT_MS4_SRSonCoSCWA.pdf. Accessed March 29, 2019.

[86] City of Santa Rosa. 2009. Santa Rosa General Plan 2035 Draft EIR, page 4.H-6.

[87] California Department of Water Resources (DWR). Evaluation of Ground Water Resources in Sonoma County Volume 2: Santa Rosa Plain, DWR Bulletin 118-4, 1982.

[88] City of Santa Rosa. 2015 Urban Water Management Plan (UWMP), page 3. Website: https://srcity.org/DocumentCenter/View/13875/Urban-Water---2015-Management-Plan-Without-Appendices. Accessed March 29, 2019.

Table 23: Groundwater Volume Pumped (AFY)

Groundwater Type	Location or Basin Name	2011	2012	2013	2014	2015
Alluvial Basin	Santa Rosa Valley	1,255	792	1,129	1,135	1,198
Source: Santa Rosa 2015 Urban Water Management Plan (UWMP)						

Sonoma Water entitlement provides up to 29,041 acre-feet/year (AFY) of water while the groundwater wells provide up to 2,300 AFY. Gross total water usage for 2015 was 5,389 million gallons. Ninety percent of the City's water supply is from Sonoma Water, while the remainder comes from groundwater and recycled water.[89] The General Plan determined that in the year 2035, 38,486 acre-feet/year of water would be available, and demand would be 37,226 acre-feet/year (36,186 + 1,040). The Water Supply Assessment prepared for the General Plan concluded that the City would have adequate water supply.[90]

Dam Inundation and Flooding

Dam inundation occurs when a flood control dam/water reservoir is damaged severely enough to compromise its ability to hold back water. These events pose a high risk to the community but have low occurrence. This damage can occur as a result of earthquakes or other seismic activity, erosion of the dam face or foundation, or rapidly rising floodwaters that weaken the dam or overwhelm its capacity to drain excess water. When a dam fails, sudden fast-moving floods migrate throughout the inundation zone. The speed and volume of these floodwaters can damage or destroy property, cause injury or loss of life, and displace large numbers of residents in the flood's path.[91] Other hazards include seiches, oscillations of water in an enclosed body of water caused by strong winds, and rapid changes in atmospheric pressure. The General Plan also identifies that landslide hazards, including mudflows, increase with steep slopes located close to the Rodgers Creek Fault Zone.[92]

Would the project:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Less than significant impact. The proposed project has the potential to release water pollutants during both construction and operation that may violate water quality standards and degrade surface or groundwater quality. During construction activity, runoff carrying eroded soils and pollutants could enter storm drainage systems and enter the Russian River and other nearby waterbodies, increasing sedimentation and degrading downstream water quality. These sediments could be carried downstream and discharge into the Pacific Ocean and could degrade surface water quality. The sediments could also seep into the associated groundwater table. This would represent a potentially significant construction impact related to surface and groundwater quality.

[89] City of Santa Rosa. 2015 Urban Water Management Plan (UWMP), page ES-1. Website: https://srcity.org/DocumentCenter/View/13875/Urban-Water---2015-Management-Plan-Without-Appendices. Accessed March 27, 2019.
[90] City of Santa Rosa. 2009. Santa Rosa General Plan 2035 Draft EIR, page 4-G-12.
[91] City of Stan Rosa. 2016. City of Santa Rosa Local Hazard Mitigation Plan, page 38.
[92] City of Santa Rosa. 2009. Santa Rosa General, Plan 2035. Page 12-3.

Under the NPDES General Construction Permit (Order No. R1-2009-0050), projects that disturb one or more acres of land are required to obtain a permit before the start of construction activity. Accordingly, the proposed project would be required to prepare and implement a SWPPP (as outlined within City Municipal Code Section 17-12.170) during construction in accordance with federal and State requirements. The SWPPP would identify structural and non-structural BMPs intended to prevent erosion during construction. Although construction activities have the potential to generate increased sedimentation, compliance with applicable policies and regulations would minimize the potential to degrade water quality in downstream water bodies to the maximum extent possible. As a result, construction-related project impacts related to surface and groundwater quality would be less than significant.

Under existing conditions, the site is almost entirely composed of pervious surfaces (aside from the existing buildings). The proposed project would develop single-family homes with associated paved surfaces. As a result, the proposed project would increase impervious surface area on the project site compared to existing conditions and the stormwater runoff generated from the proposed project could carry pollutant such as motor oil, sediment, and trash into downstream waterways, which could degrade surface or groundwater quality, a potentially significant impact.

The project would include an on-site storm drainage system consisting of a stormwater treatment facility (located on Parcel A, see Exhibit 6), catch basins, and underground pipes that would treat the stormwater and remove pollutants before releasing it to storm drain pipes that would connect to the existing pipes within Fulton Road consistent with Municipal Code Section 17-12.170. In addition, implementation of permanent stormwater quality features as required under the SUSMP, and implementation of post-construction BMPs as required under the NPDES permit would ensure that no stormwater discharge requirements are violated. Therefore, the proposed project would not violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality and impacts would be less than significant.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less than significant impact. As previously mentioned, 90 percent of the City's water supply is from Sonoma Water entitlements, which takes water from the Russian River. Although the City maintains six municipal groundwater wells, groundwater use represents less than 1 percent of the overall City of Santa Rosa water supply. Additionally, the proposed project would connect to existing City water lines contained in Fulton Road, similar to the existing residential uses nearby and would not include a new groundwater well. The proposed project would not significantly increase population (see Impact 14(a) for population increase analysis) such that groundwater use would drastically increase resulting in substantially decreased groundwater supplies. The project site is within the City's UGB and is designated for residential use by the General Plan; as such, its water demand is accounted for in the Urban Water Management Plan (UWMP) projections. The UWMP forecasts a surplus of water under 2040 conditions and, therefore, adequate water supply would be available, and the proposed project would not significantly decrease groundwater supplies.

The proposed project would increase impervious surfaces on the site compared to existing conditions. However, pursuant to the SUSMP, the proposed project would be required to include stormwater BMPs that limit the volume and flow rate of stormwater on-site by providing opportunities for groundwater infiltration. In addition, the proposed project would maintain and improve wetlands on the East Parcel, which would provide further opportunity for groundwater infiltration. As such, the proposed project would not significantly interfere with groundwater recharge. Therefore, impacts would be less than significant.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

(i) result in substantial erosion or siltation on- or off-site;

Less than significant impact. No streams or rivers are located on or immediately adjacent to the project site. Although the proposed project would not alter the course of any streams or rivers, the project would substantially alter the existing natural drainage pattern on-site. As part of construction, the entire West Parcel would be graded and a stormwater system (including a stormwater treatment facility) would be installed. As described in Impact 10(a), the proposed project would be required to implement a SWPPP as part of its Construction General Permit. The SWPPP is designed to ensure that erosion and siltation are prevented or minimized to the maximum extent feasible during construction. Grading and construction may temporarily alter stormwater flow patterns; however, compliance with Final Stormwater LID, NPDES permit conditions, and the applicable provisions of the Municipal Code would lessen impacts related to erosion or siltation during construction.

At operation, the on-site stormwater system would be composed of catch basins and underground pipes that would convey stormwater underground to a 19,557-square-foot stormwater treatment facility located in the northwest corner of the project site. The proposed project would be required to submit a Stormwater LID Determination Worksheet and Stormwater LID to the City, which would determine the need for BMPs. These BMPs would be designed to prevent stormwater related erosion and siltation impacts on- or off-site. Therefore, impacts related to alteration of drainage patterns resulting in erosion or siltation would be less than significant.

(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

Less than significant impact. As discussed in Impact 10(a), the existing site is almost completely composed of pervious surfaces. The proposed project would develop impervious surfaces on the West Parcel resulting in an increase in impervious surface compared to existing conditions that could increase the rate or amount of surface runoff in a manner that could result in flooding. However, the proposed project would include a storm drainage system, including a 19,557-square-foot stormwater treatment facility, which would be designed to detain and meter the release of peak runoff in order to avoid inundating downstream waterways in a manner that creates substantial flooding. In addition, the proposed project would be required to submit a Stormwater LID Determination Worksheet and

Stormwater LID to the City, which would determine the need for BMPs. These BMPs would be designed to mimic the stormwater benefits of the natural environment by reducing peak stormwater runoff rates so that runoff can soak into the ground. Alterations to existing on-site drainage in the East Parcel would be minimal and would modify drainage only so far as to create intentional on-site wetlands. As result, the proposed project would not significantly increase the rate or amount of surface runoff that would result in flooding on- or off-site. Therefore, impacts would be less than significant.

(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

Less than significant impact. The proposed project would increase the amount of surface runoff generated on the project site because of an increase in impervious surfaces compared to existing conditions. Consistent with the Construction General Permit, the proposed project would implement a SWPPP during construction, as outlined in the Municipal Code Section 17-12.170, which would identify structural and non-structural BMPs intended to prevent significant polluted runoff during construction. Compliance with these guidelines would prevent the discharge of pollutants to stormwater during construction.

As discussed previously, the proposed project would include a storm drainage system consisting of a stormwater treatment facility, catch basins, and underground piping that would be designed to detain and meter the release of peak runoff in order to avoid inundating downstream waterways in a manner that creates substantial flooding. In addition, consistent with the Santa Rosa LID Manual, the proposed project would include BMPs that would prevent significant additional sources of polluted runoff. These BMPs would include swales and natural landscaping that slow runoff and prevent pollutants from entering the stormwater system and ultimately the Russian River. As a result, the proposed project would not create or contribute significant stormwater runoff or additional sources of polluted runoff. Therefore, impacts would be less than significant.

(iv) impede or redirect flood flows?

No impact. As shown in Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) No. 06097C0707E, the project site is located within an "Area of Minimal Flood Hazard—Zone X," and would not be located in an area prone to flooding or within a designated flood hazard zone.[93] As described in further detail under Impact 10(d), the project site is not susceptible to inundation from flood hazards, tsunamis, or seiches. As a result, the proposed project would not impede or redirect flood flows. Therefore, there would be no impact.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

No impact. As discussed previously, the project site is located in Zone X—Area of Minimal Flood Hazard. In addition, the project site is not located in a flood prone area. Seiches and tsunamis are short duration earthquake-generated water waves in large enclosed bodies of water and the open ocean. The project site is not near any large inland bodies of water and is approximately 20 miles

[93] Federal Emergency Management Agency (FEMA) Flood Map Service Center: Search by Address. 2019. Website: https://msc.fema.gov/portal/search?AddressQuery=2220%20Fulton%20Road%2C%20Santa%20Rosa%2C%20CA#searchresultsanchor. Accessed January 22, 2020.

east of the Pacific Ocean and over 6 miles northwest of Spring Lake, a condition that precludes inundation by tsunami or seiche. Therefore, no impacts would occur.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less than significant impact. Given that proposed construction would disturb more than 1 acre of land, the project would be required to comply with the terms of the City's Construction General Permit, which requires the preparation and implementation of a SWPPP that includes BMPs to ensure reduction of pollutants from construction activities potentially entering surface waters or groundwater basins and would not obstruct the implementation of a water quality control plan or sustainable groundwater management plan.

As discussed under Impact 10(b), the City maintains six municipal groundwater wells, but groundwater uses represent less than 1 percent of the overall City of Santa Rosa water supply. In addition, the project does not propose the use of groundwater as a significant source of water supply. Developments that create or replace a combined total of 1 acre or more of impervious surface are also subject to follow the City's SUSMP. The SUSMP requires implementation of LID BMPs that aim to decentralize stormwater treatment and to integrate it into the overall site design. The LID Technical Design Manual encourages the use of LID techniques to both retain and treat runoff water from impervious surfaces. As a result, during operation, the proposed project would not conflict with or obstruct a water quality control plan or sustainable groundwater management plan. Therefore, impacts would be less than significant.

Mitigation Measures

None.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
11. Land Use and Planning *Would the project:*				
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☒	☐	☐

Environmental Evaluation

Setting

The General Plan envisions a community featuring a diverse range of housing and employment opportunities. The General Plan includes policies to focus development within the UGB in a way that maintains the local quality of life through compatibility with adjacent land uses, provision of parks and open spaces, and connection between neighborhoods and activity centers. The General Plan also includes policies (Policies H-A-1, H-A-2, H-C-1, H-C-2, H-C-4, H-C-5, H-C-6, H-C-8, H-C-9, H-C-10, H-C-12, H-F-2, and H-F-3) that encourage the development of affordable housing units.[94] The General Plan Land Use Map designates areas of the City for different uses. The Zoning Code establishes development standards for each land use, including regulations regarding building heights, lot coverage and front, side and rear setbacks. The City's Municipal Code also includes provisions for the removal of trees and the protection of trees during construction activities; stormwater pollution prevention; and erosion control.

Would the project:

a) Physically divide an established community?

No impact. The physical division of an established community would occur if construction of a large linear feature such as a railroad or interstate highway separated an existing community or if a feature that connects a community is removed, such as a bridge. The proposed project does not involve any such features and would not remove any means of access in the surrounding area. No linear features would be constructed and no connecting features would be removed. No impact would occur.

[94] City of Santa Rosa. 2009. Santa Rosa General Plan 2035, page 4-55.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Zoning and Planning Land Use Compatibility

Less than significant impact. As described in the Environmental Setting, the project site is designated Low Density Residential by the General Plan (Exhibit 4) and Planned Development (PD 04-007-SR) by the Santa Rosa Zoning Map (Exhibit 5).

The Low Density Residential designation is intended for detached single-family residential development at a density between 2.0 to 8.0 DU per gross acre.[95] The proposed project would develop 105 single-family homes on a 28.6-acre site, which is 3.7 DU/acre.[96] As a result, the proposed project would be consistent with the Low-Density Residential designation. The 105 residential units would include five pairs of attached single-family units on lots 32/33, 34/35, 68/69, 70/71, and 97/98. Attached single-family units are permitted within this designation.[97]

The project site is zoned PD 04-007-SR, and compliance with the applicable Policy Statement and Development Plan, including basic development considerations regarding treatment of the land, architectural controls, and density, is required. The applicable Policy Statement is North Village and Woodbridge (NWSR 3-97), adopted on August 24, 2004. The permitted and accessory uses are provided below.

Principal Permitted Uses:

- One single-family unit (detached or duet) per lot;
- One second dwelling unit per lot
- One duplex, triplex, or fourplex lot (if such units are shown or referenced on an approved Development Plan or Tentative Subdivision Map);
- Temporary subdivision sales offices;
- Public schools; or
- Public parks.

Accessory Uses:

- Private garage accessory to a principal residence;
- Private swimming pool accessory to a principal residence;
- The accommodation of not more than two roomers or boarders per dwelling units;
- Other accessory structures and uses incidental and appurtenant to the principal permitted use.

The proposed project is consistent with the principal and accessory permitted uses outlined in the Policy Statement. The project site falls within the "Woodbridge" Land Use Area, which lays out regulations for development, and the proposed project would adhere to these requirements. Similar

[95] City of Santa Rosa. 2009. Santa Rosa General Plan 2035, page 2-9. Website: https://srcity.org/DocumentCenter/View/24327/Santa-Rosa-General-Plan-2035-PDF---July-2019. Accessed March 10, 2020.
[96] Calculation: 105 units/28.6 acres = 3.7 units/acre
[97] City of Santa Rosa. 2009. Santa Rosa General Plan 2035, pages 2-9 and 2-10. Website: https://srcity.org/DocumentCenter/View/24327/Santa-Rosa-General-Plan-2035-PDF---July-2019. Accessed March 10, 2020

to and consistent with the General Plan land use designation's allowable density, the zoning, PD 04-007-SR, allows up to 8.0 units per gross acre, and, therefore, the proposed project is within the permitted zoning density.

The proposed project qualifies as a residential small lot subdivision pursuant to the Santa Rosa City Code (Chapter 20-42.140). The residential small lot subdivisions "[a]re intended to provide opportunities to increase the supply of smaller dwelling units and rental housing units by allowing the creation of subdivisions with smaller lots and dwellings . . ."[98] Chapter 20-42.140 Sections (C) and (D) require a CUP for all residential small lot subdivisions and Section (F) sets forth site planning and project design standards for these developments. The project applicant is applying for a CUP and the proposed project would adhere to all site planning and project design standards as set forth in Chapter 20-42.140 Section (F).[99]

As described in Impact 4(e), there are no designated protected trees or street trees on the project site. Therefore, the proposed project would not conflict with the applicable land use designation or zoning policies adopted for the purpose of avoiding or mitigating and environmental effect, and impacts would be less than significant.

Noise Land Use Compatibility

For a discussion of the characteristics of noise and further information regarding the applicable noise regulatory framework, refer to the Noise impact discussion in Impact 13, Noise.

Less than significant impact with mitigation incorporated. A significant impact would occur if the proposed project would introduce new land uses to an existing ambient noise environment that is in conflict with the City's established noise land use compatibility guidelines. As discussed below, the proposed project would result in a potential conflict with the City's adopted noise land use compatibility standards, and mitigation would be required.

For the proposed project, the closest comparable land use designation of the City's land use compatibility guidelines is single-family residential land use. The following are the General Plan noise policies applicable to that land use designation:

- Noise environments of up to 60 A-weighted decibel (dBA) day/night average sound level (L_{dn}) are considered "normally acceptable" based upon the assumption that any building involved is of normal conventional construction, without any special noise insulation requirements.
- Noise environments of 55 dBA to 70 dBA L_{dn} are "conditionally acceptable" where new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

[98] City of Santa Rosa. no date. Santa Rosa City Code, Chapter 20-42.140 Residential small lot subdivisions, Section (A). Website: http://qcode.us/codes/santarosa/view.php?topic=20-4-20_42-20_42_140&frames=on. Accessed October 3, 2018.

[99] City of Santa Rosa. no date. Santa Rosa City Code, Chapter 20-42.140 Residential small lot subdivisions, Sections (C), (D), and (F). Website: http://qcode.us/codes/santarosa/view.php?topic=20-4-20_42-20_42_140&frames=on. Accessed October 3, 2018.

- Noise environments of 70 dBA to 75 dBA L_{dn} are "normally unacceptable" where new construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
- Noise environments of 75 dBA L_{dn} and higher are "clearly unacceptable" where new construction or development should generally not be undertaken.

The ambient noise environment of the project site has been documented through traffic noise modeling. The Federal Highway Administration (FHWA) highway traffic noise prediction model (FHWA RD-77-108) was used to evaluate existing and future traffic noise conditions in the vicinity of the project site. The projected future traffic noise levels adjacent to the project site were analyzed to determine compliance with the City's noise and land use compatibility standards. The daily traffic volumes were obtained from the TIS.[100] The resultant noise levels were weighed and summed over a 24-hour period in order to determine the L_{dn} values. The traffic noise modeling input and output files are included in Appendix G of this document. Table 24 shows a summary of the traffic noise levels for existing background traffic noise levels without and with the proposed project as measured at 50 feet from the centerline of the outermost travel lane.

Table 24: Traffic Noise Model Results Summary

Roadway Segment	Existing ADT	Existing (dBA) L_{dn}	Existing Plus Project ADT	Existing Plus Project (dBA) L_{dn}	Increase over Existing No Project (dBA)
Fulton Road—North Village Drive to Tedeschi Drive	25,800	69.0	25,900	69.0	0.0
Fulton Road—Tedeschi Drive to Street A	26,900	69.2	27,500	69.3	0.1
Fulton Road—Street A to San Miguel Road	27,100	69.2	28,100	69.4	0.2
Fulton Road—San Miguel Road to Piner Road	26,500	69.1	27,200	69.3	0.2

Notes:
ADT = Average Daily Traffic
dBA = A-weighted decibel
L_{dn} = day/night average sound level
ADT is calculated by the FHWA model based on PM peak-hour traffic volumes from the traffic study prepared for the project. FHWA model ADT assumptions are lower than ADT derived from the ITE methodology used in the traffic report; however, even if all 250 average daily trips forecast using ITE methodology traveled along any of the modeled roadway segments, they would still not result in even a 1 dBA increase in traffic noise levels that would exist without the project.
L_{dn} (dBA) is stated as measured at 50 feet from the centerline of the outermost travel lane.
Source: FirstCarbon Solutions (FCS) 2019.

Based on the modeled traffic noise results, existing traffic noise levels along the modeled roadway segment of Fulton Road, adjacent to the project site, would range up to 69.2 dBA L_{dn} as measured at 50 feet from the centerline of the outermost travel lane. The nearest façade of the proposed single-

[100] W-Trans. 2019. Traffic Impact Study for the 2220 Fulton Road Project. October 22.

family residential home would be located approximately 45 feet from the centerline of the outermost travel lane of this roadway segment. At this distance, traffic noise levels along this roadway segment would range up to approximately 71 dBA L_{dn}. These traffic noise levels are within the City's "normally unacceptable" land use compatibility threshold, between 70 and 75 dBA L_{dn} for new single-family residential land use development. Therefore, mitigation would be required to reduce traffic noise levels for receiving outdoor active use areas to meet the City's "conditionally acceptable" noise land use compatibility threshold.

Implementation of minimum 6-foot high sound walls would reduce traffic noise levels by a minimum of 6 dBA. The sound walls would be located as shown in Exhibit 12. This would reduce traffic noise levels to below 65 dBA community noise equivalent level (CNEL) as measured at the proposed outdoor active use areas (backyards). These noise levels would be within the City's "conditionally acceptable" range of 55 dBA to 70 dBA L_{dn}. The City's guidelines state that for environments with "conditionally acceptable" noise levels new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. The City's guidelines further note that conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice to ensure that interior noise levels meet the City's interior noise performance standard of 45 dBA L_{dn}.

Based on the EPA's Protective Noise Levels,[101] with a combination of walls, doors, and windows, standard construction in accordance with building code requirements for single-family residential developments would provide 25 dBA in exterior-to-interior noise reduction (with windows closed) and 15 dBA or more (with windows open). With windows open, the interior noise levels of the proposed units nearest to Fulton Road would not meet the State's interior noise standard of 45 dBA CNEL for indoor sleeping areas (i.e., 65 dBA–15 dBA = 50 dBA). However, inclusion of alternate ventilation systems such as mechanical air conditioning would allow windows to remain closed for prolonged periods of time, sufficiently reducing traffic noise levels to meet the interior noise level standard of 45 dBA CNEL (i.e., 65 dBA–25 dBA = 45 dBA). Air conditioning units would give an occupant the option of controlling noise by keeping the windows shut. Therefore, implementation of MM LAND-1 would ensure the proposed project would not result in a conflict with the City's adopted land use-noise compatibility guidelines and policy and would reduce combined traffic noise impacts to the proposed project to be less than significant.

Therefore, implementation of MM LAND-1 would ensure that traffic noise impacts to the proposed project would not exceed the City's land use compatibility or the applicable interior noise standards for the proposed single-family residential land uses.

Mitigation Measures

MM LAND-1 The proposed project shall include a minimum 6-foot high sound wall along all residential project property lines adjacent to Fulton Road (Lots 1, 39, and 40), or along the nearest receiving lot lines located within 290 feet of the centerline of Fulton Road (Lots 105 and 103), as shown in Exhibit 12 of this Draft Initial Study/Mitigated Negative Declaration. The sound walls shall block the line of site

[101] United States Environmental Protection Agency (EPA). 1978. National Service Center for Environmental Publications (NSCEP). Protective Noise Levels: Condensed Version of EPA Levels Document, EPA 550/9-79-100, November.

from the roadway to the proposed outdoor use areas of the nearest residential lots. Furthermore, to meet the interior noise level standard of 45 A-weighted decibel (dBA) community noise equivalent level (CNEL), all proposed residential units shall be supplied with an alternative form of ventilation, such as air conditioning or noise-attenuated passive ventilation systems, that would allow an occupant the option of controlling noise by keeping the windows shut (as the interior noise standard would not be met with open windows).

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Source: Ripley Design Landscape Architecture Land Planning, June 2019.

FIRSTCARBON SOLUTIONS™

Exhibit 12
Sound Wall Location Map

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Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
12. Mineral Resources *Would the project:*				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Environmental Evaluation

Setting

The Surface Mining and Reclamation Act of 1975 (SMARA) is the primary state law concerning mineral resources, including sand, gravel, and building stone which are important for commercial purposes. Because of the economic importance of mineral resources, SMARA limits new development in areas with significant mineral deposits. SMARA also requires State Geologists to classify specified areas into Mineral Resource Zones (MRZs). According to the California Geologic Survey Mineral Land Classification studies of Sonoma County, the project site is in an MRZ-3b area, containing inferred mineral occurrences of undetermined mineral resource significance.[102]

There are no mineral resource recovery sites on or in the vicinity of the project site. [103] The nearest active mine is the Canyon Rock Co., Inc., located approximately 7.7 miles to the west of the site.

Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?

No impact. The project site does not currently support any mineral recovery efforts, and no known significant mineral resources exist there.[104] The proposed project would not result in the loss of availability of a known mineral resource, and there would be no impact.

[102] Miller, R.V., Kohler, S.L. Busch, L.L., Dupras, D.L., and Clinkenbeared, J.P. 2005. Special Report 175. Website: ftp://ftp.consrv.ca.gov/pub/dmg/pubs/sr/SR_175/. Accessed January 13, 2020.
[103] Division of Mine Recreation, California Department of Conservation. 2016. Mines Online. Website: maps.conservation.ca.gov/mol/index.html. Accessed July 15, 2019.
[104] Division of Mine Recreation, California Department of Conservation. 2016. Mines Online. Website: maps.conservation.ca.gov/mol/index.html. Accessed July 15, 2019.

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No impact. There are no mineral resource recovery sites within or near the project site.[105] In addition, the project site is not designated or zoned as a mineral recovery site by the General Plan or zoning code. The proposed project would not impact any mineral resource recovery site, and no impact would occur.

Mitigation Measures

None.

[105] City of Santa Rosa. 2009. Santa Rosa General Plan 2035. Environmental Impact Report. March. Website: https://srcity.org/DocumentCenter/View/24327/Santa-Rosa-General-Plan-2035-PDF---July-2019. Accessed March 10, 2020.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
13. Noise *Would the project result in:*				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Environmental Evaluation

Based on the CEQA Appendix G checklist questions, the noise land use compatibility discussion is now contained within the Land Use and Planning discussion, Impact 11(b), of this Draft IS/MND.

Setting

Characteristics of Noise

Noise is defined as unwanted sound. Sound levels are usually measured and expressed in decibels (dB), with 0 dB corresponding roughly to the threshold of hearing. Most of the sounds that we hear in the environment do not consist of a single frequency, but rather a broad band of frequencies, with each frequency differing in sound level. The intensities of each frequency add together to generate a sound. Noise is typically generated by transportation, specific land uses, and ongoing human activity.

The 0 point on the dB scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Changes of 3 dB or less are only perceptible in laboratory environments. A change of 3 dB is the lowest change that can be perceptible to the human ear in outdoor environments. While a change of 5 dBA is considered to be the minimum readily perceptible change to the human ear in outdoor environments.

Since the human ear is not equally sensitive to sound at all frequencies, the A-weighted decibel scale (dBA) was derived to relate noise to the sensitivity of humans, it gives greater weight to the frequencies of sound to which the human ear is most sensitive. The A-weighted sound level is the basis for a number of various sound level metrics, including the L_{dn} and the CNEL, both of which represent

how humans are more sensitive to sound at night. In addition, the equivalent continuous sound level (L_{eq}) is the average sound energy of time-varying noise over a sample period and maximum noise/sound level (L_{max}) is the maximum instantaneous noise level occurring over a sample period.

Regulatory Framework

The City of Santa Rosa has established Noise Compatibility Standards for residential and non-residential land uses in the Noise and Safety Element of the General Plan [106] and in the Municipal Code.[107]

General Plan

Applicable noise goals and policies of the General Plan are summarized as follows:

- Require new projects in the following categories to submit an acoustical study, prepared by a qualified acoustical consultant:
  - All new projects proposed for areas with existing noise above 60 dBA L_{dn}. Mitigation shall be sufficient to reduce noise levels below 45 dBA L_{dn} in habitable rooms and 60 dBA L_{dn} in private and shared recreational facilities. Additions to existing housing units are exempt.
  - All new projects that could generate noise whose impacts on other existing uses would be greater than those normally acceptable (as specified in the Land Use Compatibility Standards).
- Do not permit existing uses to generate new noises exceeding normally acceptable levels unless:
  - Those noises are mitigated to acceptable levels; or
  - The activities are specifically exempted by the City Council on the basis of community health, safety, and welfare.
- Adopt mitigations, including reduced speed limits, improved paving texture, and traffic controls, to reduce noise to normally acceptable levels in areas where noise standards may be exceeded (e.g., where homes front regional/arterial streets and in areas of mixed use development.)
- Encourage developers to incorporate acoustical site planning into their projects. Recommended measures include:
  - Incorporating buffers and/or landscaped earth berms;
  - Orienting windows and outdoor living areas away from unacceptable noise exposure;
  - Using reduced-noise pavement (rubberized-asphalt);
  - Incorporating traffic calming measures, alternative intersection designs, and lower speed limits; and
  - Incorporating state-of-the-art structural sound attenuation and setbacks.
  - Discourage new projects that have potential to create ambient noise levels more than 5 dBA L_{dn} above existing background, within 250 feet of sensitive receptors.

Municipal Code

The City of Santa Rosa also addresses noise in the ordinances of the Municipal Code. Municipal Code Section 17-16.120, Machinery and Equipment, states that “it is unlawful for any person to operate any machinery, equipment, pump, fan, air-conditioning apparatus or similar mechanical device in

[106] City of Santa Rosa. 2009. Santa Rosa General Plan 2035. November 3. Website: https://srcity.org/DocumentCenter/View/24327/Santa-Rosa-General-Plan-2035-PDF---July-2019.
[107] City of Santa Rosa. 2019. Santa Rosa City Code. June. Website: http://qcode.us/codes/santarosa/?view=desktop.

any manner so as to create any noise, which would cause the noise level at the property line of any property to exceed the ambient base noise level by more than five decibels."

Standard city conditions of project approval limit the hours of construction to 7:00 a.m. to 7:00 p.m., Monday through Friday, and 8:00 a.m. to 6:00 p.m. on Saturdays. No construction is permitted on Sundays and holidays.

Would the project result in:

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Short Term Construction Impacts

Less than significant impact with mitigation incorporated. For purposes of this analysis, a significant impact would occur if construction activities would result in a substantial temporary increase in ambient noise levels outside of the City's permissible hours for construction (7:00 a.m. to 7:00 p.m., Monday through Friday, and 8:00 a.m. to 6:00 p.m. on Saturdays) that would result in annoyance or sleep disturbance of nearby sensitive receptors.

Construction-related Traffic Noise

Noise impacts from construction activities associated with the project would be a function of the noise generated by construction equipment, equipment location, sensitivity of nearby land uses, and the timing and duration of the construction activities. One type of short-term noise impacts that could occur during project construction would result from the increase in traffic flow on local streets, associated with the transport of workers, equipment, and materials to and from the project site.

The transport of workers, construction equipment and materials to the project site would incrementally increase noise levels on access roads leading to the site. Because workers and construction equipment would use existing routes, noise from passing trucks would be similar to existing vehicle-generated noise on these local roadways. Typically, a doubling of the Average Daily Traffic (ADT) hourly volumes on a roadway segment is required in order to result in an increase of 3 dBA in traffic noise levels, which as discussed in the characteristics of noise discussion above, is the lowest change that can be perceptible to the human ear in outdoor environments. Project-related construction trips would not be expected to double the hourly traffic volumes along any roadway segment in the project vicinity. For these reasons, short-term intermittent noise from trucks would be minor when averaged over a longer time-period. Therefore, short-term construction-related noise impacts associated with worker commute and equipment transport to the project site would not exceed applicable significance thresholds and would be less than significant.

Construction Activity Noise

The second type of short-term noise impact is related to noise generated during construction on the project site. Construction noise levels are rarely steady in nature and, often fluctuate depending on the type and number of equipment being used at any given time. In addition, there could be times where large equipment is not operating and noise would be at or near normal ambient levels.

Construction is completed in discrete steps, each of which has its own mix of equipment and its own noise characteristics. These various sequential phases would change the character of the noise generated on the site and, therefore, the noise levels surrounding the site as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction related noise ranges to be categorized by work phase.

The site preparation phase, which includes excavation and grading activities, tends to generate the highest noise levels because the noisiest construction equipment is earthmoving equipment. Earthmoving equipment includes excavating machinery and compacting equipment, such as bulldozers, draglines, backhoes, front loaders, roller compactors, scrapers, and graders. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full power operation followed by 3 or 4 minutes at lower power settings.

Construction of the proposed project is expected to require the use of front-end loaders, excavators, haul trucks, water trucks, concrete mixer trucks, and pickup trucks. The maximum noise level generated by each concrete mixing truck is assumed to be 85 dBA L_{max} at 50 feet from this equipment.[108] Each front-end loader would also generate 85 dBA L_{max} at 50 feet. The maximum noise level generated by excavators is approximately 85 dBA L_{max} at 50 feet. Each doubling of sound sources with equal strength increases the noise level by 3 dBA.

A conservative but reasonable assumption is that this equipment would operate simultaneously and continuously over at least a 1-hour period in the vicinity of the closest existing residential receptors but would move linearly over the project site as they perform their earth moving operations, spending a relatively short amount of time adjacent to any one receptor. Assuming that each piece of construction equipment operates at some distance from the other equipment, a reasonable worst-case combined noise level during this phase of construction would be 90 dBA L_{max} at a distance of 50 feet from the acoustic center of a construction area. The acoustical center reference is used because construction equipment must operate at some distance from one another on a project site, and the combined noise level as measured at a point equidistant from the sources (acoustic center) would be the worst-case maximum noise level. These operations would be expected to result in a reasonable worst-case hourly average of 86 dBA L_{eq} at a distance of 50 feet from the acoustic center of a construction area.

The closest sensitive receptors to proposed areas of construction are the multi-family residences on Orleans Street, at the southwest corner of the project site. The façade of the closest residence would be located approximately 60 feet from the acoustic center of construction activity where multiple pieces of heavy construction equipment would potentially operate at the project site. At this distance, reasonable worst-case construction noise levels could range up to approximately 88 dBA L_{max}, intermittently and could have an hourly average of up to 84 dBA L_{eq}, at the façade of the nearest multi-family residential home when multiple pieces of equipment operate simultaneously at the nearest center of construction activity. These noise levels would occur for only a short period during the site preparation phase of construction, as noise levels would drop off at a rate of 6 dBs per doubling of distance as construction equipment moves across the site.

[108] Federal Highway Administration (FHWA). 2006. Highway Construction Noise Handbook. August.

Although there could be a relatively high single event noise exposure potential causing an intermittent noise nuisance, the effect of construction activities on longer-term (hourly or daily) ambient noise levels would be small but could result in a temporary increase in ambient noise levels in the project vicinity that could result in annoyance or sleep disturbance of nearby sensitive receptors. However, restricting the permissible hours of construction to daytime hours would reduce the effects of construction activities on longer-term (hourly or daily) ambient noise levels, and it would reduce potential impacts that could result in annoyance or sleep disturbances at nearby sensitive receptors. Noise producing construction activities would be restricted to the daytime hours of 7:00 a.m. to 7:00 p.m., Monday through Friday, and 8:00 a.m. to 6:00 p.m. on Saturdays; and no construction is permitted on Sundays and holidays per standard conditions of project approval. Compulsory restriction of construction activities to these stated time-periods, as well as implementing the best management noise reduction techniques and practices outlined in MM NOI-1, would ensure that construction noise would not result in a substantial temporary increase in ambient noise levels that would result in annoyance or sleep disturbance of nearby sensitive receptors. Therefore, the impact would be less than significant.

Operational/Stationary Source Noise Impacts

Less than significant impact. A significant impact would occur if operational noise levels generated by stationary noise sources at the project site would result in a substantial permanent increase in ambient noise levels in excess of any of the noise performance thresholds established by the City. According to Municipal Code Section 17-16.120, it is unlawful for any person to operate any machinery, equipment, pump, fan, air-conditioning apparatus or similar mechanical device in any manner so as to create any noise that would cause the noise level at the property line of any property to exceed the ambient base noise level by more than 5 dBA. Therefore, for purposes of this analysis, an increase of more than 5 dBA above the applicable noise performance thresholds would be considered a substantial permanent increase in ambient noise levels.

Ambient noise levels in the project vicinity are dominated by traffic noise on Fulton Road. As shown in Table 25, existing traffic noise levels along Fulton Road in the project vicinity range up to approximately 69 dBA L_{dn} as measured at 50 feet from the centerline of the outermost travel lane.

Mechanical Equipment Operations

At the time of preparation of this analysis, details were not available pertaining to proposed mechanical ventilation systems for the project. Therefore, a reference noise level for typical residential mechanical ventilation systems was used. Noise levels from typical residential mechanical ventilation equipment are sound rated from 45 dBA to 60 dBA L_{eq} as measured at approximately 3 feet from the operating unit.

Mechanical ventilation systems could be located as close as 15 feet from the nearest off-site residential receptor. At this distance, noise generated by mechanical ventilation equipment would attenuate to less than 46 dBA L_{eq} at the nearest residential property line, which is well below the documented existing ambient noise levels in the project vicinity. As noted previously, existing 24-hour average traffic noise levels in the project vicinity range up to approximately 69 dBA L_{dn}. In addition, mechanical ventilation noise is typical of surrounding residential land uses and would be no louder

than the ambient noise levels at receiving residences. Therefore, mechanical ventilation equipment operational noise levels, as measured at the nearest off-site sensitive receptors, would not exceed existing ambient noise levels more than 5 dBA.

Operational/Mobile Source Noise Impacts

Less than significant impact. A significant impact would occur if project-generated traffic would result in a substantial increase in ambient noise levels compared with those that would exist without the project. The City does not define "substantial increase," therefore, for purpose of this analysis; a substantial increase is based on the following criteria. A characteristic of noise is that audible increases in noise levels generally refer to a change of 3 dBA or more, as this level has been found to be barely perceptible to the human ear in outdoor environments. A change of 5 dBA is considered the minimum readily perceptible change to the human ear in outdoor environments. Therefore, for purposes of this analysis, a significant impact would occur if project-related traffic would cause the L_{dn} along roadway segments in the project vicinity to increase by any of the following:

- 5 dBA or more even if the L_{dn} would remain below normally acceptable levels for a receiving land use.
- 3 dBA or more, thereby causing the L_{dn} in the project vicinity to exceed normally acceptable levels and result in noise levels that would be considered conditionally acceptable for a receiving land use.
- 1.5 dBA or more where the L_{dn} currently exceeds conditionally acceptable levels.

Table 25 shows a summary of the traffic noise levels for Existing, Existing Plus Project, Baseline, and Baseline Plus Project conditions as measured at 50 feet from the centerline of the outermost travel lane.

Table 25: Traffic Noise Increase Summary

Roadway Segment	Existing (dBA) L_{dn}	Existing Plus Project (dBA) L_{dn}	Increase over Existing (dBA)	Baseline (dBA) L_{dn}	Baseline Plus Project (dBA) L_{dn}	Increase over Baseline (dBA)
Fulton Road—North Village Drive to Tedeschi Drive	69.0	69.0	0.0	69.2	69.2	0.0
Fulton Road—Tedeschi Drive to Street A	69.2	69.3	0.1	69.4	69.5	0.1
Fulton Road—Street A to San Miguel Road	69.2	69.4	0.2	69.4	69.6	0.2
Fulton Road—San Miguel Road to Piner Road	69.1	69.3	0.2	69.3	69.4	0.1
Source: FCS 2019.						

As shown in Table 25, the highest traffic noise level increase with implementation of the project would occur along Fulton Road between the Street A and San Miguel Road, under Baseline Plus Project conditions. Along this roadway segment, the project would result in traffic noise levels

ranging up to 69.6 dBA L_{dn} as measured at 50 feet from the centerline of the nearest travel lane, representing an increase of 0.2 dBA over baseline conditions for this roadway segment. The resulting noise levels are within the conditionally acceptable threshold for receiving land uses adjacent to this roadway segment. The project-related increase of 0.2 dBA is well below the 3 dBA increase that would be considered a substantial permanent increase in noise levels for ambient noise environments that are considered conditionally acceptable for the receiving land use. Therefore, project-related traffic noise levels would not result in a substantial permanent increase in traffic noise levels in excess of applicable standards and would represent a less than significant impact.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Less than significant. A significant impact would occur if the project would generate groundborne vibration or groundborne noise levels in excess of established standards. For determining construction-related vibration impacts, the Federal Transit Administration's (FTA's) Construction Vibration Impact Criteria are utilized. The FTA has established industry accepted standards for vibration impact assessment in its Transit Noise and Vibration Impact Assessment Manual, dated September 2018.[109]

Groundborne noise is an effect of groundborne vibration and only exists indoors, since it is produced from noise radiated from the motion of the walls and floors of a room and may also consist of the rattling of windows or dishes on shelves. In general, if groundborne vibration levels do not exceed levels considered to be perceptible, then groundborne noise levels would not be perceptible in most interior environments. Therefore, this analysis focuses on determining exceedances of groundborne vibration levels.

In extreme cases, excessive groundborne vibration has the potential to cause structural damage to buildings. Common sources of groundborne vibration include construction activities such as blasting, pile driving, and operating heavy earthmoving equipment. However, construction vibration impacts on building structures are generally assessed in terms of peak particle velocity (PPV). For purposes of this analysis, project related impacts are expressed in terms of PPV.

Short-term Construction Vibration Impacts

A significant impact would occur if project construction activities would generate groundborne vibration levels in excess of levels established by the FTA's Construction Vibration Impact Criteria for the receiving type of structure.

Of the variety of equipment used during construction, the small vibratory rollers that are anticipated to be used in the site preparation phase of construction would produce the greatest groundborne vibration levels. Small vibratory rollers produce groundborne vibration levels ranging up to 0.101 inch per second (in/sec) PPV at 25 feet from the operating equipment.

[109] Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manal. Website: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf. Accessed January 13, 2020.

The nearest off-site structures to the project site are the multi-family residences located south of the project site. The façade of the closest building would be located approximately 35 feet from the nearest construction footprint where the heaviest construction equipment would potentially operate (the extension of Andre Lane). At this distance, groundborne vibration levels would range up to 0.061 PPV from operation of the types of equipment that would produce the highest vibration levels. This is well below the FTA's Construction Vibration Impact Criteria of 0.2 PPV for this type of structure, a building of non-engineered timber and masonry.

Other equipment that could operate adjacent to off-site receptors would be small bulldozers ranging up to 0.003 in/sec PPV at 25 feet from the operating equipment. The nearest off-site structure to the project site where small bulldozers are anticipated to be used is the multi-family residence located 11 feet south of the project site. At this distance, groundborne vibration levels would range up to 0.010 PPV from small bulldozers. This is well below the FTA's Construction Vibration Impact Criteria of 0.2 PPV for this type of structure, a building of non-engineered timber and masonry. Therefore, project construction activities would not generate groundborne vibration or groundborne noise levels in excess of established standards and impacts to off-site receptors would be less than significant.

Operational Vibration Impacts

A significant impact would occur if project operations would generate excessive groundborne vibration levels at sensitive receptors in the project vicinity.

Implementation of the project would not include any permanent sources of vibration that would expose persons in the project vicinity to groundborne vibration levels that could be perceptible without instruments at any existing sensitive land use in the project vicinity. Therefore, operational groundborne vibration impacts would be less than significant.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No impact. A significant impact would occur if the project would expose people residing or working in the project area to excessive noise levels for a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport.

The project site is not located within the vicinity of a private airstrip. The nearest public airport to the project site is the Charles M. Shultz Sonoma County Airport, located approximately 2.6 miles northwest of the project site. The project site is located outside of the 55 dBA CNEL airport noise contours of this closest airport. While aircraft noise is occasionally audible on the project site from aircraft flyovers, aircraft noise associated with nearby airport activity would not expose people residing or working near the project site to excessive noise levels. Therefore, implementation of the project would not expose persons residing or working in the project vicinity to noise levels from airport activity that would be in excess of normally acceptable standards for the proposed land use development, and no impact would occur.

Mitigation Measures

MM NOI-1 Implementation of the following multi-part mitigation measure is required to reduce potential construction period noise impacts:

- The construction contractor shall ensure that all equipment driven by internal combustion engines shall be equipped with mufflers, which are in good condition and appropriate for the equipment.
- The construction contractor shall ensure that unnecessary idling of internal combustion engines (i.e., idling in excess of 5 minutes) is prohibited.
- The construction contractor shall utilize "quiet" models of air compressors and other stationary noise sources where technology exists.
- At all times during project grading and construction, the construction contractor shall ensure that stationary noise-generating equipment shall be located as far as practicable from sensitive receptors and placed so that emitted noise is directed away from adjacent residences.
- The construction contractor shall ensure that the construction staging areas shall be located to create the greatest feasible distance between the staging area and noise-sensitive receptors nearest the project site.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
14. Population and Housing *Would the project:*				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☐

Environmental Evaluation

Setting

According to the California Department of Finance, the City of Santa Rosa had a population of 167,815 as of January 1, 2010, and a population of 177,017 as of January 1, 2018,[110] totaling a 5.5 percent increase in population from 2010 to 2018.[111] The General Plan projects that the City of Santa Rosa would increase by 89,405 people by 2035 and would add 25,225 new housing units for a total of 96,295 units.[112] The City of Santa Rosa projected regional housing needs in its General Plan Housing Element. The City of Santa Rosa's share of the 2015-2023 Regional Housing Needs Assessment (RHNA) is 5,083 housing units.[113] The unemployment rate of the Santa Rosa Metropolitan Statistical Area (Santa Rosa MSA), which includes the City of Santa Rosa, in June 2019 was 2.8 percent, down from 2.9 percent in June 2018.[114]

Would the project:

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Less than significant impact. Unplanned direct population growth would occur if the proposed project produces a population growth not anticipated and evaluated by the City of Santa Rosa in its General Plan. The proposed project would develop 105 residential units. Using the California Department of Finance's 2019 person per household of 2.65 for the City of Santa Rosa,[115] the project

[110] California Department of Finance. 2018. Report E-5, Population and Housing Estimates for Cities, Counties, and the State.
[111] Calculation: [(177,017–167,815)/167,815]*100 = 5.5.
[112] City of Santa Rosa. 2009. Santa Rosa General Plan 2035, Land Use and Livability Element, page 2-15.
[113] Association of Bay Area Governments (ABAG). Regional Housing Need Plan San Francisco Bay Area 2015-2023. December 2013.
[114] California Employment Development Department. Immediate Release Santa Rosa Metropolitan Statistical Area (Santa Rosa MSA). July 19, 2019.
[115] California Department of Finance. 2019. Report E-5, Population and Housing Estimates for Cities, Counties, and the State.

could directly increase population by as much as 278[116] people, representing a 0.16 percent increase[117] from the City's 2018 population of 177,017.[118]

The General Plan Housing Element projected a City population of 201,800 by 2030.[119] The proposed project would represent approximately 0.14 percent of the projected population growth from 2018 to 2030. The project site lies within the City's UGB and Sphere of Influence and is currently designated for low density residential use. The proposed project does not represent a significant portion of the projected population growth and the resulting slight population increase is included in the General Plan Housing Element projections.

In addition, the City of Santa Rosa's share of the 2015-2023 RHNA totals 5,083 units. The project would provide 105 new housing units (10 affordable units in the 5 pairs of attached single-family units on lots 32/33, 34/35, 68/69, 70/71, and 97/98, which would be restricted to affordable to moderate-income households), with an anticipated full build-out to occur between in 2023-2028. The proposed project would contribute to the City of Santa Rosa's housing needs established by ABAG in the RHNA.

Because the proposed project would represent a small portion of the anticipated population growth and would provide needed housing, the proposed project would not induce substantial unplanned direct population growth in the City of Santa Rosa.

Unplanned indirect population growth would occur if the proposed project creates employment opportunities and/or removes barriers to growth not accounted for in the General Plan or considered as part of the project. For example, a project could create thousands of jobs and result in a substantial number of people moving to the area permanently to pursue employment. In addition, barriers to growth include lack of roads, water and wastewater services, and public services such as fire and police protection, schools, and hospitals.

The proposed project would generate temporary employment opportunities during construction. These employees would be temporary and limited to the project construction period. As of 2009, approximately 7 percent of the Santa Rosa labor force consisted of construction jobs, employing 5,493 people.[120] As previously described, in 2019 the unemployment rate of the Santa Rosa MSA encompassing Sonoma County was 2.8 percent. Given the relatively short construction period, the local labor pool would be expected to satisfy labor demands of the project. As a result, construction workers would not require permanent relocation contributing to population growth over time and for the period of construction the project would not contribute substantially to new employment.

The area surrounding the project site is composed of undeveloped, single and multi-family residential, and rural residential land. The area around the project site currently contains utility infrastructure such as roads, water, wastewater, and stormwater facilities to which the project could connect. Fulton Road (an existing street) would connect to Street A allowing direct access into the

[116] Calculation: 105 units x 2.65 persons/household = 278.
[117] Calculation: [(177,295-177,017)/177,017]*100 = 0.16.
[118] California Department of Finance. 2018. Report E-5, Population and Housing Estimates for Cities, Counties, and the State.
[119] City of Santa Rosa. 2009. Santa Rosa General Plan 2035, Housing Element, Table 4-2.
[120] Association of Bay Area Governments (ABAG). City of Santa Rosa General Plan Housing Element, Table 4-6. 2009.

project site. Andre Lane (an existing street) would extend from the northern neighboring residential subdivision through the project site and connect to the residential subdivision to the south of the project site at Orleans Street. Extension of infrastructure to the project site would serve the site alone and would not remove barriers of growth.

Overall, the proposed project would result in direct population increase, however, the population increase is consistent with expected growth and land use planning and the proposed project would not induce indirect population growth. As such, impacts would be less than significant.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Less than significant impact. There is one existing home on the project site, which would be demolished for construction of the project. Using the California Department of Finance persons per household figure of 2.65, the demolition of one existing residence would displace approximately three people. Although one dwelling would be demolished, the proposed project would result in the construction of 105 units, and a net increase of 104 housing units on undeveloped land. Thus, while the proposed project would displace one existing dwelling unit, it would not necessitate the construction of replacement housing elsewhere not already anticipated in the General Plan.

Therefore, the proposed project would not require the construction of replacement housing elsewhere due to the displacement of housing or people. This would represent a less than significant impact related to population and housing displacement.

Mitigation Measures

None.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
15. Public Services *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*				
a) Fire protection?	☐	☐	☒	☐
b) Police protection?	☐	☐	☒	☐
c) Schools?	☐	☐	☒	☐
d) Parks?	☐	☐	☒	☐
e) Other public facilities?	☐	☐	☒	☐

Environmental Evaluation

Setting

Public services provided by the City include fire protection, police protection, education, recreation and parks, and libraries.

Santa Rosa Fire Department

Santa Rosa Fire Department (SRFD) provides fire protection services in the City of Santa Rosa. The SRFD responds to all fires, hazardous materials incidents, and medical emergencies (including injury accidents) in the City. The senior command structure consists of a Fire Chief, an Emergency Preparedness Coordinator, a Deputy Fire Chief, an Administrative Services Officer, and a Division Chief Fire Marshal. The SRFD consists of three Bureaus—Operations, Administration, and Prevention—and two divisions—Training and Safety Division and Support Services Division. Ten fire engines and two truck companies respond to emergencies.[121] The SRFD has 138 dedicated employees. The General Plan establishes a response time goal for first resource arrival within 5 minutes of dispatch 90 percent of the time. A secondary goal, pertaining to larger incidents, is to provide a full assignment within 8 minutes 90 percent of the time. For calendar year 2017, the SRFD responded to all incidents within 6 minutes or less 72.68 percent of the time and Engine 5 responded to all incidents within 6 minutes or less 77.88 percent of the time.[122,123]

The General Plan EIR projected buildout over 25 years and determined the need to move the fire station on Parker Hill Road to a new location near Fountaingrove Parkway to serve the future residents of the area. Fire Station No. 5, constructed in 2015, was located at 2201 Newgate Court.

[121] City of Santa Rosa. Fire Department About Us. Website: https://srcity.org/395/About-Us. Accessed July 18, 2019.
[122] City of Santa Rosa. Fire Department About Us. Website: http://srcity.org/395/About-US. Accessed March 29, 2019.
[123] Ian Hardage, Assistant Fire Marshall, Santa Rosa Fire Department. Personal Communication with City of Santa Rosa, email. June 14, 2019.

However, it was destroyed by the 2017 Tubbs Fire. Station 5 is temporarily located at the Parker Hill Road site until the Newgate Court facility is rebuilt.

Santa Rosa Police Department

Santa Rosa Police Department (SRPD) provides police protection services throughout the City.[124] The SRPD consists of four divisions (Administration, Field Services, Special Services, and Technical Services) consisting of seven Bureaus: Patrol, Investigations, Communications, Records, Technology, Traffic, and Support Services. There is one police station located at 965 Sonoma Avenue. The SRPD has 255.5 personnel, with the majority being sworn personnel. Recently, budget cuts resulted in the release of six officers despite Santa Rosa's growing population. However, this is a trend is most cities. The SRPD keeps track of officer time spent with a goal of half time spent answering calls for service and half time engaging with the community. Currently, the SRPD is not meeting this target, as more time is spent responded to calls than engaging with the community. Police officers respond from assigned patrol areas at an average response time of 6 minutes and 26 seconds.[125]

Santa Rosa City Schools

The project site is located in the Piner-Olivet and Santa Rosa City High School Districts, two of 10 districts serving the City of Santa Rosa. Within the Piner-Olivet School District, there is one elementary school and three charter and alternative schools.[126] Within the Santa Rosa City High School District, there are seven middle schools, six high schools, and one alternative high school.[127] The nearest elementary school is Jack London Elementary School located at 2707 Francisco Avenue, approximately 0.22 mile north of the project site. The nearest middle school is Hilliard Comstock Middle School located at 2750 West Steele Lane, approximately 1.47 miles southeast of the project site. The nearest high school is Piner High School, located at 1700 Fulton Road, approximately 0.84 mile south of the project site.

Santa Rosa Recreation and Parks Department

The closest park to the project site is Jack London School Park located at Jack London Elementary School at 2707 San Francisco Avenue, approximately 0.22 mile north of the project site. Jack London School Park is approximately 4.5-acres in size, with amenities that include a baseball field, a playground, and a soccer field. Another nearby park is the 4.5-acre Pioneer Park, located approximately 0.35 mile southeast of the project site. Pioneer Park amenities include picnic tables, a playground, a basketball court, horseshoe pits, barbecues, and an open grass area.

General Plan Policy PSF-A-2 and the City Code establish a City standard of 3.5 acres of city park land per 1,000 residents.[128] The General Plan 2035 EIR determined the City would have 864.15 acres of parks and recreational facilities with development of all undeveloped and proposed park facilities by 2035. Based on an expected population of 233,520 by 2035 at full buildout of the General Plan 2035,

[124] City of Santa Rosa. Police Department About Us. Website: https://srcity.org/243/About-Us. Accessed July 18, 2019. http://www.srcity.org/departments/police/Pages/default.aspx.
[125] Jodi Frost, Administrative Services Officer, Santa Rosa Police Department (SRPD). Personal Communication with FirstCarbon Solutions. Email co) Email . July 29, 2019.
[126] Santa Rosa City Schools. Our Schools. Website: https://www.srcschools.org/Domain/94. Accessed July 18, 2019.
[127] Sonoma County Office of Education. 2019. Find A School. Website: https://www.scoe.org/pub/htdocs/findschool.html. Accessed July 22, 2019.
[128] City of Santa Rosa. 2009. Santa Rosa General Plan 2035, page 6-14.

with 864.15 acres of parkland, the City of Santa Rosa will have 3.7 acres of city parks per 1,000 residents.[129]

The Quimby Act, codified in 1975 under California Government Code Section 66477, authorizes California cities and counties to pass ordinances requiring developers set aside land, donate conservation easements, or pay fees for park acquisition to help ensure the adequate provision of parkland and preserve open space through a series of policy provisions.

Sonoma County Library System

The Sonoma County Library System operates five libraries in Santa Rosa, including the Central Library and four branch libraries. The Northwest Regional Library is the closest library to the project site, and is located at 150 Coddingtown Center, approximately 2.05 miles southeast of the project site. Library amenities include computer loan (with internet), wireless internet, a research station with access to the library database, a copy machine, and a public printer.

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

a) Fire protection?

Less than significant impact. Fire Station No. 3 is located at 3311 Coffey Lane, approximately 2.1 miles from the project site. Construction of 105 residential units on the project site is consistent with the General Plan land use designation and, at 3.7 DU/acre, is at the lower end of the allowable 2.0 to 8.0 DU per gross acre. Development of this project site for residential purposes was considered in the General Plan EIR, which concluded that impacts related to the need for additional fire protection facilities would be less than significant with the implementation of General Plan policies as laid out in Chapter 6, Public Services and Facilities. Furthermore, the proposed project would be required to comply with City of Santa Rosa Special Tax Financing Code provisions, including Section 4-56.240 and would, therefore, be required to make a fair-share contribution to reserve funds for the replacement of public facilities, including fire protection and suppression services. As such, new or expanded fire facilities would not be required to serve the proposed project. Therefore, impacts would be less than significant.

b) Police protection?

Less than significant impact. With a projected population increase of 278 residents, a 0.16 percent increase from the current population, the project would likely have a negligible effect on demand for police services. Police officers respond from assigned patrol areas at an average response time of 6 minutes and 26 seconds.[130] The project is consistent with the General Plan's projected population growth, and therefore, the increase in police services was accounted for in the General Plan planning

[129] City of Santa Rosa. 2009. Santa Rosa General Plan 2035. Draft Environmental Impact Report, page 4.P-7.
[130] Jodi Frost, Administrative Services Officer, Santa Rosa Police Department (SRPD). Personal Communication with FirstCarbon Solutions. Email. July 29, 2019.

process. Section 21-02.090 of the Santa Rosa City Code establishes a housing impact fee for residential housing developments, which will account for any increased demand in public services, including police services.[131] As such, the SRPD would adequately serve the proposed project. Therefore, impacts would be less than significant.

c) Schools?

Less than significant impact. The Santa Rosa City Schools includes the Piner-Olivet and Santa Rosa City High School Districts. FCS reached out to the Santa Rosa City School System superintendent in July 2019, but as of the time of this Draft IS/MND has not received a response. The proposed project would generate additional elementary, middle, and high school students. In order to help offset the construction or expansion of facilities, the procurement of equipment, and the hiring and training of additional personnel, the developer would pay a mandatory housing impact fee.[132] Therefore, as part of the project entitlement process, the project applicant would pay for its fair share of school facility fees in accordance with applicable laws. As such, while the proposed project would result in additional school-age children, the mandatory housing and development fees would help offset potential impacts related to capacity and budget. Therefore, impacts would be less than significant.

d) Parks?

Less than significant impact. Using the City's city park ratio of 3.5 acres per 1,000 residents, the proposed project's 278 residents would create a demand for 0.97-acre of city parks. As previously indicated, the City currently exceeds its established ratio of 3.5 acres of City park land to 1,000 residents and is projected to continue to exceed it with buildout of the General Plan. Furthermore, according to Section 19-70.090 of the Santa Rosa City Code, the project applicant would provide the City in lieu-of fees for the development of parkland elsewhere.[133] As such, the proposed project would not directly result in a need for new or expanded park facilities. Therefore, impacts would be less than significant.

e) Other public facilities?

Less than significant impact. The proposed project's future residents would create a demand for library services. However, 278 new residents represent a small proportion of the total population growth expected in Santa Rosa and Sonoma County through 2035. In 2016, the Sonoma County Library System prepared a Facilities Master Plan to guide facilities planning and improvements for the next 10 years. The Facilities Master Plan classified the Northwest Regional Library, the closest library branch to the project site, as in good condition, but a high priority for update.[134] Section 21-02.090 of the Santa Rosa City Code establishes a housing impact fee for residential housing developments, which will

[131] City of Santa Rosa. 2012. Santa Rosa City Code. November. Website: http://qcode.us/codes/santarosa/?view=desktop. Accessed July 18, 2019.
[132] City of Santa Rosa. 2009. Santa Rosa General Plan. November. Website: https://www.srcity.org/392/General-Plan. Accessed July 18, 2019.
[133] City of Santa Rosa. 2012. Santa Rosa City Code. November. Website: http://qcode.us/codes/santarosa/?view=desktop. Accessed July 18, 2019.
[134] Sonoma County Library. 2016. Sonoma County Library—Facilities Master Plan Report. Website: https://sonomalibrary.org/sites/default/files/attachments/facilities/161214_Facilities%20Master%20Plan%20FINAL.pdf. Accessed July 18, 2019.

account for any increased demand in library services.[135] As a result, payment of housing development fees would ensure the project offsets any potential increase in library usage. Therefore, impacts would be less than significant.

Mitigation Measures

None.

[135] City of Santa Rosa. 2012. Santa Rosa City Code. November. Website: http://qcode.us/codes/santarosa/?view=desktop. Accessed July 18, 2019.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
16. Recreation				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☐	☒	☐

Environmental Evaluation

Setting

General Plan Policy PSF-A-2 and the City Code establish a City standard of 3.5 acres of city park land per 1,000 residents.[136] The General Plan 2035 EIR determined the City would have 864.15 acres of parks and recreational facilities with development of all undeveloped and proposed park facilities by 2035. Based on an expected population of 233,520 by 2035 at full buildout of the General Plan 2035, with 864.15 acres of parkland, the City of Santa Rosa will have 3.7 acres of city parks per 1,000 residents.[137] Additionally, the City of Santa Rosa has Spring Lake County Park (320 acres) and Annadel State Park (5,000 acres) located within its UGB.

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Less than significant impact. The closest accessible neighborhood park to the project site is Jack London School Park, approximately 0.22 mile north of the project site. It is an approximately 4.5-acre neighborhood park consisting of recreation equipment, children's play equipment, an open grass field, and picnic facilities.[138] The nearest community park to the project, with substantial recreational facilities, is the 73.8-acre Youth Community Park located approximately 0.82 mile south of the site. This community park features picnic facilities, recreation areas and equipment, children's play areas, a skate park, and large grass area.[139] Spring Lake County Park is located approximately 6.56 mile east of the project site.

[136] City of Santa Rosa. 2009. Santa Rosa General Plan 2035, page 6-14.
[137] City of Santa Rosa. 2009. Santa Rosa General Plan 2035. Draft Environmental Impact Report, page 4.P-7.
[138] City of Santa Rosa. Recreation and Parks. Website: https://srcity.org/Facilities/Facility/Details/Pioneer-Park-94. Accessed August 8, 2019.
[139] City of Santa Rosa. Recreation and Parks. Website: https://srcity.org/Facilities/Facility/Details/Youth-Community-Park-98. Accessed August 8, 2019.

The proposed project would increase park use because it would generate new residents. However, this increase in population and their related park use is not likely to result in accelerated substantial physical deterioration. Santa Rosa Municipal Code Section 11.46.050 establishes park user fees and Section 19.70.090 requires the project developer to pay a park impact fee. This park impact fee would contribute to funding parks and recreation facilities, or dedication of parklands to the City of Santa Rosa. The proposed project would not develop the East Parcel of the project site in order to preserve wetland habitats. Although the proposed project would set aside the East Parcel for habitat preservation, it would not be considered active recreation space because it would not contain trails, recreation facilities, or allow public or resident access. As a result, the proposed project would be required to pay the park impact fee in accordance with Santa Rosa Municipal Codes Section 19.70.090. Therefore, impacts would be less than significant.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

Less than significant impact. The proposed project would increase demand and use of existing recreational facilities. As described in Impact 14(a), the proposed project would not result in a substantial unplanned increase in population. As a result, the proposed project would not substantially increase recreational facility use because of population growth. As stated previously, the proposed project would not develop or designate land for active recreation or parkland, so the project would be required to pay park impact fees to the City of Santa Rosa consistent with Municipal Code Section 19.70.090. Payment of fees would ensure Santa Rosa Recreation and Parks could provide recreational services to new development and maintain existing recreational facilities. In addition, the proposed project would be within 0.82 mile of existing parklands (Youth Community Park) and 0.22 mile of recreational facilities (Jack London School Park). The combination of payment of park impact fees and proximity to existing parklands and recreation facilities would ensure the proposed project would not result in the construction of new recreation facilities or expansion of existing recreational facilities. Therefore, impacts would be less than significant.

Mitigation Measures

None.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
17. Transportation *Would the project:*				
a) Conflict with a program plan, ordinance or policy of the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐
b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	The City of Santa Rosa has not established a threshold with regard to VMT impact significance consistent with CEQA Guidelines Section 15064.3, subdivision (b). Beginning on July 1, 2020, Section 15064.3 shall apply prospectively, only. As a result, this question does not serve as a threshold for determining impacts.			
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☒	☐	☐
d) Result in inadequate emergency access?	☐	☐	☒	☐

Environmental Evaluation

Setting

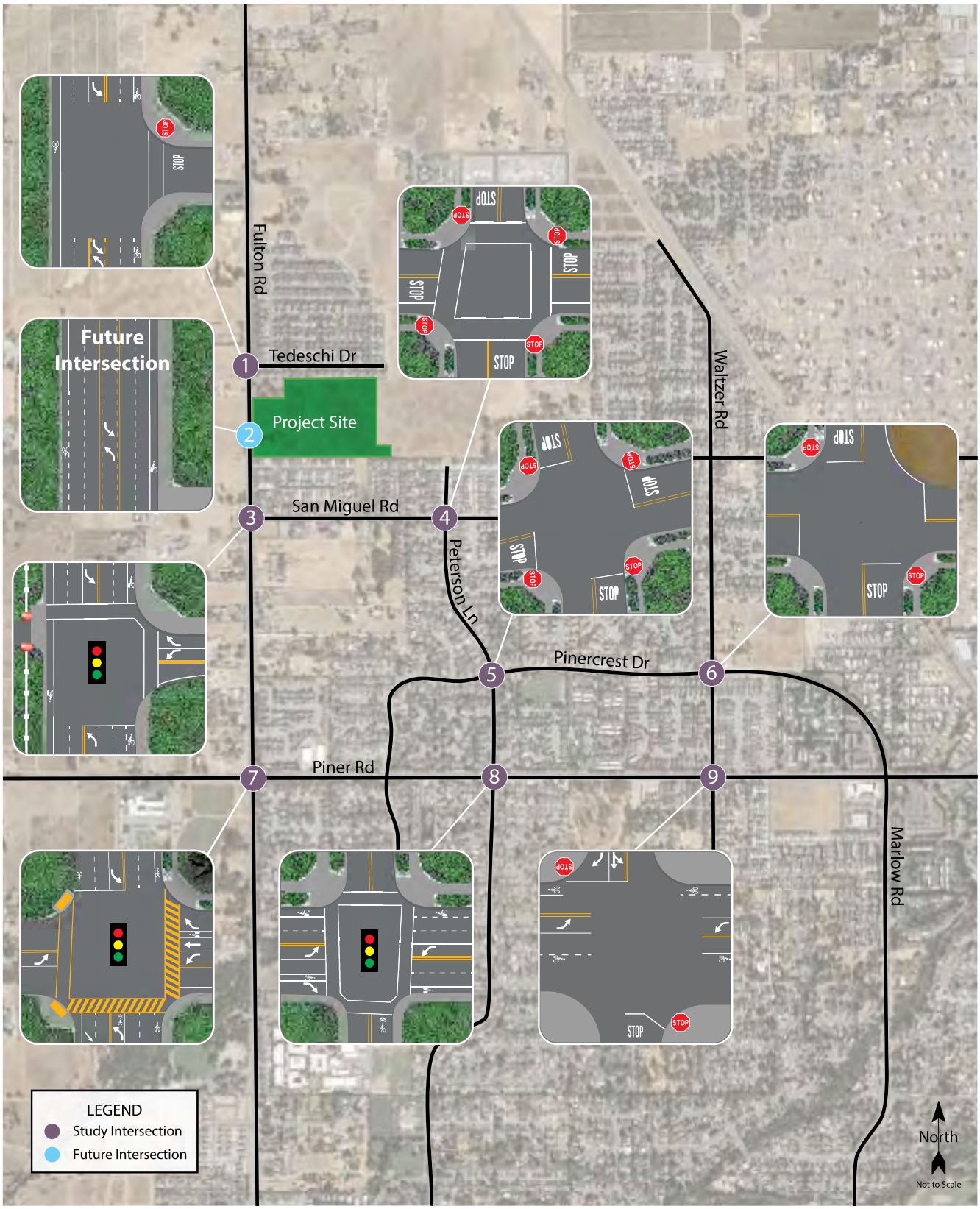
The transportation analysis in this section is based on the TIS prepared by W-Trans, dated October 22, 2019, provided in Appendix H. The TIS analyzed 120 single-family units (as opposed to 105 units), and thus represents a conservative analysis.

Traffic impacts are evaluated by determining the number of new trips that the proposed project would be expected to generate, distributing these trips to the surrounding street system based on existing or anticipated travel patterns specific to the project, then analyzing the impact the new traffic would be expected to have on critical intersections or roadway segments. In addition, impacts to access for pedestrians, bicyclists, and transit are also addressed.

Study Area and Periods

The study area consists of the following intersections (Exhibit 13).

- Fulton Road/Tedeschi Drive
- Fulton Road/Street A
- Fulton Road/San Miguel Road
- Peterson Lane/San Miguel Road
- Peterson Lane/Pinecrest Drive
- Waltzer Road/Pinecrest Drive
- Fulton Road/Piner Road
- Peterson Lane/Piner Road
- Waltzer Road/Piner Road



Source: W-Trans, October 2019.

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Exhibit 13
Study Area and Existing Lane Configurations

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Operating conditions during the weekday AM and PM peak periods were evaluated to capture the highest potential impacts for the project as well as the highest volumes on the local transportation network. The AM peak-hour occurs between 7:00 a.m. and 9:00 a.m. and reflects conditions during the home to work or school commute, while the PM peak-hour occurs between 4:00 p.m. and 6:00 p.m. and typically reflects the highest level of congestion during the homeward bound commute.

Study Intersections

Fulton Road/Tedeschi Drive is a stop-controlled tee-intersection, with a stop control at the westbound Tedeschi Drive approach. There are bicycle lanes along Fulton Road and a crosswalk on the east leg.

Fulton Road/Street A would be a new intersection constructed with the proposed project approximately 0.10 mile north of Fulton Road/San Miguel Road. As proposed, Street A would form the eastern leg of the intersection. There are bicycle lanes along Fulton Road at the proposed Street A.

Fulton Road/San Miguel Road is a signalized four-legged intersection with protected left-turn phasing on the northbound, southbound, and westbound approaches. However, the west leg is a driveway to a single-family dwelling. Crosswalks and associated pedestrian signal heads are present on the north and east legs.

Peterson Lane/San Miguel Road is an all-way stop-controlled four-legged intersection. Crosswalks and curb ramps are present on all legs of the intersection.

Peterson Lane/Pinercrest Drive is a four-legged all-way stop-controlled intersection. While curb ramps are present on all four curbs, there are no associated crosswalks on any leg of the intersection.

Waltzer Road/Pinercrest Drive is an all-way stop-controlled four-legged intersection. Curb ramps are present on three of the four curbs, with no associated crosswalks on any of the legs.

Fulton Road/Piner Road is a signalized four-legged intersection, with protected left-turn phasing on all four approaches. Crosswalks, as well as associated pedestrian signal heads and phasing, are present on the south, east, and west legs of the intersection. Bicycle lanes exist along Fulton Road and along Piner Road east of the intersection.

Peterson Lane/Piner Road is a four-legged, signalized intersection. Left-turn protected-permitted phasing is present on the eastbound and westbound approaches of Piner Road. Bicycle lanes exist along Piner Road, and crosswalks are present on all four legs with associated pedestrian signal phasing.

Waltzer Road/Piner Road is a four-legged, two-way stop-controlled intersection with stop controls at the northbound and southbound Waltzer Road approaches. Bicycle lanes exist along Piner Road, and there are curb ramps at all four legs but no associated crosswalks.

Exhibit 13 shows the locations of the study intersections and the existing lane configurations and controls. Exhibit 14 provides existing traffic volumes.

Collision History

W-Trans reviewed collision history for the study area to determine trends or patterns that may indicate a safety issue. Collision rates were calculated based on records available from the California Highway Patrol as published in their Statewide Integrated Traffic Records System (SWITRS) reports. The most current 5-year period available is October 1, 2013, through September 30, 2018.

Average collision rates for intersections differ based on whether the intersection is controlled by a traffic signal, all-way stop signs, or is uncontrolled, as well as the number of approaches. As presented in Table 26, all nine intersections had lower collision rates than Statewide averages within the most recent 5-year period. The collision rate calculation output is provided in Appendix H.

Table 26: Collision Rates at the Study Intersections

Study Intersection	Number of Collisions (2013–2018)	Calculated Collision Rate (c/mve)	Statewide Average Collision Rate (c/mve)
1. Fulton Road/Tedeschi Drive	2	0.05	0.14
3. Fulton Road/San Miguel Road	4	0.12	0.43
4. Peterson Lane/San Miguel Road	0	0.00	0.14
5. Peterson Lane/Pinercrest Drive	1	0.23	0.32
6. Waltzer Road/Pinercrest Drive	0	0.00	0.32
7. Fulton Road/Piner Road	9	0.19	0.43
8. Peterson Lane/Piner Road	7	0.25	0.43
9. Waltzer Road/Piner Road	3	0.11	0.26

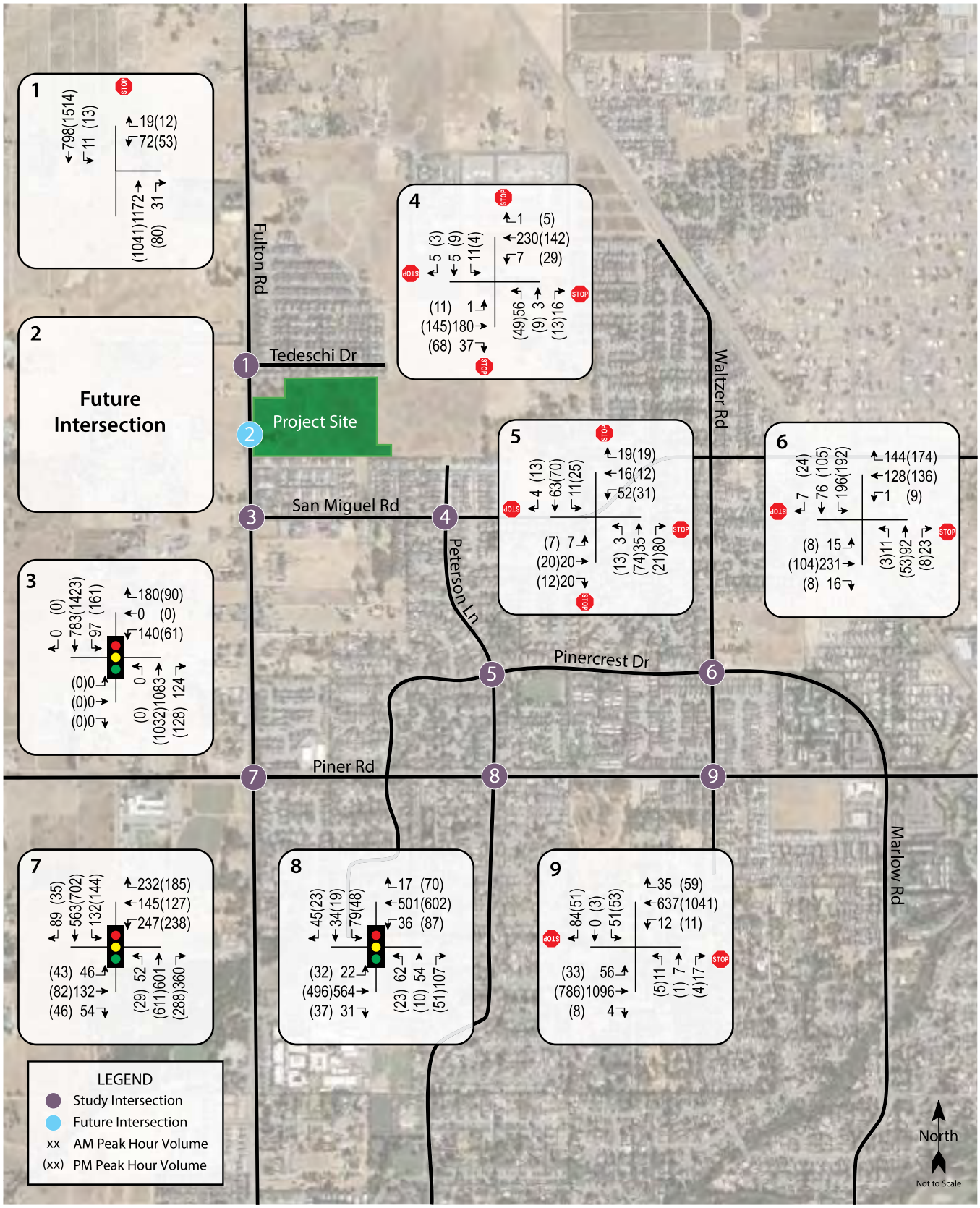
Note:
c/mve = collisions per million vehicles entering
Source: W-Trans 2019.

Transit Facilities

Santa Rosa CityBus provides fixed route bus service in the City. CityBus Route 6 provides services to destinations throughout western Santa Rosa between the Santa Rosa Transit Mall and Coddingtown Transit Hub via Fulton Road 7 days a week.[140]

There are no public transit service or facilities within 0.25 mile of the project site. CityBus Route 6 serves the nearest transit service stop, located south of the Fulton Road/Piner Road intersection, approximately 0.5 mile from the project site.

[140] City of Santa Rosa, Department of Transportation and Public Works. 2019. Route 6: Fulton Road. April 22.



Source: W-Trans, October 2019.

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Exhibit 14
Existing Traffic Volumes

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Bicycle Facilities

The 2018 Caltrans Highway Design Manual classifies bikeways into four categories:[141]

- **Class I Multi-Use Path—**a completely separated right-of-way for the exclusive use of bicycles and pedestrians with cross flows of motorized traffic minimized.
- **Class II Bike Lane—**a striped and signed lane for one-way bike travel on a street or highway.
- **Class III Bike Route—**signing only for shared use with motor vehicles within the same travel lane on a street or highway.
- **Class IV Bikeway—**also known as a separated bikeway, a Class IV Bikeway is for the exclusive use of bicycles and includes a separation between the bikeway and the motor vehicle traffic lane. The separation may include, but is not limited to, grade separation, flexible posts, inflexible physical barriers, or on-street parking.

Fronting the proposed project, there are Class II bike lanes on Fulton Road between the Santa Rosa north city limits and Sebastopol Road. There are also Class II bicycle lanes on Piner Road between Fulton Road and Marlow Road. Bicyclists ride in the roadway and/or on sidewalks along all other streets within the project study area. According to the City of Santa Rosa Bicycle and Pedestrian Master Plan Update 2018, a Class I Shared-Use Path is planned along the eastern boundary of the East Parcel. Table 27 summarizes existing and planned bicycle facilities in the project vicinity, as contained in the City of Santa Rosa Bicycle and Pedestrian Master Plan Update 2018.[142]

Table 27: Bicycle Facility Summary

Status Facility	Class	Length (miles)	Begin Point	End Point
Existing				
Fulton Road	II	3.95	City Limits North	Sebastopol Road
Piner Road	II	1.00	Fulton Road	Marlow Road
Planned				
Trail	I	0.44	Village Drive	Orleans Street
San Miguel Ave	II	0.50	Fulton Road	Francisco Avenue
Francisco Ave	II	1.00	City Limits North	San Miguel Avenue
Source: W-Trans 2019.				

Pedestrian Facilities

Pedestrian facilities include sidewalks, crosswalks, pedestrian signal phases, curb ramps, curb extensions, and various streetscape amenities such as lighting, benches, etc. In general, a network of

[141] California Department of Transportation (Caltrans). 2018. Highway Design Manual, 6th Edition.
[142] City of Santa Rosa. 2019. City of Santa Rosa Bicycle & Pedestrian Master Plan: Update 2018. Website: https://srcity.org/2711/Bicycle-and-Pedestrian-Master-Plan. Accessed January 22, 2020.

sidewalks, crosswalks, and curb ramps provide access for pedestrians in the residential areas near the project site. Currently there are sidewalks along Fulton Road and plans for a connected sidewalk network throughout the project site.

Intersection Level of Service Methodologies

Level of Service (LOS) is used to rank traffic operation on various types of facilities based on traffic volumes and roadway capacity using a series of letter designations ranging from A to F. Generally, LOS A represents free flow conditions and LOS F represents forced flow or breakdown conditions. A unit of measure that indicates a level of delay generally accompanies the LOS designation.

The study intersections were analyzed using methodologies published in the Highway Capacity Manual (HCM), Transportation Research Board.[143] This source contains methodologies for various types of intersection control, all of which are related to a measurement of delay in average number of seconds per vehicle.

The LOS for the intersections with side street stop controls, or those that are unsignalized and have one or two approaches stop controlled, were analyzed using the "Two-Way Stop-Controlled" intersection capacity method from the HCM. This methodology determines a LOS for each minor turning movement by estimating the level of average delay in seconds per vehicle. Results are presented for individual movements together with the weighted overall average delay for the intersection.

The study intersections with stop signs on all approaches were analyzed using the "All-Way Stop-Controlled" Intersection methodology from the HCM. This methodology evaluates delay for each approach based on turning movements, opposing and conflicting traffic volumes, and the number of lanes. Average vehicle delay is computed for the intersection as a whole and then related to a LOS.

The study intersections that are currently controlled by a traffic signal, or may be in the future, were evaluated using the signalized methodology from the HCM. This methodology is based on factors including traffic volumes, green time for each movement, phasing, whether the signals are coordinated or not, truck traffic, and pedestrian activity. Average stopped delay per vehicle in seconds is used as the basis for evaluation in this LOS methodology. For purposes of this study, delays were calculated using signal timing obtained from the City of Santa Rosa.

The ranges of delay associated with the various levels of service are indicated in Table 28.

[143] Transportation Research Board. 2010. Highway Capacity Manual.

Table 28: Intersection Level of Service Criteria

LOS	Two-way Stop-controlled	All-Way-Stop-Controlled	Signalized
A	Delay of 0 to 10 seconds. Gaps in traffic are readily available for drivers exiting the minor street.	Delay of 0 to 10 seconds. Upon stopping, drivers are immediately able to proceed.	Delay of 0 to 10 seconds. Most vehicles arrive during the green phase, so do not stop at all.
B	Delay of 10 to 15 seconds. Gaps in traffic are somewhat less readily available than with LOS A, but no queuing occurs on the minor street.	Delay of 10 to 15 seconds. Drivers may wait for one or two vehicles to clear the intersection before proceeding from a stop.	Delay of 10 to 20 seconds. More vehicles stop than with LOS A, but many drivers still do not have to stop.
C	Delay of 15 to 25 seconds. Acceptable gaps in traffic are less frequent, and drivers may approach while another vehicle is already waiting to exit the side street.	Delay of 15 to 25 seconds. Drivers will enter a queue of one or two vehicles on the same approach and wait for vehicle to clear from one or more approaches prior to entering the intersection.	Delay of 20 to 35 seconds. The number of vehicles stopping is significant, although many still pass through without stopping.
D	Delay of 25 to 35 seconds. There are fewer acceptable gaps in traffic, and drivers may enter a queue of one or two vehicles on the side street.	Delay of 25 to 35 seconds. Queues of more than two vehicles are encountered on one or more approaches.	Delay of 35 to 55 seconds. The influence of congestion is noticeable, and most vehicles have to stop.
E	Delay of 35 to 50 seconds. Few acceptable gaps in traffic are available, and longer queues may form on the side street.	Delay of 35 to 50 seconds. Longer queues are encountered on more than one approach to the intersection.	Delay of 55 to 80 seconds. Most, if not all, vehicles must stop, and drivers consider the delay excessive.
F	Delay of more than 50 seconds. Drivers may wait for long periods before there is an acceptable gap in traffic for exiting the side streets, creating long queues.	Delay of more than 50 seconds. Drivers enter long queues on all approaches.	Delay of more than 80 seconds. Vehicles may wait through more than one cycle to clear the intersection.
Source: Transportation Research Board. 2010. Highway Capacity Manual.			

City of Santa Rosa Operations Standards

The City of Santa Rosa's adopted LOS Standard is contained in the General Plan. Standard TD-1 states that the City will try to maintain a LOS D or better along all major corridors. Exceptions to meeting this standard are allowed where attainment would result in significant environmental degradation;

where topography or environmental impacts make the improvement impossible; or where attainment would ensure loss of an area's unique character.

While a corridor LOS is applied by the City in its analysis of the entire City as part of the environmental documentation supporting the General Plan, this type of analysis only provides relevant data when performed on a much longer segment than the ones included within the study area for the project. Therefore, although the City's standard does not specify criteria for intersections, for the purposes of this study, as is standard practice for such studies, a minimum operation of LOS D for the overall operation of signalized intersections was applied.

Because delay on a stop-controlled side-street does not impact operation of the through corridor on which the City's service level standard is based, delay indicative of LOS E or F on a side-street approach was considered acceptable as long as the average for the intersection as a whole is LOS D or better.

Access and Circulation

Sight Distance

The recommended sight distance at intersections of public streets is based on corner sight distances, with approach travel speeds used as the basis for determining the recommended sight distance. Additionally, the stopping sight distance needed for a following driver to stop if there is a vehicle waiting to turn into a side street or driveway is evaluated based on stopping sight distance criterion and the approach speed on the major street.

Would the project:

a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less than significant impact. Table 29 summarize the associated trip generation of the proposed project and Table 30 summarizes the trip distribution. The proposed project is expected to generate 1,124 new trips with 88 in the AM peak-hour and 118 in the PM peak-hour.

Table 29: Trip Generation Summary

Land Use	Units	Daily		AM Peak-hour				PM Peak-hour			
		Rate	Trips	Rate	Trips	In	Out	Rate	Trips	In	Out
Existing											
Single-family Detached Housing	-1 DU	9.44	-9	0.74	-1	0	-1	0.99	-1	-1	0
Proposed											
Single-family Detached Housing	120 DU	9.44	1,133	0.74	89	22	67	0.99	119	75	44
Total (net new trips)		**—**	**1,124**	**—**	**88**	**22**	**66**	**—**	**118**	**74**	**44**

Note:
DU = dwelling unit
Source: W-Trans, 2019.

The pattern used to allocate new project trips to the street network was based on data from the 2000 Census for home-to-work trips. It should be noted that of the 5 percent of trips anticipated to travel to and from the north via Fulton Road, 1 percent of the trips were allocated to travel via Andre Lane to the intersection of Fulton Road/Tedeschi Drive to account for the 25 units (approximately 20 percent of the total proposed dwelling units) on the northern section of the project site that might use this route rather than directly onto Fulton Road via Street A. It was conservatively assumed that all the project trips going south on Fulton Road would use the Street A, resulting in the maximum potential for improvements to be warranted at this location. The proposed project is expected to result in a nominal number of trips through the adjacent neighborhoods because few destinations are to the north and the most direct route would be to exit via Street A. Therefore, the proposed project is expected to generate only one new trip during each peak period through the neighborhood to the north to reach Tedeschi Drive and connect to Fulton Road. Exhibit 15 illustrates project trip generation and distribution.

Table 30: Trip Distribution Assumptions

Route	Percent	Daily Trips	AM Trips	PM Trips
To/from the north on Fulton Road via Tedeschi Drive	1%	11	1	1
To/from the north on Fulton Road via Street A	4%	45	4	5
To/from the east on San Miguel Road	15%	169	13	18
To/from the east on Piner Road via Peterson Lane	10%	112	9	12
To/from the east on Piner Road via Pinercrest Drive	10%	112	9	12
To/from the east on Piner Road	40%	450	35	47
To/from the south on Fulton Road	20%	225	18	24
Total	**100%**	**1,124**	**89***	**119***

Note:
* Trips do not add up to the calculated trip generation due to rounding
Source: W-Trans 2019.

Intersection Level of Service

SB 743, codified at Public Resources Code Section 21099, mandated a transition away from LOS as a way of measuring the significance of traffic impacts under CEQA. Section 21099(b)(2) provides that "[u]pon certification of the guidelines by the Secretary of the Natural Resources Agency pursuant to this section, automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion, **shall not be considered a significant impact on the environment pursuant to this division**, except in locations specifically identified in the guidelines, if any."[144] (emphasis added). SB 743 also requires agencies to transition to a metric known as VMT by July 1, 2020, which focuses on whether a proposed project will require people to drive more or less and is far more favorable to transit-oriented development. At the time of this publication of the Draft

[144] FindLaw. No date. Public Resources Code Section 21099. Website: https://codes.findlaw.com/ca/public-resources-code/prc-sect-21099.html. Accessed May 13, 2020.

IS/MND, the City has not adopted VMT metrics. As indicated in State CEQA Guidelines Section 15064.3, the requirement to use VMT applies prospectively only. Consistent with the Public Resources Code, no significant impact is found with respect to LOS.

Existing Plus Project

The Existing Plus Project scenario evaluates the addition of project traffic to the existing volumes during peak periods at study area intersections. Table 31 summarizes the LOS and Exhibit 16 shows Existing Plus Project traffic volumes. The City of Santa Rosa's adopted LOS Standard is D or better along all major corridors. It is noted that while some stop-controlled approaches are projected to operate at LOS F, this is considered acceptable as these intersections would be expected to operate at LOS A or B overall. The proposed project's impact under Existing Plus Project conditions is therefore less than significant.

Table 31: Existing and Existing Plus Project Peak-hour Intersection Level of Service

Study Intersection *Approach*	Existing Conditions				Existing Plus Project			
	AM Peak-hour		PM Peak-hour		AM Peak-hour		PM Peak-hour	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1. Fulton Road/Tedeschi Drive	4.9	A	4.0	A	4.9	A	4.1	A
Westbound (Tedeschi Drive) Approach	*110.9*	*F*	**	*F*	*111.6*	*F*	**	*F*
2. Fulton Road/Street A	—	—	—	—	1.5	A	1.2	A
Westbound (Street A) Approach	—	—	—	—	*82.0*	*F*	*118.7*	*F*
3. Fulton Road/San Miguel Road	13.9	B	13.9	B	13.9	B	13.9	B
4. Peterson Lane/San Miguel Road	9.0	A	8.6	A	9.1	A	8.8	A
5. Peterson Lane/Pinercrest Drive	7.7	A	7.8	A	7.8	A	7.9	A
6. Waltzer Road/Pinercrest Drive	12.2	B	11.6	B	12.4	B	11.7	B
7. Fulton Road/Piner Road	33.3	C	30.1	C	34.1	C	30.8	C
8. Peterson Lane/Piner Road	9.9	A	9.0	A	10.4	B	9.1	A
9. Waltzer Road/Piner Road	11.6	B	10.8	B	12.9	B	12.4	B
Northbound (Waltzer Road) Approach	*78.1*	*F*	*75.7*	*F*	*86.7*	*F*	*85.2*	*F*
Southbound (Waltzer Road) Approach	**	*F*	**	*F*	**	*F*	**	*F*

Notes:
Delay is measured in average seconds per vehicle
LOS = Level of Service; Results for minor approaches to two-way stop-controlled intersections are indicated in *italics*;
** = delay greater than 120 seconds
Source: W-Trans 2019.

Baseline Plus Project

The Baseline Plus Project Conditions scenario provides an evaluation of operation with traffic added from approved or pending projects in the study area that could be operational within the next two to three years. The following three approved projects were included in the Baseline Conditions.

- Kerry Ranch (Phase 1-3)–95 detached single-family dwelling units at 2181 Francisco Avenue
- Francisco Billage–77 single-family dwelling unit development at 2601 Francisco Avenue
- North Village II–164 multi-family dwelling units at 2406 Fulton Road

Underestimated baseline volumes, study intersections would be expected to continue operating at the same LOS as under existing volumes, except for Peterson Lane/Piner Road. This intersection would be anticipated to continue operating acceptably but experience a change in LOS during the AM peak-hour from LOS A to B. Baseline traffic volumes are shown in Exhibit 17. Table 32 summarizes the LOS calculations under this scenario and with the addition of project related traffic. Baseline Plus Project traffic volumes are shown in Exhibit 18. As shown, with the addition of project related traffic, study intersections would continue to operate acceptably overall and impacts would be less than significant.

Table 32: Baseline and Baseline Plus Project Peak-hour Intersection Level of Service

Study Intersection *Approach*	Existing Conditions				Existing Plus Project			
	AM Peak-hour		PM Peak-hour		AM Peak-hour		PM Peak-hour	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1. Fulton Road/Tedeschi Drive	5.6	A	5.0	A	5.7	A	5.1	A
Westbound (Tedeschi Drive) Approach	**	*F*	**	*F*	**	*F*	**	*F*
2. Fulton Road/Street A	—	—	—	—	1.7	A	1.5	A
Westbound (Street A) Approach	—	—	—	—	*93.3*	*F*	**	*F*
3. Fulton Road/San Miguel Road	14.1	B	14.4	B	14.1	B	14.6	B
4. Peterson Lane/San Miguel Road	9.4	A	9.1	A	9.6	A	9.3	A
5. Peterson Lane/Pinercrest Drive	7.7	A	7.8	A	7.8	A	7.9	A
6. Waltzer Road/Pinercrest Drive	12.2	B	11.6	B	12.4	B	11.7	B
7. Fulton Road/Piner Road	34.0	C	30.7	C	34.8	C	31.4	C
8. Peterson Lane/Piner Road	10.5	B	9.1	A	11.0	B	9.4	A
9. Waltzer Road/Piner Road	12.9	B	12.3	B	14.4	B	14.0	B
Northbound (Waltzer Road) Approach	*86.4*	*F*	*85.1*	*F*	*96.3*	*F*	*96.3*	*F*
Southbound (Waltzer Road) Approach	**	*F*	**	*F*	**	*F*	**	*F*

Notes:
Delay is measured in average seconds per vehicle
LOS = Level of Service; Results for minor approaches to two-way stop-controlled intersections are indicated in *italics*;
** = delay greater than 120 seconds
Source: W-Trans 2019.

Future (Cumulative) Conditions

The City of Santa Rosa is in the process of updating the transportation element for the General Plan, as well as their Traffic Impact Study Guidelines. Since the proposed project is consistent with its zoning and General Plan land use designation, its traffic would be included in volumes projected for analysis of the General Plan, so analysis of a future scenario is not necessary under the policies contained in the draft traffic study guidelines.

Signal Warrants

A signal warrant analysis was performed to determine need for a traffic signal at Fulton Road/Street A. Chapter 4C of the California Manual on Uniform Traffic Control Devices (CA-MUTCD) provides guidance on when a traffic signal should be considered.[145]

Warrant 3, peak-hour volumes, which is often the first warrant to be met, is based on the volumes during the highest-volume hour of the day. Under the Peak-hour Warrant, the need for a traffic control signal shall be considered if an engineering study finds that the criteria in either of the following two categories are met:

a) If all three of the following conditions exist for the same one hour (any four consecutive 15-minute periods) of an average day:
    a. The total stopped time delay experienced by the traffic on one minor-street approach (one direction only) controlled by a stop sign equals or exceeds: four vehicle-hours for a one-lane approach; or five vehicle-hours for a two-lane approach, and
    b. The volume on the same minor-street approach (one direction only) equals or exceeds 100 vehicles per hour for one moving lane of traffic or 150 vehicles per hour for two moving lanes, and
    c. The total entering volume serviced during the hour equals or exceeds 650 vehicles per hour for intersections with three approaches or 800 vehicles per hour for intersections with four or more approaches.
b) The plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the higher-volume minor-street approach (one direction only) for one hour (any four consecutive 15-minute periods) of an average day falls above the applicable curve in Figure 4C-3 (of the CA-MUTCD) for the existing combination of approach lanes.

The intersection of Fulton Road/Street A would not warrant a traffic signal under volumes for either the Existing or Baseline Plus Project scenarios during the AM or PM peak-hour. Copies of the Signal Warrant Spreadsheets are provided in Appendix H.

Transit Facilities

There are no existing transit routes or stops within an acceptable walking distance of the site; however, based on the distance between the project site and employment centers, it is reasonable to expect that some residents would want to travel using transit if it were available. The nearest bus stop is less than 1 mile from the project site and CityBus Route 6 connects a large portion of Fulton

[145] California Department of Transportation (Caltrans). 2014 (Revision 4 [March 29, 2019]). California Manual on Uniform Traffic Control Devices (CA-MUTCD).

Road to transit hubs in the City. The TIS notes that the transit facilities serving the project site are inadequate. However, this is an existing condition, and the project would not conflict with a program plan, ordinance or policy addressing the circulation system, including transit facilities. Therefore, impacts would be less than significant.

Policy T-A-7 of the General Plan directs the City to "expand non-motorized and bus infrastructure throughout the City such that greater amenities exist for cyclists, pedestrians, and transit users…"[146] Santa Rosa CityBus is initiating an update to their Short Ranch Transit Plan. The project applicant is coordinating with Santa Rosa CityBus to include an evaluation of a potential expansion of service on Fulton Road north of Piner Road and east of Fulton Road as part of the update to the Short Ranch Transit Plan, which would provide more convenient access to transit services for residents of the proposed project.

Bicycle Facilities

The existing and planned bike lanes, as shown in Table 27, as well as minor streets, would provide adequate access for bicyclists in the project vicinity. In addition, all units would have a garage where bicycles could be stored, so no additional bicycle storage facilities are necessary. Therefore, the proposed project would not conflict with a program plan, ordinance, or policy regarding bicycle facilities and impacts would be less than significant.

Pedestrian Facilities

The proposed project would provide sidewalks along all streets within the project site, and the TIS concluded that pedestrian facilities serving the project site would be adequate upon completion of proposed project improvements. Furthermore, all curb ramps would be required to be Americans with Disabilities Act (ADA) compliant. As a result, the proposed project would not conflict with a program plan, ordinance, or policy regarding pedestrian facilities and impacts would be less than significant.

b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

Not applicable. Currently, the provisions of Section 15064.3 apply beginning on July 1, 2020, unless a lead agency elects to be governed by the Guideline before that date. Moreover, Section 15064.3 provisions apply prospectively from that effective date, and do not apply to steps in the CEQA process completed before the effective date or to CEQA documents that were circulated for public review prior to July 1, 2020.

The City has not elected to be governed by the requirements of Section 15064.3 prior to its effective date. Additionally, the City has not finalized the adoption of VMT thresholds or identified the appropriate metrics for analyzing VMT.

Because the City has not yet adopted thresholds and this Draft IS/MND has been completed and released for public review prior to July 1, 2020, Guidelines Section 15064.3 does not apply, no VMT analysis is required, and the project is not inconsistent with Section 15064.3, subdivision (b). Accordingly, no determination on the significance of VMT impacts is made in this document since none is legally required.

[146] City of Santa Rosa. 2009. Santa Rosa General Plan 2035, page 5-14.

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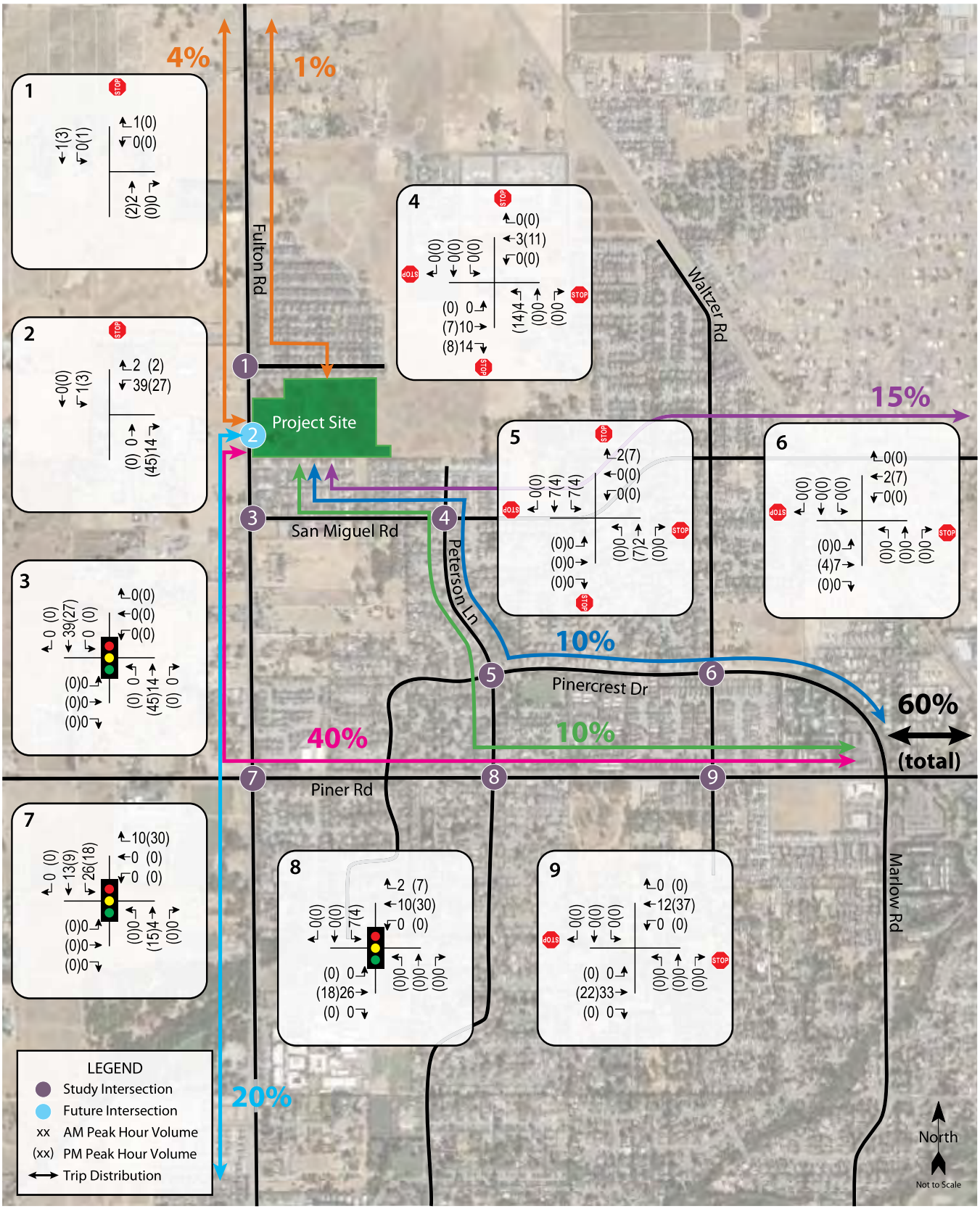

Source: W-Trans, October 2019.

FIRSTCARBON SOLUTIONS™

Exhibit 15
Project Traffic Volumes and Trip Distribution

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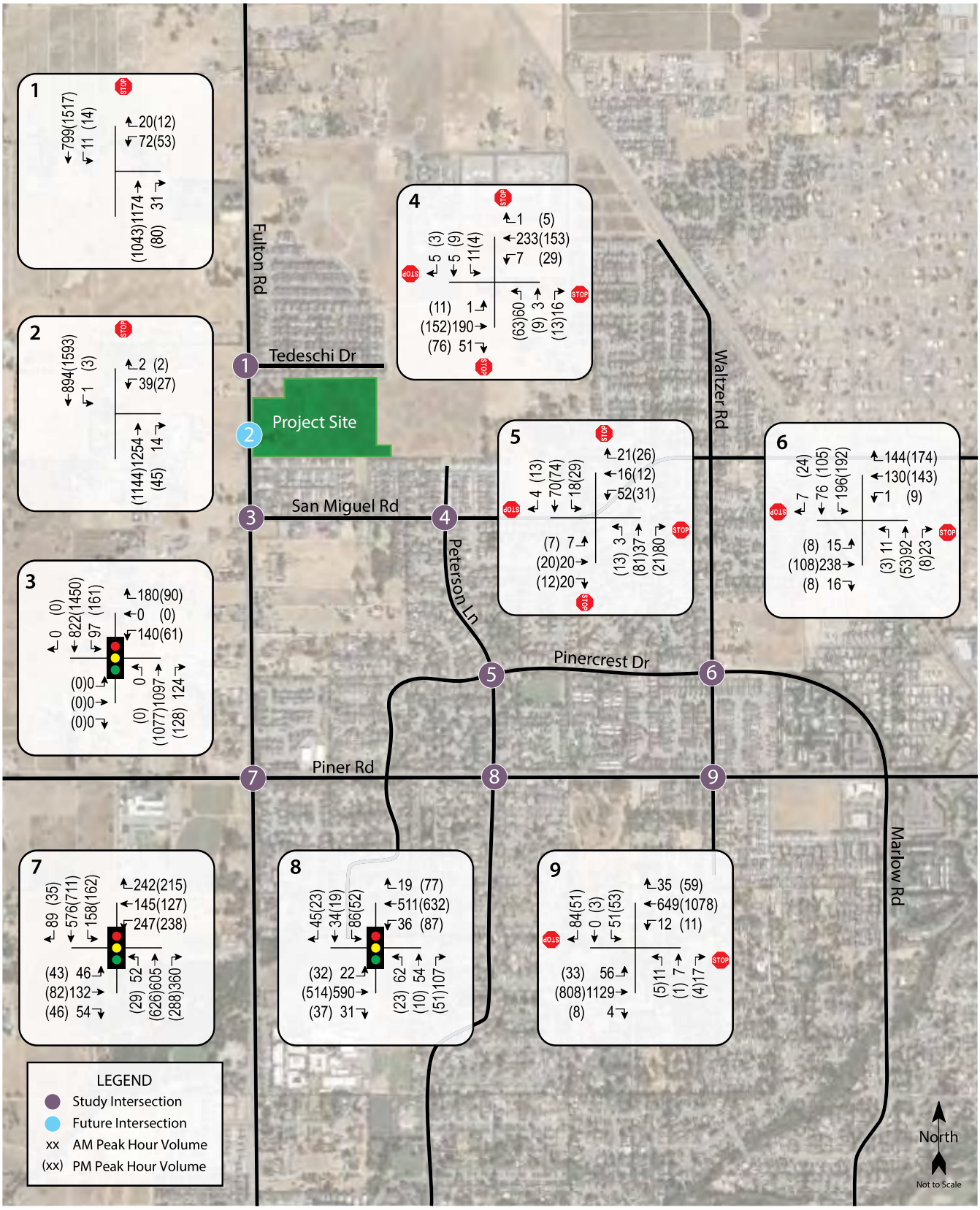

Source: W-Trans, October 2019.

FIRSTCARBON SOLUTIONS™

Exhibit 16
Existing Plus Project Traffic Volumes

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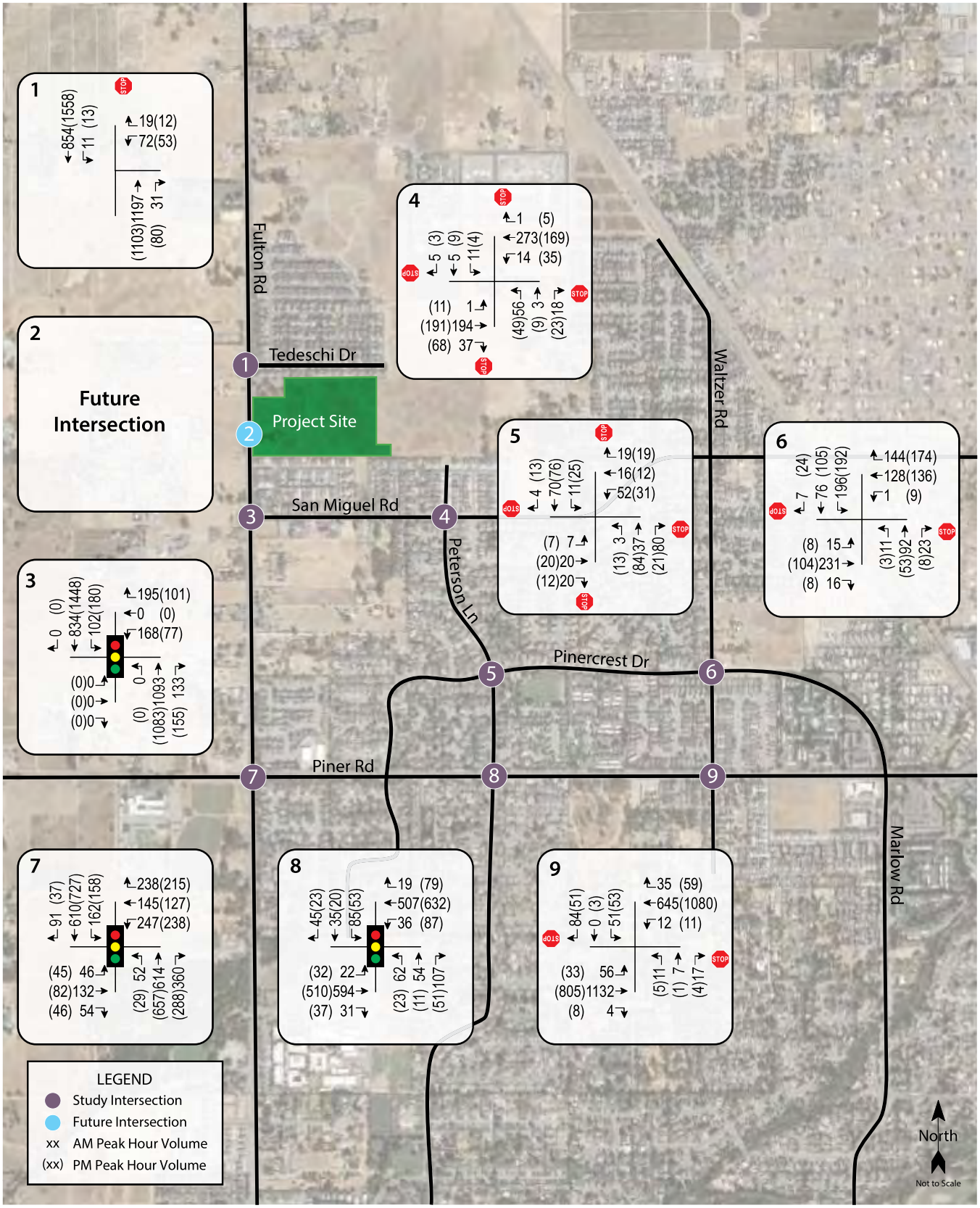

Source: W-Trans, October 2019.

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Exhibit 17
Baseline Traffic Volumes

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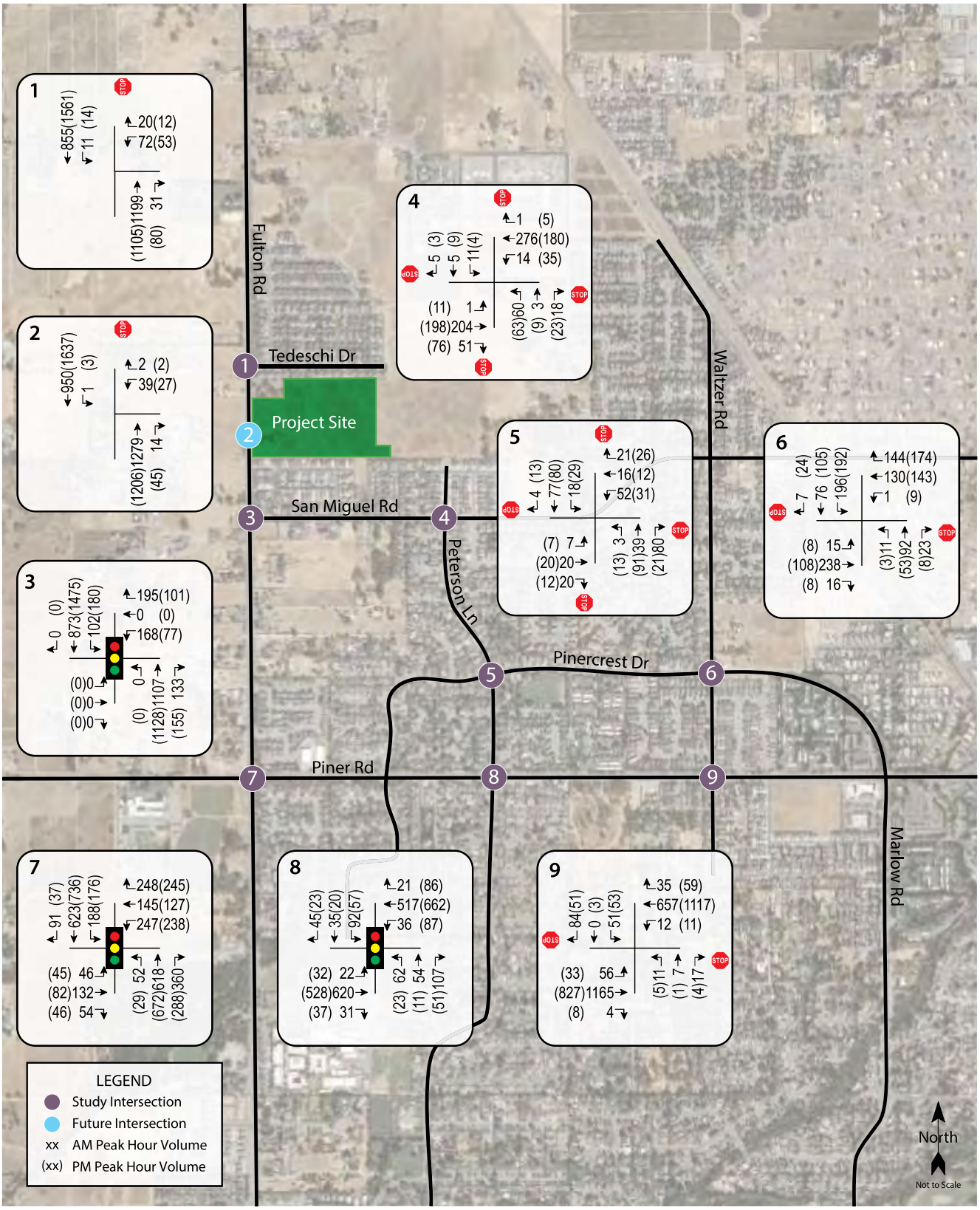

Source: W-Trans, October 2019.

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Exhibit 18
Baseline Plus Project Traffic Volumes

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c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less than significant impact with mitigation incorporated. Sight distance at the proposed Street A driveway was field measured. Based on a design speed of 45 miles per hour (mph), the minimum corner sight distance needed is 495 feet. Based on observations during a field visit, there is more than adequate sight lines in both directions at the project driveway along Fulton Road.

The TIS concluded that the two-way left turn lane on Fulton Road at Street A should be converted to a dedicated left-turn lane in the southbound direction, which is included as MM TRANS-1. MM TRANS-1 would eliminate the potential for a head-on crash if a southbound driver pulls into the turn lane and a driver simultaneously uses the center lane to turn left from a driveway on the west side of Fulton Road. It is noted that while there is not currently a driveway opposite the proposed street location, it is standard practice to re-stripe two-way left-turn lanes to dedicated left-turn lanes to serve new streets. In addition, this recommendation is consistent with the City's standard practice and this change would eliminate the potential for a future safety conflict. Impacts would be less than significant with implementation of MM TRANS-1.

d) Result in inadequate emergency access?

Less than significant. The proposed project would provide at least two full access points (a primary vehicular access point from Fulton Road and two secondary points of access via an extension of Andre Lane) and at least two points of access consistent with California Fire Code standards. Based on a standard-sized fire truck and the proposed site plan, on-site circulation would be adequate to accommodate emergency vehicle turning-movements.[147] W-Trans also reviewed the site plan for compliance with the City of Santa Rosa neighborhood street design features. All streets widths are adequate to meet City standards. Therefore, impacts would be less than significant.

Mitigation Measures

MM TRANS-1 Prior to issuance of building permits, the project applicant shall prepare and submit plans to the City of Santa Rosa Transportation and Public Works Department depicting a dedicated left-turn lane in the southbound direction on Fulton Road at Street A. The plans shall be approved by the Traffic Engineering Department Traffic Engineer.

[147] AutoTURN (AutoCAD vehicle swept path analysis software) output for emergency vehicle access is provided in the TIS which is included in Appendix H.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
18. Tribal Cultural Resources *Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:*				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	☐	☐	☒	☐
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

Environmental Evaluation

Setting

Native American Heritage Commission Sacred Lands File Record Search and Tribal Consultation

Tom Origer & Associates sent a request to the NAHC in an effort to determine whether any sacred sites are listed on its Sacred Lands File within the project area and the names of Native American individuals and groups that would be appropriate to contact regarding the proposed project. Letters were also sent to the following groups:

- Cloverdale Rancheria of Pomo Indians of California
- Dry Creek Rancheria of Pomo Indians
- Federated Indians of Graton Rancheria
- Kashia Band of Pomo Indians of the Stewarts Point Rancheria
- Lytton Rancheria of California
- Middletown Rancheria of Pomo Indians of California
- Mishewal-Wappo Tribe of Alexander Valley

A letter was received via email from Ryan Peterson, Administrative Assistant for the Middletown Rancheria Tribal Historic Preservation Department, on March 12, 2019. The Middletown Rancheria of Pomo Indians of California had no comment at this time, but if evidence of human habitation is found they request that work stop immediately and that they be notified.

A response was received on March 12, 2019, from Brenda Tomaras of Tomaras & Ogas, LLP, representative of the Lytton Rancheria of California. Ms. Tomaras stated that the Tribe has no specific information about the project, but that the land does fall within their traditional Pomo territory. Ms. Tomaras further stated that artifacts and sites may be encountered during project construction and they will be consulting with the appropriate lead agency.

A response was received on March 12, 2019, from Dino Franklin, Chairman of the Kashia Band of Pomo Indians of the Stewarts Point Rancheria. Chairman Franklin stated that he was unable to comment on the proposed project and deferred to Lytton Rancheria of California or the Federated Indians of Graton Rancheria.

A response was received on March 25, 2019, from Buffy McQuillen, Tribal Historic Preservation Officer for the Federated Indians of Graton Rancheria. Ms. McQuillen stated that the project area is within the Tribe's ancestral territory and there may be tribal cultural resource impacts. Ms. McQuillen requested the results of the cultural resources study and the recommendations made based on those results.

Pursuant to AB 52, the City of Santa Rosa reached out to Brenda Tomaras and Buffy McQuillen with a letter providing a project description, project location map, and offer to engage in consultation on February 18, 2020. The City did not receive any responses and no other responses have been received to date. The NAHC and tribal contact efforts are available in Appendix C.

Northwest Information Center

Julia Franco of Tom Origer & Associates reviewed the archaeological site base maps and records, survey reports, and other materials on file at the NWIC on February 25, 2019 (NWIC File 18-1609). The library and project files at Tom Origer & Associates and various on-line databases were also reviewed. The purpose of this review was to access existing cultural resource survey reports, archaeological site records, and historic maps and evaluate whether any previously documented prehistoric or historic archaeological sites, architectural resources, cultural landscapes, or other resources exist within or near the project area.

Results from the NWIC indicate that 30 resources are on file within a 0.5-mile radius of the project area and three of these studies were conducted adjacent to the project site. Six resources have been recorded within 0.5 mile of the project site. All six of the resources recorded within 0.5 mile of the project site are historic-era resources and would not extend into the project site. There are no resources located on the project site. A records search map, identifying the project boundaries and 0.5-mile search radius along with relevant records search results may be found in Appendix C.

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or

Less than significant impact. A review of the CRHR, local registers of historic resources, a records search conducted at the NWIC failed to identify any listed Tribal Cultural Resources (TCRs) that may be adversely affected by the proposed project. A search of the NAHC Sacred Lands File failed to identify any listed TCRs that may be adversely affected by the proposed project. As such, no eligible or potentially eligible TCRs will be adversely affected by the proposed project and impacts are less than significant.

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1.

Less than significant impact with mitigation incorporated. Pursuant to AB 52, the City of Santa Rosa sent letters to Ms. Tomaras and MS. McQuillen, two tribal representatives that initially requested consultation through outreach conducted by Tom Origer & Associates. The letters were sent on February 18, 2020 and provided a project description, project location map, and offer to engage in consultation. The City did not receive any responses, and no additional comments or requests for consultation were received (Appendix C). Should any undiscovered TCRs be encountered during project construction, implementation of MM CUL-I and MM CUL-2 would reduce potential impacts to a less than significant level.

Mitigation Measures

Implement MM CUL-1 and MM CUL-2.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
19. Utilities and Service Systems *Would the project:*				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e) Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

Environmental Evaluation

Setting

Water Supply

A majority of the City's water supply is derived from the Russian River watershed and is delivered under contractual agreement by Sonoma Water. Sonoma Water holds water rights to divert 92 million gallons of water per day (mgd) with an annual maximum of 75,000 AFY from the Russian River. Sonoma Water also has three groundwater wells in the Santa Rosa Plain, which provide an average additional supply of 3,870 AFY.[148] The City of Santa Rosa utilized 16,679 acre-feet in 2015 and expected the demand to rise to 28,840 acre-feet by 2040.[149] Table 33 summarizes the projected Sonoma Water water supply and demand during dry years.

[148] City of Santa Rosa. 2009. Santa Rosa General Plan 2035, Public Services and Facilities Element, page 6-8.
[149] City of Santa Rosa. 2015 Urban Water Management Plan (UWMP), page ES-2. Website: https://srcity.org/DocumentCenter/View/13875/Urban-Water---2015-Management-Plan-Without-Appendices. Accessed March 27, 2019.

Table 33: Projected Water Supply and Demand Dry Water Year Comparison

Multiple Dry Years Supply and Demand Comparison (AFY)		2020	2025	2030	2035	2040
First Year	Supply Totals	24,289	25,730	26,946	28,243	28,280
	Demand Totals	24,289	25,730	26,946	28,243	24,280
	Difference	0	0	0	0	0
Second Year	Supply Totals	24,289	25,730	26,946	28,243	28,280
	Demand Totals	24,289	25,730	26,946	28,243	24,280
	Difference	0	0	0	0	0
Third Year	Supply Totals	24,289	25,730	26,946	28,243	28,280
	Demand Totals	24,289	25,730	26,946	28,243	24,280
	Difference	0	0	0	0	0
Fourth Year (Optional)	Supply Totals	24,289	25,730	26,946	28,243	28,280
	Demand Totals	24,289	25,730	26,946	28,243	24,280
	Difference	0	0	0	0	0

Note:
AFY = acre-feet/year
Source: City of Santa Rosa 2015 UWMP.

Stormwater

Stormwater generated in Santa Rosa drains through six drainage basins to the Laguna de Santa Rosa. The largest drainage basin includes Santa Rosa Creek, which drains the northern Santa Rosa area by six major creeks and various tributaries. Four creeks (Brush, Austin, Spring, and Matanzas) primarily drain the easterly portion, while Paulin and Piner Creeks drain the westerly portion. Santa Rosa Creek also drains stormwater runoff generated downtown and in surrounding neighborhoods. The number and location of creeks in northern Santa Rosa result in adequate stormwater drainage capacity in the northern area.[150] The City's SUSMP requires projects to design and implement post-development measures to reduce the potential stormwater impacts to local drainages.[151]

Wastewater

The City's existing water distribution system is divided into 18 major pressure zones and several smaller sub-zones that are served by pipelines ranging in diameter from 4 to 24 inches. The majority of services are provided via 6-inch to 12-inch diameter mains.[152] The City's Utilities Department is responsible for the operation and management of the Santa Rosa Subregional Water Reclamation System, which operates the Laguna Wastewater Treatment Plant (WWTP). The Laguna WWTP is a tertiary level treatment facility that has an average daily dry weather flow of 16.5 mgd and is

[150] City of Santa Rosa. 2009. Santa Rosa General Plan 2035. Public Services and Facilities Element, page 6-13
[151] City of Santa Rosa. 2009. Santa Rosa General Plan 2035 Draft EIR, page 4.H-6.
[152] City of Santa Rosa. 2015 Urban Water Management Plan (UWMP), page 3-4. Website: https://srcity.org/DocumentCenter/View/13875/Urban-Water---2015-Management-Plan-Without-Appendices. Accessed March 27, 2019.

permitted for 21.34 mgd average daily dry weather flow.[153] The Laguna WWTP serves the cities of Santa Rosa, Rohnert Park, Sebastopol, and Cotati. In 2015, the Laguna WWTP treated an estimated 11.7 mgd.[154,155] The primary point of discharge is via Delta Pond at the confluence of Santa Rosa Creek and Laguna de Santa Rosa. The North Coast RWQCB regulates wastewater discharges, which cannot exceed 5 percent of the Russian River flow.[156]

Solid Waste

For solid waste, within the City of Santa Rosa, Recology provides solid waste and recycling collection services to commercial and residential customers. The City of Santa Rosa and Recology maintain an exclusive franchise agreement for the collection of solid waste, organic waste, and recyclable materials in the City pursuant to Chapter 9-12 of the Santa Rosa City Code. Sonoma County disposes of solid waste to Redwood Sanitary Landfill, Potrero Hills Landfill, Vasco Road Landfill, and Keller Canyon Landfill, because the Central Disposal Facility that previously served the County is no longer operational. According to Table 34, the closest landfill to the project site, Redwood Sanitary Landfill in Novato, has a permitted daily capacity of 2,300 tons and a total remaining permitted capacity of 26 million tons through 2039.[157]

The State of California has mandated a 50 percent waste diversion rate that must be met by all counties. The waste diversion rate is expected to rise, due to continued waste reduction programs such as composting, special waste, and household toxics. The County has also adopted several waste reduction initiatives, including the Carryout Bags Ordinance and Sonoma Green Business Program, to promote and divert the amount of waste away from landfills.[158]

Table 34: Landfill Facility Detail

Landfill	Distance from Project Site	Remaining Capacity	Daily Permitted Capacity
Potrero Hills Landfill	94 miles	13,872,000 cubic yards	4,330 tons/day
Redwood Landfill	28 miles	26,000,000 cubic yards	2,300 tons/day
Keller Canyon Landfill	99 miles	63,408,410 cubic yards	3,500 tons/day
Source: California Department of Resources Recycling and Recovery (CalRecycle). Solid Waste Information System (SWIS) Facility Detail. 2019.			

Electricity and Natural Gas

PG&E would provide natural gas to the proposed project. The proposed project would be served with electricity generated by Sonoma Clean Power and delivered by PG&E. The existing single-family

[153] City of Santa Rosa. 2015 Urban Water Management Plan (UWMP), page 6-12. Website: https://srcity.org/DocumentCenter/View/13875/Urban-Water---2015-Management-Plan-Without-Appendices. Accessed March 27, 2019.
[154] City of Santa Rosa. 2015 Urban Water Management Plan (UWMP), page 6-14. Website: https://srcity.org/DocumentCenter/View/13875/Urban-Water---2015-Management-Plan-Without-Appendices. Accessed March 27, 2019.
[155] 4,274,840,000 gallons annually = 11,711,890 gallons per day = 11.7 mgd
[156] Ibid.
[157] CalRecycle. 2017. Redwood Landfill. Website: http://www.calrecycle.ca.gov/SWFacilities/Directory/21-AA-0001/Detail/. Accessed April 15, 2019.
[158] Sonoma County Waste Management Agency. Sonoma County 2018 Recycling Guide. Website: http://www.recyclenow.org/pdf/2018-Recycling-Guide-Condensed-English-Rev25-for-web.pdf. Accessed March 27, 2019.

home currently connects to electric power lines on the west side of Fulton Road. No natural gas facilities are known to exist on-site.

Telecommunications

Local telephone service would be provided by AT&T and cable television would be provided by Comcast. No telecommunications facilities are known to exist on-site.

Would the project:

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less than significant impact. As part of construction, any existing water or sewer lines connecting to the existing single-family home would be removed. In addition, the proposed project would provide new water and wastewater lines throughout all streets within the project site that would connect to the existing connections in Fulton Road. Removal of existing connections and construction of new connections would be required to abide by applicable federal, State, and local regulations, as well as mitigation measures outlined in this document, to avoid significant environmental impact. As described further in Impact 18(b), the proposed project would be served by sufficient water supply and would not require new or expanded water distribution facilities. As described in Impact 18(c), the proposed project would be served by sufficient wastewater treatment capacity and would not require new or expanded wastewater treatment facilities.

In order to reduce the release of pollutants into stormwater from construction and development, the City implements a LID program to treat stormwater on-site and reduce peak stormwater flows. As described further in Impact 10(c), the proposed project would include a 19,557-square-foot stormwater treatment facility located in the northwest corner of the project site. In addition, the proposed project would be required to submit a Stormwater LID to the City, which would determine the need for BMPs. Construction of project stormwater infrastructure would be required to abide by applicable federal, State, and local regulations, as well as mitigation measures outlined in this document, to avoid significant environmental impact. As discussed in Impact 10(c), the stormwater system has been designed and sized to appropriately handle stormwater flows generated on the project site and would not require new or expanded off-site stormwater facilities.

The proposed project would remove existing power lines on the project site, include new underground connections, and would not include new above-ground power lines. The proposed project would not remove or replace natural gas or telecommunications facilities because none currently are known to exist on-site. The proposed project would connect to electricity, natural gas, and telecommunication facilities located in the immediate proximity of the project site. Electricity and natural gas connections would be coordinated with PG&E. Construction of these connections would be required to abide by applicable federal, State, and local regulations, as well as mitigation measures outlined in this document, to avoid significant environmental impact.

In summary, the proposed project would not require the relocation or construction of new water, wastewater, storm drainage, electrical power, natural gas, or telecommunications facilities outside of those proposed on-site and considered within this Draft IS/MND. Therefore, impacts would be less than significant.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less than significant impact. It is estimated that the proposed project's 278 new residents would use 23,630[159] gallons per day (GPD) or 26.5 AFY.[160] According to Santa Rosa's UWMP, the project's 26.5 AFY represents less than one percent of the City's total projected water supply for 2040, which is about 10 billion gallons (31,540 acre-feet), assuming it is a normal year.[161] As shown in Table 33, the City of Santa Rosa anticipates sufficient capacity would be available to accommodate water demand for the entire City during normal, dry, and multiple dry years through 2040. As a result, there would be sufficient water supplies to serve the project during normal, dry, and multiple dry years, and impacts would be less than significant.

c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Less than significant impact. Wastewater generated in the City of Santa Rosa is treated at the Laguna WWTP. The facility has an average daily dry weather flow of 16.5 mgd and is permitted to treat 21.34 mgd,[162] leaving 4.84 mgd available for treatment to accommodate future growth in the City of Santa Rosa.[163]

For planning purposes, the City uses a residential wastewater generation rate of 50 gallons per capita per day (GPCD). As a result, the proposed project would generate an estimated 13,900 gallons of wastewater per day or 0.0001 mgd. The projected sewage generation is less than .01 percent of the Laguna WWTP capacity allocated to Santa Rosa. As a result, the Laguna WWTP would contain sufficient capacity to serve the expected wastewater demand of the proposed project. Therefore, impacts would be less than significant.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less than significant impact. During construction, the proposed project would remove all existing structures including the 1,832-square-foot single-family home. The closest landfills would contain sufficient capacity to handle construction waste. In addition, construction waste would be temporary and therefore, would not result in a significant impact.

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[159] Calculation: 85 gallons per capita per day x 278 residents = 23,630 GPD.

[160] 85 gallons per capita per day from: City of Santa Rosa. 2015 Urban Water Management Plan (UWMP), page 3-4. Website: https://srcity.org/DocumentCenter/View/13875/Urban-Water---2015-Management-Plan-Without-Appendices. Accessed March 27, 2019.

[161] City of Santa Rosa. 2016. 2015 Urban Water Management Plan (UWMP). June. Website: https://www.srcity.org/1172/Planning-Documents. Accessed July 23, 2019.

[162] City of Santa Rosa. 2009. Santa Rosa General Plan 2035 Environmental Impact Report. March.

[163] Ibid.

The proposed addition of 105 new housing units and associated population increase would result in an increased demand for solid waste services. The California Department of Resources Recycling estimates that the average single-family home produces 11.4-pounds of solid waste per day.[164] Therefore, the proposed project would generate an estimated 1,197[165] pounds of solid waste per day (0.6 tons per day) and 436,905[166] pounds of solid waste per year (218 tons per year). As shown in Table 34, Redwood Landfill in Marin County, Keller Canyon Landfill in Contra Costa County, or Potrero Hills Landfill in Solano County contain sufficient maximum capacity to serve the project. In addition, the proposed project would represent less than .001 percent of the landfills' daily permitted capacity.

Consistent with California AB 341 and AB 1826, the proposed project would be required to provide a recycling program that would divert recyclables and organic recyclable materials, such as yard trimmings, from landfills. Project waste diversion measures would contribute toward achieving a 50 percent waste diversion as mandated by the California Integrated Waste Management Act. As a result, the proposed project would not generate solid waste in excess of State or local standards or exceed the capacity of local infrastructure. Therefore, impacts would be less than significant.

e) Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?

Less than significant impact. Recology is the City of Santa Rosa's franchise waste hauler and provides solid waste, organic, and recyclable material pick-up to residential and non-residential customers within the city limits. Solid waste disposal would follow the requirements of Recology, which must adhere to federal, state, and local statutes and regulations related to the collection and management of solid waste. Recology provides separate collection containers to its customers for organic and recyclable materials, thereby allowing them to be separated from the solid waste stream. Recology would provide the proposed project with dumpsters (or other containers) for organics and recycling. In addition, as described in Impact 19(d), the proposed project would comply with AB 341 and AB 1826. Because solid waste disposal and management would be compliant with federal, State, and local statutes and regulation, impacts would be less than significant.

Mitigation Measures

None.

[164] California Department of Resources Recycling and Recovery (CalRecycle). 2019. Estimated Solid Waste Generation Rates. Website: https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates. Accessed January 22, 2020.
[165] Calculation: [(11.4 pounds of solid waste per household per day) x (105 housing units)] = 1,197 pounds of solid waste per day.
[166] Calculation: [(1,197 pounds of solid waste per day) x (365 days per year)] = 436,905 pounds of solid waste per year.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
20. Wildfire *If located in or near State Responsibility Areas or lands classified as very high fire hazard severity zones, would the project:*				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

Environmental Evaluation

Setting

An SRA is an area of the State in which the financial responsibility of preventing and suppressing fires has been determined by the California Board of Forestry and Fire Protection pursuant to Public Resources Code Section 4125, to be primarily the responsibility of the State. The proposed project is not located in an SRA.[167] An LRA is an area designated by CAL FIRE pursuant to Government Code Section 51178 that is not within an SRA and is managed at the local level. The project site is not located in a designated "Very High Fire Hazard Severity Zone."[168]

The United States Forest Service defines the WUI Zone qualitatively as a place where "humans and their development meet or intermix with wildland fuel."[169] The project site is not located in a WUI Zone.[170]

[167] California Department of Forestry and Fire Protection (CAL FIRE). 2019. California State Responsibility Area (SRA). Website: https://www.arcgis.com/home/webmap/viewer.html?layers=5ac1dae3cb2544629a845d9a19e83991. Accessed January 16, 2020.
[168] California Department of Forestry and Fire Protection (CAL FIRE). 2008. Very High Fire Hazard Severity Zones in LIRA (as recommended by CAL FIRE), Santa Rosa. Website: https://osfm.fire.ca.gov/media/6005/santa_rosa.pdf. Accessed January 16, 2020.
[169] Stein, Susan M. et al. 2008. Wildfire, Wildlands, and People: Understanding and Preparing for Wildfire in the Wildland-Urban Interface. United States Department of Agriculture (USDA), Forest Service. May 8.
[170] City of Santa Rosa. 2009. City of Santa Rosa General Plan 2035.

The City of Santa Rosa was significantly impacted by the Tubbs and Nuns fires in October 2017. The Tubbs fire burned 36,432 acres in Napa and Sonoma counties, destroyed 5,300 structures, and killed 22 civilians. The Nuns fire burned 54,382 acres, destroyed more than 1,200 structures, and killed 3 people. [171] The project site was not impacted by the Tubbs or Nuns fires.

Would the project:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

Less than significant impact. Primary vehicular access to the project site would be provided from Fulton Road. Two secondary points of access would be provided via an extension of Andre Lane. One access point would be provided from the Woodbridge subdivision to the north and the second access point would be provided via Orleans Street from the Montage II subdivision to the south (see Exhibit 6). As discussed in Impact 9(f), the proposed project would not conflict or obstruct an adopted emergency response plan. In compliance with the Santa Rosa City Code and the California Fire Code, all project roadways would be a minimum of 20 feet wide. Therefore, impacts would be less than significant.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Less than significant impact. The project site contains mostly flat, level, and undeveloped land at approximately 138 to 142 feet above MSL**.** As a result, the proposed project would not exacerbate wildfire risks due to development on a severe slope. The BAAQMD collects wind speed data from the City of Napa, which is approximately 25 miles southeast of Santa Rosa. The area is located in a similar climate as Santa Rosa and as such, has similar average wind speeds. The BAAQMD data demonstrates an average wind speed of 5.67 mph from August 2018 to July 1019. The project site would be expected to experience similar wind speed conditions as experienced in Napa and would not be susceptible to significantly high wind speeds that could exacerbate risk of spreading wildfires. Given that the project site is not located in or near an area of steep terrain nor experiences consistent high winds, the project site would be not be prone to greater wildfire risk than other properties in the vicinity. Therefore, impacts would be less than significant.

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Less than significant impact. As stated previously, the project site would extend Andre Lane and Orleans Street to access the project site at internal minor streets built within the project site. All new roads would be at least 20 feet wide and consistent with California Fire Code and City of Santa Rosa construction standard requirements. The proposed project would not include the installation of overhead power lines. Additionally, the proposed project would not require emergency water

[171] SFGATE. 2017. Tubbs Fire in Sonoma County is most destructive in State history. October. Website: https://www.sfgate.com/bayarea/article/Little-tears-of-joy-falling-from-the-skies-12293647.php. Accessed July 31, 2019.

sources, because sufficient water supplies would be provided by the City of Santa Rosa, as discussed under Impact 19(b). Therefore, impacts would be less than significant.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Less than significant impact. The project site and surrounding area is flat and does not contain steep slopes. Although the City of Santa Rosa has experienced significant damage from recent wildfires, the project site has not previously been directly damaged. Additionally, the project site does not contain post-fire slope instability nor is it directly downslope from affected areas. As a result, it would not expose people to significant risks of downslope or downstream flooding. Therefore, impacts would be less than significant.

Mitigation Measures

None.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
21. Mandatory Findings of Significance				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Environmental Evaluation

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?

Less than significant impact with mitigation incorporated. The proposed project may result in impacts associated with air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, land use and planning, noise, and transportation that would be significant if left unmitigated. Implementation of mitigation measures as outlined in the respective sections of this Draft IS/MND would mitigate all potential impacts on these resources to levels that are less than significant.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less than significant impact with mitigation incorporated. Implementation of mitigation as outlined in this Draft IS/MND would reduce all potentially significant impacts to less than significant. Given that all impacts to a less than significant level with mitigation and given the project's size, the incremental effects of this project are not considerable relative to the effects of past, current, and probable future projects. Therefore, the project would not result in cumulatively considerable impacts, and impacts would be less than significant with mitigation incorporated.

c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?

Less than significant impact with mitigation incorporated. As described throughout the preceding checklist portion of this Draft IS/MND, the proposed project would not have any substantial environmental effects on human beings, either directly or indirectly. All impacts identified throughout this document either do not require mitigation or would be mitigated to levels that are less than significant. In addition, the proposed project would be required to comply with existing regulations as discussed throughout the Draft IS/MND. The proposed mitigation measures, once implemented, and compliance with existing regulations would ensure that no substantial adverse effects on human beings would result from the proposed project. Therefore, impacts would be less than significant with mitigation incorporated.

Mitigation Measures

Implement MM AIR-1, MM AIR-2, MM BIO-1a, MM BIO-1b, MM BIO-1c, MM BIO-1d, MM CUL-1, MM CUL-2, MM GEO-1, MM GEO-2, MM GHG-1, MM HAZ-1, MM LAND-1, MM NOI-1, and MM TRANS-1.

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FIRSTCARBONSOLUTIONS™

Mitigation Monitoring and Reporting Program for the Stonebridge Subdivision Project 2220 Fulton Road Initial Study/Mitigated Negative Declaration City of Santa Rosa, Sonoma County, California

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PREFACE

Section 21081.6 of the California Environmental Quality Act (CEQA) and CEQA Guidelines Section 15097 require a Lead Agency to adopt a Mitigation Monitoring and Reporting Program (MMRP) whenever it adopts a Mitigated Negative Declaration (MND) in conjunction with a project approval. The purpose of the MMRP is to ensure compliance with mitigation measures occurs during project implementation.

The Initial Study and Mitigated Negative Declaration (IS/MND) prepared for the Stonebridge Subdivision Project concluded that project implementation could result in potentially significant effects on the environment and mitigation measures were incorporated into the proposed project or are required as a condition of project approval that reduce these potential impacts to a less than significant level. This MMRP documents how and when the mitigation measures adopted by the lead agency will be implemented and confirms that potential environmental impacts are reduced to less than significant levels as identified in the MND. In the event of any inconsistencies between the mitigation measures set forth in the IS/MND and the MMRP, the MMRP shall control.

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Table 1: Stonebridge Subdivision Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
3. Air Quality					
MM AIR-1: During construction activities, the following Best Management Practices (BMPs) shall be implemented: • Exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. • All haul trucks transporting soil, sand, or other loose material off-site shall be covered. • All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. • All vehicle speeds on unpaved roads shall be limited to 15 miles per hour. • All roadways, driveways, and sidewalks shall be paved as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. • Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for construction workers at all access points. • All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. • A publicly visible sign shall be posted with the telephone number and person to contact at the City regarding dust	Incorporation into project construction documents and plans; the City of Santa Rosa Planning and Economic Development Department: Building Division shall inspect the worksite regularly to ensure the construction mitigation measures are implemented	Prior to issuance of building permits and during construction	City of Santa Rosa Planning and Economic Development Department: Building Division		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
complaints. This person shall respond and take corrective action within 48 hours of a complaint or issue notification. The Bay Area Air Quality Management District (BAAQMD) phone number shall also be visible to ensure compliance with applicable regulations.					
MM AIR-2: During construction activities, all off-road equipment with engines greater than 50 horsepower shall meet either the United States Environmental Protection Agency (EPA) or California Air Resources Board (ARB) Tier IV Final off-road emission standards. The construction contractor shall maintain records concerning its efforts to comply with this requirement, including equipment lists. Off-road equipment descriptions and information may include but are not limited to equipment type, equipment manufacturer, equipment identification number, engine model year, engine certification (Tier rating), horsepower, and engine serial number.	Incorporation into contractor bid documents; on-site inspection; submittal of logs	Prior to issuance of building permit; prior to any fuel powered grading or construction activities	City of Santa Rosa Planning and Economic Development Department: Building Division		
4. Biological Resources					
MM BIO-1a: Prepare Rare Plant Mitigation Compliance Report and Obtain California Department of Fish and Wildlife Incidental Take Permit Prior to Initiating Construction A mitigation compliance report shall be submitted to the City Planning Staff or Staff Biologist at least 30 days prior to breaking ground on the residential subdivision portion of the proposed project. The report shall detail progress made towards implementation of vernal pool creation/enhancement. Provided mitigation is well underway or adequate security has been provided and approved by the City, the City may approve commencement of the development portion of the project thereafter.	Completion of mitigation compliance report; acceptance of plant survey results by CDFW; completion of application to the CDFW for a Memorandum of Understanding (MOU) pursuant to Section 2081(a) of the California Fish and Game Code; periodic on-site inspection/monitoring	At least 30 days prior to breaking ground on the residential subdivision portion of the proposed project; prior to the start of wetland creation/enhancement	City of Santa Rosa Planning and Economic Development Department: Building Division; CDFW (as applicable)		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
The project applicant shall also submit to the California Department of Fish and Wildlife (CDFW) the plant survey results for the entire project to confirm the surveys were implemented in accordance with standard protocols. The project applicant shall apply to the CDFW for a Memorandum of Understanding (MOU) pursuant to Section 2081(a) of the California Fish and Game Code that allows collection of Burke's goldfield seeds. The MOU must be obtained prior to the start of wetland creation/enhancement. Per a Seed Collection Plan prepared by L. Stromberg for the proposed Stonebridge Preserve (i.e., the East Parcel), Burke's goldfield seeds shall be collected from several possible source populations that the CDFW may designate, including the privately-owned Alton Lane Mitigation Site and/or the CDFW-owned Woodbridge Reserve. To collect seed on a CDFW-owned property, a Letter of Permission from the CDFW will be required. Finally, prior to initiating wetland enhancement/construction activities on the East Parcel, the project applicant shall coordinate with CDFW to ensure impacts to the CDFW-owned Woodbridge Reserve are avoided.					
MM BIO-1b: Obtain Permits and Mitigate for Loss of Habitat as Stipulated by Resource Agencies for Potential Impacts to California Tiger Salamander Habitat **Positive Survey Results:** If the Protocol Survey demonstrates that the project site is occupied by California tiger salamander then: 1. The project applicant would obtain a California Endangered Species Act (CESA) 2081(b) Incidental Take Permit from the California Department of Fish and Wildlife (CDFW) and a Biological Opinion prepared by the United States Fish and Wildlife Service (USFWS) would also include conditions for	**Positive Survey Results:** Obtain ITP, Biological Opinion prepared by the USFWS, CWA Section 404 permits; physical implementation of permitting conditions via on-site inspection; submittal of California tiger salamander protocol survey results; establishment of the East	**Positive Survey Results:** Prior to issuance of grading permit and during construction if protocol survey demonstrates project site is occupied by California tiger salamander	**Positive Survey Results:** City of Santa Rosa Planning and Economic Development Department: Building Division; CDFW, USFWS, and USACE (as applicable)		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
the proposed project to ensure the recovery of the species. Any conditions in these permits/authorizations shall be implemented by the applicant prior to grading the project site. 2. The project applicant shall also obtain a Section 404 permit from the United States Army Corp of Engineers (USACE) for discharge of fill or dredged material to waters of the United States (pursuant to MM BIO-1d). Under Section 7 of the Federal Endangered Species Act (FESA), the USACE is required to consult with the USFWS. Under Section 7, the USFWS shall prepare a Biological Opinion that provides FESA Incidental Take authorization for the proposed project. The Biological Opinion shall impose mitigation requirements for potential impacts to California tiger salamander migration/dispersal habitat and suitable rare plant habitat. These requirements will become conditions of the USACE permit. The project applicant shall implement applicable USACE permit conditions including the conditions in the USFWS Biological Opinion. 3. Consistent with mitigation requirements imposed by the CDFW and USFWS for impacts to occupied habitat, mitigation shall be implemented at a 3:1 replacement to impact ratio (i.e., 3 acres of occupied California tiger salamander habitat shall be preserved in perpetuity for each acre of impact from the proposed project). Establishment of the 14-acre East Parcel preserve shall be allowed to constitute a pro rata acreage share of this California tiger salamander mitigation requirement. The remainder of mitigation shall be met by purchasing mitigation credits at a USFWS-approved mitigation bank within the Alton Lane California Tiger Salamander Management Area (see Figure 12 of the Biological Resources Analysis). After approved credits are purchased, proof of purchase shall be provided to the City of Santa	Parcel and proof of purchase of credits **Negative Survey Results:** establishment of the East Parcel; submittal of California tiger salamander protocol survey results	**Negative Survey Results:** Prior to issuance of grading permit and during construction if protocol survey demonstrates project site is not occupied by California tiger salamander	**Negative Survey Results:** City of Santa Rosa Planning and Economic Development Department: Building Division; CDFW (as applicable)		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
Rosa, CDFW, and USFWS prior to the time that grading may commence on the project site. **Negative Survey Results:** If the Protocol Survey confirms that California tiger salamander are not present on the project site, the project applicant shall provide mitigation for California tiger salamander dispersal/migration habitat at a 1:1 ratio (i.e., 1 acre of preservation for each acre of development—or a pro rata share thereof) in accordance with the USFWS Programmatic Biological Opinion for the Santa Rosa Plain. Establishment of the East Parcel shall constitute this California tiger salamander mitigation requirement. The proposed 14-acre East Parcel would meet the 1:1 mitigation requirement. The project applicant shall submit to CDFW the California tiger salamander protocol survey results for CDFW review to confirm the surveys were implemented in accordance with standard protocols.					
MM BIO-1c: Avoid Active Nesting Birds During Construction If construction or tree removal is proposed during the nesting season for local avian species (typically February 1 through August 31), a focused survey for active nests of raptors, waterfowl (including ducks), and passerine birds within and in the vicinity of the project site (no less than 500 feet outside the project boundaries, where possible) shall be conducted by a qualified Biologist within 15 days of commencing earth-movement, construction or tree removal. Two surveys shall be conducted, at least 1 week apart, with the second survey occurring no more than 2 days prior to tree removal. If no active nests are found, tree removal or construction activities may proceed. If an active nest is located during pre-construction surveys, a qualified Biologist shall establish a temporary protective nest buffer around the nest(s). The nest buffer should be staked with orange construction fencing. The buffer must be of sufficient size	Pre-construction surveys by a qualified Biologist; submittal of survey documents; periodic on-site inspection and monitoring	Within 15 days of commencing earth-movement, construction, or tree removal if construction or tree removal is proposed during the nesting season for local avian species (typically February 1 through August 31)	City of Santa Rosa Planning and Economic Development Department: Building Division; CDFW (as applicable)		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
to protect the nesting site from construction-related disturbance and shall be established by a qualified Ornithologist or Biologist with extensive experience working with nesting birds near and on construction sites. Typically, adequate nesting buffers are 50 feet from the nest site or nest tree dripline for passerine birds or waterfowl and up to 300 feet for sensitive nesting birds and several raptor species known to nest in the region of the project site. If the nesting bird or raptor is listed by the California Department of Fish and Wildlife (CDFW), this agency shall be notified regarding the status of the nest. Biological monitoring of active nests will be necessary to ensure that birds are not disturbed, and that buffers are adjusted by a qualified Biologist as needed to avoid disturbance. For all identified nests, prior to construction activities a qualified Biologist shall conduct a survey to establish a behavioral baseline of birds using each nest. Once construction begins, the Biologist shall continuously monitor nests to detect behavioral changes resulting from the project. If behavioral changes occur, project activities causing that change shall cease until such time as the behavioral patterns return to pre-construction conditions, and no-disturbance buffers shall be implemented as described below. However, continuous monitoring may allow less conservative buffer distances as the Biologist will be on-site to detect behavioral changes. If continuous monitoring of identified nests by a qualified Wildlife Biologist is not feasible, conservative no-disturbance buffers shall be implemented and set around the nest by a qualified Biologist, with the buffer distance based on the tolerance level of the non-listed bird or raptor species. No construction or earth-moving activity shall occur within any established nest protection buffer prior to September 1 unless it is determined by a qualified Ornithologist/Biologist that the young have fledged (left the nest) and have attained sufficient flight skills to avoid project construction zones, or that the nesting cycle is otherwise complete. In the region of the project					

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
site, most species complete nesting by mid-July. This date can be significantly earlier or later and would have to be determined by a qualified Biologist. At the end of the nesting cycle, as determined by a qualified Biologist, temporary nesting buffers may be removed, and construction may commence in established nesting buffers without further regard for buffered nest site(s).					
MM BIO-1d: Obtain a Section 404 Permit from the United States Army Corps of Engineers (USACE) for Impacts to waters of the United States and a Section 401 Water Quality Certification for Impacts to waters of the State The project applicant shall obtain a Section 404 permit from the USACE and Section 401 permit from the Regional Water Quality Control Board (RWQCB) for discharge of fill or dredged material to waters of the United States and State. The proposed project shall compensate for the loss of 2.65 acres of waters of the United States and State at a 2:1 mitigation ratio, or as otherwise required by the USACE and RWQCB to achieve no net loss of wetlands. The project applicant proposes to construct, enhance, and avoid a total of 5.52 acres of wetlands in the East Parcel. This will be accomplished by creating a total of 1.766 acres of new wetlands, as well as enhancing 3.267 acres of degraded wetlands and avoiding 0.484-acre of existing wetlands within the East Parcel (this enhancement and creation is shown on Exhibit 11a and Exhibit 11b). To meet the USACE "no net loss" policy, the project applicant will also purchase 0.89-acre of wetland mitigation credit from the Hazel Mitigation Bank or another USACE and RWQCB-approved wetland mitigation bank in order to meet the USACE and RWQCB not net loss policies. Taken together this mitigation will exceed a 2:1 overall replacement/enhancement to impacts ratio.	Obtain CWA Section 401 and 404 permits; incorporation into project design and construction documents; physical implementation of permitting conditions via on-site inspection	Prior to issuance of grading permit and during construction	City of Santa Rosa Planning and Economic Development Department: Building Division; USACE and RWQCB (as applicable)		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
As part of the wetland enhancement and construction process, the project applicant shall scalp and salvage the top 2 inches of top soil from the East Parcel and appropriately store the topsoil on-site for redistribution on the side slopes of the created and enhanced pools after enhancement/construction is complete. Drying Lobb's buttercup plants with seed shall also be collected from the West Parcel and the East Parcel (prior to topsoil scalping) and appropriately stored for later distribution in the enhanced and created wetlands on the East Parcel. Finally, previously collected Burke's gold field seeds, as discussed in MM BIO-1a, shall also be distributed in the finished created/enhanced pools.					
5. Cultural Resources					
MM CUL-1: In the event a potentially significant cultural resource or Tribal Cultural Resource (as defined by Public Resources Code [PRC] 21074) is encountered during subsurface earthwork activities, all construction activities within a 100-foot radius of the find shall cease, the City and appropriate Native American Tribe(s) shall be notified of the find, and workers shall avoid altering the materials until an Archaeologist who meets the Secretary of Interior's Professional Qualification Standards for archaeology has evaluated the situation and the appropriate Native American Tribe(s) have provided input regarding the significance of the find. The project applicant shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. Potentially significant cultural resources consist of but are not limited to stone, bone, glass, ceramics, fossils, wood, or shell artifacts, or features including hearths, structural remains, or historic dumpsites. The Archaeologist, in consultation with the appropriate Native American Tribe(s), shall make recommendations concerning appropriate measures that will	Inclusion in construction contracts; qualified Archaeologist's/appropriate Tribal American Tribe(s) Monitor's on-site inspection; provision of Section 15064.5 permit(s); copy of Department of Parks and Recreation (DPR) 523 forms; submittal of findings and documentation	During initial grading/construction; in the event resources are found	City of Santa Rosa Planning and Economic Development Department: Building Division; appropraite Native American Tribe(s)		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
be implemented to protect the resource, including but not limited to excavation and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. Any previously undiscovered resources found during construction within the project site shall be recorded on appropriate Department of Parks and Recreation (DPR) 523 forms and will be submitted to the City of Santa Rosa, the NWIC, and the State Historic Preservation Office (OHP), if required					
MM CUL-2: In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5; Health and Safety Code Section 7050.5; Public Resources Code Section 5097.94 and Section 5097.98 must be followed. If during the course of project development there is accidental discovery or recognition of any human remains, the following steps shall be taken: 1. There shall be no further excavation or disturbance within 100 feet of the remains until the County Coroner is contacted to determine if the remains are Native American and if an investigation of the cause of death is required. If the Coroner determines the remains to be Native American, the Coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the most likely descendant (MLD) of the deceased Native American. The MLD may make recommendations to the landowner or the person responsible for the excavation work within 48 hours, for appropriate treatment and disposition of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98. 2. Where the following conditions occur, the landowner or his or her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the	Review of NAHC correspondence; on-site inspection and monitoring; submittal of findings and documentation	During grading and construction, in the event human remains are encountered	City of Santa Rosa Planning and Economic Development Department: Building Division; NAHC; Sonoma County Coroner		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
recommendations of the MLD or on the project site in a location not subject to further subsurface disturbance: • The NAHC is unable to identify an MLD or the MLD failed to make a recommendation within 48 hours after being notified by the commission. • The descendant identified fails to make a recommendation. • The landowner or his authorized representative rejects the recommendation of the descendant, and mediation by the NAHC fails to provide measures acceptable to the landowner. Additionally, California Public Resources Code Section 15064.5 requires the following relative to Native American Remains: When an initial study identifies the existence of, or the probable likelihood of, Native American Remains within a project, a lead agency shall work with the appropriate Native Americans as identified by the NAHC as provided in Public Resources Code Section 5097.98. The project applicant may develop a plan for treating or disposing of, with appropriate dignity, the human remains and any items associated with Native American Burials with the appropriate Native Americans as identified by the NAHC.					
7. Geology and Soils					
MM GEO-1: Prior to issuance of grading or building permits, the project applicant shall submit a design-level geotechnical report that provides geotechnical recommendations for the project based on adequate subsurface exploration, laboratory testing, and engineering analysis. In addition, the project applicant shall submit plans to the City of Santa Rosa for review and approval demonstrating project compliance with the latest adopted edition of the California Building Standards Code (CBC) seismic requirements and the recommendations	Approval of final grading and building plans by City-approved Geotechnical Engineer or Certified Engineering Geologist; on-site monitoring	Prior to issuance of building permits; during grading and construction activities	City of Santa Rosa Planning and Economic Development Department: Building Division; qualified engineer		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
of the design-level geotechnical report. A licensed Professional Engineer shall design all soil engineering recommendations and structural foundations. The final project plans shall incorporate the recommendations from the approved, design-level geotechnical report. A licensed Geotechnical Engineer or Certified Engineering Geologist shall supervise all on-site soil engineering activities.					
MM GEO-2: Prior to issuance of grading or building permits, the project applicant and City shall ensure a professional Paleontologist has trained the construction crew on how to recognize fossils and the procedure to follow in the event paleontological resources are discovered.	Review of construction specifications; training of construction crew	Prior to issuance of grading and construction permits, if paleontological resources are discovered	City of Santa Rosa Planning and Economic Development Department: Building Division; professional Paleontologist		
8. Greenhouse Gas Emissions					
MM GHG-1: Prior to issuance of building permits, the applicant shall prepare and submit a CAP New Development Checklist for the proposed project to the City of Santa Rosa, to demonstrate to the City's satisfaction that the proposed project would be constructed and operated to be consistent with measures required in the applicable CAP Development Checklist in effect at that time.	Submittal of the of the applicable CAP New Development Checklist in effect at the time the project would be constructed and operated	Prior to the issuance of building permits	City of Santa Rosa Planning and Economic Development Department: Building Division		
9. Hazards and Hazardous Materials					
MM HAZ-1: Conduct Asbestos Containing Materials and Lead Based Paint Surveys Prior to Demolition Prior to the issuance of demolition permits for the existing residence and associated outbuildings, the project applicant shall retain a licensed abatement professional to conduct asbestos and lead paint surveys. These surveys shall be conducted prior to the disturbance or removal of any suspect	Qualified licensed professional to conduct asbestos and lead survey; submit asbestos and lead based paint survey results and documentation/proof of removal of all identified	Prior to issuance of demolition permits	City of Santa Rosa Planning and Economic Development Department: Building Division		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
asbestos-containing materials and lead-based paint, and these materials shall be characterized for asbestos and lead by a reliable method. All activities involving asbestos-containing materials and lead-based paint shall be conducted in accordance with governmental regulations, and all removal shall be conducted by properly licensed abatement professionals.	asbestos containing materials/lead based paint materials; review of survey results				
11. Land Use and Planning					
MM LAND-1: The proposed project shall include a minimum 6-foot high sound wall along all residential project property lines adjacent to Fulton Road (Lots 1, 39, and 40), or along the nearest receiving lot lines located within 290 feet of the centerline of Fulton Road (Lots 105 and 103), as shown in Exhibit 12 of this Draft Initial Study/Mitigated Negative Declaration. The sound walls shall block the line of site from the roadway to the proposed outdoor use areas of the nearest residential lots. Furthermore, to meet the interior noise level standard of 45 A-weighted decibel (dBA) community noise equivalent level (CNEL), all proposed residential units shall be supplied with an alternative form of ventilation, such as air conditioning or noise-attenuated passive ventilation systems, that would allow an occupant the option of controlling noise by keeping the windows shut (as the interior noise standard would not be met with open windows).	Incorporation into project design and construction documents; on-site inspection	Prior to issuance of the certificate of occupancy	City of Santa Rosa Planning and Economic Development Department: Building Division		
13. Noise					
MM NOI-1: Implementation of the following multi-part mitigation measure is required to reduce potential construction period noise impacts: • The construction contractor shall ensure that all equipment driven by internal combustion engines shall be equipped	Record in contract specifications; periodic on-site inspection/monitoring and submittal of on-site inspection monitoring reports	Prior to issuance of grading and building permits; prior to and during construction	City of Santa Rosa Planning and Economic Development Department: Building Division		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
with mufflers, which are in good condition and appropriate for the equipment. • The construction contractor shall ensure that unnecessary idling of internal combustion engines (i.e., idling in excess of 5 minutes) is prohibited. • The construction contractor shall utilize "quiet" models of air compressors and other stationary noise sources where technology exists. • At all times during project grading and construction, the construction contractor shall ensure that stationary noise-generating equipment shall be located as far as practicable from sensitive receptors and placed so that emitted noise is directed away from adjacent residences. • The construction contractor shall ensure that the construction staging areas shall be located to create the greatest feasible distance between the staging area and noise-sensitive receptors nearest the project site.					
17. Transportation					
MM TRANS-1: Prior to issuance of building permits, the project applicant shall prepare and submit plans to the City of Santa Rosa Transportation and Public Works Department depicting a dedicated left-turn lane in the southbound direction on Fulton Road at Street A. The plans shall be approved by the Traffic Engineering Department Traffic Engineer.	Identification on-site circulation plans and site plan review and approval; site inspection	Prior to final site plan approval; prior to issuance of building permits	City of Santa Rosa Transportation and Public Works Department		
18. Tribal Cultural Resources					
Implement MM CUL-1 and MM CUL-2.	See MM CUL-1 and MM CUL-2				

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Appendix A:
Air Quality and Greenhouse Gas Emissions Supporting Information

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A.1 - CalEEMod Output

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CalEEMod Output

Table of Contents

Unmitigated Construction—Site Work for the Entire Project Site **A.1-1**

Unmitigated Construction—Phase 2: Building Construction of Homes 1-21 ..... **A.1-29**

Unmitigated Construction—Phase 3: Building Construction of Homes 22-42 ..... **A.1-55**

Unmitigated Construction—Phase 4: Building Construction of Homes 43-63 ..... **A.1-81**

Unmitigated Construction—Phase 5: Building Construction of Homes 64-84 ..... **A.1-107**

Unmitigated Construction—Phase 6: Building Construction of Homes 85-105 .... **A.1-133**

Mitigated Construction—Site Work for the Entire Project Site **A.1-159**

Mitigated Construction—Phase 2: Building Construction of Homes 1-21 ..... **A.1-188**

Mitigated Construction—Phase 3: Building Construction of Homes 22-42 ..... **A.1-215**

Mitigated Construction—Phase 4: Building Construction of Homes 43-63 ..... **A.1-242**

Mitigated Construction—Phase 5: Building Construction of Homes 64-84 ..... **A.1-269**

Mitigated Construction—Phase 6: Building Construction of Homes 85-105 ..... **A.1-296**

Project Buildout Unmitigated Operations (Annual) **A.1-323**

Project Buildout Unmitigated Operations (Summer) **A.1-344**

Project Buildout Unmitigated Operations (Winter) **A.1-359**

Project 2030 Unmitigated Operations (Annual) **A.1-374**

Existing Emissions 2023 Operations (Annual) **A.1-395**

Existing Emissions 2023 Operations (Summer) **A.1-414**

Existing Emissions 2023 Operations (Winter) **A.1-428**

Existing Emissions 2030 Operations (Annual) **A.1-442**

Project Buildout Unmitigated Operations (Annual) **A.1-461**

Project 2030 Unmitigated Operations (Annual) **A.1-482**

Unmitigated Construction-Demolition,Site Prep,Grading,Paving

Sonoma-San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	3.98	Acre	3.98	173,368.80	0
Other Non-Asphalt Surfaces	0.45	Acre	0.45	19,557.00	0
Other Non-Asphalt Surfaces	14.00	Acre	14.00	609,840.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	75
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	390.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Unmitigated Construction-Demolition,Site Prep,Grading,Paving - Sonoma-San Francisco County, Annual

Project Characteristics - CO2 intensity factor based on Renewable Energy Portfolio Standard. Start of construction as provided by the Applicant in response to request for information form(8/16/19).

Land Use - 3.98 acre internal road deducting acreage for 105 lots and 0.45 acres of stormwater treatment area from 14.6 acres of total acres as provided in Project Description and Site Plans.19,557 sqft stormwater treatment area as provided by Applicant.

Construction Phase - Schedule as provided by Applicant in response to request for information form(8/16/19). Construction for Stomwater Treatment Area considered to be building construction activity for conservative analysis.

Trips and VMT -

Demolition - Building (sqft) = 1,824 sqft single-family home as stated in Project Description. Total sqft converted to tons of debris.

Grading - As provided by Applicant in response to request for information form(8/16/19).

Vehicle Trips - Construction Only.

Area Coating - Construction Only.

Energy Use -

Construction Off-road Equipment Mitigation - Compliance with BAAQMD best management practices threshold for fugitive dust; recommended measures from BAAQMD's Basic Construction Mitigation Measures for all Proposed Projects.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Parking	48166	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	300.00	100.00
tblConstructionPhase	NumDays	20.00	70.00
tblGrading	MaterialImported	0.00	1,100.00
tblLandUse	LandUseSquareFeet	19,602.00	19,557.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	390.65

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.3589	3.3316	2.8711	6.8400e-003	0.4070	0.1301	0.5371	0.1540	0.1209	0.2749	0.0000	617.6858	617.6858	0.1066	0.0000	620.3513
Maximum	**0.3589**	**3.3316**	**2.8711**	**6.8400e-003**	**0.4070**	**0.1301**	**0.5371**	**0.1540**	**0.1209**	**0.2749**	**0.0000**	**617.6858**	**617.6858**	**0.1066**	**0.0000**	**620.3513**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.3589	3.3316	2.8711	6.8400e-003	0.2847	0.1301	0.4148	0.0969	0.1209	0.2178	0.0000	617.6854	617.6854	0.1066	0.0000	620.3509
Maximum	**0.3589**	**3.3316**	**2.8711**	**6.8400e-003**	**0.2847**	**0.1301**	**0.4148**	**0.0969**	**0.1209**	**0.2178**	**0.0000**	**617.6854**	**617.6854**	**0.1066**	**0.0000**	**620.3509**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**30.04**	**0.00**	**22.76**	**37.09**	**0.00**	**20.78**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Unmitigated Construction-Demolition,Site Prep,Grading,Paving - Sonoma-San Francisco County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-1-2021	6-30-2021	2.0259	2.0259
2	7-1-2021	9-30-2021	1.6534	1.6534
		Highest	2.0259	2.0259

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0519	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.3000e-004	3.3000e-004	0.0000	0.0000	3.5000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0519**	**0.0000**	**1.7000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**3.3000e-004**	**3.3000e-004**	**0.0000**	**0.0000**	**3.5000e-004**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0519	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.3000e-004	3.3000e-004	0.0000	0.0000	3.5000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0519**	**0.0000**	**1.7000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**3.3000e-004**	**3.3000e-004**	**0.0000**	**0.0000**	**3.5000e-004**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Unmitigated Construction-Demolition,Site Prep,Grading,Paving - Sonoma-San Francisco County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2021	4/28/2021	5	20	
2	Site Preparation	Site Preparation	4/29/2021	5/12/2021	5	10	
3	Grading	Grading	5/13/2021	6/23/2021	5	30	
4	Stormwater Treatment Area	Building Construction	5/13/2021	9/29/2021	5	100	
5	Paving	Paving	6/24/2021	9/29/2021	5	70	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 18.43

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Unmitigated Construction-Demolition,Site Prep,Grading,Paving - Sonoma-San Francisco County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Stormwater Treatment Area	Cranes	1	7.00	231	0.29
Stormwater Treatment Area	Forklifts	3	8.00	89	0.20
Stormwater Treatment Area	Generator Sets	1	8.00	84	0.74
Stormwater Treatment Area	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Stormwater Treatment Area	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Unmitigated Construction-Demolition,Site Prep,Grading,Paving - Sonoma-San Francisco County, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	17.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	138.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Stormwater Treatment Area	9	337.00	132.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.7900e-003	0.0000	1.7900e-003	2.7000e-004	0.0000	2.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0317	0.3144	0.2157	3.9000e-004		0.0155	0.0155		0.0144	0.0144	0.0000	34.0008	34.0008	9.5700e-003	0.0000	34.2400
Total	**0.0317**	**0.3144**	**0.2157**	**3.9000e-004**	**1.7900e-003**	**0.0155**	**0.0173**	**2.7000e-004**	**0.0144**	**0.0147**	**0.0000**	**34.0008**	**34.0008**	**9.5700e-003**	**0.0000**	**34.2400**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.0000e-005	2.3100e-003	4.9000e-004	1.0000e-005	1.4000e-004	1.0000e-005	1.5000e-004	4.0000e-005	1.0000e-005	5.0000e-005	0.0000	0.6462	0.6462	4.0000e-005	0.0000	0.6472
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e-004	4.6000e-004	4.7300e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0469	1.0469	4.0000e-005	0.0000	1.0478
Total	**7.2000e-004**	**2.7700e-003**	**5.2200e-003**	**2.0000e-005**	**1.3200e-003**	**2.0000e-005**	**1.3400e-003**	**3.5000e-004**	**2.0000e-005**	**3.7000e-004**	**0.0000**	**1.6932**	**1.6932**	**8.0000e-005**	**0.0000**	**1.6950**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.0000e-004	0.0000	8.0000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0317	0.3144	0.2157	3.9000e-004		0.0155	0.0155		0.0144	0.0144	0.0000	34.0007	34.0007	9.5700e-003	0.0000	34.2400
Total	**0.0317**	**0.3144**	**0.2157**	**3.9000e-004**	**8.0000e-004**	**0.0155**	**0.0163**	**1.2000e-004**	**0.0144**	**0.0145**	**0.0000**	**34.0007**	**34.0007**	**9.5700e-003**	**0.0000**	**34.2400**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.0000e-005	2.3100e-003	4.9000e-004	1.0000e-005	1.4000e-004	1.0000e-005	1.5000e-004	4.0000e-005	1.0000e-005	5.0000e-005	0.0000	0.6462	0.6462	4.0000e-005	0.0000	0.6472
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e-004	4.6000e-004	4.7300e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0469	1.0469	4.0000e-005	0.0000	1.0478
Total	**7.2000e-004**	**2.7700e-003**	**5.2200e-003**	**2.0000e-005**	**1.3200e-003**	**2.0000e-005**	**1.3400e-003**	**3.5000e-004**	**2.0000e-005**	**3.7000e-004**	**0.0000**	**1.6932**	**1.6932**	**8.0000e-005**	**0.0000**	**1.6950**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0194	0.2025	0.1058	1.9000e-004		0.0102	0.0102		9.4000e-003	9.4000e-003	0.0000	16.7179	16.7179	5.4100e-003	0.0000	16.8530
Total	**0.0194**	**0.2025**	**0.1058**	**1.9000e-004**	**0.0903**	**0.0102**	**0.1006**	**0.0497**	**9.4000e-003**	**0.0591**	**0.0000**	**16.7179**	**16.7179**	**5.4100e-003**	**0.0000**	**16.8530**

Unmitigated Construction-Demolition,Site Prep,Grading,Paving - Sonoma-San Francisco County, Annual

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-004	2.8000e-004	2.8400e-003	1.0000e-005	7.1000e-004	1.0000e-005	7.1000e-004	1.9000e-004	1.0000e-005	1.9000e-004	0.0000	0.6282	0.6282	2.0000e-005	0.0000	0.6287
Total	**4.0000e-004**	**2.8000e-004**	**2.8400e-003**	**1.0000e-005**	**7.1000e-004**	**1.0000e-005**	**7.1000e-004**	**1.9000e-004**	**1.0000e-005**	**1.9000e-004**	**0.0000**	**0.6282**	**0.6282**	**2.0000e-005**	**0.0000**	**0.6287**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0407	0.0000	0.0407	0.0223	0.0000	0.0223	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0194	0.2025	0.1058	1.9000e-004		0.0102	0.0102		9.4000e-003	9.4000e-003	0.0000	16.7178	16.7178	5.4100e-003	0.0000	16.8530
Total	**0.0194**	**0.2025**	**0.1058**	**1.9000e-004**	**0.0407**	**0.0102**	**0.0509**	**0.0223**	**9.4000e-003**	**0.0317**	**0.0000**	**16.7178**	**16.7178**	**5.4100e-003**	**0.0000**	**16.8530**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-004	2.8000e-004	2.8400e-003	1.0000e-005	7.1000e-004	1.0000e-005	7.1000e-004	1.9000e-004	1.0000e-005	1.9000e-004	0.0000	0.6282	0.6282	2.0000e-005	0.0000	0.6287
Total	**4.0000e-004**	**2.8000e-004**	**2.8400e-003**	**1.0000e-005**	**7.1000e-004**	**1.0000e-005**	**7.1000e-004**	**1.9000e-004**	**1.0000e-005**	**1.9000e-004**	**0.0000**	**0.6282**	**0.6282**	**2.0000e-005**	**0.0000**	**0.6287**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1302	0.0000	0.1302	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0629	0.6960	0.4632	9.3000e-004		0.0298	0.0298		0.0274	0.0274	0.0000	81.7425	81.7425	0.0264	0.0000	82.4034
Total	**0.0629**	**0.6960**	**0.4632**	**9.3000e-004**	**0.1302**	**0.0298**	**0.1599**	**0.0540**	**0.0274**	**0.0814**	**0.0000**	**81.7425**	**81.7425**	**0.0264**	**0.0000**	**82.4034**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.2000e-004	0.0188	3.9900e-003	5.0000e-005	1.1400e-003	6.0000e-005	1.2100e-003	3.1000e-004	6.0000e-005	3.7000e-004	0.0000	5.2459	5.2459	3.2000e-004	0.0000	5.2540
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3300e-003	9.3000e-004	9.4500e-003	2.0000e-005	2.3500e-003	2.0000e-005	2.3700e-003	6.3000e-004	2.0000e-005	6.4000e-004	0.0000	2.0939	2.0939	7.0000e-005	0.0000	2.0956
Total	**1.8500e-003**	**0.0197**	**0.0134**	**7.0000e-005**	**3.4900e-003**	**8.0000e-005**	**3.5800e-003**	**9.4000e-004**	**8.0000e-005**	**1.0100e-003**	**0.0000**	**7.3398**	**7.3398**	**3.9000e-004**	**0.0000**	**7.3496**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0586	0.0000	0.0586	0.0243	0.0000	0.0243	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0629	0.6960	0.4632	9.3000e-004		0.0298	0.0298		0.0274	0.0274	0.0000	81.7424	81.7424	0.0264	0.0000	82.4033
Total	**0.0629**	**0.6960**	**0.4632**	**9.3000e-004**	**0.0586**	**0.0298**	**0.0884**	**0.0243**	**0.0274**	**0.0517**	**0.0000**	**81.7424**	**81.7424**	**0.0264**	**0.0000**	**82.4033**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.2000e-004	0.0188	3.9900e-003	5.0000e-005	1.1400e-003	6.0000e-005	1.2100e-003	3.1000e-004	6.0000e-005	3.7000e-004	0.0000	5.2459	5.2459	3.2000e-004	0.0000	5.2540
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3300e-003	9.3000e-004	9.4500e-003	2.0000e-005	2.3500e-003	2.0000e-005	2.3700e-003	6.3000e-004	2.0000e-005	6.4000e-004	0.0000	2.0939	2.0939	7.0000e-005	0.0000	2.0956
Total	**1.8500e-003**	**0.0197**	**0.0134**	**7.0000e-005**	**3.4900e-003**	**8.0000e-005**	**3.5800e-003**	**9.4000e-004**	**8.0000e-005**	**1.0100e-003**	**0.0000**	**7.3398**	**7.3398**	**3.9000e-004**	**0.0000**	**7.3496**

3.5 Stormwater Treatment Area - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0951	0.8716	0.8288	1.3500e-003		0.0479	0.0479		0.0451	0.0451	0.0000	115.8186	115.8186	0.0279	0.0000	116.5172
Total	**0.0951**	**0.8716**	**0.8288**	**1.3500e-003**		**0.0479**	**0.0479**		**0.0451**	**0.0451**	**0.0000**	**115.8186**	**115.8186**	**0.0279**	**0.0000**	**116.5172**

3.5 Stormwater Treatment Area - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0210	0.7186	0.1759	1.7400e-003	0.0428	1.8000e-003	0.0446	0.0124	1.7200e-003	0.0141	0.0000	168.3935	168.3935	0.0100	0.0000	168.6437
Worker	0.0745	0.0521	0.5309	1.3000e-003	0.1322	1.0300e-003	0.1333	0.0352	9.5000e-004	0.0362	0.0000	117.6050	117.6050	3.9800e-003	0.0000	117.7045
Total	**0.0955**	**0.7706**	**0.7069**	**3.0400e-003**	**0.1750**	**2.8300e-003**	**0.1779**	**0.0476**	**2.6700e-003**	**0.0502**	**0.0000**	**285.9985**	**285.9985**	**0.0140**	**0.0000**	**286.3481**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0951	0.8716	0.8288	1.3500e-003		0.0479	0.0479		0.0451	0.0451	0.0000	115.8185	115.8185	0.0279	0.0000	116.5171
Total	**0.0951**	**0.8716**	**0.8288**	**1.3500e-003**		**0.0479**	**0.0479**		**0.0451**	**0.0451**	**0.0000**	**115.8185**	**115.8185**	**0.0279**	**0.0000**	**116.5171**

3.5 Stormwater Treatment Area - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0210	0.7186	0.1759	1.7400e-003	0.0428	1.8000e-003	0.0446	0.0124	1.7200e-003	0.0141	0.0000	168.3935	168.3935	0.0100	0.0000	168.6437
Worker	0.0745	0.0521	0.5309	1.3000e-003	0.1322	1.0300e-003	0.1333	0.0352	9.5000e-004	0.0362	0.0000	117.6050	117.6050	3.9800e-003	0.0000	117.7045
Total	**0.0955**	**0.7706**	**0.7069**	**3.0400e-003**	**0.1750**	**2.8300e-003**	**0.1779**	**0.0476**	**2.6700e-003**	**0.0502**	**0.0000**	**285.9985**	**285.9985**	**0.0140**	**0.0000**	**286.3481**

3.6 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0439	0.4522	0.5129	8.0000e-004		0.0237	0.0237		0.0218	0.0218	0.0000	70.0822	70.0822	0.0227	0.0000	70.6488
Paving	5.2100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0492**	**0.4522**	**0.5129**	**8.0000e-004**		**0.0237**	**0.0237**		**0.0218**	**0.0218**	**0.0000**	**70.0822**	**70.0822**	**0.0227**	**0.0000**	**70.6488**

3.6 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3200e-003	1.6200e-003	0.0165	4.0000e-005	4.1200e-003	3.0000e-005	4.1500e-003	1.1000e-003	3.0000e-005	1.1300e-003	0.0000	3.6643	3.6643	1.2000e-004	0.0000	3.6674
Total	**2.3200e-003**	**1.6200e-003**	**0.0165**	**4.0000e-005**	**4.1200e-003**	**3.0000e-005**	**4.1500e-003**	**1.1000e-003**	**3.0000e-005**	**1.1300e-003**	**0.0000**	**3.6643**	**3.6643**	**1.2000e-004**	**0.0000**	**3.6674**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0439	0.4522	0.5129	8.0000e-004		0.0237	0.0237		0.0218	0.0218	0.0000	70.0821	70.0821	0.0227	0.0000	70.6488
Paving	5.2100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0492**	**0.4522**	**0.5129**	**8.0000e-004**		**0.0237**	**0.0237**		**0.0218**	**0.0218**	**0.0000**	**70.0821**	**70.0821**	**0.0227**	**0.0000**	**70.6488**

3.6 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3200e-003	1.6200e-003	0.0165	4.0000e-005	4.1200e-003	3.0000e-005	4.1500e-003	1.1000e-003	3.0000e-005	1.1300e-003	0.0000	3.6643	3.6643	1.2000e-004	0.0000	3.6674
Total	**2.3200e-003**	**1.6200e-003**	**0.0165**	**4.0000e-005**	**4.1200e-003**	**3.0000e-005**	**4.1500e-003**	**1.1000e-003**	**3.0000e-005**	**1.1300e-003**	**0.0000**	**3.6643**	**3.6643**	**1.2000e-004**	**0.0000**	**3.6674**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Unmitigated Construction-Demolition,Site Prep,Grading,Paving - Sonoma-San Francisco County, Annual

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.594113	0.036394	0.166849	0.102253	0.024126	0.006070	0.030484	0.028024	0.003137	0.001706	0.004997	0.000880	0.000967
Other Non-Asphalt Surfaces	0.594113	0.036394	0.166849	0.102253	0.024126	0.006070	0.030484	0.028024	0.003137	0.001706	0.004997	0.000880	0.000967

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

Unmitigated Construction-Demolition,Site Prep,Grading,Paving - Sonoma-San Francisco County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0519	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.3000e-004	3.3000e-004	0.0000	0.0000	3.5000e-004
Unmitigated	0.0519	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.3000e-004	3.3000e-004	0.0000	0.0000	3.5000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0519					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.3000e-004	3.3000e-004	0.0000	0.0000	3.5000e-004
Total	**0.0519**	**0.0000**	**1.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**3.3000e-004**	**3.3000e-004**	**0.0000**	**0.0000**	**3.5000e-004**

Unmitigated Construction-Demolition,Site Prep,Grading,Paving - Sonoma-San Francisco County, Annual

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0519					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.3000e-004	3.3000e-004	0.0000	0.0000	3.5000e-004
Total	**0.0519**	**0.0000**	**1.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**3.3000e-004**	**3.3000e-004**	**0.0000**	**0.0000**	**3.5000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Unmitigated Construction-Homes 1-21

Sonoma-San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	21.00	Dwelling Unit	2.03	48,702.60	56

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	75
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	390.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Unmitigated Construction-Homes 1-21 - Sonoma-San Francisco County, Annual

Project Characteristics - .CO2 intensity factor based on Renewable Energy Portfolio Standard. Start of construction as provided by the Applicant in response to request for information form (8/16/19).

Land Use - Building Construction for 21 units. Acreage and square footage for 21 units derived by dividing total acreage(10.17) and square footage(243,513) equally for 105 units. 2.65 persons per unit (City of Santa Rosa).

Construction Phase - As provided by Applicant in response to request for information form (8/16/19).

Off-road Equipment - Adjusted construction equipment usage to match CalEEMod default total building construction usage hours.

Demolition -

Grading -

Vehicle Trips - Construction Only.

Woodstoves - Construction Only.

Area Coating - Construction Only.

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Compliance with BAAQMD best management practices threshold for fugitive dust; recommended measures from BAAQMD's Basic Construction Mitigation Measures for all Proposed Projects.

Mobile Land Use Mitigation -

Operational Off-Road Equipment -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Emergency Generators and Fire Pumps EF -

Unmitigated Construction-Homes 1-21 - Sonoma-San Francisco County, Annual

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Residential_Exterior	32874	0
tblAreaCoating	Area_Residential_Interior	98623	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberWood	9.03	0.00
tblLandUse	LandUseSquareFeet	37,800.00	48,702.60
tblLandUse	LotAcreage	6.82	2.03
tblLandUse	Population	60.00	56.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	UsageHours	8.00	2.80
tblOffRoadEquipment	UsageHours	7.00	3.20
tblOffRoadEquipment	UsageHours	8.00	3.20
tblOffRoadEquipment	UsageHours	6.00	2.80
tblOffRoadEquipment	UsageHours	8.00	3.20
tblProjectCharacteristics	CO2IntensityFactor	641.35	390.65
tblVehicleTrips	ST_TR	9.91	0.00
tblVehicleTrips	SU_TR	8.62	0.00
tblVehicleTrips	WD_TR	9.52	0.00
tblWoodstoves	WoodstoveWoodMass	956.80	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0269	0.2417	0.2323	4.0000e-004	2.5400e-003	0.0129	0.0154	6.9000e-004	0.0121	0.0128	0.0000	34.6194	34.6194	7.6500e-003	0.0000	34.8107
2022	0.4041	0.5493	0.5917	1.0200e-003	6.4600e-003	0.0277	0.0341	1.7400e-003	0.0260	0.0278	0.0000	88.4937	88.4937	0.0199	0.0000	88.9912
Maximum	**0.4041**	**0.5493**	**0.5917**	**1.0200e-003**	**6.4600e-003**	**0.0277**	**0.0341**	**1.7400e-003**	**0.0260**	**0.0278**	**0.0000**	**88.4937**	**88.4937**	**0.0199**	**0.0000**	**88.9912**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0269	0.2417	0.2323	4.0000e-004	2.5400e-003	0.0129	0.0154	6.9000e-004	0.0121	0.0128	0.0000	34.6193	34.6193	7.6500e-003	0.0000	34.8107
2022	0.4041	0.5493	0.5917	1.0200e-003	6.4600e-003	0.0277	0.0341	1.7400e-003	0.0260	0.0278	0.0000	88.4936	88.4936	0.0199	0.0000	88.9911
Maximum	**0.4041**	**0.5493**	**0.5917**	**1.0200e-003**	**6.4600e-003**	**0.0277**	**0.0341**	**1.7400e-003**	**0.0260**	**0.0278**	**0.0000**	**88.4936**	**88.4936**	**0.0199**	**0.0000**	**88.9911**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Unmitigated Construction-Homes 1-21 - Sonoma-San Francisco County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-30-2021	12-29-2021	0.2608	0.2608
2	12-30-2021	3-29-2022	0.2321	0.2321
3	3-30-2022	6-29-2022	0.2363	0.2363
4	6-30-2022	9-29-2022	0.4927	0.4927
		Highest	0.4927	0.4927

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1950	2.3600e-003	0.1562	1.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	0.9101	0.9101	2.6000e-004	1.0000e-005	0.9201
Energy	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	62.6774	62.6774	2.8600e-003	1.0600e-003	63.0647
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	4.7744	0.0000	4.7744	0.2822	0.0000	11.8282
Water						0.0000	0.0000		0.0000	0.0000	0.4341	1.8468	2.2809	0.0447	1.0800e-003	3.7211
Total	**0.1983**	**0.0305**	**0.1682**	**1.9000e-004**	**0.0000**	**3.1800e-003**	**3.1800e-003**	**0.0000**	**3.1800e-003**	**3.1800e-003**	**5.2084**	**65.4344**	**70.6428**	**0.3300**	**2.1500e-003**	**79.5341**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1950	2.3600e-003	0.1562	1.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	0.9101	0.9101	2.6000e-004	1.0000e-005	0.9201
Energy	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	62.6774	62.6774	2.8600e-003	1.0600e-003	63.0647
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	4.7744	0.0000	4.7744	0.2822	0.0000	11.8282
Water						0.0000	0.0000		0.0000	0.0000	0.4341	1.8468	2.2809	0.0447	1.0800e-003	3.7211
Total	**0.1983**	**0.0305**	**0.1682**	**1.9000e-004**	**0.0000**	**3.1800e-003**	**3.1800e-003**	**0.0000**	**3.1800e-003**	**3.1800e-003**	**5.2084**	**65.4344**	**70.6428**	**0.3300**	**2.1500e-003**	**79.5341**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	9/30/2021	8/3/2022	5	220	
2	Paving	Paving	8/4/2022	8/17/2022	5	10	
3	Architectural Coating	Architectural Coating	8/18/2022	8/31/2022	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 98,623; Residential Outdoor: 32,874; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	2.80	231	0.29
Building Construction	Forklifts	3	3.20	89	0.20
Building Construction	Generator Sets	1	3.20	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	2.80	97	0.37
Building Construction	Welders	1	3.20	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	9	8.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0255	0.2336	0.2221	3.6000e-004		0.0129	0.0129		0.0121	0.0121	0.0000	31.0394	31.0394	7.4900e-003	0.0000	31.2266
Total	**0.0255**	**0.2336**	**0.2221**	**3.6000e-004**		**0.0129**	**0.0129**		**0.0121**	**0.0121**	**0.0000**	**31.0394**	**31.0394**	**7.4900e-003**	**0.0000**	**31.2266**

3.2 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1000e-004	7.2900e-003	1.7900e-003	2.0000e-005	4.3000e-004	2.0000e-005	4.5000e-004	1.3000e-004	2.0000e-005	1.4000e-004	0.0000	1.7095	1.7095	1.0000e-004	0.0000	1.7120
Worker	1.1800e-003	8.3000e-004	8.4400e-003	2.0000e-005	2.1000e-003	2.0000e-005	2.1200e-003	5.6000e-004	2.0000e-005	5.7000e-004	0.0000	1.8705	1.8705	6.0000e-005	0.0000	1.8721
Total	**1.3900e-003**	**8.1200e-003**	**0.0102**	**4.0000e-005**	**2.5300e-003**	**4.0000e-005**	**2.5700e-003**	**6.9000e-004**	**4.0000e-005**	**7.1000e-004**	**0.0000**	**3.5800**	**3.5800**	**1.6000e-004**	**0.0000**	**3.5841**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0255	0.2336	0.2221	3.6000e-004		0.0129	0.0129		0.0121	0.0121	0.0000	31.0394	31.0394	7.4900e-003	0.0000	31.2266
Total	**0.0255**	**0.2336**	**0.2221**	**3.6000e-004**		**0.0129**	**0.0129**		**0.0121**	**0.0121**	**0.0000**	**31.0394**	**31.0394**	**7.4900e-003**	**0.0000**	**31.2266**

3.2 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1000e-004	7.2900e-003	1.7900e-003	2.0000e-005	4.3000e-004	2.0000e-005	4.5000e-004	1.3000e-004	2.0000e-005	1.4000e-004	0.0000	1.7095	1.7095	1.0000e-004	0.0000	1.7120
Worker	1.1800e-003	8.3000e-004	8.4400e-003	2.0000e-005	2.1000e-003	2.0000e-005	2.1200e-003	5.6000e-004	2.0000e-005	5.7000e-004	0.0000	1.8705	1.8705	6.0000e-005	0.0000	1.8721
Total	**1.3900e-003**	**8.1200e-003**	**0.0102**	**4.0000e-005**	**2.5300e-003**	**4.0000e-005**	**2.5700e-003**	**6.9000e-004**	**4.0000e-005**	**7.1000e-004**	**0.0000**	**3.5800**	**3.5800**	**1.6000e-004**	**0.0000**	**3.5841**

3.2 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0522	0.4778	0.5007	8.2000e-004		0.0248	0.0248		0.0233	0.0233	0.0000	70.9079	70.9079	0.0170	0.0000	71.3326
Total	**0.0522**	**0.4778**	**0.5007**	**8.2000e-004**		**0.0248**	**0.0248**		**0.0233**	**0.0233**	**0.0000**	**70.9079**	**70.9079**	**0.0170**	**0.0000**	**71.3326**

3.2 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.5000e-004	0.0158	3.7400e-003	4.0000e-005	9.9000e-004	4.0000e-005	1.0300e-003	2.9000e-004	3.0000e-005	3.2000e-004	0.0000	3.8674	3.8674	2.3000e-004	0.0000	3.8731
Worker	2.5100e-003	1.6800e-003	0.0173	5.0000e-005	4.8000e-003	4.0000e-005	4.8400e-003	1.2800e-003	3.0000e-005	1.3100e-003	0.0000	4.1152	4.1152	1.3000e-004	0.0000	4.1184
Total	**2.9600e-003**	**0.0175**	**0.0210**	**9.0000e-005**	**5.7900e-003**	**8.0000e-005**	**5.8700e-003**	**1.5700e-003**	**6.0000e-005**	**1.6300e-003**	**0.0000**	**7.9826**	**7.9826**	**3.6000e-004**	**0.0000**	**7.9914**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0522	0.4778	0.5007	8.2000e-004		0.0248	0.0248		0.0233	0.0233	0.0000	70.9078	70.9078	0.0170	0.0000	71.3325
Total	**0.0522**	**0.4778**	**0.5007**	**8.2000e-004**		**0.0248**	**0.0248**		**0.0233**	**0.0233**	**0.0000**	**70.9078**	**70.9078**	**0.0170**	**0.0000**	**71.3325**

3.2 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.5000e-004	0.0158	3.7400e-003	4.0000e-005	9.9000e-004	4.0000e-005	1.0300e-003	2.9000e-004	3.0000e-005	3.2000e-004	0.0000	3.8674	3.8674	2.3000e-004	0.0000	3.8731
Worker	2.5100e-003	1.6800e-003	0.0173	5.0000e-005	4.8000e-003	4.0000e-005	4.8400e-003	1.2800e-003	3.0000e-005	1.3100e-003	0.0000	4.1152	4.1152	1.3000e-004	0.0000	4.1184
Total	**2.9600e-003**	**0.0175**	**0.0210**	**9.0000e-005**	**5.7900e-003**	**8.0000e-005**	**5.8700e-003**	**1.5700e-003**	**6.0000e-005**	**1.6300e-003**	**0.0000**	**7.9826**	**7.9826**	**3.6000e-004**	**0.0000**	**7.9914**

3.3 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.7100e-003	0.0467	0.0585	9.0000e-005		2.4400e-003	2.4400e-003		2.2500e-003	2.2500e-003	0.0000	7.7550	7.7550	2.4600e-003	0.0000	7.8165
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.7100e-003**	**0.0467**	**0.0585**	**9.0000e-005**		**2.4400e-003**	**2.4400e-003**		**2.2500e-003**	**2.2500e-003**	**0.0000**	**7.7550**	**7.7550**	**2.4600e-003**	**0.0000**	**7.8165**

3.3 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.1000e-004	2.1200e-003	1.0000e-005	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5043	0.5043	2.0000e-005	0.0000	0.5047
Total	**3.1000e-004**	**2.1000e-004**	**2.1200e-003**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**5.9000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.5043**	**0.5043**	**2.0000e-005**	**0.0000**	**0.5047**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.7100e-003	0.0467	0.0585	9.0000e-005		2.4400e-003	2.4400e-003		2.2500e-003	2.2500e-003	0.0000	7.7550	7.7550	2.4600e-003	0.0000	7.8165
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.7100e-003**	**0.0467**	**0.0585**	**9.0000e-005**		**2.4400e-003**	**2.4400e-003**		**2.2500e-003**	**2.2500e-003**	**0.0000**	**7.7550**	**7.7550**	**2.4600e-003**	**0.0000**	**7.8165**

3.3 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.1000e-004	2.1200e-003	1.0000e-005	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5043	0.5043	2.0000e-005	0.0000	0.5047
Total	**3.1000e-004**	**2.1000e-004**	**2.1200e-003**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**5.9000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.5043**	**0.5043**	**2.0000e-005**	**0.0000**	**0.5047**

3.4 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3428					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0200e-003	7.0400e-003	9.0700e-003	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2787
Total	**0.3439**	**7.0400e-003**	**9.0700e-003**	**1.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2787**

3.4 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	2.8000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0672	0.0672	0.0000	0.0000	0.0673
Total	**4.0000e-005**	**3.0000e-005**	**2.8000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0672**	**0.0672**	**0.0000**	**0.0000**	**0.0673**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3428					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0200e-003	7.0400e-003	9.0700e-003	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2787
Total	**0.3439**	**7.0400e-003**	**9.0700e-003**	**1.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2787**

3.4 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	2.8000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0672	0.0672	0.0000	0.0000	0.0673
Total	**4.0000e-005**	**3.0000e-005**	**2.8000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0672**	**0.0672**	**0.0000**	**0.0000**	**0.0673**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.594113	0.036394	0.166849	0.102253	0.024126	0.006070	0.030484	0.028024	0.003137	0.001706	0.004997	0.000880	0.000967

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	30.1059	30.1059	2.2300e-003	4.6000e-004	30.2996
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	30.1059	30.1059	2.2300e-003	4.6000e-004	30.2996
NaturalGas Mitigated	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	32.5715	32.5715	6.2000e-004	6.0000e-004	32.7651
NaturalGas Unmitigated	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	32.5715	32.5715	6.2000e-004	6.0000e-004	32.7651

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	610367	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	32.5715	32.5715	6.2000e-004	6.0000e-004	32.7651
Total		**3.2900e-003**	**0.0281**	**0.0120**	**1.8000e-004**		**2.2700e-003**	**2.2700e-003**		**2.2700e-003**	**2.2700e-003**	**0.0000**	**32.5715**	**32.5715**	**6.2000e-004**	**6.0000e-004**	**32.7651**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	610367	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	32.5715	32.5715	6.2000e-004	6.0000e-004	32.7651
Total		**3.2900e-003**	**0.0281**	**0.0120**	**1.8000e-004**		**2.2700e-003**	**2.2700e-003**		**2.2700e-003**	**2.2700e-003**	**0.0000**	**32.5715**	**32.5715**	**6.2000e-004**	**6.0000e-004**	**32.7651**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	169902	30.1059	2.2300e-003	4.6000e-004	30.2996
Total		**30.1059**	**2.2300e-003**	**4.6000e-004**	**30.2996**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	169902	30.1059	2.2300e-003	4.6000e-004	30.2996
Total		**30.1059**	**2.2300e-003**	**4.6000e-004**	**30.2996**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1950	2.3600e-003	0.1562	1.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	0.9101	0.9101	2.6000e-004	1.0000e-005	0.9201
Unmitigated	0.1950	2.3600e-003	0.1562	1.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	0.9101	0.9101	2.6000e-004	1.0000e-005	0.9201

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1902					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.0000e-005	5.7000e-004	2.4000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.6554	0.6554	1.0000e-005	1.0000e-005	0.6593
Landscaping	4.7000e-003	1.8000e-003	0.1560	1.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004	0.0000	0.2547	0.2547	2.4000e-004	0.0000	0.2608
Total	**0.1950**	**2.3700e-003**	**0.1562**	**1.0000e-005**		**9.1000e-004**	**9.1000e-004**		**9.1000e-004**	**9.1000e-004**	**0.0000**	**0.9101**	**0.9101**	**2.5000e-004**	**1.0000e-005**	**0.9201**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1902					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.0000e-005	5.7000e-004	2.4000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.6554	0.6554	1.0000e-005	1.0000e-005	0.6593
Landscaping	4.7000e-003	1.8000e-003	0.1560	1.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004	0.0000	0.2547	0.2547	2.4000e-004	0.0000	0.2608
Total	**0.1950**	**2.3700e-003**	**0.1562**	**1.0000e-005**		**9.1000e-004**	**9.1000e-004**		**9.1000e-004**	**9.1000e-004**	**0.0000**	**0.9101**	**0.9101**	**2.5000e-004**	**1.0000e-005**	**0.9201**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2.2809	0.0447	1.0800e-003	3.7211
Unmitigated	2.2809	0.0447	1.0800e-003	3.7211

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	1.36823 / 0.862583	2.2809	0.0447	1.0800e-003	3.7211
Total		**2.2809**	**0.0447**	**1.0800e-003**	**3.7211**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	1.36823 / 0.862583	2.2809	0.0447	1.0800e-003	3.7211
Total		**2.2809**	**0.0447**	**1.0800e-003**	**3.7211**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	4.7744	0.2822	0.0000	11.8282
Unmitigated	4.7744	0.2822	0.0000	11.8282

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	23.52	4.7744	0.2822	0.0000	11.8282
Total		**4.7744**	**0.2822**	**0.0000**	**11.8282**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	23.52	4.7744	0.2822	0.0000	11.8282
Total		**4.7744**	**0.2822**	**0.0000**	**11.8282**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Unmitigated Construction-Homes 22-42

Sonoma-San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	21.00	Dwelling Unit	2.03	48,702.60	56

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	75
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	390.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Unmitigated Construction-Homes 22-42 - Sonoma-San Francisco County, Annual

Project Characteristics - CO2 intensity factor based on Renewable Energy Portfolio Standard. Start of construction as provided by the Applicant in response to request for information form(8/16/19).

Land Use - Building Construction for 21 units. Acreage and square footage for 21 units derived by dividing total acreage(10.17) and square footage(243,513) equally for 105 units. 2.65 persons per unit (City of Santa Rosa).

Construction Phase - As provided by Applicant in response to request for information form (8/16/19).

Off-road Equipment - Adjusted construction equipment usage to match CalEEMod default total building construction usage hours.

Demolition -

Grading -

Vehicle Trips - Construction Only.

Woodstoves - Construction Only.

Area Coating - Construction Only.

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Compliance with BAAQMD best management practices threshold for fugitive dust; recommended measures from BAAQMD's Basic Construction Mitigation Measures for all Proposed Projects.

Mobile Land Use Mitigation -

Operational Off-Road Equipment -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Emergency Generators and Fire Pumps EF -

Unmitigated Construction-Homes 22-42 - Sonoma-San Francisco County, Annual

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Residential_Exterior	32874	0
tblAreaCoating	Area_Residential_Interior	98623	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberWood	9.03	0.00
tblLandUse	LandUseSquareFeet	37,800.00	48,702.60
tblLandUse	LotAcreage	6.82	2.03
tblLandUse	Population	60.00	56.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	UsageHours	8.00	2.80
tblOffRoadEquipment	UsageHours	7.00	3.20
tblOffRoadEquipment	UsageHours	8.00	3.20
tblOffRoadEquipment	UsageHours	6.00	2.80
tblOffRoadEquipment	UsageHours	8.00	3.20
tblProjectCharacteristics	CO2IntensityFactor	641.35	390.65
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	9.91	0.00
tblVehicleTrips	SU_TR	8.62	0.00
tblVehicleTrips	WD_TR	9.52	0.00
tblWoodstoves	WoodstoveWoodMass	956.80	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0758	0.6810	0.6552	1.1200e-003	7.0400e-003	0.0363	0.0434	1.9000e-003	0.0342	0.0361	0.0000	97.2731	97.2731	0.0216	0.0000	97.8126
2022	0.3601	0.1542	0.1756	2.9000e-004	1.8200e-003	7.8800e-003	9.7000e-003	4.9000e-004	7.4000e-003	7.8800e-003	0.0000	25.5251	25.5251	6.0700e-003	0.0000	25.6769
Maximum	**0.3601**	**0.6810**	**0.6552**	**1.1200e-003**	**7.0400e-003**	**0.0363**	**0.0434**	**1.9000e-003**	**0.0342**	**0.0361**	**0.0000**	**97.2731**	**97.2731**	**0.0216**	**0.0000**	**97.8126**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0758	0.6810	0.6552	1.1200e-003	7.0400e-003	0.0363	0.0434	1.9000e-003	0.0342	0.0361	0.0000	97.2730	97.2730	0.0216	0.0000	97.8125
2022	0.3601	0.1542	0.1756	2.9000e-004	1.8200e-003	7.8800e-003	9.7000e-003	4.9000e-004	7.4000e-003	7.8800e-003	0.0000	25.5251	25.5251	6.0700e-003	0.0000	25.6769
Maximum	**0.3601**	**0.6810**	**0.6552**	**1.1200e-003**	**7.0400e-003**	**0.0363**	**0.0434**	**1.9000e-003**	**0.0342**	**0.0361**	**0.0000**	**97.2730**	**97.2730**	**0.0216**	**0.0000**	**97.8125**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Unmitigated Construction-Homes 22-42 - Sonoma-San Francisco County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-13-2021	7-12-2021	0.2601	0.2601
2	7-13-2021	10-12-2021	0.2630	0.2630
3	10-13-2021	1-12-2022	0.2598	0.2598
4	1-13-2022	4-12-2022	0.4877	0.4877
		Highest	0.4877	0.4877

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1950	2.3600e-003	0.1562	1.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	0.9101	0.9101	2.6000e-004	1.0000e-005	0.9201
Energy	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	62.6774	62.6774	2.8600e-003	1.0600e-003	63.0647
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	4.7744	0.0000	4.7744	0.2822	0.0000	11.8282
Water						0.0000	0.0000		0.0000	0.0000	0.4341	1.8468	2.2809	0.0447	1.0800e-003	3.7211
Total	**0.1983**	**0.0305**	**0.1682**	**1.9000e-004**	**0.0000**	**3.1800e-003**	**3.1800e-003**	**0.0000**	**3.1800e-003**	**3.1800e-003**	**5.2084**	**65.4344**	**70.6428**	**0.3300**	**2.1500e-003**	**79.5341**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1950	2.3600e-003	0.1562	1.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	0.9101	0.9101	2.6000e-004	1.0000e-005	0.9201
Energy	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	62.6774	62.6774	2.8600e-003	1.0600e-003	63.0647
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	4.7744	0.0000	4.7744	0.2822	0.0000	11.8282
Water						0.0000	0.0000		0.0000	0.0000	0.4341	1.8468	2.2809	0.0447	1.0800e-003	3.7211
Total	**0.1983**	**0.0305**	**0.1682**	**1.9000e-004**	**0.0000**	**3.1800e-003**	**3.1800e-003**	**0.0000**	**3.1800e-003**	**3.1800e-003**	**5.2084**	**65.4344**	**70.6428**	**0.3300**	**2.1500e-003**	**79.5341**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	4/13/2021	2/14/2022	5	220	
2	Paving	Paving	2/15/2022	2/28/2022	5	10	
3	Architectural Coating	Architectural Coating	3/1/2022	3/14/2022	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 98,623; Residential Outdoor: 32,874; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	2.80	231	0.29
Building Construction	Forklifts	3	3.20	89	0.20
Building Construction	Generator Sets	1	3.20	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	2.80	97	0.37
Building Construction	Welders	1	3.20	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	9	8.00	2.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0719	0.6589	0.6265	1.0200e-003		0.0362	0.0362		0.0341	0.0341	0.0000	87.5589	87.5589	0.0211	0.0000	88.0870
Total	**0.0719**	**0.6589**	**0.6265**	**1.0200e-003**		**0.0362**	**0.0362**		**0.0341**	**0.0341**	**0.0000**	**87.5589**	**87.5589**	**0.0211**	**0.0000**	**88.0870**

3.2 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.7000e-004	0.0197	4.8200e-003	5.0000e-005	1.1100e-003	5.0000e-005	1.1600e-003	3.2000e-004	5.0000e-005	3.7000e-004	0.0000	4.4377	4.4377	2.8000e-004	0.0000	4.4446
Worker	3.3400e-003	2.3400e-003	0.0238	6.0000e-005	5.9300e-003	5.0000e-005	5.9800e-003	1.5800e-003	4.0000e-005	1.6200e-003	0.0000	5.2765	5.2765	1.8000e-004	0.0000	5.2810
Total	**3.9100e-003**	**0.0221**	**0.0286**	**1.1000e-004**	**7.0400e-003**	**1.0000e-004**	**7.1400e-003**	**1.9000e-003**	**9.0000e-005**	**1.9900e-003**	**0.0000**	**9.7142**	**9.7142**	**4.6000e-004**	**0.0000**	**9.7256**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0719	0.6589	0.6265	1.0200e-003		0.0362	0.0362		0.0341	0.0341	0.0000	87.5588	87.5588	0.0211	0.0000	88.0869
Total	**0.0719**	**0.6589**	**0.6265**	**1.0200e-003**		**0.0362**	**0.0362**		**0.0341**	**0.0341**	**0.0000**	**87.5588**	**87.5588**	**0.0211**	**0.0000**	**88.0869**

3.2 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.7000e-004	0.0197	4.8200e-003	5.0000e-005	1.1100e-003	5.0000e-005	1.1600e-003	3.2000e-004	5.0000e-005	3.7000e-004	0.0000	4.4377	4.4377	2.8000e-004	0.0000	4.4446
Worker	3.3400e-003	2.3400e-003	0.0238	6.0000e-005	5.9300e-003	5.0000e-005	5.9800e-003	1.5800e-003	4.0000e-005	1.6200e-003	0.0000	5.2765	5.2765	1.8000e-004	0.0000	5.2810
Total	**3.9100e-003**	**0.0221**	**0.0286**	**1.1000e-004**	**7.0400e-003**	**1.0000e-004**	**7.1400e-003**	**1.9000e-003**	**9.0000e-005**	**1.9900e-003**	**0.0000**	**9.7142**	**9.7142**	**4.6000e-004**	**0.0000**	**9.7256**

3.2 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0106	0.0968	0.1015	1.7000e-004		5.0200e-003	5.0200e-003		4.7200e-003	4.7200e-003	0.0000	14.3670	14.3670	3.4400e-003	0.0000	14.4530
Total	**0.0106**	**0.0968**	**0.1015**	**1.7000e-004**		**5.0200e-003**	**5.0200e-003**		**4.7200e-003**	**4.7200e-003**	**0.0000**	**14.3670**	**14.3670**	**3.4400e-003**	**0.0000**	**14.4530**

3.2 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.0000e-005	3.0800e-003	7.2000e-004	1.0000e-005	1.8000e-004	1.0000e-005	1.9000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.7212	0.7212	4.0000e-005	0.0000	0.7223
Worker	5.1000e-004	3.4000e-004	3.5000e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.8000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8338	0.8338	3.0000e-005	0.0000	0.8344
Total	**6.0000e-004**	**3.4200e-003**	**4.2200e-003**	**2.0000e-005**	**1.1500e-003**	**2.0000e-005**	**1.1700e-003**	**3.1000e-004**	**2.0000e-005**	**3.3000e-004**	**0.0000**	**1.5550**	**1.5550**	**7.0000e-005**	**0.0000**	**1.5567**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0106	0.0968	0.1015	1.7000e-004		5.0200e-003	5.0200e-003		4.7200e-003	4.7200e-003	0.0000	14.3670	14.3670	3.4400e-003	0.0000	14.4530
Total	**0.0106**	**0.0968**	**0.1015**	**1.7000e-004**		**5.0200e-003**	**5.0200e-003**		**4.7200e-003**	**4.7200e-003**	**0.0000**	**14.3670**	**14.3670**	**3.4400e-003**	**0.0000**	**14.4530**

3.2 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.0000e-005	3.0800e-003	7.2000e-004	1.0000e-005	1.8000e-004	1.0000e-005	1.9000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.7212	0.7212	4.0000e-005	0.0000	0.7223
Worker	5.1000e-004	3.4000e-004	3.5000e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.8000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8338	0.8338	3.0000e-005	0.0000	0.8344
Total	**6.0000e-004**	**3.4200e-003**	**4.2200e-003**	**2.0000e-005**	**1.1500e-003**	**2.0000e-005**	**1.1700e-003**	**3.1000e-004**	**2.0000e-005**	**3.3000e-004**	**0.0000**	**1.5550**	**1.5550**	**7.0000e-005**	**0.0000**	**1.5567**

3.3 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.7100e-003	0.0467	0.0585	9.0000e-005		2.4400e-003	2.4400e-003		2.2500e-003	2.2500e-003	0.0000	7.7550	7.7550	2.4600e-003	0.0000	7.8165
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.7100e-003**	**0.0467**	**0.0585**	**9.0000e-005**		**2.4400e-003**	**2.4400e-003**		**2.2500e-003**	**2.2500e-003**	**0.0000**	**7.7550**	**7.7550**	**2.4600e-003**	**0.0000**	**7.8165**

3.3 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.1000e-004	2.1200e-003	1.0000e-005	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5043	0.5043	2.0000e-005	0.0000	0.5047
Total	**3.1000e-004**	**2.1000e-004**	**2.1200e-003**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**5.9000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.5043**	**0.5043**	**2.0000e-005**	**0.0000**	**0.5047**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.7100e-003	0.0467	0.0585	9.0000e-005		2.4400e-003	2.4400e-003		2.2500e-003	2.2500e-003	0.0000	7.7550	7.7550	2.4600e-003	0.0000	7.8165
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.7100e-003**	**0.0467**	**0.0585**	**9.0000e-005**		**2.4400e-003**	**2.4400e-003**		**2.2500e-003**	**2.2500e-003**	**0.0000**	**7.7550**	**7.7550**	**2.4600e-003**	**0.0000**	**7.8165**

3.3 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.1000e-004	2.1200e-003	1.0000e-005	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5043	0.5043	2.0000e-005	0.0000	0.5047
Total	**3.1000e-004**	**2.1000e-004**	**2.1200e-003**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**5.9000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.5043**	**0.5043**	**2.0000e-005**	**0.0000**	**0.5047**

3.4 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3428					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0200e-003	7.0400e-003	9.0700e-003	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2787
Total	**0.3439**	**7.0400e-003**	**9.0700e-003**	**1.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2787**

3.4 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	2.8000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0672	0.0672	0.0000	0.0000	0.0673
Total	**4.0000e-005**	**3.0000e-005**	**2.8000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0672**	**0.0672**	**0.0000**	**0.0000**	**0.0673**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3428					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0200e-003	7.0400e-003	9.0700e-003	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2787
Total	**0.3439**	**7.0400e-003**	**9.0700e-003**	**1.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2787**

3.4 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	2.8000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0672	0.0672	0.0000	0.0000	0.0673
Total	**4.0000e-005**	**3.0000e-005**	**2.8000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0672**	**0.0672**	**0.0000**	**0.0000**	**0.0673**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.594113	0.036394	0.166849	0.102253	0.024126	0.006070	0.030484	0.028024	0.003137	0.001706	0.004997	0.000880	0.000967

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	30.1059	30.1059	2.2300e-003	4.6000e-004	30.2996
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	30.1059	30.1059	2.2300e-003	4.6000e-004	30.2996
NaturalGas Mitigated	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	32.5715	32.5715	6.2000e-004	6.0000e-004	32.7651
NaturalGas Unmitigated	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	32.5715	32.5715	6.2000e-004	6.0000e-004	32.7651

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	610367	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	32.5715	32.5715	6.2000e-004	6.0000e-004	32.7651
Total		**3.2900e-003**	**0.0281**	**0.0120**	**1.8000e-004**		**2.2700e-003**	**2.2700e-003**		**2.2700e-003**	**2.2700e-003**	**0.0000**	**32.5715**	**32.5715**	**6.2000e-004**	**6.0000e-004**	**32.7651**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	610367	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	32.5715	32.5715	6.2000e-004	6.0000e-004	32.7651
Total		**3.2900e-003**	**0.0281**	**0.0120**	**1.8000e-004**		**2.2700e-003**	**2.2700e-003**		**2.2700e-003**	**2.2700e-003**	**0.0000**	**32.5715**	**32.5715**	**6.2000e-004**	**6.0000e-004**	**32.7651**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	169902	30.1059	2.2300e-003	4.6000e-004	30.2996
Total		**30.1059**	**2.2300e-003**	**4.6000e-004**	**30.2996**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	169902	30.1059	2.2300e-003	4.6000e-004	30.2996
Total		**30.1059**	**2.2300e-003**	**4.6000e-004**	**30.2996**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1950	2.3600e-003	0.1562	1.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	0.9101	0.9101	2.6000e-004	1.0000e-005	0.9201
Unmitigated	0.1950	2.3600e-003	0.1562	1.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	0.9101	0.9101	2.6000e-004	1.0000e-005	0.9201

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1902					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.0000e-005	5.7000e-004	2.4000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.6554	0.6554	1.0000e-005	1.0000e-005	0.6593
Landscaping	4.7000e-003	1.8000e-003	0.1560	1.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004	0.0000	0.2547	0.2547	2.4000e-004	0.0000	0.2608
Total	**0.1950**	**2.3700e-003**	**0.1562**	**1.0000e-005**		**9.1000e-004**	**9.1000e-004**		**9.1000e-004**	**9.1000e-004**	**0.0000**	**0.9101**	**0.9101**	**2.5000e-004**	**1.0000e-005**	**0.9201**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1902					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.0000e-005	5.7000e-004	2.4000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.6554	0.6554	1.0000e-005	1.0000e-005	0.6593
Landscaping	4.7000e-003	1.8000e-003	0.1560	1.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004	0.0000	0.2547	0.2547	2.4000e-004	0.0000	0.2608
Total	**0.1950**	**2.3700e-003**	**0.1562**	**1.0000e-005**		**9.1000e-004**	**9.1000e-004**		**9.1000e-004**	**9.1000e-004**	**0.0000**	**0.9101**	**0.9101**	**2.5000e-004**	**1.0000e-005**	**0.9201**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2.2809	0.0447	1.0800e-003	3.7211
Unmitigated	2.2809	0.0447	1.0800e-003	3.7211

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	1.36823 / 0.862583	2.2809	0.0447	1.0800e-003	3.7211
Total		**2.2809**	**0.0447**	**1.0800e-003**	**3.7211**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	1.36823 / 0.862583	2.2809	0.0447	1.0800e-003	3.7211
Total		**2.2809**	**0.0447**	**1.0800e-003**	**3.7211**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	4.7744	0.2822	0.0000	11.8282
Unmitigated	4.7744	0.2822	0.0000	11.8282

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	23.52	4.7744	0.2822	0.0000	11.8282
Total		**4.7744**	**0.2822**	**0.0000**	**11.8282**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	23.52	4.7744	0.2822	0.0000	11.8282
Total		**4.7744**	**0.2822**	**0.0000**	**11.8282**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Unmitigated Construction-Homes 43-63

Sonoma-San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	21.00	Dwelling Unit	2.03	48,702.60	56

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	75
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	390.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Unmitigated Construction-Homes 43-63 - Sonoma-San Francisco County, Annual

Project Characteristics - CO2 intensity factor based on Renewable Energy Portfolio Standard. Start of construction as provided by the Applicant in response to request for information form(8/16/19).

Land Use - Building Construction for 21 units. Acreage and square footage for 21 units derived by dividing total acreage(10.17) and square footage(243,513) equally for 105 units. 2.65 persons per unit (City of Santa Rosa).

Construction Phase - As provided by Applicant in response to request for information(8/16/19).

Off-road Equipment - Adjusted construction equipment usage to match CalEEMod default total building construction usage hours.

Vehicle Trips - Construction Only.

Woodstoves - Construction Only.

Area Coating - Construction Only.

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Compliance with BAAQMD best management practices threshold for fugitive dust; recommended measures from BAAQMD's Basic Construction Mitigation Measures for all Proposed Projects.

Mobile Land Use Mitigation -

Operational Off-Road Equipment -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Emergency Generators and Fire Pumps EF -

Unmitigated Construction-Homes 43-63 - Sonoma-San Francisco County, Annual

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Residential_Exterior	32874	0
tblAreaCoating	Area_Residential_Interior	98623	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberWood	9.03	0.00
tblLandUse	LandUseSquareFeet	37,800.00	48,702.60
tblLandUse	LotAcreage	6.82	2.03
tblLandUse	Population	60.00	56.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	UsageHours	8.00	2.80
tblOffRoadEquipment	UsageHours	7.00	3.20
tblOffRoadEquipment	UsageHours	8.00	3.20
tblOffRoadEquipment	UsageHours	6.00	2.80
tblOffRoadEquipment	UsageHours	8.00	3.20
tblProjectCharacteristics	CO2IntensityFactor	641.35	390.65
tblVehicleTrips	ST_TR	9.91	0.00
tblVehicleTrips	SU_TR	8.62	0.00
tblVehicleTrips	WD_TR	9.52	0.00
tblWoodstoves	WoodstoveWoodMass	956.80	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0201	0.1804	0.1734	3.0000e-004	1.8900e-003	9.6100e-003	0.0115	5.1000e-004	9.0400e-003	9.5500e-003	0.0000	25.8353	25.8353	5.7100e-003	0.0000	25.9781
2022	0.4102	0.6043	0.6497	1.1200e-003	7.1100e-003	0.0304	0.0376	1.9200e-003	0.0286	0.0305	0.0000	97.2593	97.2593	0.0218	0.0000	97.8050
Maximum	**0.4102**	**0.6043**	**0.6497**	**1.1200e-003**	**7.1100e-003**	**0.0304**	**0.0376**	**1.9200e-003**	**0.0286**	**0.0305**	**0.0000**	**97.2593**	**97.2593**	**0.0218**	**0.0000**	**97.8050**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0201	0.1804	0.1734	3.0000e-004	1.8900e-003	9.6100e-003	0.0115	5.1000e-004	9.0400e-003	9.5500e-003	0.0000	25.8353	25.8353	5.7100e-003	0.0000	25.9781
2022	0.4102	0.6043	0.6497	1.1200e-003	7.1100e-003	0.0304	0.0376	1.9200e-003	0.0286	0.0305	0.0000	97.2592	97.2592	0.0218	0.0000	97.8049
Maximum	**0.4102**	**0.6043**	**0.6497**	**1.1200e-003**	**7.1100e-003**	**0.0304**	**0.0376**	**1.9200e-003**	**0.0286**	**0.0305**	**0.0000**	**97.2592**	**97.2592**	**0.0218**	**0.0000**	**97.8049**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Unmitigated Construction-Homes 43-63 - Sonoma-San Francisco County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	10-25-2021	1-24-2022	0.2566	0.2566
2	1-25-2022	4-24-2022	0.2314	0.2314
3	4-25-2022	7-24-2022	0.2338	0.2338
4	7-25-2022	9-30-2022	0.4876	0.4876
		Highest	0.4876	0.4876

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1950	2.3600e-003	0.1562	1.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	0.9101	0.9101	2.6000e-004	1.0000e-005	0.9201
Energy	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	62.6774	62.6774	2.8600e-003	1.0600e-003	63.0647
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	4.7744	0.0000	4.7744	0.2822	0.0000	11.8282
Water						0.0000	0.0000		0.0000	0.0000	0.4341	1.8468	2.2809	0.0447	1.0800e-003	3.7211
Total	**0.1983**	**0.0305**	**0.1682**	**1.9000e-004**	**0.0000**	**3.1800e-003**	**3.1800e-003**	**0.0000**	**3.1800e-003**	**3.1800e-003**	**5.2084**	**65.4344**	**70.6428**	**0.3300**	**2.1500e-003**	**79.5341**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1950	2.3600e-003	0.1562	1.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	0.9101	0.9101	2.6000e-004	1.0000e-005	0.9201
Energy	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	62.6774	62.6774	2.8600e-003	1.0600e-003	63.0647
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	4.7744	0.0000	4.7744	0.2822	0.0000	11.8282
Water						0.0000	0.0000		0.0000	0.0000	0.4341	1.8468	2.2809	0.0447	1.0800e-003	3.7211
Total	**0.1983**	**0.0305**	**0.1682**	**1.9000e-004**	**0.0000**	**3.1800e-003**	**3.1800e-003**	**0.0000**	**3.1800e-003**	**3.1800e-003**	**5.2084**	**65.4344**	**70.6428**	**0.3300**	**2.1500e-003**	**79.5341**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	10/25/2021	8/26/2022	5	220	
2	Paving	Paving	8/27/2022	9/9/2022	5	10	
3	Architectural Coating	Architectural Coating	9/10/2022	9/23/2022	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 98,623; Residential Outdoor: 32,874; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	2.80	231	0.29
Building Construction	Forklifts	3	3.20	89	0.20
Building Construction	Generator Sets	1	3.20	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	2.80	97	0.37
Building Construction	Welders	1	3.20	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	9	8.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0190	0.1743	0.1658	2.7000e-004		9.5900e-003	9.5900e-003		9.0100e-003	9.0100e-003	0.0000	23.1637	23.1637	5.5900e-003	0.0000	23.3034
Total	**0.0190**	**0.1743**	**0.1658**	**2.7000e-004**		**9.5900e-003**	**9.5900e-003**		**9.0100e-003**	**9.0100e-003**	**0.0000**	**23.1637**	**23.1637**	**5.5900e-003**	**0.0000**	**23.3034**

3.2 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6000e-004	5.4400e-003	1.3300e-003	1.0000e-005	3.2000e-004	1.0000e-005	3.4000e-004	9.0000e-005	1.0000e-005	1.1000e-004	0.0000	1.2757	1.2757	8.0000e-005	0.0000	1.2776
Worker	8.8000e-004	6.2000e-004	6.3000e-003	2.0000e-005	1.5700e-003	1.0000e-005	1.5800e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.3959	1.3959	5.0000e-005	0.0000	1.3971
Total	**1.0400e-003**	**6.0600e-003**	**7.6300e-003**	**3.0000e-005**	**1.8900e-003**	**2.0000e-005**	**1.9200e-003**	**5.1000e-004**	**2.0000e-005**	**5.4000e-004**	**0.0000**	**2.6716**	**2.6716**	**1.3000e-004**	**0.0000**	**2.6747**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0190	0.1743	0.1658	2.7000e-004		9.5900e-003	9.5900e-003		9.0100e-003	9.0100e-003	0.0000	23.1637	23.1637	5.5900e-003	0.0000	23.3034
Total	**0.0190**	**0.1743**	**0.1658**	**2.7000e-004**		**9.5900e-003**	**9.5900e-003**		**9.0100e-003**	**9.0100e-003**	**0.0000**	**23.1637**	**23.1637**	**5.5900e-003**	**0.0000**	**23.3034**

3.2 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6000e-004	5.4400e-003	1.3300e-003	1.0000e-005	3.2000e-004	1.0000e-005	3.4000e-004	9.0000e-005	1.0000e-005	1.1000e-004	0.0000	1.2757	1.2757	8.0000e-005	0.0000	1.2776
Worker	8.8000e-004	6.2000e-004	6.3000e-003	2.0000e-005	1.5700e-003	1.0000e-005	1.5800e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.3959	1.3959	5.0000e-005	0.0000	1.3971
Total	**1.0400e-003**	**6.0600e-003**	**7.6300e-003**	**3.0000e-005**	**1.8900e-003**	**2.0000e-005**	**1.9200e-003**	**5.1000e-004**	**2.0000e-005**	**5.4000e-004**	**0.0000**	**2.6716**	**2.6716**	**1.3000e-004**	**0.0000**	**2.6747**

3.2 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0580	0.5309	0.5564	9.2000e-004		0.0275	0.0275		0.0259	0.0259	0.0000	78.7866	78.7866	0.0189	0.0000	79.2585
Total	**0.0580**	**0.5309**	**0.5564**	**9.2000e-004**		**0.0275**	**0.0275**		**0.0259**	**0.0259**	**0.0000**	**78.7866**	**78.7866**	**0.0189**	**0.0000**	**79.2585**

3.2 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.0000e-004	0.0176	4.1600e-003	4.0000e-005	1.1000e-003	4.0000e-005	1.1400e-003	3.2000e-004	4.0000e-005	3.6000e-004	0.0000	4.2971	4.2971	2.5000e-004	0.0000	4.3034
Worker	2.7800e-003	1.8700e-003	0.0192	5.0000e-005	5.3400e-003	4.0000e-005	5.3800e-003	1.4200e-003	4.0000e-005	1.4600e-003	0.0000	4.5724	4.5724	1.4000e-004	0.0000	4.5760
Total	**3.2800e-003**	**0.0195**	**0.0234**	**9.0000e-005**	**6.4400e-003**	**8.0000e-005**	**6.5200e-003**	**1.7400e-003**	**8.0000e-005**	**1.8200e-003**	**0.0000**	**8.8695**	**8.8695**	**3.9000e-004**	**0.0000**	**8.8794**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0580	0.5309	0.5564	9.2000e-004		0.0275	0.0275		0.0259	0.0259	0.0000	78.7865	78.7865	0.0189	0.0000	79.2584
Total	**0.0580**	**0.5309**	**0.5564**	**9.2000e-004**		**0.0275**	**0.0275**		**0.0259**	**0.0259**	**0.0000**	**78.7865**	**78.7865**	**0.0189**	**0.0000**	**79.2584**

3.2 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.0000e-004	0.0176	4.1600e-003	4.0000e-005	1.1000e-003	4.0000e-005	1.1400e-003	3.2000e-004	4.0000e-005	3.6000e-004	0.0000	4.2971	4.2971	2.5000e-004	0.0000	4.3034
Worker	2.7800e-003	1.8700e-003	0.0192	5.0000e-005	5.3400e-003	4.0000e-005	5.3800e-003	1.4200e-003	4.0000e-005	1.4600e-003	0.0000	4.5724	4.5724	1.4000e-004	0.0000	4.5760
Total	**3.2800e-003**	**0.0195**	**0.0234**	**9.0000e-005**	**6.4400e-003**	**8.0000e-005**	**6.5200e-003**	**1.7400e-003**	**8.0000e-005**	**1.8200e-003**	**0.0000**	**8.8695**	**8.8695**	**3.9000e-004**	**0.0000**	**8.8794**

3.3 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.7100e-003	0.0467	0.0585	9.0000e-005		2.4400e-003	2.4400e-003		2.2500e-003	2.2500e-003	0.0000	7.7550	7.7550	2.4600e-003	0.0000	7.8165
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.7100e-003**	**0.0467**	**0.0585**	**9.0000e-005**		**2.4400e-003**	**2.4400e-003**		**2.2500e-003**	**2.2500e-003**	**0.0000**	**7.7550**	**7.7550**	**2.4600e-003**	**0.0000**	**7.8165**

3.3 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.1000e-004	2.1200e-003	1.0000e-005	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5043	0.5043	2.0000e-005	0.0000	0.5047
Total	**3.1000e-004**	**2.1000e-004**	**2.1200e-003**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**5.9000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.5043**	**0.5043**	**2.0000e-005**	**0.0000**	**0.5047**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.7100e-003	0.0467	0.0585	9.0000e-005		2.4400e-003	2.4400e-003		2.2500e-003	2.2500e-003	0.0000	7.7550	7.7550	2.4600e-003	0.0000	7.8165
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.7100e-003**	**0.0467**	**0.0585**	**9.0000e-005**		**2.4400e-003**	**2.4400e-003**		**2.2500e-003**	**2.2500e-003**	**0.0000**	**7.7550**	**7.7550**	**2.4600e-003**	**0.0000**	**7.8165**

3.3 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.1000e-004	2.1200e-003	1.0000e-005	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5043	0.5043	2.0000e-005	0.0000	0.5047
Total	**3.1000e-004**	**2.1000e-004**	**2.1200e-003**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**5.9000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.5043**	**0.5043**	**2.0000e-005**	**0.0000**	**0.5047**

3.4 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3428					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0200e-003	7.0400e-003	9.0700e-003	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2787
Total	**0.3439**	**7.0400e-003**	**9.0700e-003**	**1.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2787**

3.4 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	2.8000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0672	0.0672	0.0000	0.0000	0.0673
Total	**4.0000e-005**	**3.0000e-005**	**2.8000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0672**	**0.0672**	**0.0000**	**0.0000**	**0.0673**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3428					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0200e-003	7.0400e-003	9.0700e-003	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2787
Total	**0.3439**	**7.0400e-003**	**9.0700e-003**	**1.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2787**

3.4 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	2.8000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0672	0.0672	0.0000	0.0000	0.0673
Total	**4.0000e-005**	**3.0000e-005**	**2.8000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0672**	**0.0672**	**0.0000**	**0.0000**	**0.0673**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.594113	0.036394	0.166849	0.102253	0.024126	0.006070	0.030484	0.028024	0.003137	0.001706	0.004997	0.000880	0.000967

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	30.1059	30.1059	2.2300e-003	4.6000e-004	30.2996
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	30.1059	30.1059	2.2300e-003	4.6000e-004	30.2996
NaturalGas Mitigated	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	32.5715	32.5715	6.2000e-004	6.0000e-004	32.7651
NaturalGas Unmitigated	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	32.5715	32.5715	6.2000e-004	6.0000e-004	32.7651

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	610367	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	32.5715	32.5715	6.2000e-004	6.0000e-004	32.7651
Total		**3.2900e-003**	**0.0281**	**0.0120**	**1.8000e-004**		**2.2700e-003**	**2.2700e-003**		**2.2700e-003**	**2.2700e-003**	**0.0000**	**32.5715**	**32.5715**	**6.2000e-004**	**6.0000e-004**	**32.7651**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	610367	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	32.5715	32.5715	6.2000e-004	6.0000e-004	32.7651
Total		**3.2900e-003**	**0.0281**	**0.0120**	**1.8000e-004**		**2.2700e-003**	**2.2700e-003**		**2.2700e-003**	**2.2700e-003**	**0.0000**	**32.5715**	**32.5715**	**6.2000e-004**	**6.0000e-004**	**32.7651**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	169902	30.1059	2.2300e-003	4.6000e-004	30.2996
Total		**30.1059**	**2.2300e-003**	**4.6000e-004**	**30.2996**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	169902	30.1059	2.2300e-003	4.6000e-004	30.2996
Total		**30.1059**	**2.2300e-003**	**4.6000e-004**	**30.2996**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1950	2.3600e-003	0.1562	1.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	0.9101	0.9101	2.6000e-004	1.0000e-005	0.9201
Unmitigated	0.1950	2.3600e-003	0.1562	1.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	0.9101	0.9101	2.6000e-004	1.0000e-005	0.9201

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1902					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.0000e-005	5.7000e-004	2.4000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.6554	0.6554	1.0000e-005	1.0000e-005	0.6593
Landscaping	4.7000e-003	1.8000e-003	0.1560	1.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004	0.0000	0.2547	0.2547	2.4000e-004	0.0000	0.2608
Total	**0.1950**	**2.3700e-003**	**0.1562**	**1.0000e-005**		**9.1000e-004**	**9.1000e-004**		**9.1000e-004**	**9.1000e-004**	**0.0000**	**0.9101**	**0.9101**	**2.5000e-004**	**1.0000e-005**	**0.9201**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1902					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.0000e-005	5.7000e-004	2.4000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.6554	0.6554	1.0000e-005	1.0000e-005	0.6593
Landscaping	4.7000e-003	1.8000e-003	0.1560	1.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004	0.0000	0.2547	0.2547	2.4000e-004	0.0000	0.2608
Total	**0.1950**	**2.3700e-003**	**0.1562**	**1.0000e-005**		**9.1000e-004**	**9.1000e-004**		**9.1000e-004**	**9.1000e-004**	**0.0000**	**0.9101**	**0.9101**	**2.5000e-004**	**1.0000e-005**	**0.9201**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2.2809	0.0447	1.0800e-003	3.7211
Unmitigated	2.2809	0.0447	1.0800e-003	3.7211

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	1.36823 / 0.862583	2.2809	0.0447	1.0800e-003	3.7211
Total		**2.2809**	**0.0447**	**1.0800e-003**	**3.7211**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	1.36823 / 0.862583	2.2809	0.0447	1.0800e-003	3.7211
Total		**2.2809**	**0.0447**	**1.0800e-003**	**3.7211**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	4.7744	0.2822	0.0000	11.8282
Unmitigated	4.7744	0.2822	0.0000	11.8282

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	23.52	4.7744	0.2822	0.0000	11.8282
Total		**4.7744**	**0.2822**	**0.0000**	**11.8282**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	23.52	4.7744	0.2822	0.0000	11.8282
Total		**4.7744**	**0.2822**	**0.0000**	**11.8282**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Unmitigated Construction-Homes 64-84

Sonoma-San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	21.00	Dwelling Unit	2.03	48,702.60	56

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	75
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	390.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Unmitigated Construction-Homes 64-84 - Sonoma-San Francisco County, Annual

Project Characteristics - CO2 intensity factor based on Renewable Energy Portfolio Standard. Start of construction as provided by the Applicant in response to request for information form(8/16/19).

Land Use - Building Construction for 21 units. Acreage and square footage for 21 units derived by dividing total acreage(10.17) and square footage(243,513) equally for 105 units. 2.65 persons per unit (City of Santa Rosa).

Construction Phase - As provided by Applicant in response to request for information form(8/16/19).

Off-road Equipment - Adjusted construction equipment usage to match CalEEMod default total building construction usage hours.

Vehicle Trips - Construction Only.

Woodstoves - Construction Only.

Area Coating - Construction Only.

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Compliance with BAAQMD best management practices threshold for fugitive dust; recommended measures from BAAQMD's Basic Construction Mitigation Measures for all Proposed Projects.

Mobile Land Use Mitigation -

Operational Off-Road Equipment -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Emergency Generators and Fire Pumps EF -

Unmitigated Construction-Homes 64-84 - Sonoma-San Francisco County, Annual

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Residential_Exterior	32874	0
tblAreaCoating	Area_Residential_Interior	98623	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberWood	9.03	0.00
tblLandUse	LandUseSquareFeet	37,800.00	48,702.60
tblLandUse	LotAcreage	6.82	2.03
tblLandUse	Population	60.00	56.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	UsageHours	8.00	2.80
tblOffRoadEquipment	UsageHours	7.00	3.20
tblOffRoadEquipment	UsageHours	8.00	3.20
tblOffRoadEquipment	UsageHours	6.00	2.80
tblOffRoadEquipment	UsageHours	8.00	3.20
tblProjectCharacteristics	CO2IntensityFactor	641.35	390.65
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	9.91	0.00
tblVehicleTrips	SU_TR	8.62	0.00
tblVehicleTrips	WD_TR	9.52	0.00
tblWoodstoves	WoodstoveWoodMass	956.80	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.0616	0.5529	0.5829	1.0100e-003	6.3700e-003	0.0278	0.0341	1.7200e-003	0.0261	0.0278	0.0000	87.8275	87.8275	0.0194	0.0000	88.3118
2023	0.3648	0.1951	0.2348	4.0000e-004	2.4900e-003	9.4000e-003	0.0119	6.7000e-004	8.8300e-003	9.5000e-003	0.0000	34.6808	34.6808	8.0500e-003	0.0000	34.8820
Maximum	**0.3648**	**0.5529**	**0.5829**	**1.0100e-003**	**6.3700e-003**	**0.0278**	**0.0341**	**1.7200e-003**	**0.0261**	**0.0278**	**0.0000**	**87.8275**	**87.8275**	**0.0194**	**0.0000**	**88.3118**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.0616	0.5529	0.5829	1.0100e-003	6.3700e-003	0.0278	0.0341	1.7200e-003	0.0261	0.0278	0.0000	87.8274	87.8274	0.0194	0.0000	88.3117
2023	0.3648	0.1951	0.2348	4.0000e-004	2.4900e-003	9.4000e-003	0.0119	6.7000e-004	8.8300e-003	9.5000e-003	0.0000	34.6807	34.6807	8.0500e-003	0.0000	34.8820
Maximum	**0.3648**	**0.5529**	**0.5829**	**1.0100e-003**	**6.3700e-003**	**0.0278**	**0.0341**	**1.7200e-003**	**0.0261**	**0.0278**	**0.0000**	**87.8274**	**87.8274**	**0.0194**	**0.0000**	**88.3117**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Unmitigated Construction-Homes 64-84 - Sonoma-San Francisco County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	5-6-2022	8-5-2022	0.2361	0.2361
2	8-6-2022	11-5-2022	0.2362	0.2362
3	11-6-2022	2-5-2023	0.2288	0.2288
4	2-6-2023	5-5-2023	0.4738	0.4738
		Highest	0.4738	0.4738

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1950	2.3600e-003	0.1562	1.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	0.9101	0.9101	2.6000e-004	1.0000e-005	0.9201
Energy	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	62.6774	62.6774	2.8600e-003	1.0600e-003	63.0647
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	4.7744	0.0000	4.7744	0.2822	0.0000	11.8282
Water						0.0000	0.0000		0.0000	0.0000	0.4341	1.8468	2.2809	0.0447	1.0800e-003	3.7211
Total	**0.1983**	**0.0305**	**0.1682**	**1.9000e-004**	**0.0000**	**3.1800e-003**	**3.1800e-003**	**0.0000**	**3.1800e-003**	**3.1800e-003**	**5.2084**	**65.4344**	**70.6428**	**0.3300**	**2.1500e-003**	**79.5341**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1950	2.3600e-003	0.1562	1.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	0.9101	0.9101	2.6000e-004	1.0000e-005	0.9201
Energy	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	62.6774	62.6774	2.8600e-003	1.0600e-003	63.0647
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	4.7744	0.0000	4.7744	0.2822	0.0000	11.8282
Water						0.0000	0.0000		0.0000	0.0000	0.4341	1.8468	2.2809	0.0447	1.0800e-003	3.7211
Total	**0.1983**	**0.0305**	**0.1682**	**1.9000e-004**	**0.0000**	**3.1800e-003**	**3.1800e-003**	**0.0000**	**3.1800e-003**	**3.1800e-003**	**5.2084**	**65.4344**	**70.6428**	**0.3300**	**2.1500e-003**	**79.5341**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	5/6/2022	3/9/2023	5	220	
2	Paving	Paving	3/10/2023	3/23/2023	5	10	
3	Architectural Coating	Architectural Coating	3/24/2023	4/6/2023	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 98,623; Residential Outdoor: 32,874; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	2.80	231	0.29
Building Construction	Forklifts	3	3.20	89	0.20
Building Construction	Generator Sets	1	3.20	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	2.80	97	0.37
Building Construction	Welders	1	3.20	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	9	8.00	2.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0584	0.5341	0.5596	9.2000e-004		0.0277	0.0277		0.0260	0.0260	0.0000	79.2500	79.2500	0.0190	0.0000	79.7247
Total	**0.0584**	**0.5341**	**0.5596**	**9.2000e-004**		**0.0277**	**0.0277**		**0.0260**	**0.0260**	**0.0000**	**79.2500**	**79.2500**	**0.0190**	**0.0000**	**79.7247**

3.2 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.7000e-004	0.0170	3.9900e-003	4.0000e-005	1.0000e-003	4.0000e-005	1.0400e-003	2.9000e-004	4.0000e-005	3.3000e-004	0.0000	3.9781	3.9781	2.4000e-004	0.0000	3.9842
Worker	2.8000e-003	1.8800e-003	0.0193	5.0000e-005	5.3700e-003	4.0000e-005	5.4100e-003	1.4300e-003	4.0000e-005	1.4700e-003	0.0000	4.5993	4.5993	1.4000e-004	0.0000	4.6029
Total	**3.2700e-003**	**0.0189**	**0.0233**	**9.0000e-005**	**6.3700e-003**	**8.0000e-005**	**6.4500e-003**	**1.7200e-003**	**8.0000e-005**	**1.8000e-003**	**0.0000**	**8.5775**	**8.5775**	**3.8000e-004**	**0.0000**	**8.5871**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0584	0.5341	0.5596	9.2000e-004		0.0277	0.0277		0.0260	0.0260	0.0000	79.2499	79.2499	0.0190	0.0000	79.7246
Total	**0.0584**	**0.5341**	**0.5596**	**9.2000e-004**		**0.0277**	**0.0277**		**0.0260**	**0.0260**	**0.0000**	**79.2499**	**79.2499**	**0.0190**	**0.0000**	**79.7246**

3.2 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.7000e-004	0.0170	3.9900e-003	4.0000e-005	1.0000e-003	4.0000e-005	1.0400e-003	2.9000e-004	4.0000e-005	3.3000e-004	0.0000	3.9781	3.9781	2.4000e-004	0.0000	3.9842
Worker	2.8000e-003	1.8800e-003	0.0193	5.0000e-005	5.3700e-003	4.0000e-005	5.4100e-003	1.4300e-003	4.0000e-005	1.4700e-003	0.0000	4.5993	4.5993	1.4000e-004	0.0000	4.6029
Total	**3.2700e-003**	**0.0189**	**0.0233**	**9.0000e-005**	**6.3700e-003**	**8.0000e-005**	**6.4500e-003**	**1.7200e-003**	**8.0000e-005**	**1.8000e-003**	**0.0000**	**8.5775**	**8.5775**	**3.8000e-004**	**0.0000**	**8.5871**

3.2 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0154	0.1410	0.1592	2.6000e-004		6.8600e-003	6.8600e-003		6.4500e-003	6.4500e-003	0.0000	22.7169	22.7169	5.4000e-003	0.0000	22.8520
Total	**0.0154**	**0.1410**	**0.1592**	**2.6000e-004**		**6.8600e-003**	**6.8600e-003**		**6.4500e-003**	**6.4500e-003**	**0.0000**	**22.7169**	**22.7169**	**5.4000e-003**	**0.0000**	**22.8520**

3.2 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-004	3.9200e-003	1.0100e-003	1.0000e-005	2.9000e-004	0.0000	2.9000e-004	8.0000e-005	0.0000	9.0000e-005	0.0000	1.1141	1.1141	6.0000e-005	0.0000	1.1156
Worker	7.4000e-004	4.8000e-004	4.9800e-003	1.0000e-005	1.5400e-003	1.0000e-005	1.5500e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.2672	1.2672	4.0000e-005	0.0000	1.2681
Total	**8.4000e-004**	**4.4000e-003**	**5.9900e-003**	**2.0000e-005**	**1.8300e-003**	**1.0000e-005**	**1.8400e-003**	**4.9000e-004**	**1.0000e-005**	**5.1000e-004**	**0.0000**	**2.3813**	**2.3813**	**1.0000e-004**	**0.0000**	**2.3837**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0154	0.1410	0.1592	2.6000e-004		6.8600e-003	6.8600e-003		6.4500e-003	6.4500e-003	0.0000	22.7168	22.7168	5.4000e-003	0.0000	22.8519
Total	**0.0154**	**0.1410**	**0.1592**	**2.6000e-004**		**6.8600e-003**	**6.8600e-003**		**6.4500e-003**	**6.4500e-003**	**0.0000**	**22.7168**	**22.7168**	**5.4000e-003**	**0.0000**	**22.8519**

3.2 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-004	3.9200e-003	1.0100e-003	1.0000e-005	2.9000e-004	0.0000	2.9000e-004	8.0000e-005	0.0000	9.0000e-005	0.0000	1.1141	1.1141	6.0000e-005	0.0000	1.1156
Worker	7.4000e-004	4.8000e-004	4.9800e-003	1.0000e-005	1.5400e-003	1.0000e-005	1.5500e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.2672	1.2672	4.0000e-005	0.0000	1.2681
Total	**8.4000e-004**	**4.4000e-003**	**5.9900e-003**	**2.0000e-005**	**1.8300e-003**	**1.0000e-005**	**1.8400e-003**	**4.9000e-004**	**1.0000e-005**	**5.1000e-004**	**0.0000**	**2.3813**	**2.3813**	**1.0000e-004**	**0.0000**	**2.3837**

3.3 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.4000e-003	0.0431	0.0584	9.0000e-005		2.1700e-003	2.1700e-003		2.0000e-003	2.0000e-003	0.0000	7.7564	7.7564	2.4600e-003	0.0000	7.8179
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.4000e-003**	**0.0431**	**0.0584**	**9.0000e-005**		**2.1700e-003**	**2.1700e-003**		**2.0000e-003**	**2.0000e-003**	**0.0000**	**7.7564**	**7.7564**	**2.4600e-003**	**0.0000**	**7.8179**

3.3 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-004	1.8000e-004	1.9100e-003	1.0000e-005	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4849	0.4849	1.0000e-005	0.0000	0.4853
Total	**2.9000e-004**	**1.8000e-004**	**1.9100e-003**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**5.9000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.4849**	**0.4849**	**1.0000e-005**	**0.0000**	**0.4853**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.4000e-003	0.0431	0.0584	9.0000e-005		2.1700e-003	2.1700e-003		2.0000e-003	2.0000e-003	0.0000	7.7564	7.7564	2.4600e-003	0.0000	7.8178
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.4000e-003**	**0.0431**	**0.0584**	**9.0000e-005**		**2.1700e-003**	**2.1700e-003**		**2.0000e-003**	**2.0000e-003**	**0.0000**	**7.7564**	**7.7564**	**2.4600e-003**	**0.0000**	**7.8178**

3.3 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-004	1.8000e-004	1.9100e-003	1.0000e-005	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4849	0.4849	1.0000e-005	0.0000	0.4853
Total	**2.9000e-004**	**1.8000e-004**	**1.9100e-003**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**5.9000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.4849**	**0.4849**	**1.0000e-005**	**0.0000**	**0.4853**

3.4 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3428					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.6000e-004	6.5100e-003	9.0600e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2785
Total	**0.3438**	**6.5100e-003**	**9.0600e-003**	**1.0000e-005**		**3.5000e-004**	**3.5000e-004**		**3.5000e-004**	**3.5000e-004**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2785**

3.4 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	2.0000e-005	2.5000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0647	0.0647	0.0000	0.0000	0.0647
Total	**4.0000e-005**	**2.0000e-005**	**2.5000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0647**	**0.0647**	**0.0000**	**0.0000**	**0.0647**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3428					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.6000e-004	6.5100e-003	9.0600e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2785
Total	**0.3438**	**6.5100e-003**	**9.0600e-003**	**1.0000e-005**		**3.5000e-004**	**3.5000e-004**		**3.5000e-004**	**3.5000e-004**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2785**

3.4 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	2.0000e-005	2.5000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0647	0.0647	0.0000	0.0000	0.0647
Total	**4.0000e-005**	**2.0000e-005**	**2.5000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0647**	**0.0647**	**0.0000**	**0.0000**	**0.0647**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.594113	0.036394	0.166849	0.102253	0.024126	0.006070	0.030484	0.028024	0.003137	0.001706	0.004997	0.000880	0.000967

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	30.1059	30.1059	2.2300e-003	4.6000e-004	30.2996
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	30.1059	30.1059	2.2300e-003	4.6000e-004	30.2996
NaturalGas Mitigated	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	32.5715	32.5715	6.2000e-004	6.0000e-004	32.7651
NaturalGas Unmitigated	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	32.5715	32.5715	6.2000e-004	6.0000e-004	32.7651

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	610367	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	32.5715	32.5715	6.2000e-004	6.0000e-004	32.7651
Total		**3.2900e-003**	**0.0281**	**0.0120**	**1.8000e-004**		**2.2700e-003**	**2.2700e-003**		**2.2700e-003**	**2.2700e-003**	**0.0000**	**32.5715**	**32.5715**	**6.2000e-004**	**6.0000e-004**	**32.7651**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	610367	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	32.5715	32.5715	6.2000e-004	6.0000e-004	32.7651
Total		**3.2900e-003**	**0.0281**	**0.0120**	**1.8000e-004**		**2.2700e-003**	**2.2700e-003**		**2.2700e-003**	**2.2700e-003**	**0.0000**	**32.5715**	**32.5715**	**6.2000e-004**	**6.0000e-004**	**32.7651**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	169902	30.1059	2.2300e-003	4.6000e-004	30.2996
Total		**30.1059**	**2.2300e-003**	**4.6000e-004**	**30.2996**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	169902	30.1059	2.2300e-003	4.6000e-004	30.2996
Total		**30.1059**	**2.2300e-003**	**4.6000e-004**	**30.2996**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1950	2.3600e-003	0.1562	1.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	0.9101	0.9101	2.6000e-004	1.0000e-005	0.9201
Unmitigated	0.1950	2.3600e-003	0.1562	1.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	0.9101	0.9101	2.6000e-004	1.0000e-005	0.9201

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1902					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.0000e-005	5.7000e-004	2.4000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.6554	0.6554	1.0000e-005	1.0000e-005	0.6593
Landscaping	4.7000e-003	1.8000e-003	0.1560	1.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004	0.0000	0.2547	0.2547	2.4000e-004	0.0000	0.2608
Total	**0.1950**	**2.3700e-003**	**0.1562**	**1.0000e-005**		**9.1000e-004**	**9.1000e-004**		**9.1000e-004**	**9.1000e-004**	**0.0000**	**0.9101**	**0.9101**	**2.5000e-004**	**1.0000e-005**	**0.9201**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1902					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.0000e-005	5.7000e-004	2.4000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.6554	0.6554	1.0000e-005	1.0000e-005	0.6593
Landscaping	4.7000e-003	1.8000e-003	0.1560	1.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004	0.0000	0.2547	0.2547	2.4000e-004	0.0000	0.2608
Total	**0.1950**	**2.3700e-003**	**0.1562**	**1.0000e-005**		**9.1000e-004**	**9.1000e-004**		**9.1000e-004**	**9.1000e-004**	**0.0000**	**0.9101**	**0.9101**	**2.5000e-004**	**1.0000e-005**	**0.9201**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2.2809	0.0447	1.0800e-003	3.7211
Unmitigated	2.2809	0.0447	1.0800e-003	3.7211

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	1.36823 / 0.862583	2.2809	0.0447	1.0800e-003	3.7211
Total		**2.2809**	**0.0447**	**1.0800e-003**	**3.7211**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	1.36823 / 0.862583	2.2809	0.0447	1.0800e-003	3.7211
Total		**2.2809**	**0.0447**	**1.0800e-003**	**3.7211**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	4.7744	0.2822	0.0000	11.8282
Unmitigated	4.7744	0.2822	0.0000	11.8282

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	23.52	4.7744	0.2822	0.0000	11.8282
Total		**4.7744**	**0.2822**	**0.0000**	**11.8282**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	23.52	4.7744	0.2822	0.0000	11.8282
Total		**4.7744**	**0.2822**	**0.0000**	**11.8282**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Unmitigated Construction-Homes 85-105

Sonoma-San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	21.00	Dwelling Unit	2.03	48,702.60	55

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	75
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	390.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Unmitigated Construction-Homes 85-105 - Sonoma-San Francisco County, Annual

Project Characteristics - CO2 intensity factor based on Renewable Energy Portfolio Standard. Start of construction as provided by the Applicant in response to request for information form(8/16/19).

Land Use - Acreage and square footage for 21 units derived by dividing total acreage(10.17) and square footage(243,513) equally for 105 units. 2.65 persons per unit(City of Santa Rosa).Rounded down to be consistent with total population of 279.

Construction Phase - As provided by Applicant in response to request for information form(8/16/19).

Off-road Equipment - Adjusted construction equipment usage to match CalEEMod default total building construction usage hours.

Vehicle Trips - Construction Only.

Woodstoves - Construction Only.

Area Coating - Construction Only.

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Compliance with BAAQMD best management practices threshold for fugitive dust; recommended measures from BAAQMD's Basic Construction Mitigation Measures for all Proposed Projects.

Mobile Land Use Mitigation -

Operational Off-Road Equipment -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Emergency Generators and Fire Pumps EF -

Unmitigated Construction-Homes 85-105 - Sonoma-San Francisco County, Annual

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Residential_Exterior	32874	0
tblAreaCoating	Area_Residential_Interior	98623	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberWood	9.03	0.00
tblLandUse	LandUseSquareFeet	37,800.00	48,702.60
tblLandUse	LotAcreage	6.82	2.03
tblLandUse	Population	60.00	55.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	UsageHours	8.00	2.80
tblOffRoadEquipment	UsageHours	7.00	3.20
tblOffRoadEquipment	UsageHours	8.00	3.20
tblOffRoadEquipment	UsageHours	6.00	2.80
tblOffRoadEquipment	UsageHours	8.00	3.20
tblProjectCharacteristics	CO2IntensityFactor	641.35	390.65
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	9.91	0.00
tblVehicleTrips	SU_TR	8.62	0.00
tblVehicleTrips	WD_TR	9.52	0.00
tblWoodstoves	WoodstoveWoodMass	956.80	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.0115	0.1035	0.1091	1.9000e-004	1.1900e-003	5.1900e-003	6.3800e-003	3.2000e-004	4.8900e-003	5.2100e-003	0.0000	16.4356	16.4356	3.6300e-003	0.0000	16.5262
2023	0.4109	0.6075	0.7034	1.2200e-003	7.6700e-003	0.0289	0.0366	2.0700e-003	0.0272	0.0292	0.0000	105.8776	105.8776	0.0237	0.0000	106.4690
Maximum	**0.4109**	**0.6075**	**0.7034**	**1.2200e-003**	**7.6700e-003**	**0.0289**	**0.0366**	**2.0700e-003**	**0.0272**	**0.0292**	**0.0000**	**105.8776**	**105.8776**	**0.0237**	**0.0000**	**106.4690**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.0115	0.1035	0.1091	1.9000e-004	1.1900e-003	5.1900e-003	6.3800e-003	3.2000e-004	4.8900e-003	5.2100e-003	0.0000	16.4355	16.4355	3.6300e-003	0.0000	16.5262
2023	0.4109	0.6075	0.7034	1.2200e-003	7.6700e-003	0.0289	0.0366	2.0700e-003	0.0272	0.0292	0.0000	105.8775	105.8775	0.0237	0.0000	106.4689
Maximum	**0.4109**	**0.6075**	**0.7034**	**1.2200e-003**	**7.6700e-003**	**0.0289**	**0.0366**	**2.0700e-003**	**0.0272**	**0.0292**	**0.0000**	**105.8775**	**105.8775**	**0.0237**	**0.0000**	**106.4689**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Unmitigated Construction-Homes 85-105 - Sonoma-San Francisco County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	11-17-2022	2-16-2023	0.2264	0.2264
2	2-17-2023	5-16-2023	0.2097	0.2097
3	5-17-2023	8-16-2023	0.2167	0.2167
4	8-17-2023	9-30-2023	0.1167	0.1167
		Highest	0.2264	0.2264

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1950	2.3600e-003	0.1562	1.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	0.9101	0.9101	2.6000e-004	1.0000e-005	0.9201
Energy	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	62.6774	62.6774	2.8600e-003	1.0600e-003	63.0647
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	4.6891	0.0000	4.6891	0.2771	0.0000	11.6170
Water						0.0000	0.0000		0.0000	0.0000	0.4341	1.8468	2.2809	0.0447	1.0800e-003	3.7211
Total	**0.1983**	**0.0305**	**0.1682**	**1.9000e-004**	**0.0000**	**3.1800e-003**	**3.1800e-003**	**0.0000**	**3.1800e-003**	**3.1800e-003**	**5.1232**	**65.4344**	**70.5575**	**0.3250**	**2.1500e-003**	**79.3229**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1950	2.3600e-003	0.1562	1.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	0.9101	0.9101	2.6000e-004	1.0000e-005	0.9201
Energy	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	62.6774	62.6774	2.8600e-003	1.0600e-003	63.0647
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	4.6891	0.0000	4.6891	0.2771	0.0000	11.6170
Water						0.0000	0.0000		0.0000	0.0000	0.4341	1.8468	2.2809	0.0447	1.0800e-003	3.7211
Total	**0.1983**	**0.0305**	**0.1682**	**1.9000e-004**	**0.0000**	**3.1800e-003**	**3.1800e-003**	**0.0000**	**3.1800e-003**	**3.1800e-003**	**5.1232**	**65.4344**	**70.5575**	**0.3250**	**2.1500e-003**	**79.3229**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	11/17/2022	9/20/2023	5	220	
2	Paving	Paving	9/21/2023	10/4/2023	5	10	
3	Architectural Coating	Architectural Coating	10/5/2023	10/18/2023	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 98,623; Residential Outdoor: 32,874; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	2.80	231	0.29
Building Construction	Forklifts	3	3.20	89	0.20
Building Construction	Generator Sets	1	3.20	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	2.80	97	0.37
Building Construction	Welders	1	3.20	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	9	8.00	2.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.0999	0.1047	1.7000e-004		5.1800e-003	5.1800e-003		4.8700e-003	4.8700e-003	0.0000	14.8304	14.8304	3.5500e-003	0.0000	14.9192
Total	**0.0109**	**0.0999**	**0.1047**	**1.7000e-004**		**5.1800e-003**	**5.1800e-003**		**4.8700e-003**	**4.8700e-003**	**0.0000**	**14.8304**	**14.8304**	**3.5500e-003**	**0.0000**	**14.9192**

3.2 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.0000e-005	3.1800e-003	7.5000e-004	1.0000e-005	1.9000e-004	1.0000e-005	1.9000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.7445	0.7445	5.0000e-005	0.0000	0.7456
Worker	5.2000e-004	3.5000e-004	3.6100e-003	1.0000e-005	1.0000e-003	1.0000e-005	1.0100e-003	2.7000e-004	1.0000e-005	2.7000e-004	0.0000	0.8607	0.8607	3.0000e-005	0.0000	0.8614
Total	**6.1000e-004**	**3.5300e-003**	**4.3600e-003**	**2.0000e-005**	**1.1900e-003**	**2.0000e-005**	**1.2000e-003**	**3.2000e-004**	**2.0000e-005**	**3.3000e-004**	**0.0000**	**1.6051**	**1.6051**	**8.0000e-005**	**0.0000**	**1.6069**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.0999	0.1047	1.7000e-004		5.1800e-003	5.1800e-003		4.8700e-003	4.8700e-003	0.0000	14.8304	14.8304	3.5500e-003	0.0000	14.9192
Total	**0.0109**	**0.0999**	**0.1047**	**1.7000e-004**		**5.1800e-003**	**5.1800e-003**		**4.8700e-003**	**4.8700e-003**	**0.0000**	**14.8304**	**14.8304**	**3.5500e-003**	**0.0000**	**14.9192**

3.2 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.0000e-005	3.1800e-003	7.5000e-004	1.0000e-005	1.9000e-004	1.0000e-005	1.9000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.7445	0.7445	5.0000e-005	0.0000	0.7456
Worker	5.2000e-004	3.5000e-004	3.6100e-003	1.0000e-005	1.0000e-003	1.0000e-005	1.0100e-003	2.7000e-004	1.0000e-005	2.7000e-004	0.0000	0.8607	0.8607	3.0000e-005	0.0000	0.8614
Total	**6.1000e-004**	**3.5300e-003**	**4.3600e-003**	**2.0000e-005**	**1.1900e-003**	**2.0000e-005**	**1.2000e-003**	**3.2000e-004**	**2.0000e-005**	**3.3000e-004**	**0.0000**	**1.6051**	**1.6051**	**8.0000e-005**	**0.0000**	**1.6069**

3.2 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0591	0.5409	0.6108	1.0100e-003		0.0263	0.0263		0.0248	0.0248	0.0000	87.1586	87.1586	0.0207	0.0000	87.6769
Total	**0.0591**	**0.5409**	**0.6108**	**1.0100e-003**		**0.0263**	**0.0263**		**0.0248**	**0.0248**	**0.0000**	**87.1586**	**87.1586**	**0.0207**	**0.0000**	**87.6769**

3.2 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.9000e-004	0.0150	3.8900e-003	4.0000e-005	1.1000e-003	2.0000e-005	1.1200e-003	3.2000e-004	2.0000e-005	3.4000e-004	0.0000	4.2745	4.2745	2.3000e-004	0.0000	4.2804
Worker	2.8600e-003	1.8400e-003	0.0191	5.0000e-005	5.9000e-003	4.0000e-005	5.9400e-003	1.5700e-003	4.0000e-005	1.6100e-003	0.0000	4.8620	4.8620	1.4000e-004	0.0000	4.8654
Total	**3.2500e-003**	**0.0169**	**0.0230**	**9.0000e-005**	**7.0000e-003**	**6.0000e-005**	**7.0600e-003**	**1.8900e-003**	**6.0000e-005**	**1.9500e-003**	**0.0000**	**9.1365**	**9.1365**	**3.7000e-004**	**0.0000**	**9.1458**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0591	0.5409	0.6108	1.0100e-003		0.0263	0.0263		0.0248	0.0248	0.0000	87.1585	87.1585	0.0207	0.0000	87.6768
Total	**0.0591**	**0.5409**	**0.6108**	**1.0100e-003**		**0.0263**	**0.0263**		**0.0248**	**0.0248**	**0.0000**	**87.1585**	**87.1585**	**0.0207**	**0.0000**	**87.6768**

3.2 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.9000e-004	0.0150	3.8900e-003	4.0000e-005	1.1000e-003	2.0000e-005	1.1200e-003	3.2000e-004	2.0000e-005	3.4000e-004	0.0000	4.2745	4.2745	2.3000e-004	0.0000	4.2804
Worker	2.8600e-003	1.8400e-003	0.0191	5.0000e-005	5.9000e-003	4.0000e-005	5.9400e-003	1.5700e-003	4.0000e-005	1.6100e-003	0.0000	4.8620	4.8620	1.4000e-004	0.0000	4.8654
Total	**3.2500e-003**	**0.0169**	**0.0230**	**9.0000e-005**	**7.0000e-003**	**6.0000e-005**	**7.0600e-003**	**1.8900e-003**	**6.0000e-005**	**1.9500e-003**	**0.0000**	**9.1365**	**9.1365**	**3.7000e-004**	**0.0000**	**9.1458**

3.3 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.4000e-003	0.0431	0.0584	9.0000e-005		2.1700e-003	2.1700e-003		2.0000e-003	2.0000e-003	0.0000	7.7564	7.7564	2.4600e-003	0.0000	7.8179
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.4000e-003**	**0.0431**	**0.0584**	**9.0000e-005**		**2.1700e-003**	**2.1700e-003**		**2.0000e-003**	**2.0000e-003**	**0.0000**	**7.7564**	**7.7564**	**2.4600e-003**	**0.0000**	**7.8179**

3.3 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-004	1.8000e-004	1.9100e-003	1.0000e-005	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4849	0.4849	1.0000e-005	0.0000	0.4853
Total	**2.9000e-004**	**1.8000e-004**	**1.9100e-003**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**5.9000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.4849**	**0.4849**	**1.0000e-005**	**0.0000**	**0.4853**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.4000e-003	0.0431	0.0584	9.0000e-005		2.1700e-003	2.1700e-003		2.0000e-003	2.0000e-003	0.0000	7.7564	7.7564	2.4600e-003	0.0000	7.8178
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.4000e-003**	**0.0431**	**0.0584**	**9.0000e-005**		**2.1700e-003**	**2.1700e-003**		**2.0000e-003**	**2.0000e-003**	**0.0000**	**7.7564**	**7.7564**	**2.4600e-003**	**0.0000**	**7.8178**

3.3 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-004	1.8000e-004	1.9100e-003	1.0000e-005	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4849	0.4849	1.0000e-005	0.0000	0.4853
Total	**2.9000e-004**	**1.8000e-004**	**1.9100e-003**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**5.9000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.4849**	**0.4849**	**1.0000e-005**	**0.0000**	**0.4853**

3.4 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3428					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.6000e-004	6.5100e-003	9.0600e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2785
Total	**0.3438**	**6.5100e-003**	**9.0600e-003**	**1.0000e-005**		**3.5000e-004**	**3.5000e-004**		**3.5000e-004**	**3.5000e-004**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2785**

3.4 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	2.0000e-005	2.5000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0647	0.0647	0.0000	0.0000	0.0647
Total	**4.0000e-005**	**2.0000e-005**	**2.5000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0647**	**0.0647**	**0.0000**	**0.0000**	**0.0647**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3428					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.6000e-004	6.5100e-003	9.0600e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2785
Total	**0.3438**	**6.5100e-003**	**9.0600e-003**	**1.0000e-005**		**3.5000e-004**	**3.5000e-004**		**3.5000e-004**	**3.5000e-004**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2785**

3.4 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	2.0000e-005	2.5000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0647	0.0647	0.0000	0.0000	0.0647
Total	**4.0000e-005**	**2.0000e-005**	**2.5000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0647**	**0.0647**	**0.0000**	**0.0000**	**0.0647**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.594113	0.036394	0.166849	0.102253	0.024126	0.006070	0.030484	0.028024	0.003137	0.001706	0.004997	0.000880	0.000967

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	30.1059	30.1059	2.2300e-003	4.6000e-004	30.2996
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	30.1059	30.1059	2.2300e-003	4.6000e-004	30.2996
NaturalGas Mitigated	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	32.5715	32.5715	6.2000e-004	6.0000e-004	32.7651
NaturalGas Unmitigated	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	32.5715	32.5715	6.2000e-004	6.0000e-004	32.7651

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	610367	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	32.5715	32.5715	6.2000e-004	6.0000e-004	32.7651
Total		**3.2900e-003**	**0.0281**	**0.0120**	**1.8000e-004**		**2.2700e-003**	**2.2700e-003**		**2.2700e-003**	**2.2700e-003**	**0.0000**	**32.5715**	**32.5715**	**6.2000e-004**	**6.0000e-004**	**32.7651**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	610367	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	32.5715	32.5715	6.2000e-004	6.0000e-004	32.7651
Total		**3.2900e-003**	**0.0281**	**0.0120**	**1.8000e-004**		**2.2700e-003**	**2.2700e-003**		**2.2700e-003**	**2.2700e-003**	**0.0000**	**32.5715**	**32.5715**	**6.2000e-004**	**6.0000e-004**	**32.7651**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	169902	30.1059	2.2300e-003	4.6000e-004	30.2996
Total		**30.1059**	**2.2300e-003**	**4.6000e-004**	**30.2996**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	169902	30.1059	2.2300e-003	4.6000e-004	30.2996
Total		**30.1059**	**2.2300e-003**	**4.6000e-004**	**30.2996**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1950	2.3600e-003	0.1562	1.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	0.9101	0.9101	2.6000e-004	1.0000e-005	0.9201
Unmitigated	0.1950	2.3600e-003	0.1562	1.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	0.9101	0.9101	2.6000e-004	1.0000e-005	0.9201

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1902					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.0000e-005	5.7000e-004	2.4000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.6554	0.6554	1.0000e-005	1.0000e-005	0.6593
Landscaping	4.7000e-003	1.8000e-003	0.1560	1.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004	0.0000	0.2547	0.2547	2.4000e-004	0.0000	0.2608
Total	**0.1950**	**2.3700e-003**	**0.1562**	**1.0000e-005**		**9.1000e-004**	**9.1000e-004**		**9.1000e-004**	**9.1000e-004**	**0.0000**	**0.9101**	**0.9101**	**2.5000e-004**	**1.0000e-005**	**0.9201**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1902					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.0000e-005	5.7000e-004	2.4000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.6554	0.6554	1.0000e-005	1.0000e-005	0.6593
Landscaping	4.7000e-003	1.8000e-003	0.1560	1.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004	0.0000	0.2547	0.2547	2.4000e-004	0.0000	0.2608
Total	**0.1950**	**2.3700e-003**	**0.1562**	**1.0000e-005**		**9.1000e-004**	**9.1000e-004**		**9.1000e-004**	**9.1000e-004**	**0.0000**	**0.9101**	**0.9101**	**2.5000e-004**	**1.0000e-005**	**0.9201**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2.2809	0.0447	1.0800e-003	3.7211
Unmitigated	2.2809	0.0447	1.0800e-003	3.7211

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	1.36823 / 0.862583	2.2809	0.0447	1.0800e-003	3.7211
Total		**2.2809**	**0.0447**	**1.0800e-003**	**3.7211**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	1.36823 / 0.862583	2.2809	0.0447	1.0800e-003	3.7211
Total		**2.2809**	**0.0447**	**1.0800e-003**	**3.7211**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	4.6891	0.2771	0.0000	11.6170
Unmitigated	4.6891	0.2771	0.0000	11.6170

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	23.1	4.6891	0.2771	0.0000	11.6170
Total		**4.6891**	**0.2771**	**0.0000**	**11.6170**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	23.1	4.6891	0.2771	0.0000	11.6170
Total		**4.6891**	**0.2771**	**0.0000**	**11.6170**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Mitigated(Tier 4 Final) Construction-Demolition,Site Prep,Grading,Paving

Sonoma-San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	3.98	Acre	3.98	173,368.80	0
Other Non-Asphalt Surfaces	0.45	Acre	0.45	19,557.00	0
Other Non-Asphalt Surfaces	14.00	Acre	14.00	609,840.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	75
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	390.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Mitigated(Tier 4 Final) Construction-Demolition,Site Prep,Grading,Paving - Sonoma-San Francisco County, Annual

Project Characteristics - CO2 intensity factor based on Renewable Energy Portfolio Standard. Start of construction as provided by the Applicant in response to request for information form(8/16/19).

Land Use - 3.98 acre internal road deducting acreage for 105 lots and 0.45 acres of stormwater treatment area from 14.6 acres of total acres as provided in Project Description and Site Plans.19,557 sqft stormwater treatment area as provided by Applicant.

Construction Phase - Schedule as provided by Applicant in response to request for information form(8/16/19). Construction for Stomwater Treatment Area considered to be building construction activity for conservative analysis.

Trips and VMT -

Demolition - Building (sqft) = 1,824 sqft single-family home as stated in Project Description. Total sqft converted to tons of debris.

Grading - As provided by Applicant in response to request for information form(8/16/19).

Vehicle Trips - Construction Only.

Area Coating - Construction Only.

Energy Use -

Construction Off-road Equipment Mitigation - Compliance with BAAQMD best management practices threshold for fugitive dust; recommended measures from BAAQMD's Basic Construction Mitigation Measures for all Proposed Projects.
Tier 4 Final mitigation applied to equipment with 50 HP or greater.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Parking	48166	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	300.00	100.00
tblConstructionPhase	NumDays	20.00	70.00
tblGrading	MaterialImported	0.00	1,100.00
tblLandUse	LandUseSquareFeet	19,602.00	19,557.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	390.65

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.3589	3.3316	2.8711	6.8400e-003	0.4070	0.1301	0.5371	0.1540	0.1209	0.2749	0.0000	617.6858	617.6858	0.1066	0.0000	620.3513
Maximum	**0.3589**	**3.3316**	**2.8711**	**6.8400e-003**	**0.4070**	**0.1301**	**0.5371**	**0.1540**	**0.1209**	**0.2749**	**0.0000**	**617.6858**	**617.6858**	**0.1066**	**0.0000**	**620.3513**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1635	1.0541	3.0665	6.8400e-003	0.2847	0.0123	0.2970	0.0969	0.0122	0.1091	0.0000	617.6854	617.6854	0.1066	0.0000	620.3509
Maximum	**0.1635**	**1.0541**	**3.0665**	**6.8400e-003**	**0.2847**	**0.0123**	**0.2970**	**0.0969**	**0.0122**	**0.1091**	**0.0000**	**617.6854**	**617.6854**	**0.1066**	**0.0000**	**620.3509**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**54.45**	**68.36**	**-6.80**	**0.00**	**30.04**	**90.53**	**44.70**	**37.09**	**89.94**	**60.34**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Mitigated(Tier 4 Final) Construction-Demolition,Site Prep,Grading,Paving - Sonoma-San Francisco County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-1-2021	6-30-2021	2.0259	0.4852
2	7-1-2021	9-30-2021	1.6534	0.7211
		Highest	2.0259	0.7211

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0519	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.3000e-004	3.3000e-004	0.0000	0.0000	3.5000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0519**	**0.0000**	**1.7000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**3.3000e-004**	**3.3000e-004**	**0.0000**	**0.0000**	**3.5000e-004**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0519	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.3000e-004	3.3000e-004	0.0000	0.0000	3.5000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0519**	**0.0000**	**1.7000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**3.3000e-004**	**3.3000e-004**	**0.0000**	**0.0000**	**3.5000e-004**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Mitigated(Tier 4 Final) Construction-Demolition,Site Prep,Grading,Paving - Sonoma-San Francisco County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2021	4/28/2021	5	20	
2	Site Preparation	Site Preparation	4/29/2021	5/12/2021	5	10	
3	Grading	Grading	5/13/2021	6/23/2021	5	30	
4	Stormwater Treatment Area	Building Construction	5/13/2021	9/29/2021	5	100	
5	Paving	Paving	6/24/2021	9/29/2021	5	70	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 18.43

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Mitigated(Tier 4 Final) Construction-Demolition,Site Prep,Grading,Paving - Sonoma-San Francisco County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Stormwater Treatment Area	Cranes	1	7.00	231	0.29
Stormwater Treatment Area	Forklifts	3	8.00	89	0.20
Stormwater Treatment Area	Generator Sets	1	8.00	84	0.74
Stormwater Treatment Area	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Stormwater Treatment Area	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	17.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	138.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Stormwater Treatment Area	9	337.00	132.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.7900e-003	0.0000	1.7900e-003	2.7000e-004	0.0000	2.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0317	0.3144	0.2157	3.9000e-004		0.0155	0.0155		0.0144	0.0144	0.0000	34.0008	34.0008	9.5700e-003	0.0000	34.2400
Total	**0.0317**	**0.3144**	**0.2157**	**3.9000e-004**	**1.7900e-003**	**0.0155**	**0.0173**	**2.7000e-004**	**0.0144**	**0.0147**	**0.0000**	**34.0008**	**34.0008**	**9.5700e-003**	**0.0000**	**34.2400**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.0000e-005	2.3100e-003	4.9000e-004	1.0000e-005	1.4000e-004	1.0000e-005	1.5000e-004	4.0000e-005	1.0000e-005	5.0000e-005	0.0000	0.6462	0.6462	4.0000e-005	0.0000	0.6472
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e-004	4.6000e-004	4.7300e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0469	1.0469	4.0000e-005	0.0000	1.0478
Total	**7.2000e-004**	**2.7700e-003**	**5.2200e-003**	**2.0000e-005**	**1.3200e-003**	**2.0000e-005**	**1.3400e-003**	**3.5000e-004**	**2.0000e-005**	**3.7000e-004**	**0.0000**	**1.6932**	**1.6932**	**8.0000e-005**	**0.0000**	**1.6950**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.0000e-004	0.0000	8.0000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.6200e-003	0.0200	0.2328	3.9000e-004		6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004	0.0000	34.0007	34.0007	9.5700e-003	0.0000	34.2400
Total	**4.6200e-003**	**0.0200**	**0.2328**	**3.9000e-004**	**8.0000e-004**	**6.2000e-004**	**1.4200e-003**	**1.2000e-004**	**6.2000e-004**	**7.4000e-004**	**0.0000**	**34.0007**	**34.0007**	**9.5700e-003**	**0.0000**	**34.2400**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.0000e-005	2.3100e-003	4.9000e-004	1.0000e-005	1.4000e-004	1.0000e-005	1.5000e-004	4.0000e-005	1.0000e-005	5.0000e-005	0.0000	0.6462	0.6462	4.0000e-005	0.0000	0.6472
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e-004	4.6000e-004	4.7300e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0469	1.0469	4.0000e-005	0.0000	1.0478
Total	**7.2000e-004**	**2.7700e-003**	**5.2200e-003**	**2.0000e-005**	**1.3200e-003**	**2.0000e-005**	**1.3400e-003**	**3.5000e-004**	**2.0000e-005**	**3.7000e-004**	**0.0000**	**1.6932**	**1.6932**	**8.0000e-005**	**0.0000**	**1.6950**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0194	0.2025	0.1058	1.9000e-004		0.0102	0.0102		9.4000e-003	9.4000e-003	0.0000	16.7179	16.7179	5.4100e-003	0.0000	16.8530
Total	**0.0194**	**0.2025**	**0.1058**	**1.9000e-004**	**0.0903**	**0.0102**	**0.1006**	**0.0497**	**9.4000e-003**	**0.0591**	**0.0000**	**16.7179**	**16.7179**	**5.4100e-003**	**0.0000**	**16.8530**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-004	2.8000e-004	2.8400e-003	1.0000e-005	7.1000e-004	1.0000e-005	7.1000e-004	1.9000e-004	1.0000e-005	1.9000e-004	0.0000	0.6282	0.6282	2.0000e-005	0.0000	0.6287
Total	**4.0000e-004**	**2.8000e-004**	**2.8400e-003**	**1.0000e-005**	**7.1000e-004**	**1.0000e-005**	**7.1000e-004**	**1.9000e-004**	**1.0000e-005**	**1.9000e-004**	**0.0000**	**0.6282**	**0.6282**	**2.0000e-005**	**0.0000**	**0.6287**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0407	0.0000	0.0407	0.0223	0.0000	0.0223	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3300e-003	0.0101	0.1043	1.9000e-004		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004	0.0000	16.7178	16.7178	5.4100e-003	0.0000	16.8530
Total	**2.3300e-003**	**0.0101**	**0.1043**	**1.9000e-004**	**0.0407**	**3.1000e-004**	**0.0410**	**0.0223**	**3.1000e-004**	**0.0227**	**0.0000**	**16.7178**	**16.7178**	**5.4100e-003**	**0.0000**	**16.8530**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-004	2.8000e-004	2.8400e-003	1.0000e-005	7.1000e-004	1.0000e-005	7.1000e-004	1.9000e-004	1.0000e-005	1.9000e-004	0.0000	0.6282	0.6282	2.0000e-005	0.0000	0.6287
Total	**4.0000e-004**	**2.8000e-004**	**2.8400e-003**	**1.0000e-005**	**7.1000e-004**	**1.0000e-005**	**7.1000e-004**	**1.9000e-004**	**1.0000e-005**	**1.9000e-004**	**0.0000**	**0.6282**	**0.6282**	**2.0000e-005**	**0.0000**	**0.6287**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1302	0.0000	0.1302	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0629	0.6960	0.4632	9.3000e-004		0.0298	0.0298		0.0274	0.0274	0.0000	81.7425	81.7425	0.0264	0.0000	82.4034
Total	**0.0629**	**0.6960**	**0.4632**	**9.3000e-004**	**0.1302**	**0.0298**	**0.1599**	**0.0540**	**0.0274**	**0.0814**	**0.0000**	**81.7425**	**81.7425**	**0.0264**	**0.0000**	**82.4034**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.2000e-004	0.0188	3.9900e-003	5.0000e-005	1.1400e-003	6.0000e-005	1.2100e-003	3.1000e-004	6.0000e-005	3.7000e-004	0.0000	5.2459	5.2459	3.2000e-004	0.0000	5.2540
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3300e-003	9.3000e-004	9.4500e-003	2.0000e-005	2.3500e-003	2.0000e-005	2.3700e-003	6.3000e-004	2.0000e-005	6.4000e-004	0.0000	2.0939	2.0939	7.0000e-005	0.0000	2.0956
Total	**1.8500e-003**	**0.0197**	**0.0134**	**7.0000e-005**	**3.4900e-003**	**8.0000e-005**	**3.5800e-003**	**9.4000e-004**	**8.0000e-005**	**1.0100e-003**	**0.0000**	**7.3398**	**7.3398**	**3.9000e-004**	**0.0000**	**7.3496**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0586	0.0000	0.0586	0.0243	0.0000	0.0243	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0114	0.0495	0.4950	9.3000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	81.7424	81.7424	0.0264	0.0000	82.4033
Total	**0.0114**	**0.0495**	**0.4950**	**9.3000e-004**	**0.0586**	**1.5200e-003**	**0.0601**	**0.0243**	**1.5200e-003**	**0.0258**	**0.0000**	**81.7424**	**81.7424**	**0.0264**	**0.0000**	**82.4033**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.2000e-004	0.0188	3.9900e-003	5.0000e-005	1.1400e-003	6.0000e-005	1.2100e-003	3.1000e-004	6.0000e-005	3.7000e-004	0.0000	5.2459	5.2459	3.2000e-004	0.0000	5.2540
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3300e-003	9.3000e-004	9.4500e-003	2.0000e-005	2.3500e-003	2.0000e-005	2.3700e-003	6.3000e-004	2.0000e-005	6.4000e-004	0.0000	2.0939	2.0939	7.0000e-005	0.0000	2.0956
Total	**1.8500e-003**	**0.0197**	**0.0134**	**7.0000e-005**	**3.4900e-003**	**8.0000e-005**	**3.5800e-003**	**9.4000e-004**	**8.0000e-005**	**1.0100e-003**	**0.0000**	**7.3398**	**7.3398**	**3.9000e-004**	**0.0000**	**7.3496**

3.5 Stormwater Treatment Area - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0951	0.8716	0.8288	1.3500e-003		0.0479	0.0479		0.0451	0.0451	0.0000	115.8186	115.8186	0.0279	0.0000	116.5172
Total	**0.0951**	**0.8716**	**0.8288**	**1.3500e-003**		**0.0479**	**0.0479**		**0.0451**	**0.0451**	**0.0000**	**115.8186**	**115.8186**	**0.0279**	**0.0000**	**116.5172**

3.5 Stormwater Treatment Area - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0210	0.7186	0.1759	1.7400e-003	0.0428	1.8000e-003	0.0446	0.0124	1.7200e-003	0.0141	0.0000	168.3935	168.3935	0.0100	0.0000	168.6437
Worker	0.0745	0.0521	0.5309	1.3000e-003	0.1322	1.0300e-003	0.1333	0.0352	9.5000e-004	0.0362	0.0000	117.6050	117.6050	3.9800e-003	0.0000	117.7045
Total	**0.0955**	**0.7706**	**0.7069**	**3.0400e-003**	**0.1750**	**2.8300e-003**	**0.1779**	**0.0476**	**2.6700e-003**	**0.0502**	**0.0000**	**285.9985**	**285.9985**	**0.0140**	**0.0000**	**286.3481**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0293	0.1370	0.8841	1.3500e-003		5.6000e-003	5.6000e-003		5.6000e-003	5.6000e-003	0.0000	115.8185	115.8185	0.0279	0.0000	116.5171
Total	**0.0293**	**0.1370**	**0.8841**	**1.3500e-003**		**5.6000e-003**	**5.6000e-003**		**5.6000e-003**	**5.6000e-003**	**0.0000**	**115.8185**	**115.8185**	**0.0279**	**0.0000**	**116.5171**

3.5 Stormwater Treatment Area - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0210	0.7186	0.1759	1.7400e-003	0.0428	1.8000e-003	0.0446	0.0124	1.7200e-003	0.0141	0.0000	168.3935	168.3935	0.0100	0.0000	168.6437
Worker	0.0745	0.0521	0.5309	1.3000e-003	0.1322	1.0300e-003	0.1333	0.0352	9.5000e-004	0.0362	0.0000	117.6050	117.6050	3.9800e-003	0.0000	117.7045
Total	**0.0955**	**0.7706**	**0.7069**	**3.0400e-003**	**0.1750**	**2.8300e-003**	**0.1779**	**0.0476**	**2.6700e-003**	**0.0502**	**0.0000**	**285.9985**	**285.9985**	**0.0140**	**0.0000**	**286.3481**

3.6 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0439	0.4522	0.5129	8.0000e-004		0.0237	0.0237		0.0218	0.0218	0.0000	70.0822	70.0822	0.0227	0.0000	70.6488
Paving	5.2100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0492**	**0.4522**	**0.5129**	**8.0000e-004**		**0.0237**	**0.0237**		**0.0218**	**0.0218**	**0.0000**	**70.0822**	**70.0822**	**0.0227**	**0.0000**	**70.6488**

3.6 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3200e-003	1.6200e-003	0.0165	4.0000e-005	4.1200e-003	3.0000e-005	4.1500e-003	1.1000e-003	3.0000e-005	1.1300e-003	0.0000	3.6643	3.6643	1.2000e-004	0.0000	3.6674
Total	**2.3200e-003**	**1.6200e-003**	**0.0165**	**4.0000e-005**	**4.1200e-003**	**3.0000e-005**	**4.1500e-003**	**1.1000e-003**	**3.0000e-005**	**1.1300e-003**	**0.0000**	**3.6643**	**3.6643**	**1.2000e-004**	**0.0000**	**3.6674**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8200e-003	0.0425	0.6054	8.0000e-004		1.3100e-003	1.3100e-003		1.3100e-003	1.3100e-003	0.0000	70.0821	70.0821	0.0227	0.0000	70.6488
Paving	5.2100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0150**	**0.0425**	**0.6054**	**8.0000e-004**		**1.3100e-003**	**1.3100e-003**		**1.3100e-003**	**1.3100e-003**	**0.0000**	**70.0821**	**70.0821**	**0.0227**	**0.0000**	**70.6488**

3.6 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3200e-003	1.6200e-003	0.0165	4.0000e-005	4.1200e-003	3.0000e-005	4.1500e-003	1.1000e-003	3.0000e-005	1.1300e-003	0.0000	3.6643	3.6643	1.2000e-004	0.0000	3.6674
Total	**2.3200e-003**	**1.6200e-003**	**0.0165**	**4.0000e-005**	**4.1200e-003**	**3.0000e-005**	**4.1500e-003**	**1.1000e-003**	**3.0000e-005**	**1.1300e-003**	**0.0000**	**3.6643**	**3.6643**	**1.2000e-004**	**0.0000**	**3.6674**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.594113	0.036394	0.166849	0.102253	0.024126	0.006070	0.030484	0.028024	0.003137	0.001706	0.004997	0.000880	0.000967
Other Non-Asphalt Surfaces	0.594113	0.036394	0.166849	0.102253	0.024126	0.006070	0.030484	0.028024	0.003137	0.001706	0.004997	0.000880	0.000967

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0519	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.3000e-004	3.3000e-004	0.0000	0.0000	3.5000e-004
Unmitigated	0.0519	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.3000e-004	3.3000e-004	0.0000	0.0000	3.5000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0519					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.3000e-004	3.3000e-004	0.0000	0.0000	3.5000e-004
Total	**0.0519**	**0.0000**	**1.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**3.3000e-004**	**3.3000e-004**	**0.0000**	**0.0000**	**3.5000e-004**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0519					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.3000e-004	3.3000e-004	0.0000	0.0000	3.5000e-004
Total	**0.0519**	**0.0000**	**1.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**3.3000e-004**	**3.3000e-004**	**0.0000**	**0.0000**	**3.5000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Mitigated(Tier 4 Final) Construction-Homes 1-21

Sonoma-San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	21.00	Dwelling Unit	2.03	48,702.60	56

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	75
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	390.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Mitigated(Tier 4 Final) Construction-Homes 1-21 - Sonoma-San Francisco County, Annual

Project Characteristics - .CO2 intensity factor based on Renewable Energy Portfolio Standard. Start of construction as provided by the Applicant in response to request for information form (8/16/19).

Land Use - Building Construction for 21 units. Acreage and square footage for 21 units derived by dividing total acreage(10.17) and square footage(243,513) equally for 105 units. 2.65 persons per unit (City of Santa Rosa).

Construction Phase - As provided by Applicant in response to request for information form (8/16/19).

Off-road Equipment - Adjusted construction equipment usage to match CalEEMod default total building construction usage hours.

Demolition -

Grading -

Vehicle Trips - Construction Only.

Woodstoves - Construction Only.

Area Coating - Construction Only.

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Compliance with BAAQMD best management practices threshold for fugitive dust; recommended measures from BAAQMD's Basic Construction Mitigation Measures for all Proposed Projects.
Tier 4 Final mitigation applied to equipment with 50 HP or greater.

Mobile Land Use Mitigation -

Operational Off-Road Equipment -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Emergency Generators and Fire Pumps EF -

Off-road Equipment -

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Residential_Exterior	32874	0
tblAreaCoating	Area_Residential_Interior	98623	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberWood	9.03	0.00
tblLandUse	LandUseSquareFeet	37,800.00	48,702.60
tblLandUse	LotAcreage	6.82	2.03
tblLandUse	Population	60.00	56.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	UsageHours	8.00	2.80
tblOffRoadEquipment	UsageHours	7.00	3.20
tblOffRoadEquipment	UsageHours	8.00	3.20

tblOffRoadEquipment	UsageHours	6.00	2.80
tblOffRoadEquipment	UsageHours	8.00	3.20
tblProjectCharacteristics	CO2IntensityFactor	641.35	390.65
tblVehicleTrips	ST_TR	9.91	0.00
tblVehicleTrips	SU_TR	8.62	0.00
tblVehicleTrips	WD_TR	9.52	0.00
tblWoodstoves	WoodstoveWoodMass	956.80	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0269	0.2417	0.2323	4.0000e-004	2.5400e-003	0.0129	0.0154	6.9000e-004	0.0121	0.0128	0.0000	34.6194	34.6194	7.6500e-003	0.0000	34.8107
2022	0.4041	0.5493	0.5917	1.0200e-003	6.4600e-003	0.0277	0.0341	1.7400e-003	0.0260	0.0278	0.0000	88.4937	88.4937	0.0199	0.0000	88.9912
Maximum	**0.4041**	**0.5493**	**0.5917**	**1.0200e-003**	**6.4600e-003**	**0.0277**	**0.0341**	**1.7400e-003**	**0.0260**	**0.0278**	**0.0000**	**88.4937**	**88.4937**	**0.0199**	**0.0000**	**88.9912**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	9.2600e-003	0.0448	0.2472	4.0000e-004	2.5400e-003	1.5400e-003	4.0700e-003	6.9000e-004	1.5300e-003	2.2200e-003	0.0000	34.6193	34.6193	7.6500e-003	0.0000	34.8107
2022	0.3648	0.1072	0.6394	1.0200e-003	6.4600e-003	3.4200e-003	9.8800e-003	1.7400e-003	3.4200e-003	5.1600e-003	0.0000	88.4936	88.4936	0.0199	0.0000	88.9911
Maximum	**0.3648**	**0.1072**	**0.6394**	**1.0200e-003**	**6.4600e-003**	**3.4200e-003**	**9.8800e-003**	**1.7400e-003**	**3.4200e-003**	**5.1600e-003**	**0.0000**	**88.4936**	**88.4936**	**0.0199**	**0.0000**	**88.9911**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**13.20**	**80.78**	**-7.58**	**0.00**	**0.00**	**87.77**	**71.85**	**0.00**	**87.02**	**81.80**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-30-2021	12-29-2021	0.2608	0.0527
2	12-30-2021	3-29-2022	0.2321	0.0507
3	3-30-2022	6-29-2022	0.2363	0.0515
4	6-30-2022	9-29-2022	0.4927	0.3715
		Highest	0.4927	0.3715

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1950	2.3600e-003	0.1562	1.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	0.9101	0.9101	2.6000e-004	1.0000e-005	0.9201
Energy	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	62.6774	62.6774	2.8600e-003	1.0600e-003	63.0647
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	4.7744	0.0000	4.7744	0.2822	0.0000	11.8282
Water						0.0000	0.0000		0.0000	0.0000	0.4341	1.8468	2.2809	0.0447	1.0800e-003	3.7211
Total	**0.1983**	**0.0305**	**0.1682**	**1.9000e-004**	**0.0000**	**3.1800e-003**	**3.1800e-003**	**0.0000**	**3.1800e-003**	**3.1800e-003**	**5.2084**	**65.4344**	**70.6428**	**0.3300**	**2.1500e-003**	**79.5341**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1950	2.3600e-003	0.1562	1.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	0.9101	0.9101	2.6000e-004	1.0000e-005	0.9201
Energy	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	62.6774	62.6774	2.8600e-003	1.0600e-003	63.0647
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	4.7744	0.0000	4.7744	0.2822	0.0000	11.8282
Water						0.0000	0.0000		0.0000	0.0000	0.4341	1.8468	2.2809	0.0447	1.0800e-003	3.7211
Total	**0.1983**	**0.0305**	**0.1682**	**1.9000e-004**	**0.0000**	**3.1800e-003**	**3.1800e-003**	**0.0000**	**3.1800e-003**	**3.1800e-003**	**5.2084**	**65.4344**	**70.6428**	**0.3300**	**2.1500e-003**	**79.5341**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	9/30/2021	8/3/2022	5	220	
2	Paving	Paving	8/4/2022	8/17/2022	5	10	
3	Architectural Coating	Architectural Coating	8/18/2022	8/31/2022	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 98,623; Residential Outdoor: 32,874; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	2.80	231	0.29
Building Construction	Forklifts	3	3.20	89	0.20
Building Construction	Generator Sets	1	3.20	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	2.80	97	0.37
Building Construction	Welders	1	3.20	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	9	8.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0255	0.2336	0.2221	3.6000e-004		0.0129	0.0129		0.0121	0.0121	0.0000	31.0394	31.0394	7.4900e-003	0.0000	31.2266
Total	**0.0255**	**0.2336**	**0.2221**	**3.6000e-004**		**0.0129**	**0.0129**		**0.0121**	**0.0121**	**0.0000**	**31.0394**	**31.0394**	**7.4900e-003**	**0.0000**	**31.2266**

3.2 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1000e-004	7.2900e-003	1.7900e-003	2.0000e-005	4.3000e-004	2.0000e-005	4.5000e-004	1.3000e-004	2.0000e-005	1.4000e-004	0.0000	1.7095	1.7095	1.0000e-004	0.0000	1.7120
Worker	1.1800e-003	8.3000e-004	8.4400e-003	2.0000e-005	2.1000e-003	2.0000e-005	2.1200e-003	5.6000e-004	2.0000e-005	5.7000e-004	0.0000	1.8705	1.8705	6.0000e-005	0.0000	1.8721
Total	**1.3900e-003**	**8.1200e-003**	**0.0102**	**4.0000e-005**	**2.5300e-003**	**4.0000e-005**	**2.5700e-003**	**6.9000e-004**	**4.0000e-005**	**7.1000e-004**	**0.0000**	**3.5800**	**3.5800**	**1.6000e-004**	**0.0000**	**3.5841**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.8600e-003	0.0367	0.2369	3.6000e-004		1.5000e-003	1.5000e-003		1.5000e-003	1.5000e-003	0.0000	31.0394	31.0394	7.4900e-003	0.0000	31.2266
Total	**7.8600e-003**	**0.0367**	**0.2369**	**3.6000e-004**		**1.5000e-003**	**1.5000e-003**		**1.5000e-003**	**1.5000e-003**	**0.0000**	**31.0394**	**31.0394**	**7.4900e-003**	**0.0000**	**31.2266**

3.2 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1000e-004	7.2900e-003	1.7900e-003	2.0000e-005	4.3000e-004	2.0000e-005	4.5000e-004	1.3000e-004	2.0000e-005	1.4000e-004	0.0000	1.7095	1.7095	1.0000e-004	0.0000	1.7120
Worker	1.1800e-003	8.3000e-004	8.4400e-003	2.0000e-005	2.1000e-003	2.0000e-005	2.1200e-003	5.6000e-004	2.0000e-005	5.7000e-004	0.0000	1.8705	1.8705	6.0000e-005	0.0000	1.8721
Total	**1.3900e-003**	**8.1200e-003**	**0.0102**	**4.0000e-005**	**2.5300e-003**	**4.0000e-005**	**2.5700e-003**	**6.9000e-004**	**4.0000e-005**	**7.1000e-004**	**0.0000**	**3.5800**	**3.5800**	**1.6000e-004**	**0.0000**	**3.5841**

3.2 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0522	0.4778	0.5007	8.2000e-004		0.0248	0.0248		0.0233	0.0233	0.0000	70.9079	70.9079	0.0170	0.0000	71.3326
Total	**0.0522**	**0.4778**	**0.5007**	**8.2000e-004**		**0.0248**	**0.0248**		**0.0233**	**0.0233**	**0.0000**	**70.9079**	**70.9079**	**0.0170**	**0.0000**	**71.3326**

3.2 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.5000e-004	0.0158	3.7400e-003	4.0000e-005	9.9000e-004	4.0000e-005	1.0300e-003	2.9000e-004	3.0000e-005	3.2000e-004	0.0000	3.8674	3.8674	2.3000e-004	0.0000	3.8731
Worker	2.5100e-003	1.6800e-003	0.0173	5.0000e-005	4.8000e-003	4.0000e-005	4.8400e-003	1.2800e-003	3.0000e-005	1.3100e-003	0.0000	4.1152	4.1152	1.3000e-004	0.0000	4.1184
Total	**2.9600e-003**	**0.0175**	**0.0210**	**9.0000e-005**	**5.7900e-003**	**8.0000e-005**	**5.8700e-003**	**1.5700e-003**	**6.0000e-005**	**1.6300e-003**	**0.0000**	**7.9826**	**7.9826**	**3.6000e-004**	**0.0000**	**7.9914**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0172	0.0824	0.5404	8.2000e-004		3.1100e-003	3.1100e-003		3.1100e-003	3.1100e-003	0.0000	70.9078	70.9078	0.0170	0.0000	71.3325
Total	**0.0172**	**0.0824**	**0.5404**	**8.2000e-004**		**3.1100e-003**	**3.1100e-003**		**3.1100e-003**	**3.1100e-003**	**0.0000**	**70.9078**	**70.9078**	**0.0170**	**0.0000**	**71.3325**

3.2 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.5000e-004	0.0158	3.7400e-003	4.0000e-005	9.9000e-004	4.0000e-005	1.0300e-003	2.9000e-004	3.0000e-005	3.2000e-004	0.0000	3.8674	3.8674	2.3000e-004	0.0000	3.8731
Worker	2.5100e-003	1.6800e-003	0.0173	5.0000e-005	4.8000e-003	4.0000e-005	4.8400e-003	1.2800e-003	3.0000e-005	1.3100e-003	0.0000	4.1152	4.1152	1.3000e-004	0.0000	4.1184
Total	**2.9600e-003**	**0.0175**	**0.0210**	**9.0000e-005**	**5.7900e-003**	**8.0000e-005**	**5.8700e-003**	**1.5700e-003**	**6.0000e-005**	**1.6300e-003**	**0.0000**	**7.9826**	**7.9826**	**3.6000e-004**	**0.0000**	**7.9914**

3.3 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.7100e-003	0.0467	0.0585	9.0000e-005		2.4400e-003	2.4400e-003		2.2500e-003	2.2500e-003	0.0000	7.7550	7.7550	2.4600e-003	0.0000	7.8165
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.7100e-003**	**0.0467**	**0.0585**	**9.0000e-005**		**2.4400e-003**	**2.4400e-003**		**2.2500e-003**	**2.2500e-003**	**0.0000**	**7.7550**	**7.7550**	**2.4600e-003**	**0.0000**	**7.8165**

3.3 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.1000e-004	2.1200e-003	1.0000e-005	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5043	0.5043	2.0000e-005	0.0000	0.5047
Total	**3.1000e-004**	**2.1000e-004**	**2.1200e-003**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**5.9000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.5043**	**0.5043**	**2.0000e-005**	**0.0000**	**0.5047**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.3500e-003	6.4000e-003	0.0664	9.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	7.7550	7.7550	2.4600e-003	0.0000	7.8165
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.3500e-003**	**6.4000e-003**	**0.0664**	**9.0000e-005**		**2.1000e-004**	**2.1000e-004**		**2.1000e-004**	**2.1000e-004**	**0.0000**	**7.7550**	**7.7550**	**2.4600e-003**	**0.0000**	**7.8165**

3.3 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.1000e-004	2.1200e-003	1.0000e-005	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5043	0.5043	2.0000e-005	0.0000	0.5047
Total	**3.1000e-004**	**2.1000e-004**	**2.1200e-003**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**5.9000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.5043**	**0.5043**	**2.0000e-005**	**0.0000**	**0.5047**

3.4 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3428					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0200e-003	7.0400e-003	9.0700e-003	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2787
Total	**0.3439**	**7.0400e-003**	**9.0700e-003**	**1.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2787**

3.4 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	2.8000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0672	0.0672	0.0000	0.0000	0.0673
Total	**4.0000e-005**	**3.0000e-005**	**2.8000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0672**	**0.0672**	**0.0000**	**0.0000**	**0.0673**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3428					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5000e-004	6.4000e-004	9.1600e-003	1.0000e-005		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2787
Total	**0.3430**	**6.4000e-004**	**9.1600e-003**	**1.0000e-005**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2787**

3.4 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	2.8000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0672	0.0672	0.0000	0.0000	0.0673
Total	**4.0000e-005**	**3.0000e-005**	**2.8000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0672**	**0.0672**	**0.0000**	**0.0000**	**0.0673**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.594113	0.036394	0.166849	0.102253	0.024126	0.006070	0.030484	0.028024	0.003137	0.001706	0.004997	0.000880	0.000967

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	30.1059	30.1059	2.2300e-003	4.6000e-004	30.2996
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	30.1059	30.1059	2.2300e-003	4.6000e-004	30.2996
NaturalGas Mitigated	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	32.5715	32.5715	6.2000e-004	6.0000e-004	32.7651
NaturalGas Unmitigated	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	32.5715	32.5715	6.2000e-004	6.0000e-004	32.7651

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	610367	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	32.5715	32.5715	6.2000e-004	6.0000e-004	32.7651
Total		**3.2900e-003**	**0.0281**	**0.0120**	**1.8000e-004**		**2.2700e-003**	**2.2700e-003**		**2.2700e-003**	**2.2700e-003**	**0.0000**	**32.5715**	**32.5715**	**6.2000e-004**	**6.0000e-004**	**32.7651**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	610367	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	32.5715	32.5715	6.2000e-004	6.0000e-004	32.7651
Total		**3.2900e-003**	**0.0281**	**0.0120**	**1.8000e-004**		**2.2700e-003**	**2.2700e-003**		**2.2700e-003**	**2.2700e-003**	**0.0000**	**32.5715**	**32.5715**	**6.2000e-004**	**6.0000e-004**	**32.7651**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	169902	30.1059	2.2300e-003	4.6000e-004	30.2996
Total		**30.1059**	**2.2300e-003**	**4.6000e-004**	**30.2996**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	169902	30.1059	2.2300e-003	4.6000e-004	30.2996
Total		**30.1059**	**2.2300e-003**	**4.6000e-004**	**30.2996**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1950	2.3600e-003	0.1562	1.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	0.9101	0.9101	2.6000e-004	1.0000e-005	0.9201
Unmitigated	0.1950	2.3600e-003	0.1562	1.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	0.9101	0.9101	2.6000e-004	1.0000e-005	0.9201

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1902					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.0000e-005	5.7000e-004	2.4000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.6554	0.6554	1.0000e-005	1.0000e-005	0.6593
Landscaping	4.7000e-003	1.8000e-003	0.1560	1.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004	0.0000	0.2547	0.2547	2.4000e-004	0.0000	0.2608
Total	**0.1950**	**2.3700e-003**	**0.1562**	**1.0000e-005**		**9.1000e-004**	**9.1000e-004**		**9.1000e-004**	**9.1000e-004**	**0.0000**	**0.9101**	**0.9101**	**2.5000e-004**	**1.0000e-005**	**0.9201**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1902					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.0000e-005	5.7000e-004	2.4000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.6554	0.6554	1.0000e-005	1.0000e-005	0.6593
Landscaping	4.7000e-003	1.8000e-003	0.1560	1.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004	0.0000	0.2547	0.2547	2.4000e-004	0.0000	0.2608
Total	**0.1950**	**2.3700e-003**	**0.1562**	**1.0000e-005**		**9.1000e-004**	**9.1000e-004**		**9.1000e-004**	**9.1000e-004**	**0.0000**	**0.9101**	**0.9101**	**2.5000e-004**	**1.0000e-005**	**0.9201**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2.2809	0.0447	1.0800e-003	3.7211
Unmitigated	2.2809	0.0447	1.0800e-003	3.7211

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	1.36823 / 0.862583	2.2809	0.0447	1.0800e-003	3.7211
Total		**2.2809**	**0.0447**	**1.0800e-003**	**3.7211**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	1.36823 / 0.862583	2.2809	0.0447	1.0800e-003	3.7211
Total		**2.2809**	**0.0447**	**1.0800e-003**	**3.7211**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	4.7744	0.2822	0.0000	11.8282
Unmitigated	4.7744	0.2822	0.0000	11.8282

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	23.52	4.7744	0.2822	0.0000	11.8282
Total		**4.7744**	**0.2822**	**0.0000**	**11.8282**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	23.52	4.7744	0.2822	0.0000	11.8282
Total		**4.7744**	**0.2822**	**0.0000**	**11.8282**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Mitigated(Tier 4 Final) Construction-Homes 22-42

Sonoma-San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	21.00	Dwelling Unit	2.03	48,702.60	56

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	75
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	390.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Mitigated(Tier 4 Final) Construction-Homes 22-42 - Sonoma-San Francisco County, Annual

Project Characteristics - CO2 intensity factor based on Renewable Energy Portfolio Standard. Start of construction as provided by the Applicant in response to request for information form(8/16/19).

Land Use - Building Construction for 21 units. Acreage and square footage for 21 units derived by dividing total acreage(10.17) and square footage(243,513) equally for 105 units. 2.65 persons per unit (City of Santa Rosa).

Construction Phase - As provided by Applicant in response to request for information form (8/16/19).

Off-road Equipment - Adjusted construction equipment usage to match CalEEMod default total building construction usage hours.

Demolition -

Grading -

Vehicle Trips - Construction Only.

Woodstoves - Construction Only.

Area Coating - Construction Only.

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Compliance with BAAQMD best management practices threshold for fugitive dust; recommended measures from BAAQMD's Basic Construction Mitigation Measures for all Proposed Projects.
Tier 4 Final mitigation applied to equipment with 50 HP or greater.

Mobile Land Use Mitigation -

Operational Off-Road Equipment -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Emergency Generators and Fire Pumps EF -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Residential_Exterior	32874	0
tblAreaCoating	Area_Residential_Interior	98623	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

Mitigated(Tier 4 Final) Construction-Homes 22-42 - Sonoma-San Francisco County, Annual

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberWood	9.03	0.00
tblLandUse	LandUseSquareFeet	37,800.00	48,702.60
tblLandUse	LotAcreage	6.82	2.03
tblLandUse	Population	60.00	56.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	UsageHours	8.00	2.80
tblOffRoadEquipment	UsageHours	7.00	3.20
tblOffRoadEquipment	UsageHours	8.00	3.20
tblOffRoadEquipment	UsageHours	6.00	2.80
tblOffRoadEquipment	UsageHours	8.00	3.20

tblProjectCharacteristics	CO2IntensityFactor	641.35	390.65
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	9.91	0.00
tblVehicleTrips	SU_TR	8.62	0.00
tblVehicleTrips	WD_TR	9.52	0.00
tblWoodstoves	WoodstoveWoodMass	956.80	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0758	0.6810	0.6552	1.1200e-003	7.0400e-003	0.0363	0.0434	1.9000e-003	0.0342	0.0361	0.0000	97.2731	97.2731	0.0216	0.0000	97.8126
2022	0.3601	0.1542	0.1756	2.9000e-004	1.8200e-003	7.8800e-003	9.7000e-003	4.9000e-004	7.4000e-003	7.8800e-003	0.0000	25.5251	25.5251	6.0700e-003	0.0000	25.6769
Maximum	**0.3601**	**0.6810**	**0.6552**	**1.1200e-003**	**7.0400e-003**	**0.0363**	**0.0434**	**1.9000e-003**	**0.0342**	**0.0361**	**0.0000**	**97.2731**	**97.2731**	**0.0216**	**0.0000**	**97.8126**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0261	0.1256	0.6970	1.1200e-003	7.0400e-003	4.3300e-003	0.0114	1.9000e-003	4.3200e-003	6.2200e-003	0.0000	97.2730	97.2730	0.0216	0.0000	97.8125
2022	0.3488	0.0274	0.1917	2.9000e-004	1.8200e-003	8.8000e-004	2.7000e-003	4.9000e-004	8.8000e-004	1.3700e-003	0.0000	25.5251	25.5251	6.0700e-003	0.0000	25.6769
Maximum	**0.3488**	**0.1256**	**0.6970**	**1.1200e-003**	**7.0400e-003**	**4.3300e-003**	**0.0114**	**1.9000e-003**	**4.3200e-003**	**6.2200e-003**	**0.0000**	**97.2730**	**97.2730**	**0.0216**	**0.0000**	**97.8125**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**14.00**	**81.68**	**-6.97**	**0.00**	**0.00**	**88.22**	**73.49**	**0.00**	**87.49**	**82.73**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-13-2021	7-12-2021	0.2601	0.0521
2	7-13-2021	10-12-2021	0.2630	0.0527
3	10-13-2021	1-12-2022	0.2598	0.0528
4	1-13-2022	4-12-2022	0.4877	0.3705
		Highest	0.4877	0.3705

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1950	2.3600e-003	0.1562	1.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	0.9101	0.9101	2.6000e-004	1.0000e-005	0.9201
Energy	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	62.6774	62.6774	2.8600e-003	1.0600e-003	63.0647
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	4.7744	0.0000	4.7744	0.2822	0.0000	11.8282
Water						0.0000	0.0000		0.0000	0.0000	0.4341	1.8468	2.2809	0.0447	1.0800e-003	3.7211
Total	**0.1983**	**0.0305**	**0.1682**	**1.9000e-004**	**0.0000**	**3.1800e-003**	**3.1800e-003**	**0.0000**	**3.1800e-003**	**3.1800e-003**	**5.2084**	**65.4344**	**70.6428**	**0.3300**	**2.1500e-003**	**79.5341**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1950	2.3600e-003	0.1562	1.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	0.9101	0.9101	2.6000e-004	1.0000e-005	0.9201
Energy	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	62.6774	62.6774	2.8600e-003	1.0600e-003	63.0647
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	4.7744	0.0000	4.7744	0.2822	0.0000	11.8282
Water						0.0000	0.0000		0.0000	0.0000	0.4341	1.8468	2.2809	0.0447	1.0800e-003	3.7211
Total	**0.1983**	**0.0305**	**0.1682**	**1.9000e-004**	**0.0000**	**3.1800e-003**	**3.1800e-003**	**0.0000**	**3.1800e-003**	**3.1800e-003**	**5.2084**	**65.4344**	**70.6428**	**0.3300**	**2.1500e-003**	**79.5341**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	4/13/2021	2/14/2022	5	220	
2	Paving	Paving	2/15/2022	2/28/2022	5	10	
3	Architectural Coating	Architectural Coating	3/1/2022	3/14/2022	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 98,623; Residential Outdoor: 32,874; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	2.80	231	0.29
Building Construction	Forklifts	3	3.20	89	0.20
Building Construction	Generator Sets	1	3.20	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	2.80	97	0.37
Building Construction	Welders	1	3.20	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	9	8.00	2.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0719	0.6589	0.6265	1.0200e-003		0.0362	0.0362		0.0341	0.0341	0.0000	87.5589	87.5589	0.0211	0.0000	88.0870
Total	**0.0719**	**0.6589**	**0.6265**	**1.0200e-003**		**0.0362**	**0.0362**		**0.0341**	**0.0341**	**0.0000**	**87.5589**	**87.5589**	**0.0211**	**0.0000**	**88.0870**

3.2 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.7000e-004	0.0197	4.8200e-003	5.0000e-005	1.1100e-003	5.0000e-005	1.1600e-003	3.2000e-004	5.0000e-005	3.7000e-004	0.0000	4.4377	4.4377	2.8000e-004	0.0000	4.4446
Worker	3.3400e-003	2.3400e-003	0.0238	6.0000e-005	5.9300e-003	5.0000e-005	5.9800e-003	1.5800e-003	4.0000e-005	1.6200e-003	0.0000	5.2765	5.2765	1.8000e-004	0.0000	5.2810
Total	**3.9100e-003**	**0.0221**	**0.0286**	**1.1000e-004**	**7.0400e-003**	**1.0000e-004**	**7.1400e-003**	**1.9000e-003**	**9.0000e-005**	**1.9900e-003**	**0.0000**	**9.7142**	**9.7142**	**4.6000e-004**	**0.0000**	**9.7256**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0222	0.1036	0.6684	1.0200e-003		4.2300e-003	4.2300e-003		4.2300e-003	4.2300e-003	0.0000	87.5588	87.5588	0.0211	0.0000	88.0869
Total	**0.0222**	**0.1036**	**0.6684**	**1.0200e-003**		**4.2300e-003**	**4.2300e-003**		**4.2300e-003**	**4.2300e-003**	**0.0000**	**87.5588**	**87.5588**	**0.0211**	**0.0000**	**88.0869**

3.2 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.7000e-004	0.0197	4.8200e-003	5.0000e-005	1.1100e-003	5.0000e-005	1.1600e-003	3.2000e-004	5.0000e-005	3.7000e-004	0.0000	4.4377	4.4377	2.8000e-004	0.0000	4.4446
Worker	3.3400e-003	2.3400e-003	0.0238	6.0000e-005	5.9300e-003	5.0000e-005	5.9800e-003	1.5800e-003	4.0000e-005	1.6200e-003	0.0000	5.2765	5.2765	1.8000e-004	0.0000	5.2810
Total	**3.9100e-003**	**0.0221**	**0.0286**	**1.1000e-004**	**7.0400e-003**	**1.0000e-004**	**7.1400e-003**	**1.9000e-003**	**9.0000e-005**	**1.9900e-003**	**0.0000**	**9.7142**	**9.7142**	**4.6000e-004**	**0.0000**	**9.7256**

3.2 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0106	0.0968	0.1015	1.7000e-004		5.0200e-003	5.0200e-003		4.7200e-003	4.7200e-003	0.0000	14.3670	14.3670	3.4400e-003	0.0000	14.4530
Total	**0.0106**	**0.0968**	**0.1015**	**1.7000e-004**		**5.0200e-003**	**5.0200e-003**		**4.7200e-003**	**4.7200e-003**	**0.0000**	**14.3670**	**14.3670**	**3.4400e-003**	**0.0000**	**14.4530**

3.2 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.0000e-005	3.0800e-003	7.2000e-004	1.0000e-005	1.8000e-004	1.0000e-005	1.9000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.7212	0.7212	4.0000e-005	0.0000	0.7223
Worker	5.1000e-004	3.4000e-004	3.5000e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.8000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8338	0.8338	3.0000e-005	0.0000	0.8344
Total	**6.0000e-004**	**3.4200e-003**	**4.2200e-003**	**2.0000e-005**	**1.1500e-003**	**2.0000e-005**	**1.1700e-003**	**3.1000e-004**	**2.0000e-005**	**3.3000e-004**	**0.0000**	**1.5550**	**1.5550**	**7.0000e-005**	**0.0000**	**1.5567**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.4800e-003	0.0167	0.1095	1.7000e-004		6.3000e-004	6.3000e-004		6.3000e-004	6.3000e-004	0.0000	14.3670	14.3670	3.4400e-003	0.0000	14.4530
Total	**3.4800e-003**	**0.0167**	**0.1095**	**1.7000e-004**		**6.3000e-004**	**6.3000e-004**		**6.3000e-004**	**6.3000e-004**	**0.0000**	**14.3670**	**14.3670**	**3.4400e-003**	**0.0000**	**14.4530**

3.2 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.0000e-005	3.0800e-003	7.2000e-004	1.0000e-005	1.8000e-004	1.0000e-005	1.9000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.7212	0.7212	4.0000e-005	0.0000	0.7223
Worker	5.1000e-004	3.4000e-004	3.5000e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.8000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8338	0.8338	3.0000e-005	0.0000	0.8344
Total	**6.0000e-004**	**3.4200e-003**	**4.2200e-003**	**2.0000e-005**	**1.1500e-003**	**2.0000e-005**	**1.1700e-003**	**3.1000e-004**	**2.0000e-005**	**3.3000e-004**	**0.0000**	**1.5550**	**1.5550**	**7.0000e-005**	**0.0000**	**1.5567**

3.3 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.7100e-003	0.0467	0.0585	9.0000e-005		2.4400e-003	2.4400e-003		2.2500e-003	2.2500e-003	0.0000	7.7550	7.7550	2.4600e-003	0.0000	7.8165
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.7100e-003**	**0.0467**	**0.0585**	**9.0000e-005**		**2.4400e-003**	**2.4400e-003**		**2.2500e-003**	**2.2500e-003**	**0.0000**	**7.7550**	**7.7550**	**2.4600e-003**	**0.0000**	**7.8165**

3.3 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.1000e-004	2.1200e-003	1.0000e-005	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5043	0.5043	2.0000e-005	0.0000	0.5047
Total	**3.1000e-004**	**2.1000e-004**	**2.1200e-003**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**5.9000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.5043**	**0.5043**	**2.0000e-005**	**0.0000**	**0.5047**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.3500e-003	6.4000e-003	0.0664	9.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	7.7550	7.7550	2.4600e-003	0.0000	7.8165
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.3500e-003**	**6.4000e-003**	**0.0664**	**9.0000e-005**		**2.1000e-004**	**2.1000e-004**		**2.1000e-004**	**2.1000e-004**	**0.0000**	**7.7550**	**7.7550**	**2.4600e-003**	**0.0000**	**7.8165**

3.3 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.1000e-004	2.1200e-003	1.0000e-005	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5043	0.5043	2.0000e-005	0.0000	0.5047
Total	**3.1000e-004**	**2.1000e-004**	**2.1200e-003**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**5.9000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.5043**	**0.5043**	**2.0000e-005**	**0.0000**	**0.5047**

3.4 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3428					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0200e-003	7.0400e-003	9.0700e-003	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2787
Total	**0.3439**	**7.0400e-003**	**9.0700e-003**	**1.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2787**

3.4 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	2.8000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0672	0.0672	0.0000	0.0000	0.0673
Total	**4.0000e-005**	**3.0000e-005**	**2.8000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0672**	**0.0672**	**0.0000**	**0.0000**	**0.0673**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3428					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5000e-004	6.4000e-004	9.1600e-003	1.0000e-005		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2787
Total	**0.3430**	**6.4000e-004**	**9.1600e-003**	**1.0000e-005**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2787**

3.4 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	2.8000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0672	0.0672	0.0000	0.0000	0.0673
Total	**4.0000e-005**	**3.0000e-005**	**2.8000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0672**	**0.0672**	**0.0000**	**0.0000**	**0.0673**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.594113	0.036394	0.166849	0.102253	0.024126	0.006070	0.030484	0.028024	0.003137	0.001706	0.004997	0.000880	0.000967

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	30.1059	30.1059	2.2300e-003	4.6000e-004	30.2996
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	30.1059	30.1059	2.2300e-003	4.6000e-004	30.2996
NaturalGas Mitigated	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	32.5715	32.5715	6.2000e-004	6.0000e-004	32.7651
NaturalGas Unmitigated	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	32.5715	32.5715	6.2000e-004	6.0000e-004	32.7651

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	610367	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	32.5715	32.5715	6.2000e-004	6.0000e-004	32.7651
Total		**3.2900e-003**	**0.0281**	**0.0120**	**1.8000e-004**		**2.2700e-003**	**2.2700e-003**		**2.2700e-003**	**2.2700e-003**	**0.0000**	**32.5715**	**32.5715**	**6.2000e-004**	**6.0000e-004**	**32.7651**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	610367	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	32.5715	32.5715	6.2000e-004	6.0000e-004	32.7651
Total		**3.2900e-003**	**0.0281**	**0.0120**	**1.8000e-004**		**2.2700e-003**	**2.2700e-003**		**2.2700e-003**	**2.2700e-003**	**0.0000**	**32.5715**	**32.5715**	**6.2000e-004**	**6.0000e-004**	**32.7651**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	169902	30.1059	2.2300e-003	4.6000e-004	30.2996
Total		**30.1059**	**2.2300e-003**	**4.6000e-004**	**30.2996**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	169902	30.1059	2.2300e-003	4.6000e-004	30.2996
Total		**30.1059**	**2.2300e-003**	**4.6000e-004**	**30.2996**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1950	2.3600e-003	0.1562	1.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	0.9101	0.9101	2.6000e-004	1.0000e-005	0.9201
Unmitigated	0.1950	2.3600e-003	0.1562	1.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	0.9101	0.9101	2.6000e-004	1.0000e-005	0.9201

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1902					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.0000e-005	5.7000e-004	2.4000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.6554	0.6554	1.0000e-005	1.0000e-005	0.6593
Landscaping	4.7000e-003	1.8000e-003	0.1560	1.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004	0.0000	0.2547	0.2547	2.4000e-004	0.0000	0.2608
Total	**0.1950**	**2.3700e-003**	**0.1562**	**1.0000e-005**		**9.1000e-004**	**9.1000e-004**		**9.1000e-004**	**9.1000e-004**	**0.0000**	**0.9101**	**0.9101**	**2.5000e-004**	**1.0000e-005**	**0.9201**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1902					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.0000e-005	5.7000e-004	2.4000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.6554	0.6554	1.0000e-005	1.0000e-005	0.6593
Landscaping	4.7000e-003	1.8000e-003	0.1560	1.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004	0.0000	0.2547	0.2547	2.4000e-004	0.0000	0.2608
Total	**0.1950**	**2.3700e-003**	**0.1562**	**1.0000e-005**		**9.1000e-004**	**9.1000e-004**		**9.1000e-004**	**9.1000e-004**	**0.0000**	**0.9101**	**0.9101**	**2.5000e-004**	**1.0000e-005**	**0.9201**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2.2809	0.0447	1.0800e-003	3.7211
Unmitigated	2.2809	0.0447	1.0800e-003	3.7211

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	1.36823 / 0.862583	2.2809	0.0447	1.0800e-003	3.7211
Total		**2.2809**	**0.0447**	**1.0800e-003**	**3.7211**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	1.36823 / 0.862583	2.2809	0.0447	1.0800e-003	3.7211
Total		**2.2809**	**0.0447**	**1.0800e-003**	**3.7211**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	4.7744	0.2822	0.0000	11.8282
Unmitigated	4.7744	0.2822	0.0000	11.8282

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	23.52	4.7744	0.2822	0.0000	11.8282
Total		**4.7744**	**0.2822**	**0.0000**	**11.8282**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	23.52	4.7744	0.2822	0.0000	11.8282
Total		**4.7744**	**0.2822**	**0.0000**	**11.8282**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Mitigated(Tier 4 Final) Construction-Homes 43-63

Sonoma-San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	21.00	Dwelling Unit	2.03	48,702.60	56

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	75
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	390.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Mitigated(Tier 4 Final) Construction-Homes 43-63 - Sonoma-San Francisco County, Annual

Project Characteristics - CO2 intensity factor based on Renewable Energy Portfolio Standard. Start of construction as provided by the Applicant in response to request for information form(8/16/19).

Land Use - Building Construction for 21 units. Acreage and square footage for 21 units derived by dividing total acreage(10.17) and square footage(243,513) equally for 105 units. 2.65 persons per unit (City of Santa Rosa).

Construction Phase - As provided by Applicant in response to request for information(8/16/19).

Off-road Equipment - Adjusted construction equipment usage to match CalEEMod default total building construction usage hours.

Vehicle Trips - Construction Only.

Woodstoves - Construction Only.

Area Coating - Construction Only.

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Compliance with BAAQMD best management practices threshold for fugitive dust; recommended measures from BAAQMD's Basic Construction Mitigation Measures for all Proposed Projects.
Tier 4 Final mitigation applied to equipment with 50 HP or greater.

Mobile Land Use Mitigation -

Operational Off-Road Equipment -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Emergency Generators and Fire Pumps EF -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Residential_Exterior	32874	0
tblAreaCoating	Area_Residential_Interior	98623	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

Mitigated(Tier 4 Final) Construction-Homes 43-63 - Sonoma-San Francisco County, Annual

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberWood	9.03	0.00
tblLandUse	LandUseSquareFeet	37,800.00	48,702.60
tblLandUse	LotAcreage	6.82	2.03
tblLandUse	Population	60.00	56.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	UsageHours	8.00	2.80
tblOffRoadEquipment	UsageHours	7.00	3.20
tblOffRoadEquipment	UsageHours	8.00	3.20
tblOffRoadEquipment	UsageHours	6.00	2.80
tblOffRoadEquipment	UsageHours	8.00	3.20
tblProjectCharacteristics	CO2IntensityFactor	641.35	390.65
tblVehicleTrips	ST_TR	9.91	0.00

tblVehicleTrips	SU_TR	8.62	0.00
tblVehicleTrips	WD_TR	9.52	0.00
tblWoodstoves	WoodstoveWoodMass	956.80	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0201	0.1804	0.1734	3.0000e-004	1.8900e-003	9.6100e-003	0.0115	5.1000e-004	9.0400e-003	9.5500e-003	0.0000	25.8353	25.8353	5.7100e-003	0.0000	25.9781
2022	0.4102	0.6043	0.6497	1.1200e-003	7.1100e-003	0.0304	0.0376	1.9200e-003	0.0286	0.0305	0.0000	97.2593	97.2593	0.0218	0.0000	97.8050
Maximum	**0.4102**	**0.6043**	**0.6497**	**1.1200e-003**	**7.1100e-003**	**0.0304**	**0.0376**	**1.9200e-003**	**0.0286**	**0.0305**	**0.0000**	**97.2593**	**97.2593**	**0.0218**	**0.0000**	**97.8050**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	6.9100e-003	0.0335	0.1845	3.0000e-004	1.8900e-003	1.1500e-003	3.0400e-003	5.1000e-004	1.1400e-003	1.6600e-003	0.0000	25.8353	25.8353	5.7100e-003	0.0000	25.9781
2022	0.3670	0.1183	0.7017	1.1200e-003	7.1100e-003	3.7800e-003	0.0109	1.9200e-003	3.7700e-003	5.6900e-003	0.0000	97.2592	97.2592	0.0218	0.0000	97.8049
Maximum	**0.3670**	**0.1183**	**0.7017**	**1.1200e-003**	**7.1100e-003**	**3.7800e-003**	**0.0109**	**1.9200e-003**	**3.7700e-003**	**5.6900e-003**	**0.0000**	**97.2592**	**97.2592**	**0.0218**	**0.0000**	**97.8049**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**13.09**	**80.66**	**-7.67**	**0.00**	**0.00**	**87.69**	**71.63**	**0.00**	**86.96**	**81.66**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	10-25-2021	1-24-2022	0.2566	0.0529
2	1-25-2022	4-24-2022	0.2314	0.0505
3	4-25-2022	7-24-2022	0.2338	0.0509
4	7-25-2022	9-30-2022	0.4876	0.3704
		Highest	0.4876	0.3704

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1950	2.3600e-003	0.1562	1.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	0.9101	0.9101	2.6000e-004	1.0000e-005	0.9201
Energy	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	62.6774	62.6774	2.8600e-003	1.0600e-003	63.0647
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	4.7744	0.0000	4.7744	0.2822	0.0000	11.8282
Water						0.0000	0.0000		0.0000	0.0000	0.4341	1.8468	2.2809	0.0447	1.0800e-003	3.7211
Total	**0.1983**	**0.0305**	**0.1682**	**1.9000e-004**	**0.0000**	**3.1800e-003**	**3.1800e-003**	**0.0000**	**3.1800e-003**	**3.1800e-003**	**5.2084**	**65.4344**	**70.6428**	**0.3300**	**2.1500e-003**	**79.5341**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1950	2.3600e-003	0.1562	1.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	0.9101	0.9101	2.6000e-004	1.0000e-005	0.9201
Energy	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	62.6774	62.6774	2.8600e-003	1.0600e-003	63.0647
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	4.7744	0.0000	4.7744	0.2822	0.0000	11.8282
Water						0.0000	0.0000		0.0000	0.0000	0.4341	1.8468	2.2809	0.0447	1.0800e-003	3.7211
Total	**0.1983**	**0.0305**	**0.1682**	**1.9000e-004**	**0.0000**	**3.1800e-003**	**3.1800e-003**	**0.0000**	**3.1800e-003**	**3.1800e-003**	**5.2084**	**65.4344**	**70.6428**	**0.3300**	**2.1500e-003**	**79.5341**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	10/25/2021	8/26/2022	5	220	
2	Paving	Paving	8/27/2022	9/9/2022	5	10	
3	Architectural Coating	Architectural Coating	9/10/2022	9/23/2022	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 98,623; Residential Outdoor: 32,874; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	2.80	231	0.29
Building Construction	Forklifts	3	3.20	89	0.20
Building Construction	Generator Sets	1	3.20	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	2.80	97	0.37
Building Construction	Welders	1	3.20	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	9	8.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0190	0.1743	0.1658	2.7000e-004		9.5900e-003	9.5900e-003		9.0100e-003	9.0100e-003	0.0000	23.1637	23.1637	5.5900e-003	0.0000	23.3034
Total	**0.0190**	**0.1743**	**0.1658**	**2.7000e-004**		**9.5900e-003**	**9.5900e-003**		**9.0100e-003**	**9.0100e-003**	**0.0000**	**23.1637**	**23.1637**	**5.5900e-003**	**0.0000**	**23.3034**

3.2 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6000e-004	5.4400e-003	1.3300e-003	1.0000e-005	3.2000e-004	1.0000e-005	3.4000e-004	9.0000e-005	1.0000e-005	1.1000e-004	0.0000	1.2757	1.2757	8.0000e-005	0.0000	1.2776
Worker	8.8000e-004	6.2000e-004	6.3000e-003	2.0000e-005	1.5700e-003	1.0000e-005	1.5800e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.3959	1.3959	5.0000e-005	0.0000	1.3971
Total	**1.0400e-003**	**6.0600e-003**	**7.6300e-003**	**3.0000e-005**	**1.8900e-003**	**2.0000e-005**	**1.9200e-003**	**5.1000e-004**	**2.0000e-005**	**5.4000e-004**	**0.0000**	**2.6716**	**2.6716**	**1.3000e-004**	**0.0000**	**2.6747**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.8700e-003	0.0274	0.1768	2.7000e-004		1.1200e-003	1.1200e-003		1.1200e-003	1.1200e-003	0.0000	23.1637	23.1637	5.5900e-003	0.0000	23.3034
Total	**5.8700e-003**	**0.0274**	**0.1768**	**2.7000e-004**		**1.1200e-003**	**1.1200e-003**		**1.1200e-003**	**1.1200e-003**	**0.0000**	**23.1637**	**23.1637**	**5.5900e-003**	**0.0000**	**23.3034**

3.2 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6000e-004	5.4400e-003	1.3300e-003	1.0000e-005	3.2000e-004	1.0000e-005	3.4000e-004	9.0000e-005	1.0000e-005	1.1000e-004	0.0000	1.2757	1.2757	8.0000e-005	0.0000	1.2776
Worker	8.8000e-004	6.2000e-004	6.3000e-003	2.0000e-005	1.5700e-003	1.0000e-005	1.5800e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.3959	1.3959	5.0000e-005	0.0000	1.3971
Total	**1.0400e-003**	**6.0600e-003**	**7.6300e-003**	**3.0000e-005**	**1.8900e-003**	**2.0000e-005**	**1.9200e-003**	**5.1000e-004**	**2.0000e-005**	**5.4000e-004**	**0.0000**	**2.6716**	**2.6716**	**1.3000e-004**	**0.0000**	**2.6747**

3.2 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0580	0.5309	0.5564	9.2000e-004		0.0275	0.0275		0.0259	0.0259	0.0000	78.7866	78.7866	0.0189	0.0000	79.2585
Total	**0.0580**	**0.5309**	**0.5564**	**9.2000e-004**		**0.0275**	**0.0275**		**0.0259**	**0.0259**	**0.0000**	**78.7866**	**78.7866**	**0.0189**	**0.0000**	**79.2585**

3.2 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.0000e-004	0.0176	4.1600e-003	4.0000e-005	1.1000e-003	4.0000e-005	1.1400e-003	3.2000e-004	4.0000e-005	3.6000e-004	0.0000	4.2971	4.2971	2.5000e-004	0.0000	4.3034
Worker	2.7800e-003	1.8700e-003	0.0192	5.0000e-005	5.3400e-003	4.0000e-005	5.3800e-003	1.4200e-003	4.0000e-005	1.4600e-003	0.0000	4.5724	4.5724	1.4000e-004	0.0000	4.5760
Total	**3.2800e-003**	**0.0195**	**0.0234**	**9.0000e-005**	**6.4400e-003**	**8.0000e-005**	**6.5200e-003**	**1.7400e-003**	**8.0000e-005**	**1.8200e-003**	**0.0000**	**8.8695**	**8.8695**	**3.9000e-004**	**0.0000**	**8.8794**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0191	0.0916	0.6004	9.2000e-004		3.4600e-003	3.4600e-003		3.4600e-003	3.4600e-003	0.0000	78.7865	78.7865	0.0189	0.0000	79.2584
Total	**0.0191**	**0.0916**	**0.6004**	**9.2000e-004**		**3.4600e-003**	**3.4600e-003**		**3.4600e-003**	**3.4600e-003**	**0.0000**	**78.7865**	**78.7865**	**0.0189**	**0.0000**	**79.2584**

3.2 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.0000e-004	0.0176	4.1600e-003	4.0000e-005	1.1000e-003	4.0000e-005	1.1400e-003	3.2000e-004	4.0000e-005	3.6000e-004	0.0000	4.2971	4.2971	2.5000e-004	0.0000	4.3034
Worker	2.7800e-003	1.8700e-003	0.0192	5.0000e-005	5.3400e-003	4.0000e-005	5.3800e-003	1.4200e-003	4.0000e-005	1.4600e-003	0.0000	4.5724	4.5724	1.4000e-004	0.0000	4.5760
Total	**3.2800e-003**	**0.0195**	**0.0234**	**9.0000e-005**	**6.4400e-003**	**8.0000e-005**	**6.5200e-003**	**1.7400e-003**	**8.0000e-005**	**1.8200e-003**	**0.0000**	**8.8695**	**8.8695**	**3.9000e-004**	**0.0000**	**8.8794**

3.3 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.7100e-003	0.0467	0.0585	9.0000e-005		2.4400e-003	2.4400e-003		2.2500e-003	2.2500e-003	0.0000	7.7550	7.7550	2.4600e-003	0.0000	7.8165
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.7100e-003**	**0.0467**	**0.0585**	**9.0000e-005**		**2.4400e-003**	**2.4400e-003**		**2.2500e-003**	**2.2500e-003**	**0.0000**	**7.7550**	**7.7550**	**2.4600e-003**	**0.0000**	**7.8165**

3.3 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.1000e-004	2.1200e-003	1.0000e-005	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5043	0.5043	2.0000e-005	0.0000	0.5047
Total	**3.1000e-004**	**2.1000e-004**	**2.1200e-003**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**5.9000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.5043**	**0.5043**	**2.0000e-005**	**0.0000**	**0.5047**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.3500e-003	6.4000e-003	0.0664	9.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	7.7550	7.7550	2.4600e-003	0.0000	7.8165
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.3500e-003**	**6.4000e-003**	**0.0664**	**9.0000e-005**		**2.1000e-004**	**2.1000e-004**		**2.1000e-004**	**2.1000e-004**	**0.0000**	**7.7550**	**7.7550**	**2.4600e-003**	**0.0000**	**7.8165**

3.3 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.1000e-004	2.1200e-003	1.0000e-005	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5043	0.5043	2.0000e-005	0.0000	0.5047
Total	**3.1000e-004**	**2.1000e-004**	**2.1200e-003**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**5.9000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.5043**	**0.5043**	**2.0000e-005**	**0.0000**	**0.5047**

3.4 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3428					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0200e-003	7.0400e-003	9.0700e-003	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2787
Total	**0.3439**	**7.0400e-003**	**9.0700e-003**	**1.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2787**

3.4 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	2.8000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0672	0.0672	0.0000	0.0000	0.0673
Total	**4.0000e-005**	**3.0000e-005**	**2.8000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0672**	**0.0672**	**0.0000**	**0.0000**	**0.0673**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3428					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5000e-004	6.4000e-004	9.1600e-003	1.0000e-005		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2787
Total	**0.3430**	**6.4000e-004**	**9.1600e-003**	**1.0000e-005**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2787**

3.4 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	2.8000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0672	0.0672	0.0000	0.0000	0.0673
Total	**4.0000e-005**	**3.0000e-005**	**2.8000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0672**	**0.0672**	**0.0000**	**0.0000**	**0.0673**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.594113	0.036394	0.166849	0.102253	0.024126	0.006070	0.030484	0.028024	0.003137	0.001706	0.004997	0.000880	0.000967

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	30.1059	30.1059	2.2300e-003	4.6000e-004	30.2996
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	30.1059	30.1059	2.2300e-003	4.6000e-004	30.2996
NaturalGas Mitigated	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	32.5715	32.5715	6.2000e-004	6.0000e-004	32.7651
NaturalGas Unmitigated	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	32.5715	32.5715	6.2000e-004	6.0000e-004	32.7651

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	610367	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	32.5715	32.5715	6.2000e-004	6.0000e-004	32.7651
Total		**3.2900e-003**	**0.0281**	**0.0120**	**1.8000e-004**		**2.2700e-003**	**2.2700e-003**		**2.2700e-003**	**2.2700e-003**	**0.0000**	**32.5715**	**32.5715**	**6.2000e-004**	**6.0000e-004**	**32.7651**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	610367	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	32.5715	32.5715	6.2000e-004	6.0000e-004	32.7651
Total		**3.2900e-003**	**0.0281**	**0.0120**	**1.8000e-004**		**2.2700e-003**	**2.2700e-003**		**2.2700e-003**	**2.2700e-003**	**0.0000**	**32.5715**	**32.5715**	**6.2000e-004**	**6.0000e-004**	**32.7651**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	169902	30.1059	2.2300e-003	4.6000e-004	30.2996
Total		**30.1059**	**2.2300e-003**	**4.6000e-004**	**30.2996**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	169902	30.1059	2.2300e-003	4.6000e-004	30.2996
Total		**30.1059**	**2.2300e-003**	**4.6000e-004**	**30.2996**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1950	2.3600e-003	0.1562	1.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	0.9101	0.9101	2.6000e-004	1.0000e-005	0.9201
Unmitigated	0.1950	2.3600e-003	0.1562	1.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	0.9101	0.9101	2.6000e-004	1.0000e-005	0.9201

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1902					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.0000e-005	5.7000e-004	2.4000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.6554	0.6554	1.0000e-005	1.0000e-005	0.6593
Landscaping	4.7000e-003	1.8000e-003	0.1560	1.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004	0.0000	0.2547	0.2547	2.4000e-004	0.0000	0.2608
Total	**0.1950**	**2.3700e-003**	**0.1562**	**1.0000e-005**		**9.1000e-004**	**9.1000e-004**		**9.1000e-004**	**9.1000e-004**	**0.0000**	**0.9101**	**0.9101**	**2.5000e-004**	**1.0000e-005**	**0.9201**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1902					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.0000e-005	5.7000e-004	2.4000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.6554	0.6554	1.0000e-005	1.0000e-005	0.6593
Landscaping	4.7000e-003	1.8000e-003	0.1560	1.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004	0.0000	0.2547	0.2547	2.4000e-004	0.0000	0.2608
Total	**0.1950**	**2.3700e-003**	**0.1562**	**1.0000e-005**		**9.1000e-004**	**9.1000e-004**		**9.1000e-004**	**9.1000e-004**	**0.0000**	**0.9101**	**0.9101**	**2.5000e-004**	**1.0000e-005**	**0.9201**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2.2809	0.0447	1.0800e-003	3.7211
Unmitigated	2.2809	0.0447	1.0800e-003	3.7211

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	1.36823 / 0.862583	2.2809	0.0447	1.0800e-003	3.7211
Total		**2.2809**	**0.0447**	**1.0800e-003**	**3.7211**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	1.36823 / 0.862583	2.2809	0.0447	1.0800e-003	3.7211
Total		**2.2809**	**0.0447**	**1.0800e-003**	**3.7211**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	4.7744	0.2822	0.0000	11.8282
Unmitigated	4.7744	0.2822	0.0000	11.8282

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	23.52	4.7744	0.2822	0.0000	11.8282
Total		**4.7744**	**0.2822**	**0.0000**	**11.8282**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	23.52	4.7744	0.2822	0.0000	11.8282
Total		**4.7744**	**0.2822**	**0.0000**	**11.8282**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Mitigated (Tier 4 Final)Construction-Homes 64-84

Sonoma-San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	21.00	Dwelling Unit	2.03	48,702.60	56

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	75
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	390.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Mitigated (Tier 4 Final)Construction-Homes 64-84 - Sonoma-San Francisco County, Annual

Project Characteristics - CO2 intensity factor based on Renewable Energy Portfolio Standard. Start of construction as provided by the Applicant in response to request for information form(8/16/19).

Land Use - Building Construction for 21 units. Acreage and square footage for 21 units derived by dividing total acreage(10.17) and square footage(243,513) equally for 105 units. 2.65 persons per unit (City of Santa Rosa).

Construction Phase - As provided by Applicant in response to request for information form(8/16/19).

Off-road Equipment - Adjusted construction equipment usage to match CalEEMod default total building construction usage hours.

Vehicle Trips - Construction Only.

Woodstoves - Construction Only.

Area Coating - Construction Only.

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Compliance with BAAQMD best management practices threshold for fugitive dust; recommended measures from BAAQMD's Basic Construction Mitigation Measures for all Proposed Projects.
Tier 4 Final mitigation applied to equipment with 50 HP or greater.

Mobile Land Use Mitigation -

Operational Off-Road Equipment -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Emergency Generators and Fire Pumps EF -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Residential_Exterior	32874	0
tblAreaCoating	Area_Residential_Interior	98623	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

Mitigated (Tier 4 Final)Construction-Homes 64-84 - Sonoma-San Francisco County, Annual

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberWood	9.03	0.00
tblLandUse	LandUseSquareFeet	37,800.00	48,702.60
tblLandUse	LotAcreage	6.82	2.03
tblLandUse	Population	60.00	56.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	UsageHours	8.00	2.80
tblOffRoadEquipment	UsageHours	7.00	3.20
tblOffRoadEquipment	UsageHours	8.00	3.20
tblOffRoadEquipment	UsageHours	6.00	2.80
tblOffRoadEquipment	UsageHours	8.00	3.20
tblProjectCharacteristics	CO2IntensityFactor	641.35	390.65
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural

tblVehicleTrips	ST_TR	9.91	0.00
tblVehicleTrips	SU_TR	8.62	0.00
tblVehicleTrips	WD_TR	9.52	0.00
tblWoodstoves	WoodstoveWoodMass	956.80	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.0616	0.5529	0.5829	1.0100e-003	6.3700e-003	0.0278	0.0341	1.7200e-003	0.0261	0.0278	0.0000	87.8275	87.8275	0.0194	0.0000	88.3118
2023	0.3648	0.1951	0.2348	4.0000e-004	2.4900e-003	9.4000e-003	0.0119	6.7000e-004	8.8300e-003	9.5000e-003	0.0000	34.6808	34.6808	8.0500e-003	0.0000	34.8820
Maximum	**0.3648**	**0.5529**	**0.5829**	**1.0100e-003**	**6.3700e-003**	**0.0278**	**0.0341**	**1.7200e-003**	**0.0261**	**0.0278**	**0.0000**	**87.8275**	**87.8275**	**0.0194**	**0.0000**	**88.3118**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.0225	0.1110	0.6273	1.0100e-003	6.3700e-003	3.5600e-003	9.9300e-003	1.7200e-003	3.5500e-003	5.2700e-003	0.0000	87.8274	87.8274	0.0194	0.0000	88.3117
2023	0.3508	0.0376	0.2566	4.0000e-004	2.4900e-003	1.1600e-003	3.6600e-003	6.7000e-004	1.1600e-003	1.8300e-003	0.0000	34.6807	34.6807	8.0500e-003	0.0000	34.8820
Maximum	**0.3508**	**0.1110**	**0.6273**	**1.0100e-003**	**6.3700e-003**	**3.5600e-003**	**9.9300e-003**	**1.7200e-003**	**3.5500e-003**	**5.2700e-003**	**0.0000**	**87.8274**	**87.8274**	**0.0194**	**0.0000**	**88.3117**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**12.47**	**80.13**	**-8.08**	**0.00**	**0.00**	**87.29**	**70.46**	**0.00**	**86.52**	**80.98**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	5-6-2022	8-5-2022	0.2361	0.0512
2	8-6-2022	11-5-2022	0.2362	0.0513
3	11-6-2022	2-5-2023	0.2288	0.0506
4	2-6-2023	5-5-2023	0.4738	0.3690
		Highest	0.4738	0.3690

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1950	2.3600e-003	0.1562	1.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	0.9101	0.9101	2.6000e-004	1.0000e-005	0.9201
Energy	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	62.6774	62.6774	2.8600e-003	1.0600e-003	63.0647
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	4.7744	0.0000	4.7744	0.2822	0.0000	11.8282
Water						0.0000	0.0000		0.0000	0.0000	0.4341	1.8468	2.2809	0.0447	1.0800e-003	3.7211
Total	**0.1983**	**0.0305**	**0.1682**	**1.9000e-004**	**0.0000**	**3.1800e-003**	**3.1800e-003**	**0.0000**	**3.1800e-003**	**3.1800e-003**	**5.2084**	**65.4344**	**70.6428**	**0.3300**	**2.1500e-003**	**79.5341**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1950	2.3600e-003	0.1562	1.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	0.9101	0.9101	2.6000e-004	1.0000e-005	0.9201
Energy	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	62.6774	62.6774	2.8600e-003	1.0600e-003	63.0647
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	4.7744	0.0000	4.7744	0.2822	0.0000	11.8282
Water						0.0000	0.0000		0.0000	0.0000	0.4341	1.8468	2.2809	0.0447	1.0800e-003	3.7211
Total	**0.1983**	**0.0305**	**0.1682**	**1.9000e-004**	**0.0000**	**3.1800e-003**	**3.1800e-003**	**0.0000**	**3.1800e-003**	**3.1800e-003**	**5.2084**	**65.4344**	**70.6428**	**0.3300**	**2.1500e-003**	**79.5341**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	5/6/2022	3/9/2023	5	220	
2	Paving	Paving	3/10/2023	3/23/2023	5	10	
3	Architectural Coating	Architectural Coating	3/24/2023	4/6/2023	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 98,623; Residential Outdoor: 32,874; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	2.80	231	0.29
Building Construction	Forklifts	3	3.20	89	0.20
Building Construction	Generator Sets	1	3.20	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	2.80	97	0.37
Building Construction	Welders	1	3.20	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	9	8.00	2.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0584	0.5341	0.5596	9.2000e-004		0.0277	0.0277		0.0260	0.0260	0.0000	79.2500	79.2500	0.0190	0.0000	79.7247
Total	**0.0584**	**0.5341**	**0.5596**	**9.2000e-004**		**0.0277**	**0.0277**		**0.0260**	**0.0260**	**0.0000**	**79.2500**	**79.2500**	**0.0190**	**0.0000**	**79.7247**

3.2 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.7000e-004	0.0170	3.9900e-003	4.0000e-005	1.0000e-003	4.0000e-005	1.0400e-003	2.9000e-004	4.0000e-005	3.3000e-004	0.0000	3.9781	3.9781	2.4000e-004	0.0000	3.9842
Worker	2.8000e-003	1.8800e-003	0.0193	5.0000e-005	5.3700e-003	4.0000e-005	5.4100e-003	1.4300e-003	4.0000e-005	1.4700e-003	0.0000	4.5993	4.5993	1.4000e-004	0.0000	4.6029
Total	**3.2700e-003**	**0.0189**	**0.0233**	**9.0000e-005**	**6.3700e-003**	**8.0000e-005**	**6.4500e-003**	**1.7200e-003**	**8.0000e-005**	**1.8000e-003**	**0.0000**	**8.5775**	**8.5775**	**3.8000e-004**	**0.0000**	**8.5871**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0192	0.0921	0.6039	9.2000e-004		3.4800e-003	3.4800e-003		3.4800e-003	3.4800e-003	0.0000	79.2499	79.2499	0.0190	0.0000	79.7246
Total	**0.0192**	**0.0921**	**0.6039**	**9.2000e-004**		**3.4800e-003**	**3.4800e-003**		**3.4800e-003**	**3.4800e-003**	**0.0000**	**79.2499**	**79.2499**	**0.0190**	**0.0000**	**79.7246**

3.2 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.7000e-004	0.0170	3.9900e-003	4.0000e-005	1.0000e-003	4.0000e-005	1.0400e-003	2.9000e-004	4.0000e-005	3.3000e-004	0.0000	3.9781	3.9781	2.4000e-004	0.0000	3.9842
Worker	2.8000e-003	1.8800e-003	0.0193	5.0000e-005	5.3700e-003	4.0000e-005	5.4100e-003	1.4300e-003	4.0000e-005	1.4700e-003	0.0000	4.5993	4.5993	1.4000e-004	0.0000	4.6029
Total	**3.2700e-003**	**0.0189**	**0.0233**	**9.0000e-005**	**6.3700e-003**	**8.0000e-005**	**6.4500e-003**	**1.7200e-003**	**8.0000e-005**	**1.8000e-003**	**0.0000**	**8.5775**	**8.5775**	**3.8000e-004**	**0.0000**	**8.5871**

3.2 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0154	0.1410	0.1592	2.6000e-004		6.8600e-003	6.8600e-003		6.4500e-003	6.4500e-003	0.0000	22.7169	22.7169	5.4000e-003	0.0000	22.8520
Total	**0.0154**	**0.1410**	**0.1592**	**2.6000e-004**		**6.8600e-003**	**6.8600e-003**		**6.4500e-003**	**6.4500e-003**	**0.0000**	**22.7169**	**22.7169**	**5.4000e-003**	**0.0000**	**22.8520**

3.2 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-004	3.9200e-003	1.0100e-003	1.0000e-005	2.9000e-004	0.0000	2.9000e-004	8.0000e-005	0.0000	9.0000e-005	0.0000	1.1141	1.1141	6.0000e-005	0.0000	1.1156
Worker	7.4000e-004	4.8000e-004	4.9800e-003	1.0000e-005	1.5400e-003	1.0000e-005	1.5500e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.2672	1.2672	4.0000e-005	0.0000	1.2681
Total	**8.4000e-004**	**4.4000e-003**	**5.9900e-003**	**2.0000e-005**	**1.8300e-003**	**1.0000e-005**	**1.8400e-003**	**4.9000e-004**	**1.0000e-005**	**5.1000e-004**	**0.0000**	**2.3813**	**2.3813**	**1.0000e-004**	**0.0000**	**2.3837**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.2800e-003	0.0260	0.1729	2.6000e-004		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	22.7168	22.7168	5.4000e-003	0.0000	22.8519
Total	**5.2800e-003**	**0.0260**	**0.1729**	**2.6000e-004**		**9.1000e-004**	**9.1000e-004**		**9.1000e-004**	**9.1000e-004**	**0.0000**	**22.7168**	**22.7168**	**5.4000e-003**	**0.0000**	**22.8519**

3.2 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-004	3.9200e-003	1.0100e-003	1.0000e-005	2.9000e-004	0.0000	2.9000e-004	8.0000e-005	0.0000	9.0000e-005	0.0000	1.1141	1.1141	6.0000e-005	0.0000	1.1156
Worker	7.4000e-004	4.8000e-004	4.9800e-003	1.0000e-005	1.5400e-003	1.0000e-005	1.5500e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.2672	1.2672	4.0000e-005	0.0000	1.2681
Total	**8.4000e-004**	**4.4000e-003**	**5.9900e-003**	**2.0000e-005**	**1.8300e-003**	**1.0000e-005**	**1.8400e-003**	**4.9000e-004**	**1.0000e-005**	**5.1000e-004**	**0.0000**	**2.3813**	**2.3813**	**1.0000e-004**	**0.0000**	**2.3837**

3.3 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.4000e-003	0.0431	0.0584	9.0000e-005		2.1700e-003	2.1700e-003		2.0000e-003	2.0000e-003	0.0000	7.7564	7.7564	2.4600e-003	0.0000	7.8179
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.4000e-003**	**0.0431**	**0.0584**	**9.0000e-005**		**2.1700e-003**	**2.1700e-003**		**2.0000e-003**	**2.0000e-003**	**0.0000**	**7.7564**	**7.7564**	**2.4600e-003**	**0.0000**	**7.8179**

3.3 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-004	1.8000e-004	1.9100e-003	1.0000e-005	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4849	0.4849	1.0000e-005	0.0000	0.4853
Total	**2.9000e-004**	**1.8000e-004**	**1.9100e-003**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**5.9000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.4849**	**0.4849**	**1.0000e-005**	**0.0000**	**0.4853**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.3500e-003	6.4000e-003	0.0664	9.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	7.7564	7.7564	2.4600e-003	0.0000	7.8178
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.3500e-003**	**6.4000e-003**	**0.0664**	**9.0000e-005**		**2.1000e-004**	**2.1000e-004**		**2.1000e-004**	**2.1000e-004**	**0.0000**	**7.7564**	**7.7564**	**2.4600e-003**	**0.0000**	**7.8178**

3.3 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-004	1.8000e-004	1.9100e-003	1.0000e-005	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4849	0.4849	1.0000e-005	0.0000	0.4853
Total	**2.9000e-004**	**1.8000e-004**	**1.9100e-003**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**5.9000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.4849**	**0.4849**	**1.0000e-005**	**0.0000**	**0.4853**

3.4 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3428					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.6000e-004	6.5100e-003	9.0600e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2785
Total	**0.3438**	**6.5100e-003**	**9.0600e-003**	**1.0000e-005**		**3.5000e-004**	**3.5000e-004**		**3.5000e-004**	**3.5000e-004**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2785**

3.4 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	2.0000e-005	2.5000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0647	0.0647	0.0000	0.0000	0.0647
Total	**4.0000e-005**	**2.0000e-005**	**2.5000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0647**	**0.0647**	**0.0000**	**0.0000**	**0.0647**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3428					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5000e-004	6.4000e-004	9.1600e-003	1.0000e-005		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2785
Total	**0.3430**	**6.4000e-004**	**9.1600e-003**	**1.0000e-005**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2785**

3.4 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	2.0000e-005	2.5000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0647	0.0647	0.0000	0.0000	0.0647
Total	**4.0000e-005**	**2.0000e-005**	**2.5000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0647**	**0.0647**	**0.0000**	**0.0000**	**0.0647**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.594113	0.036394	0.166849	0.102253	0.024126	0.006070	0.030484	0.028024	0.003137	0.001706	0.004997	0.000880	0.000967

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	30.1059	30.1059	2.2300e-003	4.6000e-004	30.2996
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	30.1059	30.1059	2.2300e-003	4.6000e-004	30.2996
NaturalGas Mitigated	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	32.5715	32.5715	6.2000e-004	6.0000e-004	32.7651
NaturalGas Unmitigated	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	32.5715	32.5715	6.2000e-004	6.0000e-004	32.7651

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	610367	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	32.5715	32.5715	6.2000e-004	6.0000e-004	32.7651
Total		**3.2900e-003**	**0.0281**	**0.0120**	**1.8000e-004**		**2.2700e-003**	**2.2700e-003**		**2.2700e-003**	**2.2700e-003**	**0.0000**	**32.5715**	**32.5715**	**6.2000e-004**	**6.0000e-004**	**32.7651**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	610367	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	32.5715	32.5715	6.2000e-004	6.0000e-004	32.7651
Total		**3.2900e-003**	**0.0281**	**0.0120**	**1.8000e-004**		**2.2700e-003**	**2.2700e-003**		**2.2700e-003**	**2.2700e-003**	**0.0000**	**32.5715**	**32.5715**	**6.2000e-004**	**6.0000e-004**	**32.7651**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	169902	30.1059	2.2300e-003	4.6000e-004	30.2996
Total		**30.1059**	**2.2300e-003**	**4.6000e-004**	**30.2996**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	169902	30.1059	2.2300e-003	4.6000e-004	30.2996
Total		**30.1059**	**2.2300e-003**	**4.6000e-004**	**30.2996**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1950	2.3600e-003	0.1562	1.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	0.9101	0.9101	2.6000e-004	1.0000e-005	0.9201
Unmitigated	0.1950	2.3600e-003	0.1562	1.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	0.9101	0.9101	2.6000e-004	1.0000e-005	0.9201

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1902					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.0000e-005	5.7000e-004	2.4000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.6554	0.6554	1.0000e-005	1.0000e-005	0.6593
Landscaping	4.7000e-003	1.8000e-003	0.1560	1.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004	0.0000	0.2547	0.2547	2.4000e-004	0.0000	0.2608
Total	**0.1950**	**2.3700e-003**	**0.1562**	**1.0000e-005**		**9.1000e-004**	**9.1000e-004**		**9.1000e-004**	**9.1000e-004**	**0.0000**	**0.9101**	**0.9101**	**2.5000e-004**	**1.0000e-005**	**0.9201**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1902					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.0000e-005	5.7000e-004	2.4000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.6554	0.6554	1.0000e-005	1.0000e-005	0.6593
Landscaping	4.7000e-003	1.8000e-003	0.1560	1.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004	0.0000	0.2547	0.2547	2.4000e-004	0.0000	0.2608
Total	**0.1950**	**2.3700e-003**	**0.1562**	**1.0000e-005**		**9.1000e-004**	**9.1000e-004**		**9.1000e-004**	**9.1000e-004**	**0.0000**	**0.9101**	**0.9101**	**2.5000e-004**	**1.0000e-005**	**0.9201**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2.2809	0.0447	1.0800e-003	3.7211
Unmitigated	2.2809	0.0447	1.0800e-003	3.7211

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	1.36823 / 0.862583	2.2809	0.0447	1.0800e-003	3.7211
Total		**2.2809**	**0.0447**	**1.0800e-003**	**3.7211**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	1.36823 / 0.862583	2.2809	0.0447	1.0800e-003	3.7211
Total		**2.2809**	**0.0447**	**1.0800e-003**	**3.7211**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	4.7744	0.2822	0.0000	11.8282
Unmitigated	4.7744	0.2822	0.0000	11.8282

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	23.52	4.7744	0.2822	0.0000	11.8282
Total		**4.7744**	**0.2822**	**0.0000**	**11.8282**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	23.52	4.7744	0.2822	0.0000	11.8282
Total		**4.7744**	**0.2822**	**0.0000**	**11.8282**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Mitigated(Tier 4 Final) Construction-Homes 85-105

Sonoma-San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	21.00	Dwelling Unit	2.03	48,702.60	55

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	75
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	390.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Mitigated(Tier 4 Final) Construction-Homes 85-105 - Sonoma-San Francisco County, Annual

Project Characteristics - CO2 intensity factor based on Renewable Energy Portfolio Standard. Start of construction as provided by the Applicant in response to request for information form(8/16/19).

Land Use - Acreage and square footage for 21 units derived by dividing total acreage(10.17) and square footage(243,513) equally for 105 units. 2.65 persons per unit(City of Santa Rosa).Rounded down to be consistent with total population of 279.

Construction Phase - As provided by Applicant in response to request for information form(8/16/19).

Off-road Equipment - Adjusted construction equipment usage to match CalEEMod default total building construction usage hours.

Vehicle Trips - Construction Only.

Woodstoves - Construction Only.

Area Coating - Construction Only.

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Compliance with BAAQMD best management practices threshold for fugitive dust; recommended measures from BAAQMD's Basic Construction Mitigation Measures for all Proposed Projects.
Tier 4 Final mitigation applied to equipment with 50 HP or greater.

Mobile Land Use Mitigation -

Operational Off-Road Equipment -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Emergency Generators and Fire Pumps EF -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Residential_Exterior	32874	0
tblAreaCoating	Area_Residential_Interior	98623	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

Mitigated(Tier 4 Final) Construction-Homes 85-105 - Sonoma-San Francisco County, Annual

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberWood	9.03	0.00
tblLandUse	LandUseSquareFeet	37,800.00	48,702.60
tblLandUse	LotAcreage	6.82	2.03
tblLandUse	Population	60.00	55.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	UsageHours	8.00	2.80
tblOffRoadEquipment	UsageHours	7.00	3.20
tblOffRoadEquipment	UsageHours	8.00	3.20
tblOffRoadEquipment	UsageHours	6.00	2.80
tblOffRoadEquipment	UsageHours	8.00	3.20
tblProjectCharacteristics	CO2IntensityFactor	641.35	390.65
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural

tblVehicleTrips	ST_TR	9.91	0.00
tblVehicleTrips	SU_TR	8.62	0.00
tblVehicleTrips	WD_TR	9.52	0.00
tblWoodstoves	WoodstoveWoodMass	956.80	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.0115	0.1035	0.1091	1.9000e-004	1.1900e-003	5.1900e-003	6.3800e-003	3.2000e-004	4.8900e-003	5.2100e-003	0.0000	16.4356	16.4356	3.6300e-003	0.0000	16.5262
2023	0.4109	0.6075	0.7034	1.2200e-003	7.6700e-003	0.0289	0.0366	2.0700e-003	0.0272	0.0292	0.0000	105.8776	105.8776	0.0237	0.0000	106.4690
Maximum	**0.4109**	**0.6075**	**0.7034**	**1.2200e-003**	**7.6700e-003**	**0.0289**	**0.0366**	**2.0700e-003**	**0.0272**	**0.0292**	**0.0000**	**105.8776**	**105.8776**	**0.0237**	**0.0000**	**106.4690**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	4.2000e-003	0.0208	0.1174	1.9000e-004	1.1900e-003	6.7000e-004	1.8600e-003	3.2000e-004	6.6000e-004	9.9000e-004	0.0000	16.4355	16.4355	3.6300e-003	0.0000	16.5262
2023	0.3682	0.1238	0.7640	1.2200e-003	7.6700e-003	3.7900e-003	0.0115	2.0700e-003	3.7900e-003	5.8600e-003	0.0000	105.8775	105.8775	0.0237	0.0000	106.4689
Maximum	**0.3682**	**0.1238**	**0.7640**	**1.2200e-003**	**7.6700e-003**	**3.7900e-003**	**0.0115**	**2.0700e-003**	**3.7900e-003**	**5.8600e-003**	**0.0000**	**105.8775**	**105.8775**	**0.0237**	**0.0000**	**106.4689**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**11.86**	**79.66**	**-8.48**	**0.00**	**0.00**	**86.92**	**68.99**	**0.00**	**86.12**	**80.12**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	11-17-2022	2-16-2023	0.2264	0.0503
2	2-17-2023	5-16-2023	0.2097	0.0474
3	5-17-2023	8-16-2023	0.2167	0.0489
4	8-17-2023	9-30-2023	0.1167	0.0245
		Highest	0.2264	0.0503

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1950	2.3600e-003	0.1562	1.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	0.9101	0.9101	2.6000e-004	1.0000e-005	0.9201
Energy	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	62.6774	62.6774	2.8600e-003	1.0600e-003	63.0647
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	4.6891	0.0000	4.6891	0.2771	0.0000	11.6170
Water						0.0000	0.0000		0.0000	0.0000	0.4341	1.8468	2.2809	0.0447	1.0800e-003	3.7211
Total	**0.1983**	**0.0305**	**0.1682**	**1.9000e-004**	**0.0000**	**3.1800e-003**	**3.1800e-003**	**0.0000**	**3.1800e-003**	**3.1800e-003**	**5.1232**	**65.4344**	**70.5575**	**0.3250**	**2.1500e-003**	**79.3229**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1950	2.3600e-003	0.1562	1.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	0.9101	0.9101	2.6000e-004	1.0000e-005	0.9201
Energy	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	62.6774	62.6774	2.8600e-003	1.0600e-003	63.0647
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	4.6891	0.0000	4.6891	0.2771	0.0000	11.6170
Water						0.0000	0.0000		0.0000	0.0000	0.4341	1.8468	2.2809	0.0447	1.0800e-003	3.7211
Total	**0.1983**	**0.0305**	**0.1682**	**1.9000e-004**	**0.0000**	**3.1800e-003**	**3.1800e-003**	**0.0000**	**3.1800e-003**	**3.1800e-003**	**5.1232**	**65.4344**	**70.5575**	**0.3250**	**2.1500e-003**	**79.3229**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	11/17/2022	9/20/2023	5	220	
2	Paving	Paving	9/21/2023	10/4/2023	5	10	
3	Architectural Coating	Architectural Coating	10/5/2023	10/18/2023	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 98,623; Residential Outdoor: 32,874; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	2.80	231	0.29
Building Construction	Forklifts	3	3.20	89	0.20
Building Construction	Generator Sets	1	3.20	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	2.80	97	0.37
Building Construction	Welders	1	3.20	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	9	8.00	2.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.0999	0.1047	1.7000e-004		5.1800e-003	5.1800e-003		4.8700e-003	4.8700e-003	0.0000	14.8304	14.8304	3.5500e-003	0.0000	14.9192
Total	**0.0109**	**0.0999**	**0.1047**	**1.7000e-004**		**5.1800e-003**	**5.1800e-003**		**4.8700e-003**	**4.8700e-003**	**0.0000**	**14.8304**	**14.8304**	**3.5500e-003**	**0.0000**	**14.9192**

3.2 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.0000e-005	3.1800e-003	7.5000e-004	1.0000e-005	1.9000e-004	1.0000e-005	1.9000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.7445	0.7445	5.0000e-005	0.0000	0.7456
Worker	5.2000e-004	3.5000e-004	3.6100e-003	1.0000e-005	1.0000e-003	1.0000e-005	1.0100e-003	2.7000e-004	1.0000e-005	2.7000e-004	0.0000	0.8607	0.8607	3.0000e-005	0.0000	0.8614
Total	**6.1000e-004**	**3.5300e-003**	**4.3600e-003**	**2.0000e-005**	**1.1900e-003**	**2.0000e-005**	**1.2000e-003**	**3.2000e-004**	**2.0000e-005**	**3.3000e-004**	**0.0000**	**1.6051**	**1.6051**	**8.0000e-005**	**0.0000**	**1.6069**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.5900e-003	0.0172	0.1130	1.7000e-004		6.5000e-004	6.5000e-004		6.5000e-004	6.5000e-004	0.0000	14.8304	14.8304	3.5500e-003	0.0000	14.9192
Total	**3.5900e-003**	**0.0172**	**0.1130**	**1.7000e-004**		**6.5000e-004**	**6.5000e-004**		**6.5000e-004**	**6.5000e-004**	**0.0000**	**14.8304**	**14.8304**	**3.5500e-003**	**0.0000**	**14.9192**

3.2 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.0000e-005	3.1800e-003	7.5000e-004	1.0000e-005	1.9000e-004	1.0000e-005	1.9000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.7445	0.7445	5.0000e-005	0.0000	0.7456
Worker	5.2000e-004	3.5000e-004	3.6100e-003	1.0000e-005	1.0000e-003	1.0000e-005	1.0100e-003	2.7000e-004	1.0000e-005	2.7000e-004	0.0000	0.8607	0.8607	3.0000e-005	0.0000	0.8614
Total	**6.1000e-004**	**3.5300e-003**	**4.3600e-003**	**2.0000e-005**	**1.1900e-003**	**2.0000e-005**	**1.2000e-003**	**3.2000e-004**	**2.0000e-005**	**3.3000e-004**	**0.0000**	**1.6051**	**1.6051**	**8.0000e-005**	**0.0000**	**1.6069**

3.2 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0591	0.5409	0.6108	1.0100e-003		0.0263	0.0263		0.0248	0.0248	0.0000	87.1586	87.1586	0.0207	0.0000	87.6769
Total	**0.0591**	**0.5409**	**0.6108**	**1.0100e-003**		**0.0263**	**0.0263**		**0.0248**	**0.0248**	**0.0000**	**87.1586**	**87.1586**	**0.0207**	**0.0000**	**87.6769**

3.2 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.9000e-004	0.0150	3.8900e-003	4.0000e-005	1.1000e-003	2.0000e-005	1.1200e-003	3.2000e-004	2.0000e-005	3.4000e-004	0.0000	4.2745	4.2745	2.3000e-004	0.0000	4.2804
Worker	2.8600e-003	1.8400e-003	0.0191	5.0000e-005	5.9000e-003	4.0000e-005	5.9400e-003	1.5700e-003	4.0000e-005	1.6100e-003	0.0000	4.8620	4.8620	1.4000e-004	0.0000	4.8654
Total	**3.2500e-003**	**0.0169**	**0.0230**	**9.0000e-005**	**7.0000e-003**	**6.0000e-005**	**7.0600e-003**	**1.8900e-003**	**6.0000e-005**	**1.9500e-003**	**0.0000**	**9.1365**	**9.1365**	**3.7000e-004**	**0.0000**	**9.1458**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0203	0.0997	0.6633	1.0100e-003		3.5000e-003	3.5000e-003		3.5000e-003	3.5000e-003	0.0000	87.1585	87.1585	0.0207	0.0000	87.6768
Total	**0.0203**	**0.0997**	**0.6633**	**1.0100e-003**		**3.5000e-003**	**3.5000e-003**		**3.5000e-003**	**3.5000e-003**	**0.0000**	**87.1585**	**87.1585**	**0.0207**	**0.0000**	**87.6768**

3.2 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.9000e-004	0.0150	3.8900e-003	4.0000e-005	1.1000e-003	2.0000e-005	1.1200e-003	3.2000e-004	2.0000e-005	3.4000e-004	0.0000	4.2745	4.2745	2.3000e-004	0.0000	4.2804
Worker	2.8600e-003	1.8400e-003	0.0191	5.0000e-005	5.9000e-003	4.0000e-005	5.9400e-003	1.5700e-003	4.0000e-005	1.6100e-003	0.0000	4.8620	4.8620	1.4000e-004	0.0000	4.8654
Total	**3.2500e-003**	**0.0169**	**0.0230**	**9.0000e-005**	**7.0000e-003**	**6.0000e-005**	**7.0600e-003**	**1.8900e-003**	**6.0000e-005**	**1.9500e-003**	**0.0000**	**9.1365**	**9.1365**	**3.7000e-004**	**0.0000**	**9.1458**

3.3 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.4000e-003	0.0431	0.0584	9.0000e-005		2.1700e-003	2.1700e-003		2.0000e-003	2.0000e-003	0.0000	7.7564	7.7564	2.4600e-003	0.0000	7.8179
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.4000e-003**	**0.0431**	**0.0584**	**9.0000e-005**		**2.1700e-003**	**2.1700e-003**		**2.0000e-003**	**2.0000e-003**	**0.0000**	**7.7564**	**7.7564**	**2.4600e-003**	**0.0000**	**7.8179**

3.3 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-004	1.8000e-004	1.9100e-003	1.0000e-005	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4849	0.4849	1.0000e-005	0.0000	0.4853
Total	**2.9000e-004**	**1.8000e-004**	**1.9100e-003**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**5.9000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.4849**	**0.4849**	**1.0000e-005**	**0.0000**	**0.4853**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.3500e-003	6.4000e-003	0.0664	9.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	7.7564	7.7564	2.4600e-003	0.0000	7.8178
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.3500e-003**	**6.4000e-003**	**0.0664**	**9.0000e-005**		**2.1000e-004**	**2.1000e-004**		**2.1000e-004**	**2.1000e-004**	**0.0000**	**7.7564**	**7.7564**	**2.4600e-003**	**0.0000**	**7.8178**

3.3 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-004	1.8000e-004	1.9100e-003	1.0000e-005	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4849	0.4849	1.0000e-005	0.0000	0.4853
Total	**2.9000e-004**	**1.8000e-004**	**1.9100e-003**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**5.9000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.4849**	**0.4849**	**1.0000e-005**	**0.0000**	**0.4853**

3.4 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3428					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.6000e-004	6.5100e-003	9.0600e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2785
Total	**0.3438**	**6.5100e-003**	**9.0600e-003**	**1.0000e-005**		**3.5000e-004**	**3.5000e-004**		**3.5000e-004**	**3.5000e-004**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2785**

3.4 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	2.0000e-005	2.5000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0647	0.0647	0.0000	0.0000	0.0647
Total	**4.0000e-005**	**2.0000e-005**	**2.5000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0647**	**0.0647**	**0.0000**	**0.0000**	**0.0647**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3428					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5000e-004	6.4000e-004	9.1600e-003	1.0000e-005		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2785
Total	**0.3430**	**6.4000e-004**	**9.1600e-003**	**1.0000e-005**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2785**

3.4 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	2.0000e-005	2.5000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0647	0.0647	0.0000	0.0000	0.0647
Total	**4.0000e-005**	**2.0000e-005**	**2.5000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0647**	**0.0647**	**0.0000**	**0.0000**	**0.0647**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.594113	0.036394	0.166849	0.102253	0.024126	0.006070	0.030484	0.028024	0.003137	0.001706	0.004997	0.000880	0.000967

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	30.1059	30.1059	2.2300e-003	4.6000e-004	30.2996
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	30.1059	30.1059	2.2300e-003	4.6000e-004	30.2996
NaturalGas Mitigated	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	32.5715	32.5715	6.2000e-004	6.0000e-004	32.7651
NaturalGas Unmitigated	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	32.5715	32.5715	6.2000e-004	6.0000e-004	32.7651

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	610367	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	32.5715	32.5715	6.2000e-004	6.0000e-004	32.7651
Total		**3.2900e-003**	**0.0281**	**0.0120**	**1.8000e-004**		**2.2700e-003**	**2.2700e-003**		**2.2700e-003**	**2.2700e-003**	**0.0000**	**32.5715**	**32.5715**	**6.2000e-004**	**6.0000e-004**	**32.7651**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	610367	3.2900e-003	0.0281	0.0120	1.8000e-004		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	32.5715	32.5715	6.2000e-004	6.0000e-004	32.7651
Total		**3.2900e-003**	**0.0281**	**0.0120**	**1.8000e-004**		**2.2700e-003**	**2.2700e-003**		**2.2700e-003**	**2.2700e-003**	**0.0000**	**32.5715**	**32.5715**	**6.2000e-004**	**6.0000e-004**	**32.7651**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	169902	30.1059	2.2300e-003	4.6000e-004	30.2996
Total		**30.1059**	**2.2300e-003**	**4.6000e-004**	**30.2996**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	169902	30.1059	2.2300e-003	4.6000e-004	30.2996
Total		**30.1059**	**2.2300e-003**	**4.6000e-004**	**30.2996**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1950	2.3600e-003	0.1562	1.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	0.9101	0.9101	2.6000e-004	1.0000e-005	0.9201
Unmitigated	0.1950	2.3600e-003	0.1562	1.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	0.9101	0.9101	2.6000e-004	1.0000e-005	0.9201

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1902					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.0000e-005	5.7000e-004	2.4000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.6554	0.6554	1.0000e-005	1.0000e-005	0.6593
Landscaping	4.7000e-003	1.8000e-003	0.1560	1.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004	0.0000	0.2547	0.2547	2.4000e-004	0.0000	0.2608
Total	**0.1950**	**2.3700e-003**	**0.1562**	**1.0000e-005**		**9.1000e-004**	**9.1000e-004**		**9.1000e-004**	**9.1000e-004**	**0.0000**	**0.9101**	**0.9101**	**2.5000e-004**	**1.0000e-005**	**0.9201**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1902					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.0000e-005	5.7000e-004	2.4000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.6554	0.6554	1.0000e-005	1.0000e-005	0.6593
Landscaping	4.7000e-003	1.8000e-003	0.1560	1.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004	0.0000	0.2547	0.2547	2.4000e-004	0.0000	0.2608
Total	**0.1950**	**2.3700e-003**	**0.1562**	**1.0000e-005**		**9.1000e-004**	**9.1000e-004**		**9.1000e-004**	**9.1000e-004**	**0.0000**	**0.9101**	**0.9101**	**2.5000e-004**	**1.0000e-005**	**0.9201**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2.2809	0.0447	1.0800e-003	3.7211
Unmitigated	2.2809	0.0447	1.0800e-003	3.7211

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	1.36823 / 0.862583	2.2809	0.0447	1.0800e-003	3.7211
Total		**2.2809**	**0.0447**	**1.0800e-003**	**3.7211**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	1.36823 / 0.862583	2.2809	0.0447	1.0800e-003	3.7211
Total		**2.2809**	**0.0447**	**1.0800e-003**	**3.7211**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	4.6891	0.2771	0.0000	11.6170
Unmitigated	4.6891	0.2771	0.0000	11.6170

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	23.1	4.6891	0.2771	0.0000	11.6170
Total		**4.6891**	**0.2771**	**0.0000**	**11.6170**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	23.1	4.6891	0.2771	0.0000	11.6170
Total		**4.6891**	**0.2771**	**0.0000**	**11.6170**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Stonebridge Subdivision Project-Unmitigated Operational Only

Sonoma-San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	3.98	Acre	3.98	173,368.80	0
Other Non-Asphalt Surfaces	14.00	Acre	14.00	609,840.00	0
Single Family Housing	105.00	Dwelling Unit	10.62	243,513.00	279

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	75
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	390.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Stonebridge Subdivision Project-Unmitigated Operational Only - Sonoma-San Francisco County, Annual

Project Characteristics - CO2 intensity factor adjusted based on Renewable Energy Portfolio.
Construction start date and full build out date as provided by the Applicant in Request to Information Form (8/16/19).

Land Use - 14 acres of Reserve area (East parcel). 10.62 acres includes single-family units, associated garage and drive-way and stormwater treatment area. 3.98 acres of internal roads. 2.65 persons per household (City of Santa Rosa).

Construction Phase - Operational Run Only.

Off-road Equipment - Operational Run Only.

Off-road Equipment -

Trips and VMT - Operational Run Only.

Architectural Coating - Operational Run Only.

Vehicle Trips - Trip Generation rate adjusted for 105 residential units to match the total trips as per W-Trans. 2019. Traffic Impact Study for the 2220 Fulton Road Project. October 22, which considers 120 units. Weekday trip generation rate used for weekends.

Woodstoves - No woodburning fireplaces or woodstoves in compliance with BAAQMD Regulation 6 Particulate Matter and visible emissions, Rule 3 Wood-burning devices.

Area Coating -

Energy Use -

Solid Waste -

Area Mitigation - No woodburning fireplaces or woodstoves in compliance with BAAQMD Regulation 6 Particulate Matter and visible emissions, Rule 3 Wood-burning devices.

Energy Mitigation - Minimum solar requirements for single-family homes, average CFA = 2,273 square feet,Climate zone 4, 1.22 KW per dwelling unit, 1800 energy production factor. Thus, 2200 kWh per year per dwelling unit. 231,088 kWh annual production for 105 units.

Water Mitigation - Compliance with the Green Building Code Standards and the Water Efficient Land Use Ordinance.

Fleet Mix -

Stonebridge Subdivision Project-Unmitigated Operational Only - Sonoma-San Francisco County, Annual

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Residential_Exterior	164,371.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	493,114.00	0.00
tblFireplaces	NumberWood	45.15	0.00
tblLandUse	LandUseSquareFeet	189,000.00	243,513.00
tblLandUse	LotAcreage	34.09	10.62
tblLandUse	Population	300.00	279.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	390.65
tblTripsAndVMT	WorkerTripNumber	73.00	0.00
tblVehicleTrips	ST_TR	9.91	10.79
tblVehicleTrips	SU_TR	8.62	10.79
tblVehicleTrips	WD_TR	9.52	10.79

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.1634	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.1634**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.1634	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.1634**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
9	4-1-2023	6-30-2023	0.0767	0.0767
10	7-1-2023	9-30-2023	0.0867	0.0867
		Highest	0.0867	0.0867

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.2404	0.0158	1.0275	8.6000e-004		0.0447	0.0447		0.0447	0.0447	5.3809	4.5509	9.9318	0.0264	6.0000e-005	10.6107
Energy	0.0165	0.1406	0.0598	9.0000e-004		0.0114	0.0114		0.0114	0.0114	0.0000	313.3871	313.3871	0.0143	5.3000e-003	315.3233
Mobile	0.3134	1.5156	3.4654	0.0116	0.9707	0.0102	0.9808	0.2612	9.5000e-003	0.2707	0.0000	1,066.1078	1,066.1078	0.0429	0.0000	1,067.1802
Waste						0.0000	0.0000		0.0000	0.0000	23.7865	0.0000	23.7865	1.4057	0.0000	58.9300
Water						0.0000	0.0000		0.0000	0.0000	2.1704	9.2342	11.4046	0.2236	5.4100e-003	18.6055
Total	**1.5702**	**1.6721**	**4.5528**	**0.0133**	**0.9707**	**0.0663**	**1.0369**	**0.2612**	**0.0656**	**0.3268**	**31.3377**	**1,393.2800**	**1,424.6178**	**1.7130**	**0.0108**	**1,470.6496**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.2129	8.9900e-003	0.7800	4.0000e-005		4.3200e-003	4.3200e-003		4.3200e-003	4.3200e-003	0.0000	1.2738	1.2738	1.2300e-003	0.0000	1.3045
Energy	0.0165	0.1406	0.0598	9.0000e-004		0.0114	0.0114		0.0114	0.0114	0.0000	272.4393	272.4393	0.0113	4.6700e-003	274.1120
Mobile	0.3134	1.5156	3.4654	0.0116	0.9707	0.0102	0.9808	0.2612	9.5000e-003	0.2707	0.0000	1,066.1078	1,066.1078	0.0429	0.0000	1,067.1802
Waste						0.0000	0.0000		0.0000	0.0000	23.7865	0.0000	23.7865	1.4057	0.0000	58.9300
Water						0.0000	0.0000		0.0000	0.0000	1.7363	7.3873	9.1237	0.1789	4.3200e-003	14.8844
Total	**1.5428**	**1.6652**	**4.3052**	**0.0125**	**0.9707**	**0.0259**	**0.9965**	**0.2612**	**0.0252**	**0.2864**	**25.5228**	**1,347.2083**	**1,372.7311**	**1.6400**	**8.9900e-003**	**1,416.4111**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**1.75**	**0.41**	**5.44**	**6.15**	**0.00**	**60.99**	**3.90**	**0.00**	**61.60**	**12.37**	**18.56**	**3.31**	**3.64**	**4.26**	**16.53**	**3.69**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	6/8/2023	7/26/2023	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 17.98

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 46,993 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	0.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1634					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1634**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1634					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1634**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3134	1.5156	3.4654	0.0116	0.9707	0.0102	0.9808	0.2612	9.5000e-003	0.2707	0.0000	1,066.1078	1,066.1078	0.0429	0.0000	1,067.1802
Unmitigated	0.3134	1.5156	3.4654	0.0116	0.9707	0.0102	0.9808	0.2612	9.5000e-003	0.2707	0.0000	1,066.1078	1,066.1078	0.0429	0.0000	1,067.1802

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	1,132.95	1,132.95	1132.95	2,616,670	2,616,670
Total	1,132.95	1,132.95	1,132.95	2,616,670	2,616,670

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.594113	0.036394	0.166849	0.102253	0.024126	0.006070	0.030484	0.028024	0.003137	0.001706	0.004997	0.000880	0.000967
Other Non-Asphalt Surfaces	0.594113	0.036394	0.166849	0.102253	0.024126	0.006070	0.030484	0.028024	0.003137	0.001706	0.004997	0.000880	0.000967
Single Family Housing	0.594113	0.036394	0.166849	0.102253	0.024126	0.006070	0.030484	0.028024	0.003137	0.001706	0.004997	0.000880	0.000967

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	109.5818	109.5818	8.1300e-003	1.6800e-003	110.2867
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	150.5296	150.5296	0.0112	2.3100e-003	151.4980
NaturalGas Mitigated	0.0165	0.1406	0.0598	9.0000e-004		0.0114	0.0114		0.0114	0.0114	0.0000	162.8575	162.8575	3.1200e-003	2.9900e-003	163.8253
NaturalGas Unmitigated	0.0165	0.1406	0.0598	9.0000e-004		0.0114	0.0114		0.0114	0.0114	0.0000	162.8575	162.8575	3.1200e-003	2.9900e-003	163.8253

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	3.05183e+006	0.0165	0.1406	0.0598	9.0000e-004		0.0114	0.0114		0.0114	0.0114	0.0000	162.8575	162.8575	3.1200e-003	2.9900e-003	163.8253
Total		**0.0165**	**0.1406**	**0.0598**	**9.0000e-004**		**0.0114**	**0.0114**		**0.0114**	**0.0114**	**0.0000**	**162.8575**	**162.8575**	**3.1200e-003**	**2.9900e-003**	**163.8253**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	3.05183e+006	0.0165	0.1406	0.0598	9.0000e-004		0.0114	0.0114		0.0114	0.0114	0.0000	162.8575	162.8575	3.1200e-003	2.9900e-003	163.8253
Total		**0.0165**	**0.1406**	**0.0598**	**9.0000e-004**		**0.0114**	**0.0114**		**0.0114**	**0.0114**	**0.0000**	**162.8575**	**162.8575**	**3.1200e-003**	**2.9900e-003**	**163.8253**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	849510	150.5296	0.0112	2.3100e-003	151.4980
Total		**150.5296**	**0.0112**	**2.3100e-003**	**151.4980**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	-77029.3	-13.6493	-0.0010	-0.0002	-13.7371
Other Non-Asphalt Surfaces	-77029.3	-13.6493	-0.0010	-0.0002	-13.7371
Single Family Housing	772481	136.8804	0.0102	2.1000e-003	137.7609
Total		**109.5818**	**8.1400e-003**	**1.6800e-003**	**110.2867**

6.0 Area Detail

6.1 Mitigation Measures Area

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.2129	8.9900e-003	0.7800	4.0000e-005		4.3200e-003	4.3200e-003		4.3200e-003	4.3200e-003	0.0000	1.2738	1.2738	1.2300e-003	0.0000	1.3045
Unmitigated	1.2404	0.0158	1.0275	8.6000e-004		0.0447	0.0447		0.0447	0.0447	5.3809	4.4509	9.9318	0.0264	6.0000e-005	10.6107

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1878					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0017					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0275	6.8500e-003	0.2475	8.2000e-004		0.0404	0.0404		0.0404	0.0404	5.3809	3.2770	8.6579	0.0252	6.0000e-005	9.3062
Landscaping	0.0235	8.9900e-003	0.7800	4.0000e-005		4.3200e-003	4.3200e-003		4.3200e-003	4.3200e-003	0.0000	1.2738	1.2738	1.2300e-003	0.0000	1.3045
Total	**1.2404**	**0.0158**	**1.0275**	**8.6000e-004**		**0.0447**	**0.0447**		**0.0447**	**0.0447**	**5.3809**	**4.5509**	**9.9317**	**0.0265**	**6.0000e-005**	**10.6107**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1878					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0017					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0235	8.9900e-003	0.7800	4.0000e-005		4.3200e-003	4.3200e-003		4.3200e-003	4.3200e-003	0.0000	1.2738	1.2738	1.2300e-003	0.0000	1.3045
Total	**1.2129**	**8.9900e-003**	**0.7800**	**4.0000e-005**		**4.3200e-003**	**4.3200e-003**		**4.3200e-003**	**4.3200e-003**	**0.0000**	**1.2738**	**1.2738**	**1.2300e-003**	**0.0000**	**1.3045**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	9.1237	0.1789	4.3200e-003	14.8844
Unmitigated	11.4046	0.2236	5.4100e-003	18.6055

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	6.84117 / 4.31291	11.4046	0.2236	5.4100e-003	18.6055
Total		**11.4046**	**0.2236**	**5.4100e-003**	**18.6055**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	5.47294 / 3.45033	9.1237	0.1789	4.3200e-003	14.8844
Total		**9.1237**	**0.1789**	**4.3200e-003**	**14.8844**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	23.7865	1.4057	0.0000	58.9300
Unmitigated	23.7865	1.4057	0.0000	58.9300

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	117.18	23.7865	1.4057	0.0000	58.9300
Total		**23.7865**	**1.4057**	**0.0000**	**58.9300**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	117.18	23.7865	1.4057	0.0000	58.9300
Total		**23.7865**	**1.4057**	**0.0000**	**58.9300**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Stonebridge Subdivision Project-Unmitigated Operational Only

Sonoma-San Francisco County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	3.98	Acre	3.98	173,368.80	0
Other Non-Asphalt Surfaces	14.00	Acre	14.00	609,840.00	0
Single Family Housing	105.00	Dwelling Unit	10.62	243,513.00	279

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	75
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	390.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Stonebridge Subdivision Project-Unmitigated Operational Only - Sonoma-San Francisco County, Summer

Project Characteristics - CO2 intensity factor adjusted based on Renewable Energy Portfolio.
Construction start date and full build out date as provided by the Applicant in Request to Information Form (8/16/19).

Land Use - 14 acres of Reserve area (East parcel). 10.62 acres includes single-family units, associated garage and drive-way and stormwater treatment area. 3.98 acres of internal roads. 2.65 persons per household (City of Santa Rosa).

Construction Phase - Operational Run Only.

Off-road Equipment - Operational Run Only.

Off-road Equipment -

Trips and VMT - Operational Run Only.

Architectural Coating - Operational Run Only.

Vehicle Trips - Trip Generation rate adjusted for 105 residential units to match the total trips as per W-Trans. 2019. Traffic Impact Study for the 2220 Fulton Road Project. October 22, which considers 120 units. Weekday trip generation rate used for weekends.

Woodstoves - No woodburning fireplaces or woodstoves in compliance with BAAQMD Regulation 6 Particulate Matter and visible emissions, Rule 3 Wood-burning devices.

Area Coating -

Energy Use -

Solid Waste -

Area Mitigation - No woodburning fireplaces or woodstoves in compliance with BAAQMD Regulation 6 Particulate Matter and visible emissions, Rule 3 Wood-burning devices.

Energy Mitigation - Minimum solar requirements for single-family homes, average CFA = 2,273 square feet,Climate zone 4, 1.22 KW per dwelling unit, 1800 energy production factor. Thus, 2200 kWh per year per dwelling unit. 231,088 kWh annual production for 105 units.

Water Mitigation - Compliance with the Green Building Code Standards and the Water Efficient Land Use Ordinance.

Fleet Mix -

Stonebridge Subdivision Project-Unmitigated Operational Only - Sonoma-San Francisco County, Summer

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Residential_Exterior	164,371.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	493,114.00	0.00
tblFireplaces	NumberWood	45.15	0.00
tblLandUse	LandUseSquareFeet	189,000.00	243,513.00
tblLandUse	LotAcreage	34.09	10.62
tblLandUse	Population	300.00	279.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	390.65
tblTripsAndVMT	WorkerTripNumber	73.00	0.00
tblVehicleTrips	ST_TR	9.91	10.79
tblVehicleTrips	SU_TR	8.62	10.79
tblVehicleTrips	WD_TR	9.52	10.79

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	9.3348	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**9.3348**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	9.3348	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**9.3348**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.4140	0.9895	32.2765	0.0800		3.9053	3.9053		3.9053	3.9053	563.2853	664.1313	1,227.4167	2.6607	0.0119	1,297.4769
Energy	0.0902	0.7705	0.3279	4.9200e-003		0.0623	0.0623		0.0623	0.0623		983.6694	983.6694	0.0189	0.0180	989.5149
Mobile	1.9445	8.0874	19.4340	0.0666	5.5775	0.0557	5.6332	1.4949	0.0521	1.5471		6,759.0742	6,759.0742	0.2600		6,765.5735
Total	**11.4487**	**9.8474**	**52.0383**	**0.1516**	**5.5775**	**4.0234**	**9.6008**	**1.4949**	**4.0198**	**5.5147**	**563.2853**	**8,406.8750**	**8,970.1603**	**2.9395**	**0.0299**	**9,052.5653**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.7786	0.0999	8.6664	4.6000e-004		0.0480	0.0480		0.0480	0.0480	0.0000	15.6019	15.6019	0.0150	0.0000	15.9772
Energy	0.0902	0.7705	0.3279	4.9200e-003		0.0623	0.0623		0.0623	0.0623		983.6694	983.6694	0.0189	0.0180	989.5149
Mobile	1.9445	8.0874	19.4340	0.0666	5.5775	0.0557	5.6332	1.4949	0.0521	1.5471		6,759.0742	6,759.0742	0.2600		6,765.5735
Total	**8.8133**	**8.9578**	**28.4282**	**0.0720**	**5.5775**	**0.1660**	**5.7435**	**1.4949**	**0.1624**	**1.6573**	**0.0000**	**7,758.3456**	**7,758.3456**	**0.2938**	**0.0180**	**7,771.0656**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**23.02**	**9.03**	**45.37**	**52.49**	**0.00**	**95.87**	**40.18**	**0.00**	**95.96**	**69.95**	**100.00**	**7.71**	**13.51**	**90.00**	**39.74**	**14.16**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	6/8/2023	7/26/2023	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 17.98

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 46,993 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	0.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.3348					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**9.3348**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.2 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.3348					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**9.3348**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.9445	8.0874	19.4340	0.0666	5.5775	0.0557	5.6332	1.4949	0.0521	1.5471		6,759.0742	6,759.0742	0.2600		6,765.5735
Unmitigated	1.9445	8.0874	19.4340	0.0666	5.5775	0.0557	5.6332	1.4949	0.0521	1.5471		6,759.0742	6,759.0742	0.2600		6,765.5735

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	1,132.95	1,132.95	1132.95	2,616,670	2,616,670
Total	1,132.95	1,132.95	1,132.95	2,616,670	2,616,670

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.594113	0.036394	0.166849	0.102253	0.024126	0.006070	0.030484	0.028024	0.003137	0.001706	0.004997	0.000880	0.000967
Other Non-Asphalt Surfaces	0.594113	0.036394	0.166849	0.102253	0.024126	0.006070	0.030484	0.028024	0.003137	0.001706	0.004997	0.000880	0.000967
Single Family Housing	0.594113	0.036394	0.166849	0.102253	0.024126	0.006070	0.030484	0.028024	0.003137	0.001706	0.004997	0.000880	0.000967

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0902	0.7705	0.3279	4.9200e-003		0.0623	0.0623		0.0623	0.0623		983.6694	983.6694	0.0189	0.0180	989.5149
NaturalGas Unmitigated	0.0902	0.7705	0.3279	4.9200e-003		0.0623	0.0623		0.0623	0.0623		983.6694	983.6694	0.0189	0.0180	989.5149

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	8361.19	0.0902	0.7705	0.3279	4.9200e-003		0.0623	0.0623		0.0623	0.0623		983.6694	983.6694	0.0189	0.0180	989.5149
Total		**0.0902**	**0.7705**	**0.3279**	**4.9200e-003**		**0.0623**	**0.0623**		**0.0623**	**0.0623**		**983.6694**	**983.6694**	**0.0189**	**0.0180**	**989.5149**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	8.36119	0.0902	0.7705	0.3279	4.9200e-003		0.0623	0.0623		0.0623	0.0623		983.6694	983.6694	0.0189	0.0180	989.5149
Total		**0.0902**	**0.7705**	**0.3279**	**4.9200e-003**		**0.0623**	**0.0623**		**0.0623**	**0.0623**		**983.6694**	**983.6694**	**0.0189**	**0.0180**	**989.5149**

6.0 Area Detail

6.1 Mitigation Measures Area

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.7786	0.0999	8.6664	4.6000e-004		0.0480	0.0480		0.0480	0.0480	0.0000	15.6019	15.6019	0.0150	0.0000	15.9772
Unmitigated	9.4140	0.9895	32.2765	0.0800		3.9053	3.9053		3.9053	3.9053	563.2853	664.1313	1,227.4167	2.6607	0.0119	1,297.4769

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.0288					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.4886					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	2.6355	0.8896	23.6101	0.0796		3.8574	3.8574		3.8574	3.8574	563.2853	648.5294	1,211.8148	2.6457	0.0119	1,281.4997
Landscaping	0.2612	0.0999	8.6664	4.6000e-004		0.0480	0.0480		0.0480	0.0480		15.6019	15.6019	0.0150		15.9772
Total	**9.4140**	**0.9895**	**32.2765**	**0.0800**		**3.9053**	**3.9053**		**3.9053**	**3.9053**	**563.2853**	**664.1313**	**1,227.4167**	**2.6607**	**0.0119**	**1,297.4769**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.0288					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.4886					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2612	0.0999	8.6664	4.6000e-004		0.0480	0.0480		0.0480	0.0480		15.6019	15.6019	0.0150		15.9772
Total	**6.7786**	**0.0999**	**8.6664**	**4.6000e-004**		**0.0480**	**0.0480**		**0.0480**	**0.0480**	**0.0000**	**15.6019**	**15.6019**	**0.0150**	**0.0000**	**15.9772**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Stonebridge Subdivision Project-Unmitigated Operational Only

Sonoma-San Francisco County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	3.98	Acre	3.98	173,368.80	0
Other Non-Asphalt Surfaces	14.00	Acre	14.00	609,840.00	0
Single Family Housing	105.00	Dwelling Unit	10.62	243,513.00	279

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	75
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	390.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Stonebridge Subdivision Project-Unmitigated Operational Only - Sonoma-San Francisco County, Winter

Project Characteristics - CO2 intensity factor adjusted based on Renewable Energy Portfolio.
Construction start date and full build out date as provided by the Applicant in Request to Information Form (8/16/19).

Land Use - 14 acres of Reserve area (East parcel). 10.62 acres includes single-family units, associated garage and drive-way and stormwater treatment area. 3.98 acres of internal roads. 2.65 persons per household (City of Santa Rosa).

Construction Phase - Operational Run Only.

Off-road Equipment - Operational Run Only.

Off-road Equipment -

Trips and VMT - Operational Run Only.

Architectural Coating - Operational Run Only.

Vehicle Trips - Trip Generation rate adjusted for 105 residential units to match the total trips as per W-Trans. 2019. Traffic Impact Study for the 2220 Fulton Road Project. October 22, which considers 120 units. Weekday trip generation rate used for weekends.

Woodstoves - No woodburning fireplaces or woodstoves in compliance with BAAQMD Regulation 6 Particulate Matter and visible emissions, Rule 3 Wood-burning devices.

Area Coating -

Energy Use -

Solid Waste -

Area Mitigation - No woodburning fireplaces or woodstoves in compliance with BAAQMD Regulation 6 Particulate Matter and visible emissions, Rule 3 Wood-burning devices.

Energy Mitigation - Minimum solar requirements for single-family homes, average CFA = 2,273 square feet,Climate zone 4, 1.22 KW per dwelling unit, 1800 energy production factor. Thus, 2200 kWh per year per dwelling unit. 231,088 kWh annual production for 105 units.

Water Mitigation - Compliance with the Green Building Code Standards and the Water Efficient Land Use Ordinance.

Fleet Mix -

Stonebridge Subdivision Project-Unmitigated Operational Only - Sonoma-San Francisco County, Winter

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Residential_Exterior	164,371.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	493,114.00	0.00
tblFireplaces	NumberWood	45.15	0.00
tblLandUse	LandUseSquareFeet	189,000.00	243,513.00
tblLandUse	LotAcreage	34.09	10.62
tblLandUse	Population	300.00	279.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	390.65
tblTripsAndVMT	WorkerTripNumber	73.00	0.00
tblVehicleTrips	ST_TR	9.91	10.79
tblVehicleTrips	SU_TR	8.62	10.79
tblVehicleTrips	WD_TR	9.52	10.79

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	9.3348	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**9.3348**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	9.3348	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**9.3348**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.4140	0.9895	32.2765	0.0800		3.9053	3.9053		3.9053	3.9053	563.2853	664.1313	1,227.4167	2.6607	0.0119	1,297.4769
Energy	0.0902	0.7705	0.3279	4.9200e-003		0.0623	0.0623		0.0623	0.0623		983.6694	983.6694	0.0189	0.0180	989.5149
Mobile	1.7060	8.5162	19.9506	0.0630	5.5775	0.0561	5.6336	1.4949	0.0525	1.5474		6,394.0545	6,394.0545	0.2663		6,400.7130
Total	**11.2102**	**10.2763**	**52.5549**	**0.1480**	**5.5775**	**4.0238**	**9.6012**	**1.4949**	**4.0201**	**5.5150**	**563.2853**	**8,041.8552**	**8,605.1406**	**2.9459**	**0.0299**	**8,687.7048**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.7786	0.0999	8.6664	4.6000e-004		0.0480	0.0480		0.0480	0.0480	0.0000	15.6019	15.6019	0.0150	0.0000	15.9772
Energy	0.0902	0.7705	0.3279	4.9200e-003		0.0623	0.0623		0.0623	0.0623		983.6694	983.6694	0.0189	0.0180	989.5149
Mobile	1.7060	8.5162	19.9506	0.0630	5.5775	0.0561	5.6336	1.4949	0.0525	1.5474		6,394.0545	6,394.0545	0.2663		6,400.7130
Total	**8.5747**	**9.3866**	**28.9449**	**0.0684**	**5.5775**	**0.1664**	**5.7438**	**1.4949**	**0.1628**	**1.6577**	**0.0000**	**7,393.3258**	**7,393.3258**	**0.3002**	**0.0180**	**7,406.2051**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**23.51**	**8.66**	**44.92**	**53.77**	**0.00**	**95.87**	**40.18**	**0.00**	**95.95**	**69.94**	**100.00**	**8.06**	**14.08**	**89.81**	**39.74**	**14.75**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	6/8/2023	7/26/2023	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 17.98

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 46,993 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	0.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.3348					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**9.3348**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.2 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.3348					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**9.3348**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.7060	8.5162	19.9506	0.0630	5.5775	0.0561	5.6336	1.4949	0.0525	1.5474		6,394.0545	6,394.0545	0.2663		6,400.7130
Unmitigated	1.7060	8.5162	19.9506	0.0630	5.5775	0.0561	5.6336	1.4949	0.0525	1.5474		6,394.0545	6,394.0545	0.2663		6,400.7130

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	1,132.95	1,132.95	1132.95	2,616,670	2,616,670
Total	1,132.95	1,132.95	1,132.95	2,616,670	2,616,670

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.594113	0.036394	0.166849	0.102253	0.024126	0.006070	0.030484	0.028024	0.003137	0.001706	0.004997	0.000880	0.000967
Other Non-Asphalt Surfaces	0.594113	0.036394	0.166849	0.102253	0.024126	0.006070	0.030484	0.028024	0.003137	0.001706	0.004997	0.000880	0.000967
Single Family Housing	0.594113	0.036394	0.166849	0.102253	0.024126	0.006070	0.030484	0.028024	0.003137	0.001706	0.004997	0.000880	0.000967

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0902	0.7705	0.3279	4.9200e-003		0.0623	0.0623		0.0623	0.0623		983.6694	983.6694	0.0189	0.0180	989.5149
NaturalGas Unmitigated	0.0902	0.7705	0.3279	4.9200e-003		0.0623	0.0623		0.0623	0.0623		983.6694	983.6694	0.0189	0.0180	989.5149

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	8361.19	0.0902	0.7705	0.3279	4.9200e-003		0.0623	0.0623		0.0623	0.0623		983.6694	983.6694	0.0189	0.0180	989.5149
Total		**0.0902**	**0.7705**	**0.3279**	**4.9200e-003**		**0.0623**	**0.0623**		**0.0623**	**0.0623**		**983.6694**	**983.6694**	**0.0189**	**0.0180**	**989.5149**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	8.36119	0.0902	0.7705	0.3279	4.9200e-003		0.0623	0.0623		0.0623	0.0623		983.6694	983.6694	0.0189	0.0180	989.5149
Total		**0.0902**	**0.7705**	**0.3279**	**4.9200e-003**		**0.0623**	**0.0623**		**0.0623**	**0.0623**		**983.6694**	**983.6694**	**0.0189**	**0.0180**	**989.5149**

6.0 Area Detail

6.1 Mitigation Measures Area

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.7786	0.0999	8.6664	4.6000e-004		0.0480	0.0480		0.0480	0.0480	0.0000	15.6019	15.6019	0.0150	0.0000	15.9772
Unmitigated	9.4140	0.9895	32.2765	0.0800		3.9053	3.9053		3.9053	3.9053	563.2853	664.1313	1,227.4167	2.6607	0.0119	1,297.4769

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.0288					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.4886					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	2.6355	0.8896	23.6101	0.0796		3.8574	3.8574		3.8574	3.8574	563.2853	648.5294	1,211.8148	2.6457	0.0119	1,281.4997
Landscaping	0.2612	0.0999	8.6664	4.6000e-004		0.0480	0.0480		0.0480	0.0480		15.6019	15.6019	0.0150		15.9772
Total	**9.4140**	**0.9895**	**32.2765**	**0.0800**		**3.9053**	**3.9053**		**3.9053**	**3.9053**	**563.2853**	**664.1313**	**1,227.4167**	**2.6607**	**0.0119**	**1,297.4769**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.0288					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.4886					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2612	0.0999	8.6664	4.6000e-004		0.0480	0.0480		0.0480	0.0480		15.6019	15.6019	0.0150		15.9772
Total	**6.7786**	**0.0999**	**8.6664**	**4.6000e-004**		**0.0480**	**0.0480**		**0.0480**	**0.0480**	**0.0000**	**15.6019**	**15.6019**	**0.0150**	**0.0000**	**15.9772**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Stonebridge Subdivision Project-Unmitigated 2030 Operational Only

Sonoma-San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	3.98	Acre	3.98	173,368.80	0
Other Non-Asphalt Surfaces	14.00	Acre	14.00	609,840.00	0
Single Family Housing	105.00	Dwelling Unit	10.62	243,513.00	279

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	75
Climate Zone	4			**Operational Year**	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	292.24	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Stonebridge Subdivision Project-Unmitigated 2030 Operational Only - Sonoma-San Francisco County, Annual

Project Characteristics - Project operations in the 2030 operational year
CO2 intensity factor adjusted based on Renewable Energy Portfolio

Land Use - 14 acres of Reserve area (East parcel). 10.62 acres includes single-family units, associated garage and drive-way and stormwater treatment area. 3.98 acres of internal roads. 2.65 persons per household (City of Santa Rosa).

Construction Phase - Operational run only

Off-road Equipment - Operational run only

Off-road Equipment -

Trips and VMT - Operational run only

Architectural Coating - Operational run only

Vehicle Trips - Trip Generation rate adjusted for 105 residential units to match the total trips as per W-Trans. 2019. Traffic Impact Study for the 2220 Fulton Roac Project. October 22, which considers 120 units. Weekday trip generation rate used for weekends.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - No woodburning fireplaces or woodstoves in compliance with BAAQMD Regulation 6 Particulate Matter and visible emissions, Rule 3 Wood-burning devices.

Area Coating -

Energy Use -

Solid Waste -

Area Mitigation - No woodburning fireplaces or woodstoves in compliance with BAAQMD Regulation 6 Particulate Matter and visible emissions, Rule 3 Wood-burning devices.

Energy Mitigation - Minimum solar requirements for single-family homes, average CFA = 2,273 square feet, Climate zone 4, 1.22 KW per dwelling unit, 1800 energy production factor. Thus, 2200 kWh per year per dwelling unit. 231,088 kWh annual production for 105 units.

Water Mitigation - Compliance with the Green Building Code Standards and the Water Efficient Land Use Ordinance

Fleet Mix -

Stonebridge Subdivision Project-Unmitigated 2030 Operational Only - Sonoma-San Francisco County, Annual

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Residential_Exterior	164,371.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	493,114.00	0.00
tblConstructionPhase	NumDays	35.00	1.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberWood	45.15	0.00
tblLandUse	LandUseSquareFeet	189,000.00	243,513.00
tblLandUse	LotAcreage	34.09	10.62
tblLandUse	Population	300.00	279.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	292.24
tblTripsAndVMT	WorkerTripNumber	73.00	0.00
tblVehicleTrips	ST_TR	9.91	10.79
tblVehicleTrips	SU_TR	8.62	10.79
tblVehicleTrips	WD_TR	9.52	10.79
tblWoodstoves	WoodstoveWoodMass	956.80	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.1634	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.1634**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.1634	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.1634**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Stonebridge Subdivision Project-Unmitigated 2030 Operational Only - Sonoma-San Francisco County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
9	4-1-2023	6-30-2023	0.1167	0.1167
		Highest	0.1167	0.1167

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.2130	0.0118	0.7790	6.0000e-005		4.5500e-003	4.5500e-003		4.5500e-003	4.5500e-003	0.0000	4.5509	4.5509	1.2800e-003	6.0000e-005	4.6007
Energy	0.0165	0.1406	0.0598	9.0000e-004		0.0114	0.0114		0.0114	0.0114	0.0000	275.4667	275.4667	0.0143	5.3000e-003	277.4028
Mobile	0.1991	1.2154	2.1769	9.5900e-003	0.9695	6.6900e-003	0.9762	0.2607	6.2300e-003	0.2669	0.0000	888.1555	888.1555	0.0310	0.0000	888.9308
Waste						0.0000	0.0000		0.0000	0.0000	23.7865	0.0000	23.7865	1.4057	0.0000	58.9300
Water						0.0000	0.0000		0.0000	0.0000	2.1704	6.9080	9.0784	0.2236	5.4100e-003	16.2793
Total	**1.4286**	**1.3679**	**3.0157**	**0.0106**	**0.9695**	**0.0226**	**0.9921**	**0.2607**	**0.0222**	**0.2828**	**25.9569**	**1,175.0810**	**1,201.0379**	**1.6759**	**0.0108**	**1,246.1436**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.2127	8.9700e-003	0.7777	4.0000e-005		4.3200e-003	4.3200e-003		4.3200e-003	4.3200e-003	0.0000	1.2738	1.2738	1.2100e-003	0.0000	1.3042
Energy	0.0165	0.1406	0.0598	9.0000e-004		0.0114	0.0114		0.0114	0.0114	0.0000	244.8342	244.8342	0.0113	4.6700e-003	246.5069
Mobile	0.1991	1.2154	2.1769	9.5900e-003	0.9695	6.6900e-003	0.9762	0.2607	6.2300e-003	0.2669	0.0000	888.1555	888.1555	0.0310	0.0000	888.9308
Waste						0.0000	0.0000		0.0000	0.0000	23.7865	0.0000	23.7865	1.4057	0.0000	58.9300
Water						0.0000	0.0000		0.0000	0.0000	1.7363	5.5264	7.2627	0.1789	4.3200e-003	13.0234
Total	**1.4282**	**1.3650**	**3.0145**	**0.0105**	**0.9695**	**0.0224**	**0.9919**	**0.2607**	**0.0219**	**0.2826**	**25.5228**	**1,139.7899**	**1,165.3127**	**1.6281**	**8.9900e-003**	**1,208.6953**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.02**	**0.21**	**0.04**	**0.19**	**0.00**	**1.02**	**0.02**	**0.00**	**1.04**	**0.08**	**1.67**	**3.00**	**2.97**	**2.85**	**16.53**	**3.01**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	6/8/2023	6/8/2023	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 17.98

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 46,993 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	0.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1634					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1634**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1634					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1634**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1991	1.2154	2.1769	9.5900e-003	0.9695	6.6900e-003	0.9762	0.2607	6.2300e-003	0.2669	0.0000	888.1555	888.1555	0.0310	0.0000	888.9308
Unmitigated	0.1991	1.2154	2.1769	9.5900e-003	0.9695	6.6900e-003	0.9762	0.2607	6.2300e-003	0.2669	0.0000	888.1555	888.1555	0.0310	0.0000	888.9308

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	1,132.95	1,132.95	1132.95	2,616,670	2,616,670
Total	1,132.95	1,132.95	1,132.95	2,616,670	2,616,670

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.625329	0.031298	0.162135	0.089092	0.014618	0.004632	0.032111	0.030354	0.003196	0.001373	0.004305	0.000897	0.000662
Other Non-Asphalt Surfaces	0.625329	0.031298	0.162135	0.089092	0.014618	0.004632	0.032111	0.030354	0.003196	0.001373	0.004305	0.000897	0.000662
Single Family Housing	0.625329	0.031298	0.162135	0.089092	0.014618	0.004632	0.032111	0.030354	0.003196	0.001373	0.004305	0.000897	0.000662

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	81.9767	81.9767	8.1300e-003	1.6800e-003	82.6816
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	112.6092	112.6092	0.0112	2.3100e-003	113.5775
NaturalGas Mitigated	0.0165	0.1406	0.0598	9.0000e-004		0.0114	0.0114		0.0114	0.0114	0.0000	162.8575	162.8575	3.1200e-003	2.9900e-003	163.8253
NaturalGas Unmitigated	0.0165	0.1406	0.0598	9.0000e-004		0.0114	0.0114		0.0114	0.0114	0.0000	162.8575	162.8575	3.1200e-003	2.9900e-003	163.8253

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	3.05183e+006	0.0165	0.1406	0.0598	9.0000e-004		0.0114	0.0114		0.0114	0.0114	0.0000	162.8575	162.8575	3.1200e-003	2.9900e-003	163.8253
Total		**0.0165**	**0.1406**	**0.0598**	**9.0000e-004**		**0.0114**	**0.0114**		**0.0114**	**0.0114**	**0.0000**	**162.8575**	**162.8575**	**3.1200e-003**	**2.9900e-003**	**163.8253**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	3.05183e+006	0.0165	0.1406	0.0598	9.0000e-004		0.0114	0.0114		0.0114	0.0114	0.0000	162.8575	162.8575	3.1200e-003	2.9900e-003	163.8253
Total		**0.0165**	**0.1406**	**0.0598**	**9.0000e-004**		**0.0114**	**0.0114**		**0.0114**	**0.0114**	**0.0000**	**162.8575**	**162.8575**	**3.1200e-003**	**2.9900e-003**	**163.8253**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	849510	112.6092	0.0112	2.3100e-003	113.5775
Total		**112.6092**	**0.0112**	**2.3100e-003**	**113.5775**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	-77029.3	-10.2108	-0.0010	-0.0002	-10.2987
Other Non-Asphalt Surfaces	-77029.3	-10.2108	-0.0010	-0.0002	-10.2987
Single Family Housing	772481	102.3983	0.0102	2.1000e-003	103.2789
Total		**81.9767**	**8.1400e-003**	**1.6800e-003**	**82.6816**

6.0 Area Detail

6.1 Mitigation Measures Area

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.2127	8.9700e-003	0.7777	4.0000e-005		4.3200e-003	4.3200e-003		4.3200e-003	4.3200e-003	0.0000	1.2738	1.2738	1.2100e-003	0.0000	1.3042
Unmitigated	1.2130	0.0118	0.7790	6.0000e-005		4.5500e-003	4.5500e-003		4.5500e-003	4.5500e-003	0.0000	4.5509	4.5509	1.2800e-003	6.0000e-005	4.6007

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1878					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0017					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	3.3000e-004	2.8300e-003	1.2000e-003	2.0000e-005		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004	0.0000	3.2770	3.2770	6.0000e-005	6.0000e-005	3.2965
Landscaping	0.0233	8.9700e-003	0.7777	4.0000e-005		4.3200e-003	4.3200e-003		4.3200e-003	4.3200e-003	0.0000	1.2738	1.2738	1.2100e-003	0.0000	1.3042
Total	**1.2130**	**0.0118**	**0.7789**	**6.0000e-005**		**4.5500e-003**	**4.5500e-003**		**4.5500e-003**	**4.5500e-003**	**0.0000**	**4.5509**	**4.5509**	**1.2700e-003**	**6.0000e-005**	**4.6007**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1878					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0017					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0233	8.9700e-003	0.7777	4.0000e-005		4.3200e-003	4.3200e-003		4.3200e-003	4.3200e-003	0.0000	1.2738	1.2738	1.2100e-003	0.0000	1.3042
Total	**1.2127**	**8.9700e-003**	**0.7777**	**4.0000e-005**		**4.3200e-003**	**4.3200e-003**		**4.3200e-003**	**4.3200e-003**	**0.0000**	**1.2738**	**1.2738**	**1.2100e-003**	**0.0000**	**1.3042**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	7.2627	0.1789	4.3200e-003	13.0234
Unmitigated	9.0784	0.2236	5.4100e-003	16.2793

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	6.84117 / 4.31291	9.0784	0.2236	5.4100e-003	16.2793
Total		**9.0784**	**0.2236**	**5.4100e-003**	**16.2793**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	5.47294 / 3.45033	7.2627	0.1789	4.3200e-003	13.0234
Total		**7.2627**	**0.1789**	**4.3200e-003**	**13.0234**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	23.7865	1.4057	0.0000	58.9300
Unmitigated	23.7865	1.4057	0.0000	58.9300

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	117.18	23.7865	1.4057	0.0000	58.9300
Total		**23.7865**	**1.4057**	**0.0000**	**58.9300**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	117.18	23.7865	1.4057	0.0000	58.9300
Total		**23.7865**	**1.4057**	**0.0000**	**58.9300**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Stonebridge Subdivision Project—Existing Emissions (2023)

Sonoma-San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	1.00	Dwelling Unit	0.32	1,824.00	3

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	75
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	390.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Stonebridge Subdivision Project—Existing Emissions (2023) - Sonoma-San Francisco County, Annual

Project Characteristics - CO2 intensity factor adjusted based on California's Renewables Portfolio Standard. Operational year to match the project's operational year as provided by the Applicant in Request to Information Form (8/16/19).

Land Use - Existing 1,824 sqft single-family home to be demolished as provided in Project Description and confirmed by Applicant in Request to Information Form (8/16/19).

Construction Phase - Operational only run

Off-road Equipment - Operational only run

Architectural Coating - Operational only run

Vehicle Trips - Trip Generation rate to match Traffic Impact Study. W-Trans. 2019. Traffic Impact Study for the 2220 Fulton Road Project. October 22.

Woodstoves - No woodburning fireplaces or woodstoves in compliance with BAAQMD Regulation 6 Particulate Matter and visible emissions, Rule 3 Wood-burning devices.

Energy Use -

Area Mitigation - No woodburning fireplaces or woodstoves in compliance with BAAQMD Regulation 6 Particulate Matter and visible emissions, Rule 3 Wood-burning devices.

Water Mitigation -

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Fleet Mix -

Stonebridge Subdivision Project—Existing Emissions (2023) - Sonoma-San Francisco County, Annual

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Residential_Exterior	1,231.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	3,694.00	0.00
tblConstructionPhase	NumDays	5.00	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberWood	0.43	0.00
tblLandUse	LandUseSquareFeet	1,800.00	1,824.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	390.65
tblVehicleTrips	ST_TR	9.91	9.44
tblVehicleTrips	SU_TR	8.62	9.44
tblVehicleTrips	WD_TR	9.52	9.44
tblWoodstoves	WoodstoveWoodMass	956.80	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	8.6300e-003	1.1000e-004	7.4400e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0433	0.0433	1.0000e-005	0.0000	0.0438
Energy	1.6000e-004	1.3400e-003	5.7000e-004	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	2.9846	2.9846	1.4000e-004	5.0000e-005	3.0031
Mobile	2.6100e-003	0.0126	0.0289	1.0000e-004	8.0900e-003	8.0000e-005	8.1700e-003	2.1800e-003	8.0000e-005	2.2600e-003	0.0000	8.8831	8.8831	3.6000e-004	0.0000	8.8920
Waste						0.0000	0.0000		0.0000	0.0000	0.2558	0.0000	0.2558	0.0151	0.0000	0.6337
Water						0.0000	0.0000		0.0000	0.0000	0.0207	0.0879	0.1086	2.1300e-003	5.0000e-005	0.1772
Total	**0.0114**	**0.0141**	**0.0369**	**1.1000e-004**	**8.0900e-003**	**2.3000e-004**	**8.3200e-003**	**2.1800e-003**	**2.3000e-004**	**2.4100e-003**	**0.2764**	**11.9990**	**12.2754**	**0.0178**	**1.0000e-004**	**12.7498**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	8.6300e-003	9.0000e-005	7.4300e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0121	0.0121	1.0000e-005	0.0000	0.0124
Energy	1.6000e-004	1.3400e-003	5.7000e-004	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	2.9846	2.9846	1.4000e-004	5.0000e-005	3.0031
Mobile	2.6100e-003	0.0126	0.0289	1.0000e-004	8.0900e-003	8.0000e-005	8.1700e-003	2.1800e-003	8.0000e-005	2.2600e-003	0.0000	8.8831	8.8831	3.6000e-004	0.0000	8.8920
Waste						0.0000	0.0000		0.0000	0.0000	0.2558	0.0000	0.2558	0.0151	0.0000	0.6337
Water						0.0000	0.0000		0.0000	0.0000	0.0207	0.0879	0.1086	2.1300e-003	5.0000e-005	0.1772
Total	**0.0114**	**0.0141**	**0.0369**	**1.1000e-004**	**8.0900e-003**	**2.3000e-004**	**8.3200e-003**	**2.1800e-003**	**2.3000e-004**	**2.4100e-003**	**0.2764**	**11.9678**	**12.2442**	**0.0178**	**1.0000e-004**	**12.7184**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.14**	**0.03**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.26**	**0.25**	**0.00**	**0.00**	**0.25**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	9/14/2021	9/13/2021	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	0.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Architectural Coating - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.6100e-003	0.0126	0.0289	1.0000e-004	8.0900e-003	8.0000e-005	8.1700e-003	2.1800e-003	8.0000e-005	2.2600e-003	0.0000	8.8831	8.8831	3.6000e-004	0.0000	8.8920
Unmitigated	2.6100e-003	0.0126	0.0289	1.0000e-004	8.0900e-003	8.0000e-005	8.1700e-003	2.1800e-003	8.0000e-005	2.2600e-003	0.0000	8.8831	8.8831	3.6000e-004	0.0000	8.8920

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	9.44	9.44	9.44	21,803	21,803
Total	9.44	9.44	9.44	21,803	21,803

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.594113	0.036394	0.166849	0.102253	0.024126	0.006070	0.030484	0.028024	0.003137	0.001706	0.004997	0.000880	0.000967

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1.4336	1.4336	1.1000e-004	2.0000e-005	1.4428
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1.4336	1.4336	1.1000e-004	2.0000e-005	1.4428
NaturalGas Mitigated	1.6000e-004	1.3400e-003	5.7000e-004	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.5510	1.5510	3.0000e-005	3.0000e-005	1.5602
NaturalGas Unmitigated	1.6000e-004	1.3400e-003	5.7000e-004	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.5510	1.5510	3.0000e-005	3.0000e-005	1.5602

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	29065.1	1.6000e-004	1.3400e-003	5.7000e-004	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.5510	1.5510	3.0000e-005	3.0000e-005	1.5602
Total		**1.6000e-004**	**1.3400e-003**	**5.7000e-004**	**1.0000e-005**		**1.1000e-004**	**1.1000e-004**		**1.1000e-004**	**1.1000e-004**	**0.0000**	**1.5510**	**1.5510**	**3.0000e-005**	**3.0000e-005**	**1.5602**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	29065.1	1.6000e-004	1.3400e-003	5.7000e-004	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.5510	1.5510	3.0000e-005	3.0000e-005	1.5602
Total		**1.6000e-004**	**1.3400e-003**	**5.7000e-004**	**1.0000e-005**		**1.1000e-004**	**1.1000e-004**		**1.1000e-004**	**1.1000e-004**	**0.0000**	**1.5510**	**1.5510**	**3.0000e-005**	**3.0000e-005**	**1.5602**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	8090.57	1.4336	1.1000e-004	2.0000e-005	1.4428
Total		**1.4336**	**1.1000e-004**	**2.0000e-005**	**1.4428**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	8090.57	1.4336	1.1000e-004	2.0000e-005	1.4428
Total		**1.4336**	**1.1000e-004**	**2.0000e-005**	**1.4428**

6.0 Area Detail

6.1 Mitigation Measures Area

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	8.6300e-003	9.0000e-005	7.4300e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0121	0.0121	1.0000e-005	0.0000	0.0124
Unmitigated	8.6300e-003	1.1000e-004	7.4400e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0433	0.0433	1.0000e-005	0.0000	0.0438

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.2800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.1200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	3.0000e-005	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0312	0.0312	0.0000	0.0000	0.0314
Landscaping	2.2000e-004	9.0000e-005	7.4300e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0121	0.0121	1.0000e-005	0.0000	0.0124
Total	**8.6200e-003**	**1.2000e-004**	**7.4400e-003**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0433**	**0.0433**	**1.0000e-005**	**0.0000**	**0.0438**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.2800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.1200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.2000e-004	9.0000e-005	7.4300e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0121	0.0121	1.0000e-005	0.0000	0.0124
Total	**8.6200e-003**	**9.0000e-005**	**7.4300e-003**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0121**	**0.0121**	**1.0000e-005**	**0.0000**	**0.0124**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.1086	2.1300e-003	5.0000e-005	0.1772
Unmitigated	0.1086	2.1300e-003	5.0000e-005	0.1772

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	0.065154 / 0.0410754	0.1086	2.1300e-003	5.0000e-005	0.1772
Total		**0.1086**	**2.1300e-003**	**5.0000e-005**	**0.1772**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	0.065154 / 0.0410754	0.1086	2.1300e-003	5.0000e-005	0.1772
Total		**0.1086**	**2.1300e-003**	**5.0000e-005**	**0.1772**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.2558	0.0151	0.0000	0.6337
Unmitigated	0.2558	0.0151	0.0000	0.6337

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	1.26	0.2558	0.0151	0.0000	0.6337
Total		**0.2558**	**0.0151**	**0.0000**	**0.6337**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	1.26	0.2558	0.0151	0.0000	0.6337
Total		**0.2558**	**0.0151**	**0.0000**	**0.6337**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Stonebridge Subdivision Project—Existing Emissions (2023)

Sonoma-San Francisco County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	1.00	Dwelling Unit	0.32	1,824.00	3

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	75
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	390.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Stonebridge Subdivision Project—Existing Emissions (2023) - Sonoma-San Francisco County, Summer

Project Characteristics - CO2 intensity factor adjusted based on California's Renewables Portfolio Standard. Operational year to match the project's operational year as provided by the Applicant in Request to Information Form (8/16/19).

Land Use - Existing 1,824 sqft single-family home to be demolished as provided in Project Description and confirmed by Applicant in Request to Information Form (8/16/19).

Construction Phase - Operational only run

Off-road Equipment - Operational only run

Architectural Coating - Operational only run

Vehicle Trips - Trip Generation rate to match Traffic Impact Study. W-Trans. 2019. Traffic Impact Study for the 2220 Fulton Road Project. October 22.

Woodstoves - No woodburning fireplaces or woodstoves in compliance with BAAQMD Regulation 6 Particulate Matter and visible emissions, Rule 3 Wood-burning devices.

Energy Use -

Area Mitigation - No woodburning fireplaces or woodstoves in compliance with BAAQMD Regulation 6 Particulate Matter and visible emissions, Rule 3 Wood-burning devices.

Water Mitigation -

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Fleet Mix -

Stonebridge Subdivision Project—Existing Emissions (2023) - Sonoma-San Francisco County, Summer

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Residential_Exterior	1,231.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	3,694.00	0.00
tblConstructionPhase	NumDays	5.00	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberWood	0.43	0.00
tblLandUse	LandUseSquareFeet	1,800.00	1,824.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	390.65
tblVehicleTrips	ST_TR	9.91	9.44
tblVehicleTrips	SU_TR	8.62	9.44
tblVehicleTrips	WD_TR	9.52	9.44
tblWoodstoves	WoodstoveWoodMass	956.80	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0491	5.7900e-003	0.0846	4.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004	0.0000	6.3250	6.3250	2.6000e-004	1.1000e-004	6.3653
Energy	8.6000e-004	7.3400e-003	3.1200e-003	5.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004		9.3683	9.3683	1.8000e-004	1.7000e-004	9.4240
Mobile	0.0162	0.0674	0.1619	5.6000e-004	0.0465	4.6000e-004	0.0469	0.0125	4.3000e-004	0.0129		56.3182	56.3182	2.1700e-003		56.3723
Total	**0.0662**	**0.0805**	**0.2496**	**6.5000e-004**	**0.0465**	**1.9000e-003**	**0.0484**	**0.0125**	**1.8700e-003**	**0.0143**	**0.0000**	**72.0115**	**72.0115**	**2.6100e-003**	**2.8000e-004**	**72.1616**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0486	9.5000e-004	0.0825	0.0000		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	0.1486	0.1486	1.4000e-004	0.0000	0.1521
Energy	8.6000e-004	7.3400e-003	3.1200e-003	5.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004		9.3683	9.3683	1.8000e-004	1.7000e-004	9.4240
Mobile	0.0162	0.0674	0.1619	5.6000e-004	0.0465	4.6000e-004	0.0469	0.0125	4.3000e-004	0.0129		56.3182	56.3182	2.1700e-003		56.3723
Total	**0.0656**	**0.0757**	**0.2476**	**6.1000e-004**	**0.0465**	**1.5100e-003**	**0.0480**	**0.0125**	**1.4800e-003**	**0.0139**	**0.0000**	**65.8350**	**65.8350**	**2.4900e-003**	**1.7000e-004**	**65.9484**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.85**	**6.01**	**0.83**	**6.15**	**0.00**	**20.53**	**0.81**	**0.00**	**20.86**	**2.72**	**0.00**	**8.58**	**8.58**	**4.60**	**39.29**	**8.61**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	9/14/2021	9/13/2021	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	0.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Architectural Coating - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0162	0.0674	0.1619	5.6000e-004	0.0465	4.6000e-004	0.0469	0.0125	4.3000e-004	0.0129		56.3182	56.3182	2.1700e-003		56.3723
Unmitigated	0.0162	0.0674	0.1619	5.6000e-004	0.0465	4.6000e-004	0.0469	0.0125	4.3000e-004	0.0129		56.3182	56.3182	2.1700e-003		56.3723

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	9.44	9.44	9.44	21,803	21,803
Total	9.44	9.44	9.44	21,803	21,803

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.594113	0.036394	0.166849	0.102253	0.024126	0.006070	0.030484	0.028024	0.003137	0.001706	0.004997	0.000880	0.000967

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	8.6000e-004	7.3400e-003	3.1200e-003	5.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004		9.3683	9.3683	1.8000e-004	1.7000e-004	9.4240
NaturalGas Unmitigated	8.6000e-004	7.3400e-003	3.1200e-003	5.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004		9.3683	9.3683	1.8000e-004	1.7000e-004	9.4240

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Single Family Housing	79.6304	8.6000e-004	7.3400e-003	3.1200e-003	5.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004		9.3683	9.3683	1.8000e-004	1.7000e-004	9.4240
Total		**8.6000e-004**	**7.3400e-003**	**3.1200e-003**	**5.0000e-005**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**		**9.3683**	**9.3683**	**1.8000e-004**	**1.7000e-004**	**9.4240**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Single Family Housing	0.0796304	8.6000e-004	7.3400e-003	3.1200e-003	5.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004		9.3683	9.3683	1.8000e-004	1.7000e-004	9.4240
Total		**8.6000e-004**	**7.3400e-003**	**3.1200e-003**	**5.0000e-005**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**		**9.3683**	**9.3683**	**1.8000e-004**	**1.7000e-004**	**9.4240**

6.0 Area Detail

6.1 Mitigation Measures Area

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0486	9.5000e-004	0.0825	0.0000		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	0.1486	0.1486	1.4000e-004	0.0000	0.1521
Unmitigated	0.0491	5.7900e-003	0.0846	4.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004	0.0000	6.3250	6.3250	2.6000e-004	1.1000e-004	6.3653

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	7.0400e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0390					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	5.7000e-004	4.8400e-003	2.0600e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	6.1765	6.1765	1.2000e-004	1.1000e-004	6.2132
Landscaping	2.4900e-003	9.5000e-004	0.0825	0.0000		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004		0.1486	0.1486	1.4000e-004		0.1521
Total	**0.0491**	**5.7900e-003**	**0.0846**	**3.0000e-005**		**8.5000e-004**	**8.5000e-004**		**8.5000e-004**	**8.5000e-004**	**0.0000**	**6.3250**	**6.3250**	**2.6000e-004**	**1.1000e-004**	**6.3653**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	7.0400e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0390					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.4900e-003	9.5000e-004	0.0825	0.0000		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004		0.1486	0.1486	1.4000e-004		0.1521
Total	**0.0486**	**9.5000e-004**	**0.0825**	**0.0000**		**4.6000e-004**	**4.6000e-004**		**4.6000e-004**	**4.6000e-004**	**0.0000**	**0.1486**	**0.1486**	**1.4000e-004**	**0.0000**	**0.1521**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Stonebridge Subdivision Project—Existing Emissions (2023)

Sonoma-San Francisco County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	1.00	Dwelling Unit	0.32	1,824.00	3

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	75
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	390.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Stonebridge Subdivision Project—Existing Emissions (2023) - Sonoma-San Francisco County, Winter

Project Characteristics - CO2 intensity factor adjusted based on California's Renewables Portfolio Standard. Operational year to match the project's operational year as provided by the Applicant in Request to Information Form (8/16/19).

Land Use - Existing 1,824 sqft single-family home to be demolished as provided in Project Description and confirmed by Applicant in Request to Information Form (8/16/19).

Construction Phase - Operational only run

Off-road Equipment - Operational only run

Architectural Coating - Operational only run

Vehicle Trips - Trip Generation rate to match Traffic Impact Study. W-Trans. 2019. Traffic Impact Study for the 2220 Fulton Road Project. October 22.

Woodstoves - No woodburning fireplaces or woodstoves in compliance with BAAQMD Regulation 6 Particulate Matter and visible emissions, Rule 3 Wood-burning devices.

Energy Use -

Area Mitigation - No woodburning fireplaces or woodstoves in compliance with BAAQMD Regulation 6 Particulate Matter and visible emissions, Rule 3 Wood-burning devices.

Water Mitigation -

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Fleet Mix -

Stonebridge Subdivision Project—Existing Emissions (2023) - Sonoma-San Francisco County, Winter

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Residential_Exterior	1,231.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	3,694.00	0.00
tblConstructionPhase	NumDays	5.00	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberWood	0.43	0.00
tblLandUse	LandUseSquareFeet	1,800.00	1,824.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	390.65
tblVehicleTrips	ST_TR	9.91	9.44
tblVehicleTrips	SU_TR	8.62	9.44
tblVehicleTrips	WD_TR	9.52	9.44
tblWoodstoves	WoodstoveWoodMass	956.80	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0491	5.7900e-003	0.0846	4.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004	0.0000	6.3250	6.3250	2.6000e-004	1.1000e-004	6.3653
Energy	8.6000e-004	7.3400e-003	3.1200e-003	5.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004		9.3683	9.3683	1.8000e-004	1.7000e-004	9.4240
Mobile	0.0142	0.0710	0.1662	5.3000e-004	0.0465	4.7000e-004	0.0469	0.0125	4.4000e-004	0.0129		53.2767	53.2767	2.2200e-003		53.3322
Total	**0.0642**	**0.0841**	**0.2539**	**6.2000e-004**	**0.0465**	**1.9100e-003**	**0.0484**	**0.0125**	**1.8800e-003**	**0.0143**	**0.0000**	**68.9700**	**68.9700**	**2.6600e-003**	**2.8000e-004**	**69.1215**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0486	9.5000e-004	0.0825	0.0000		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	0.1486	0.1486	1.4000e-004	0.0000	0.1521
Energy	8.6000e-004	7.3400e-003	3.1200e-003	5.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004		9.3683	9.3683	1.8000e-004	1.7000e-004	9.4240
Mobile	0.0142	0.0710	0.1662	5.3000e-004	0.0465	4.7000e-004	0.0469	0.0125	4.4000e-004	0.0129		53.2767	53.2767	2.2200e-003		53.3322
Total	**0.0636**	**0.0793**	**0.2519**	**5.8000e-004**	**0.0465**	**1.5200e-003**	**0.0480**	**0.0125**	**1.4900e-003**	**0.0139**	**0.0000**	**62.7936**	**62.7936**	**2.5400e-003**	**1.7000e-004**	**62.9083**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.87**	**5.76**	**0.81**	**6.45**	**0.00**	**20.42**	**0.81**	**0.00**	**20.74**	**2.72**	**0.00**	**8.96**	**8.96**	**4.51**	**39.29**	**8.99**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	9/14/2021	9/13/2021	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	0.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Architectural Coating - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0142	0.0710	0.1662	5.3000e-004	0.0465	4.7000e-004	0.0469	0.0125	4.4000e-004	0.0129		53.2767	53.2767	2.2200e-003		53.3322
Unmitigated	0.0142	0.0710	0.1662	5.3000e-004	0.0465	4.7000e-004	0.0469	0.0125	4.4000e-004	0.0129		53.2767	53.2767	2.2200e-003		53.3322

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	9.44	9.44	9.44	21,803	21,803
Total	9.44	9.44	9.44	21,803	21,803

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.594113	0.036394	0.166849	0.102253	0.024126	0.006070	0.030484	0.028024	0.003137	0.001706	0.004997	0.000880	0.000967

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	8.6000e-004	7.3400e-003	3.1200e-003	5.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004		9.3683	9.3683	1.8000e-004	1.7000e-004	9.4240
NaturalGas Unmitigated	8.6000e-004	7.3400e-003	3.1200e-003	5.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004		9.3683	9.3683	1.8000e-004	1.7000e-004	9.4240

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Single Family Housing	79.6304	8.6000e-004	7.3400e-003	3.1200e-003	5.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004		9.3683	9.3683	1.8000e-004	1.7000e-004	9.4240
Total		**8.6000e-004**	**7.3400e-003**	**3.1200e-003**	**5.0000e-005**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**		**9.3683**	**9.3683**	**1.8000e-004**	**1.7000e-004**	**9.4240**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Single Family Housing	0.0796304	8.6000e-004	7.3400e-003	3.1200e-003	5.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004		9.3683	9.3683	1.8000e-004	1.7000e-004	9.4240
Total		**8.6000e-004**	**7.3400e-003**	**3.1200e-003**	**5.0000e-005**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**		**9.3683**	**9.3683**	**1.8000e-004**	**1.7000e-004**	**9.4240**

6.0 Area Detail

6.1 Mitigation Measures Area

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0486	9.5000e-004	0.0825	0.0000		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	0.1486	0.1486	1.4000e-004	0.0000	0.1521
Unmitigated	0.0491	5.7900e-003	0.0846	4.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004	0.0000	6.3250	6.3250	2.6000e-004	1.1000e-004	6.3653

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	7.0400e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0390					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	5.7000e-004	4.8400e-003	2.0600e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	6.1765	6.1765	1.2000e-004	1.1000e-004	6.2132
Landscaping	2.4900e-003	9.5000e-004	0.0825	0.0000		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004		0.1486	0.1486	1.4000e-004		0.1521
Total	**0.0491**	**5.7900e-003**	**0.0846**	**3.0000e-005**		**8.5000e-004**	**8.5000e-004**		**8.5000e-004**	**8.5000e-004**	**0.0000**	**6.3250**	**6.3250**	**2.6000e-004**	**1.1000e-004**	**6.3653**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	7.0400e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0390					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.4900e-003	9.5000e-004	0.0825	0.0000		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004		0.1486	0.1486	1.4000e-004		0.1521
Total	**0.0486**	**9.5000e-004**	**0.0825**	**0.0000**		**4.6000e-004**	**4.6000e-004**		**4.6000e-004**	**4.6000e-004**	**0.0000**	**0.1486**	**0.1486**	**1.4000e-004**	**0.0000**	**0.1521**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Stonebridge Subdivision Project—Existing Emissions (2030)

Sonoma-San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	1.00	Dwelling Unit	0.32	1,824.00	3

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	75
Climate Zone	4			**Operational Year**	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	292.24	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Stonebridge Subdivision Project—Existing Emissions (2030) - Sonoma-San Francisco County, Annual

Project Characteristics - CO2 intensity factor adjusted based on California's Renewables Portfolio Standard. 2030 Operational year.

Land Use - Existing 1,824 sqft single-family home to be demolished as provided in Project Description and confirmed by Applicant in Request to Information Form (8/16/19).

Construction Phase - Operational only run

Off-road Equipment - Operational only run

Architectural Coating - Operational only run

Vehicle Trips - Trip Generation rate to match Traffic Impact Study. W-Trans. 2019. Traffic Impact Study for the 2220 Fulton Road Project. October 22.

Woodstoves - No woodburning fireplaces or woodstoves in compliance with BAAQMD Regulation 6 Particulate Matter and visible emissions, Rule 3 Wood-burning devices.

Energy Use -

Area Mitigation - No woodburning fireplaces or woodstoves in compliance with BAAQMD Regulation 6 Particulate Matter and visible emissions, Rule 3 Wood-burning devices.

Water Mitigation -

Fleet Mix -

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Stonebridge Subdivision Project—Existing Emissions (2030) - Sonoma-San Francisco County, Annual

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Residential_Exterior	1,231.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	3,694.00	0.00
tblConstructionPhase	NumDays	5.00	1.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberWood	0.43	0.00
tblLandUse	LandUseSquareFeet	1,800.00	1,824.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	292.24
tblVehicleTrips	ST_TR	9.91	9.44
tblVehicleTrips	SU_TR	8.62	9.44
tblVehicleTrips	WD_TR	9.52	9.44
tblWoodstoves	WoodstoveWoodMass	956.80	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	8.6300e-003	1.1000e-004	7.4200e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0433	0.0433	1.0000e-005	0.0000	0.0438
Energy	1.6000e-004	1.3400e-003	5.7000e-004	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	2.6235	2.6235	1.4000e-004	5.0000e-005	2.6419
Mobile	1.6600e-003	0.0101	0.0181	8.0000e-005	8.0800e-003	6.0000e-005	8.1300e-003	2.1700e-003	5.0000e-005	2.2200e-003	0.0000	7.4003	7.4003	2.6000e-004	0.0000	7.4068
Waste						0.0000	0.0000		0.0000	0.0000	0.2558	0.0000	0.2558	0.0151	0.0000	0.6337
Water						0.0000	0.0000		0.0000	0.0000	0.0207	0.0658	0.0865	2.1300e-003	5.0000e-005	0.1550
Total	**0.0105**	**0.0116**	**0.0261**	**9.0000e-005**	**8.0800e-003**	**2.1000e-004**	**8.2800e-003**	**2.1700e-003**	**2.0000e-004**	**2.3700e-003**	**0.2764**	**10.1329**	**10.4094**	**0.0177**	**1.0000e-004**	**10.8812**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	8.6300e-003	9.0000e-005	7.4100e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0121	0.0121	1.0000e-005	0.0000	0.0124
Energy	1.6000e-004	1.3400e-003	5.7000e-004	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	2.6235	2.6235	1.4000e-004	5.0000e-005	2.6419
Mobile	1.6600e-003	0.0101	0.0181	8.0000e-005	8.0800e-003	6.0000e-005	8.1300e-003	2.1700e-003	5.0000e-005	2.2200e-003	0.0000	7.4003	7.4003	2.6000e-004	0.0000	7.4068
Waste						0.0000	0.0000		0.0000	0.0000	0.2558	0.0000	0.2558	0.0151	0.0000	0.6337
Water						0.0000	0.0000		0.0000	0.0000	0.0207	0.0658	0.0865	2.1300e-003	5.0000e-005	0.1550
Total	**0.0105**	**0.0116**	**0.0261**	**9.0000e-005**	**8.0800e-003**	**2.1000e-004**	**8.2800e-003**	**2.1700e-003**	**2.0000e-004**	**2.3700e-003**	**0.2764**	**10.1017**	**10.3782**	**0.0177**	**1.0000e-004**	**10.8498**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.17**	**0.04**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.31**	**0.30**	**0.00**	**0.00**	**0.29**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	9/14/2021	9/14/2021	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	0.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Architectural Coating - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.6600e-003	0.0101	0.0181	8.0000e-005	8.0800e-003	6.0000e-005	8.1300e-003	2.1700e-003	5.0000e-005	2.2200e-003	0.0000	7.4003	7.4003	2.6000e-004	0.0000	7.4068
Unmitigated	1.6600e-003	0.0101	0.0181	8.0000e-005	8.0800e-003	6.0000e-005	8.1300e-003	2.1700e-003	5.0000e-005	2.2200e-003	0.0000	7.4003	7.4003	2.6000e-004	0.0000	7.4068

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	9.44	9.44	9.44	21,803	21,803
Total	9.44	9.44	9.44	21,803	21,803

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.625329	0.031298	0.162135	0.089092	0.014618	0.004632	0.032111	0.030354	0.003196	0.001373	0.004305	0.000897	0.000662

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1.0725	1.0725	1.1000e-004	2.0000e-005	1.0817
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1.0725	1.0725	1.1000e-004	2.0000e-005	1.0817
NaturalGas Mitigated	1.6000e-004	1.3400e-003	5.7000e-004	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.5510	1.5510	3.0000e-005	3.0000e-005	1.5602
NaturalGas Unmitigated	1.6000e-004	1.3400e-003	5.7000e-004	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.5510	1.5510	3.0000e-005	3.0000e-005	1.5602

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	29065.1	1.6000e-004	1.3400e-003	5.7000e-004	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.5510	1.5510	3.0000e-005	3.0000e-005	1.5602
Total		**1.6000e-004**	**1.3400e-003**	**5.7000e-004**	**1.0000e-005**		**1.1000e-004**	**1.1000e-004**		**1.1000e-004**	**1.1000e-004**	**0.0000**	**1.5510**	**1.5510**	**3.0000e-005**	**3.0000e-005**	**1.5602**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	29065.1	1.6000e-004	1.3400e-003	5.7000e-004	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.5510	1.5510	3.0000e-005	3.0000e-005	1.5602
Total		**1.6000e-004**	**1.3400e-003**	**5.7000e-004**	**1.0000e-005**		**1.1000e-004**	**1.1000e-004**		**1.1000e-004**	**1.1000e-004**	**0.0000**	**1.5510**	**1.5510**	**3.0000e-005**	**3.0000e-005**	**1.5602**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	8090.57	1.0725	1.1000e-004	2.0000e-005	1.0817
Total		**1.0725**	**1.1000e-004**	**2.0000e-005**	**1.0817**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	8090.57	1.0725	1.1000e-004	2.0000e-005	1.0817
Total		**1.0725**	**1.1000e-004**	**2.0000e-005**	**1.0817**

6.0 Area Detail

6.1 Mitigation Measures Area

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	8.6300e-003	9.0000e-005	7.4100e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0121	0.0121	1.0000e-005	0.0000	0.0124
Unmitigated	8.6300e-003	1.1000e-004	7.4200e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0433	0.0433	1.0000e-005	0.0000	0.0438

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.2800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.1200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	3.0000e-005	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0312	0.0312	0.0000	0.0000	0.0314
Landscaping	2.2000e-004	9.0000e-005	7.4100e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0121	0.0121	1.0000e-005	0.0000	0.0124
Total	**8.6200e-003**	**1.2000e-004**	**7.4200e-003**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0433**	**0.0433**	**1.0000e-005**	**0.0000**	**0.0438**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.2800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.1200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.2000e-004	9.0000e-005	7.4100e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0121	0.0121	1.0000e-005	0.0000	0.0124
Total	**8.6200e-003**	**9.0000e-005**	**7.4100e-003**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0121**	**0.0121**	**1.0000e-005**	**0.0000**	**0.0124**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0865	2.1300e-003	5.0000e-005	0.1550
Unmitigated	0.0865	2.1300e-003	5.0000e-005	0.1550

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	0.065154 / 0.0410754	0.0865	2.1300e-003	5.0000e-005	0.1550
Total		**0.0865**	**2.1300e-003**	**5.0000e-005**	**0.1550**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	0.065154 / 0.0410754	0.0865	2.1300e-003	5.0000e-005	0.1550
Total		**0.0865**	**2.1300e-003**	**5.0000e-005**	**0.1550**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.2558	0.0151	0.0000	0.6337
Unmitigated	0.2558	0.0151	0.0000	0.6337

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	1.26	0.2558	0.0151	0.0000	0.6337
Total		**0.2558**	**0.0151**	**0.0000**	**0.6337**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	1.26	0.2558	0.0151	0.0000	0.6337
Total		**0.2558**	**0.0151**	**0.0000**	**0.6337**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Stonebridge Subdivision Project-Mitigated Operational Only

Sonoma-San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	3.98	Acre	3.98	173,368.80	0
Other Non-Asphalt Surfaces	14.00	Acre	14.00	609,840.00	0
Single Family Housing	105.00	Dwelling Unit	10.62	243,513.00	279

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	75
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	390.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Stonebridge Subdivision Project-Mitigated Operational Only - Sonoma-San Francisco County, Annual

Project Characteristics - CO2 intensity factor adjusted based on Renewable Energy Portfolio.
Construction start date and full build out date as provided by the Applicant in Request to Information Form (8/16/19).

Land Use - 14 acres of Reserve area (East parcel). 10.62 acres includes single-family units, associated garage and drive-way and stormwater treatment area. 3.98 acres of internal roads. 2.65 persons per household (City of Santa Rosa).

Construction Phase - Operational Run Only.

Off-road Equipment - Operational Run Only.

Off-road Equipment -

Trips and VMT - Operational Run Only.

Architectural Coating - Operational Run Only.

Vehicle Trips - Trip Generation rate adjusted for 105 residential units to match the total trips as per W-Trans. 2019. Traffic Impact Study for the 2220 Fulton Road Project. October 22, which considers 120 units. Weekday trip generation rate used for weekends.

Woodstoves - No woodburning fireplaces or woodstoves in compliance with BAAQMD Regulation 6 Particulate Matter and visible emissions, Rule 3 Wood-burning devices.

Area Coating -

Energy Use - No natural gas in residential development as required by MM GHG-1.

Solid Waste -

Area Mitigation - No woodburning fireplaces or woodstoves in compliance with BAAQMD Regulation 6 Particulate Matter and visible emissions, Rule 3 Wood-burning devices.

Energy Mitigation - One-hundred percent renewable energy included to represent net zero electricity as required by MM GHG-1.

Water Mitigation - Compliance with the Green Building Code Standards and the Water Efficient Land Use Ordinance.

Fleet Mix -

Stonebridge Subdivision Project-Mitigated Operational Only - Sonoma-San Francisco County, Annual

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Residential_Exterior	164,371.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	493,114.00	0.00
tblConstructionPhase	NumDays	35.00	1.00
tblEnergyUse	NT24NG	3,155.00	0.00
tblEnergyUse	T24NG	25,910.09	0.00
tblFireplaces	NumberWood	45.15	0.00
tblLandUse	LandUseSquareFeet	189,000.00	243,513.00
tblLandUse	LotAcreage	34.09	10.62
tblLandUse	Population	300.00	279.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	390.65
tblTripsAndVMT	WorkerTripNumber	73.00	0.00
tblVehicleTrips	ST_TR	9.91	10.79
tblVehicleTrips	SU_TR	8.62	10.79
tblVehicleTrips	WD_TR	9.52	10.79

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.1634	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.1634**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.1634	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.1634**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
9	4-1-2023	6-30-2023	0.1167	0.1167
		Highest	0.1167	0.1167

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.2404	0.0158	1.0275	8.6000e-004		0.0447	0.0447		0.0447	0.0447	5.3809	4.5509	9.9318	0.0264	6.0000e-005	10.6107
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	150.5296	150.5296	0.0112	2.3100e-003	151.4980
Mobile	0.3134	1.5156	3.4654	0.0116	0.9707	0.0102	0.9808	0.2612	9.5000e-003	0.2707	0.0000	1,066.1078	1,066.1078	0.0429	0.0000	1,067.1802
Waste						0.0000	0.0000		0.0000	0.0000	23.7865	0.0000	23.7865	1.4057	0.0000	58.9300
Water						0.0000	0.0000		0.0000	0.0000	2.1704	9.2342	11.4046	0.2236	5.4100e-003	18.6055
Total	**1.5538**	**1.5315**	**4.4929**	**0.0124**	**0.9707**	**0.0549**	**1.0256**	**0.2612**	**0.0542**	**0.3154**	**31.3377**	**1,230.4225**	**1,261.7602**	**1.7099**	**7.7800e-003**	**1,306.8244**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.2129	8.9900e-003	0.7800	4.0000e-005		4.3200e-003	4.3200e-003		4.3200e-003	4.3200e-003	0.0000	1.2738	1.2738	1.2300e-003	0.0000	1.3045
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.3134	1.5156	3.4654	0.0116	0.9707	0.0102	0.9808	0.2612	9.5000e-003	0.2707	0.0000	1,066.1078	1,066.1078	0.0429	0.0000	1,067.1802
Waste						0.0000	0.0000		0.0000	0.0000	23.7865	0.0000	23.7865	1.4057	0.0000	58.9300
Water						0.0000	0.0000		0.0000	0.0000	1.7363	7.3873	9.1237	0.1789	4.3200e-003	14.8844
Total	**1.5263**	**1.5246**	**4.2454**	**0.0116**	**0.9707**	**0.0145**	**0.9852**	**0.2612**	**0.0138**	**0.2750**	**25.5228**	**1,074.7690**	**1,100.2918**	**1.6287**	**4.3200e-003**	**1,142.2991**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**1.77**	**0.45**	**5.51**	**6.59**	**0.00**	**73.62**	**3.94**	**0.00**	**74.52**	**12.81**	**18.56**	**12.65**	**12.80**	**4.74**	**44.47**	**12.59**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	6/8/2023	6/8/2023	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 17.98

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 46,993 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	0.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1634					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1634**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1634					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1634**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3134	1.5156	3.4654	0.0116	0.9707	0.0102	0.9808	0.2612	9.5000e-003	0.2707	0.0000	1,066.1078	1,066.1078	0.0429	0.0000	1,067.1802
Unmitigated	0.3134	1.5156	3.4654	0.0116	0.9707	0.0102	0.9808	0.2612	9.5000e-003	0.2707	0.0000	1,066.1078	1,066.1078	0.0429	0.0000	1,067.1802

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	1,132.95	1,132.95	1132.95	2,616,670	2,616,670
Total	1,132.95	1,132.95	1,132.95	2,616,670	2,616,670

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.594113	0.036394	0.166849	0.102253	0.024126	0.006070	0.030484	0.028024	0.003137	0.001706	0.004997	0.000880	0.000967
Other Non-Asphalt Surfaces	0.594113	0.036394	0.166849	0.102253	0.024126	0.006070	0.030484	0.028024	0.003137	0.001706	0.004997	0.000880	0.000967
Single Family Housing	0.594113	0.036394	0.166849	0.102253	0.024126	0.006070	0.030484	0.028024	0.003137	0.001706	0.004997	0.000880	0.000967

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	150.5296	150.5296	0.0112	2.3100e-003	151.4980
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	849510	150.5296	0.0112	2.3100e-003	151.4980
Total		**150.5296**	**0.0112**	**2.3100e-003**	**151.4980**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.2129	8.9900e-003	0.7800	4.0000e-005		4.3200e-003	4.3200e-003		4.3200e-003	4.3200e-003	0.0000	1.2738	1.2738	1.2300e-003	0.0000	1.3045
Unmitigated	1.2404	0.0158	1.0275	8.6000e-004		0.0447	0.0447		0.0447	0.0447	5.3809	4.4509	9.9318	0.0264	6.0000e-005	10.6107

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1878					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0017					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0275	6.8500e-003	0.2475	8.2000e-004		0.0404	0.0404		0.0404	0.0404	5.3809	3.2770	8.6579	0.0252	6.0000e-005	9.3062
Landscaping	0.0235	8.9900e-003	0.7800	4.0000e-005		4.3200e-003	4.3200e-003		4.3200e-003	4.3200e-003	0.0000	1.2738	1.2738	1.2300e-003	0.0000	1.3045
Total	**1.2404**	**0.0158**	**1.0275**	**8.6000e-004**		**0.0447**	**0.0447**		**0.0447**	**0.0447**	**5.3809**	**4.5509**	**9.9317**	**0.0265**	**6.0000e-005**	**10.6107**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1878					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0017					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0235	8.9900e-003	0.7800	4.0000e-005		4.3200e-003	4.3200e-003		4.3200e-003	4.3200e-003	0.0000	1.2738	1.2738	1.2300e-003	0.0000	1.3045
Total	**1.2129**	**8.9900e-003**	**0.7800**	**4.0000e-005**		**4.3200e-003**	**4.3200e-003**		**4.3200e-003**	**4.3200e-003**	**0.0000**	**1.2738**	**1.2738**	**1.2300e-003**	**0.0000**	**1.3045**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	9.1237	0.1789	4.3200e-003	14.8844
Unmitigated	11.4046	0.2236	5.4100e-003	18.6055

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	6.84117 / 4.31291	11.4046	0.2236	5.4100e-003	18.6055
Total		**11.4046**	**0.2236**	**5.4100e-003**	**18.6055**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	5.47294 / 3.45033	9.1237	0.1789	4.3200e-003	14.8844
Total		**9.1237**	**0.1789**	**4.3200e-003**	**14.8844**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	23.7865	1.4057	0.0000	58.9300
Unmitigated	23.7865	1.4057	0.0000	58.9300

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	117.18	23.7865	1.4057	0.0000	58.9300
Total		**23.7865**	**1.4057**	**0.0000**	**58.9300**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	117.18	23.7865	1.4057	0.0000	58.9300
Total		**23.7865**	**1.4057**	**0.0000**	**58.9300**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Stonebridge Subdivision Project-Mitigated 2030 Operational Only

Sonoma-San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	3.98	Acre	3.98	173,368.80	0
Other Non-Asphalt Surfaces	14.00	Acre	14.00	609,840.00	0
Single Family Housing	105.00	Dwelling Unit	10.62	243,513.00	279

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	75
Climate Zone	4			**Operational Year**	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	292.24	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Mitigated project operations in the 2030 operational year
CO2 intensity factor adjusted based on Renewable Energy Portfolio

Land Use - 14 acres of Reserve area (East parcel). 10.62 acres includes single-family units, associated garage and drive-way and stormwater treatment area. 3.98 acres of internal roads. 2.65 persons per household (City of Santa Rosa).

Construction Phase - Operational run only

Off-road Equipment - Operational run only

Off-road Equipment -

Trips and VMT - Operational run only

Architectural Coating - Operational run only

Vehicle Trips - Trip Generation rate adjusted for 105 residential units to match the total trips as per W-Trans. 2019. Traffic Impact Study for the 2220 Fulton Road Project. October 22, which considers 120 units. Weekday trip generation rate used for weekends.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - No woodburning fireplaces or woodstoves in compliance with BAAQMD Regulation 6 Particulate Matter and visible emissions, Rule 3 Wood-burning devices.

Area Coating -

Energy Use - No natural gas in residential development as required by MM GHG-1.

Solid Waste -

Area Mitigation - No woodburning fireplaces or woodstoves in compliance with BAAQMD Regulation 6 Particulate Matter and visible emissions, Rule 3 Wood-burning devices.

Energy Mitigation - One-hundred percent renewable energy included to represent net zero electricity as required by MM GHG-1.

Water Mitigation - Compliance with the Green Building Code Standards and the Water Efficient Land Use Ordinance

Fleet Mix -

Stonebridge Subdivision Project-Mitigated 2030 Operational Only - Sonoma-San Francisco County, Annual

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Residential_Exterior	164,371.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	493,114.00	0.00
tblConstructionPhase	NumDays	35.00	1.00
tblEnergyUse	NT24NG	3,155.00	0.00
tblEnergyUse	T24NG	25,910.09	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberWood	45.15	0.00
tblLandUse	LandUseSquareFeet	189,000.00	243,513.00
tblLandUse	LotAcreage	34.09	10.62
tblLandUse	Population	300.00	279.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	292.24
tblTripsAndVMT	WorkerTripNumber	73.00	0.00
tblVehicleTrips	ST_TR	9.91	10.79
tblVehicleTrips	SU_TR	8.62	10.79
tblVehicleTrips	WD_TR	9.52	10.79
tblWoodstoves	WoodstoveWoodMass	956.80	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.1634	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.1634**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.1634	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.1634**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
9	4-1-2023	6-30-2023	0.1167	0.1167
		Highest	0.1167	0.1167

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.2130	0.0118	0.7790	6.0000e-005		4.5500e-003	4.5500e-003		4.5500e-003	4.5500e-003	0.0000	4.5509	4.5509	1.2800e-003	6.0000e-005	4.6007
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	112.6092	112.6092	0.0112	2.3100e-003	113.5775
Mobile	0.1991	1.2154	2.1769	9.5900e-003	0.9695	6.6900e-003	0.9762	0.2607	6.2300e-003	0.2669	0.0000	888.1555	888.1555	0.0310	0.0000	888.9308
Waste						0.0000	0.0000		0.0000	0.0000	23.7865	0.0000	23.7865	1.4057	0.0000	58.9300
Water						0.0000	0.0000		0.0000	0.0000	2.1704	6.9080	9.0784	0.2236	5.4100e-003	16.2793
Total	**1.4121**	**1.2272**	**2.9558**	**9.6500e-003**	**0.9695**	**0.0112**	**0.9808**	**0.2607**	**0.0108**	**0.2714**	**25.9569**	**1,012.2235**	**1,038.1804**	**1.6728**	**7.7800e-003**	**1,082.3183**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.2127	8.9700e-003	0.7777	4.0000e-005		4.3200e-003	4.3200e-003		4.3200e-003	4.3200e-003	0.0000	1.2738	1.2738	1.2100e-003	0.0000	1.3042
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.1991	1.2154	2.1769	9.5900e-003	0.9695	6.6900e-003	0.9762	0.2607	6.2300e-003	0.2669	0.0000	888.1555	888.1555	0.0310	0.0000	888.9308
Waste						0.0000	0.0000		0.0000	0.0000	23.7865	0.0000	23.7865	1.4057	0.0000	58.9300
Water						0.0000	0.0000		0.0000	0.0000	1.7363	5.5264	7.2627	0.1789	4.3200e-003	13.0234
Total	**1.4118**	**1.2244**	**2.9546**	**9.6300e-003**	**0.9695**	**0.0110**	**0.9805**	**0.2607**	**0.0106**	**0.2712**	**25.5228**	**894.9557**	**920.4785**	**1.6168**	**4.3200e-003**	**962.1884**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.02**	**0.23**	**0.04**	**0.21**	**0.00**	**2.05**	**0.02**	**0.00**	**2.13**	**0.08**	**1.67**	**11.59**	**11.34**	**3.35**	**44.47**	**11.10**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	6/8/2023	6/8/2023	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 17.98

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 46,993 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	0.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1634					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1634**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1634					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1634**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1991	1.2154	2.1769	9.5900e-003	0.9695	6.6900e-003	0.9762	0.2607	6.2300e-003	0.2669	0.0000	888.1555	888.1555	0.0310	0.0000	888.9308
Unmitigated	0.1991	1.2154	2.1769	9.5900e-003	0.9695	6.6900e-003	0.9762	0.2607	6.2300e-003	0.2669	0.0000	888.1555	888.1555	0.0310	0.0000	888.9308

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	1,132.95	1,132.95	1132.95	2,616,670	2,616,670
Total	1,132.95	1,132.95	1,132.95	2,616,670	2,616,670

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.625329	0.031298	0.162135	0.089092	0.014618	0.004632	0.032111	0.030354	0.003196	0.001373	0.004305	0.000897	0.000662
Other Non-Asphalt Surfaces	0.625329	0.031298	0.162135	0.089092	0.014618	0.004632	0.032111	0.030354	0.003196	0.001373	0.004305	0.000897	0.000662
Single Family Housing	0.625329	0.031298	0.162135	0.089092	0.014618	0.004632	0.032111	0.030354	0.003196	0.001373	0.004305	0.000897	0.000662

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	112.6092	112.6092	0.0112	2.3100e-003	113.5775
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	849510	112.6092	0.0112	2.3100e-003	113.5775
Total		**112.6092**	**0.0112**	**2.3100e-003**	**113.5775**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.2127	8.9700e-003	0.7777	4.0000e-005		4.3200e-003	4.3200e-003		4.3200e-003	4.3200e-003	0.0000	1.2738	1.2738	1.2100e-003	0.0000	1.3042
Unmitigated	1.2130	0.0118	0.7790	6.0000e-005		4.5500e-003	4.5500e-003		4.5500e-003	4.5500e-003	0.0000	4.5509	4.5509	1.2800e-003	6.0000e-005	4.6007

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1878					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0017					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	3.3000e-004	2.8300e-003	1.2000e-003	2.0000e-005		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004	0.0000	3.2770	3.2770	6.0000e-005	6.0000e-005	3.2965
Landscaping	0.0233	8.9700e-003	0.7777	4.0000e-005		4.3200e-003	4.3200e-003		4.3200e-003	4.3200e-003	0.0000	1.2738	1.2738	1.2100e-003	0.0000	1.3042
Total	**1.2130**	**0.0118**	**0.7789**	**6.0000e-005**		**4.5500e-003**	**4.5500e-003**		**4.5500e-003**	**4.5500e-003**	**0.0000**	**4.5509**	**4.5509**	**1.2700e-003**	**6.0000e-005**	**4.6007**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1878					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0017					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0233	8.9700e-003	0.7777	4.0000e-005		4.3200e-003	4.3200e-003		4.3200e-003	4.3200e-003	0.0000	1.2738	1.2738	1.2100e-003	0.0000	1.3042
Total	**1.2127**	**8.9700e-003**	**0.7777**	**4.0000e-005**		**4.3200e-003**	**4.3200e-003**		**4.3200e-003**	**4.3200e-003**	**0.0000**	**1.2738**	**1.2738**	**1.2100e-003**	**0.0000**	**1.3042**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	7.2627	0.1789	4.3200e-003	13.0234
Unmitigated	9.0784	0.2236	5.4100e-003	16.2793

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	6.84117 / 4.31291	9.0784	0.2236	5.4100e-003	16.2793
Total		**9.0784**	**0.2236**	**5.4100e-003**	**16.2793**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	5.47294 / 3.45033	7.2627	0.1789	4.3200e-003	13.0234
Total		**7.2627**	**0.1789**	**4.3200e-003**	**13.0234**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	23.7865	1.4057	0.0000	58.9300
Unmitigated	23.7865	1.4057	0.0000	58.9300

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	117.18	23.7865	1.4057	0.0000	58.9300
Total		**23.7865**	**1.4057**	**0.0000**	**58.9300**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	117.18	23.7865	1.4057	0.0000	58.9300
Total		**23.7865**	**1.4057**	**0.0000**	**58.9300**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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A.2 - Construction Health Risk Assessment Files

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City of Santa Rosa—Stonebridge Subdivision Project

Project Site

Estimation of Annual Onsite Construction Emissions (Project Site)

Start of Construction	4/1/2021	1/1/2022	1/1/2023	
End of Construction	12/31/2021	12/31/2022	10/18/2023	**Total**
Number of Days	274	364	290	928
Number of Hours	6,576	8,736	6,960	22,272
Number of Construction Days	197	260	208	665
Number of Construction Hours (8 hours/day)	1,576	2,080	1,664	5,320
Hours Per Year/Construction Hours per Year Factor				3.0

Size of the construction area source (Project Site): 59,161 sq-meters

CalEEMod Run	Year	On-site Construction Activity	Unmitigated Onsite DPM (tons)*	Unmitigated Onsite PM2.5 (tons)*	Year	On-site Construction Activity	Mitigated Onsite DPM (tons)*	Mitigated Onsite PM2.5 (tons)*
Run 1	2021	Demolition	0.0432	0.0435	2021	Demolition	0.00186	0.00222
Run 1	2021	Site Preparation	0.0282	0.0951	2021	Site Preparation	0.00093	0.0681
Run 1	2021	Grading	0.0822	0.1551	2021	Grading	0.00456	0.0774
Run 1	2021	Stormwater Treatment Area	0.1353	0.1353	2021	Stormwater Treatment Area	0.0168	0.0168
Run 1	2021	Paving	0.0654	0.0654	2021	Paving	0.00393	0.00393
Run 2	2021	Building Construction	0.0363	0.0363	2021	Building Construction	0.0045	0.0045
Run 2	2022	Building Construction	0.0699	0.0699	2022	Building Construction	0.00933	0.00933
Run 2	2022	Paving	0.0068	0.0068	2022	Paving	0.00063	0.00063
Run 2	2022	Architectural Coatings	0.0012	0.0012	2022	Architectural Coatings	0.00006	0.00006
Run 3	2021	Building Construction	0.1023	0.1023	2021	Building Construction	0.01269	0.01269
Run 3	2022	Building Construction	0.0142	0.0142	2022	Building Construction	0.00189	0.00189
Run 3	2022	Paving	0.0068	0.0068	2022	Paving	0.00063	0.00063
Run 3	2022	Architectural Coatings	0.0012	0.0012	2022	Architectural Coatings	0.00006	0.00006
Run 4	2021	Building Construction	0.0270	0.0270	2021	Building Construction	0.00336	0.00336
Run 4	2022	Building Construction	0.0777	0.0777	2022	Building Construction	0.01038	0.01038
Run 4	2022	Paving	0.0068	0.0068	2022	Paving	0.00063	0.00063
Run 4	2022	Architectural Coatings	0.0012	0.0012	2022	Architectural Coatings	0.00006	0.00006
Run 5	2022	Building Construction	0.0780	0.0780	2022	Building Construction	0.01044	0.01044
Run 5	2023	Building Construction	0.0194	0.0194	2023	Building Construction	0.00273	0.00273
Run 5	2023	Paving	0.0060	0.0060	2023	Paving	0.00063	0.00063
Run 5	2023	Architectural Coatings	0.0011	0.0011	2023	Architectural Coatings	0.00006	0.00006
Run 6	2022	Building Construction	0.0146	0.0146	2022	Building Construction	0.00195	0.00195
Run 6	2023	Building Construction	0.0744	0.0744	2023	Building Construction	0.0105	0.0105
Run 6	2023	Paving	0.0060	0.0060	2023	Paving	0.00063	0.00063
Run 6	2023	Architectural Coatings	0.0011	0.0011	2023	Architectural Coatings	0.00006	0.00006

* Emissions modeled for 8 hours each day were adjusted using a factor of 3 to correct for 24 hour per day period averaging.

Total Unmitigated DPM (On-site)	9.061E-01	tons	**Total Mitigated DPM (On-site)**	9.930E-02	tons
Average Emission	8.227E+05	grams	Average Emission	9.016E+04	grams
	1.026E-02	grams/sec		1.125E-03	grams/sec
	1.734E-07	grams/m2-sec		1.901E-08	grams/m2-sec
Total Unmitigated PM2.5 (On-site)	1.046E+00	tons	**Total Mitigated PM2.5 (On-site)**	2.397E-01	tons
Average Emission	9.499E+05	grams	Average Emission	2.176E+05	grams
	1.185E-02	grams/sec		2.714E-03	grams/sec
	2.003E-07	grams/m2-sec		4.588E-08	grams/m2-sec

City of Santa Rosa—Stonebridge Subdivision Project

Project Site

Estimation of Annual Offsite Construction DPM Emissions (No Mitigation)

Start of Construction	4/1/2021	1/1/2022	1/1/2023	
End of Construction	12/31/2021	12/31/2022	10/18/2023	**Total**
Number of Days	274	364	290	928
Number of Hours	6,576	8,736	6,960	22,272
Number of Construction Days	197	260	208	665
Number of Construction Hours (8 hours/day)	1,576	2,080	1,664	5,320

Routes

Route 1 - Fulton Rd.>River Rd.> US 101 S on ramp or US 101 N on ramp
Route 2 - Fulton Rd. > Piner Rd. > Range Rd.> Bicentennial > 101 S
Route 3 - 100 S> Exit 494 for River Rd.> Fulton Rd.
Route 4 - 101 S> Bicentennial > Range Rd.> Piner Rd.>Fulton Rd.

		Run 1 2021	Run 1 2021	Run 1 2021	Run 1 2021 Stormwater Treatment Area	Run 1 2021	Run 2 2021	Run 2 2022	Run 2 2022	Run 2 2022	Run 2 2022 Architectural Coatings	Run 3 2021	Run 3 2022	Run 3 2022	Run 3 2022 Architectural Coatings	Run 4 2021 Building Construction	Run 4 2022 Building Construction	Run 4 2022	Run 4 2022 Architectural Coatings	Run 5 2022 Building Construction	Run 5 2023 Building Construction	Run 5 2023	Run 5 2023 Architectural Coatings	Run 6 2022 Building Construction	Run 6 2023 Building Construction	Run 6 2023	Run 6 2023 Architectural Coatings
	Construction Trip Type	Demolition	Site Preparation	Grading		Paving	Building Construction	Building Construction	Paving		Building Construction	Building Construction	Paving				Paving										
DPM	Haul Truck	0.00001	0.00000	0.00006	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
DPM	Vendor Truck	0.00000	0.00000	0.00000	0.00172	0.00000	0.00002	0.00003	0.00000	0.00000	0.00005	0.00001	0.00000	0.00000	0.00001	0.00004	0.00000	0.00000	0.00004	0.00000	0.00000	0.00000	0.00001	0.00002	0.00000	0.00000	0.00000
DPM	Worker	0.00001	0.00001	0.00002	0.00095	0.00003	0.00003	0.00003	0.00000	0.00000	0.00004	0.00001	0.00000	0.00000	0.00001	0.00004	0.00000	0.00000	0.00004	0.00001	0.00000	0.00000	0.00001	0.00004	0.00000	0.00000	0.00000
DPM	Total	0.00002	0.00001	0.00008	0.00267	0.00003	0.00004	0.00006	0.00000	0.00000	0.00009	0.00002	0.00000	0.00000	0.00002	0.00008	0.00000	0.00000	0.00008	0.00001	0.00000	0.00000	0.00002	0.00006	0.00000	0.00000	0.00000
PM2.5 Total	Haul Truck	0.00005	0.00000	0.00037	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PM2.5 Total	Vendor Truck	0.00000	0.00000	0.00000	0.01410	0.00000	0.00014	0.00032	0.00000	0.00000	0.00037	0.00006	0.00000	0.00000	0.00011	0.00036	0.00000	0.00000	0.00033	0.00009	0.00000	0.00000	0.00006	0.00034	0.00000	0.00000	0.00000
PM2.5 Total	Worker	0.00032	0.00019	0.00064	0.03620	0.00113	0.00057	0.00131	0.00016	0.00002	0.00162	0.00027	0.00016	0.00002	0.00043	0.00146	0.00016	0.00002	0.00147	0.00042	0.00016	0.00002	0.00027	0.00161	0.00016	0.00002	0.00000
PM2.5 Total	Total	0.00037	0.00019	0.00101	0.05020	0.00113	0.00071	0.00163	0.00016	0.00002	0.00199	0.00033	0.00016	0.00002	0.00054	0.00182	0.00016	0.00002	0.00180	0.00051	0.00016	0.00002	0.00033	0.00195	0.00016	0.00002	0.00000

		Haul Truck (tons)	Vendor Truck (tons)	Worker (tons)	Total (tons)
Total DPM		7.000E-05	1.950E-03	1.270E-03	3.290E-03
Total DPM After Scaled by 3		2.100E-04	5.850E-03	3.810E-03	9.870E-03
Average Emissions	Grams	1.907E+02	5.312E+03	3.459E+03	
	Grams/sec	2.378E-06	6.625E-05	4.315E-05	
	Default Vehicle Travel Distance in CalEEMod	20	7.3	10.8	
Vehicle Travel Distances in the Construction HRA (miles)					
Road Segment 1		0.71	0.71	0.71	miles
Road Segment 2		0.62	0.62	0.62	miles
Road Segment 3		0.71	0.71	0.71	miles
Road Segment 4		0.60	0.60	0.60	miles
Trip Distribution (percent)					
Road Segment 1		25%	25%	25%	
Road Segment 2		25%	25%	25%	
Road Segment 3		25%	25%	25%	
Road Segment 4		25%	25%	25%	
Total Average Offsite Vehicle Emissions Along Travel Distance (g/sec)					**Total**
Road Segment 1		2.117E-08	1.615E-06	7.111E-07	2.348E-06
Road Segment 2		1.849E-08	1.411E-06	6.212E-07	2.051E-06
Road Segment 3		2.117E-08	1.615E-06	7.111E-07	2.348E-06
Road Segment 4		1.775E-08	1.354E-06	5.963E-07	1.968E-06

		Haul Truck (tons)	Vendor Truck (tons)	Worker (tons)	Total (tons)
Total PM2.5 Total		4.200E-04	1.628E-02	4.881E-02	6.551E-02
Total PM2.5 Total After Scaled by 3		1.260E-03	4.884E-02	1.464E-01	1.965E-01
Average Emissions	Grams	1.144E+03	4.435E+04	1.330E+05	
	Grams/sec	1.427E-05	5.531E-04	1.658E-03	
	Default Vehicle Travel Distance in CalEEMod	20	7.3	10.8	
Vehicle Travel Distances in the Construction HRA (miles)					
Road Segment 1		0.71	0.71	0.71	miles
Road Segment 2		0.62	0.62	0.62	miles
Road Segment 3		0.71	0.71	0.71	miles
Road Segment 4		0.60	0.60	0.60	miles
Trip Distribution (percent)					
Road Segment 1		25%	25%	25%	
Road Segment 2		25%	25%	25%	
Road Segment 3		25%	25%	25%	
Road Segment 4		25%	25%	25%	
Total Average Offsite Vehicle Emissions Along Travel Distance (g/sec)					**Total**
Road Segment 1		1.270E-07	1.349E-05	2.733E-05	4.094E-05
Road Segment 2		1.109E-07	1.178E-05	2.388E-05	3.577E-05
Road Segment 3		1.270E-07	1.349E-05	2.733E-05	4.094E-05
Road Segment 4		1.065E-07	1.131E-05	2.292E-05	3.433E-05

City of Santa Rosa—Stonebridge Subdivision Project

Project Site
Construction Annual DPM Emissions (PM2.5 Exhaust)

Unmitigated Concentrations

Annual Average Onsite DPM Rate (grams/m2/sec):	1.73E-07
Annual Average Offsite DPM Emission Rate - Road Segment 2 (grams/sec):	2.35E-06
Annual Average Offsite DPM Emission Rate - Road Segment 3 (grams/sec):	2.05E-06
Annual Average Offsite DPM Emission Rate - Road Segment 4 (grams/sec):	2.35E-06
Annual Average Offsite DPM Emission Rate - Road Segment 5 (grams/sec):	1.97E-06

Unmitigated DPM Concentrations		
Maximum DPM (ug/m3)	**MIR UTM** X	Y
1.1483E-01	520285.95	4258692.95

X	Y	Onsite Project Site Unit Emissions VALUES AVERAGED AVERAGE CONC	Offsite-Road Segment 1 Unit Emissions VALUES AVERAGED AVERAGE CONC	Offsite-Road Segment 2 Unit Emissions VALUES AVERAGED AVERAGE CONC	Offsite-Road Segment 3 Unit Emissions VALUES AVERAGED AVERAGE CONC	Offsite-Road Segment 4 Unit Emissions VALUES AVERAGED AVERAGE CONC	Onsite Project Site Annual DPM Exhaust w/Actual Emissions (ug/m3)	Offsite-Road Segment 1 Annual DPM Exhaust w/Actual Emissions (ug/m3)	Offsite-Road Segment 2 Annual DPM Exhaust w/Actual Emissions (ug/m3)	Offsite-Road Segment 3 Annual DPM Exhaust w/Actual Emissions (ug/m3)	Offsite-Road Segment 4 Annual DPM Exhaust w/Actual Emissions (ug/m3)	**Total DPM (ug/m3)**
520285.95	4258692.95	662010.4627	0.70541	0.47948	0.67924	0.51632	1.15E-01	1.66E-06	9.83E-07	1.59E-06	1.02E-06	1.1483E-01
520276.05	4258692.97	661730.7007	0.7558	0.50671	0.7262	0.54656	1.15E-01	1.77E-06	1.04E-06	1.70E-06	1.08E-06	1.1478E-01
520266.15	4258692.98	661237.0252	0.81334	0.53678	0.77956	0.57991	1.15E-01	1.91E-06	1.10E-06	1.83E-06	1.14E-06	1.1469E-01
520295.85	4258692.94	660914.3292	0.66038	0.45448	0.63708	0.4886	1.15E-01	1.55E-06	9.32E-07	1.50E-06	9.62E-07	1.1464E-01
520256.24	4258693	658495.184	0.87811	0.56962	0.83922	0.61631	1.14E-01	2.06E-06	1.17E-06	1.97E-06	1.21E-06	1.1422E-01
520305.75	4258692.92	656765.0041	0.61928	0.43121	0.59835	0.46286	1.14E-01	1.45E-06	8.84E-07	1.40E-06	9.11E-07	1.1392E-01
520246.34	4258693.02	654632.1663	0.95238	0.60592	0.90721	0.65636	1.14E-01	2.24E-06	1.24E-06	2.13E-06	1.29E-06	1.1355E-01
520315.65	4258692.9	650173.4768	0.58193	0.40963	0.56299	0.43904	1.13E-01	1.37E-06	8.40E-07	1.32E-06	8.64E-07	1.1277E-01
520236.44	4258693.03	647446.2042	1.03669	0.64581	0.9838	0.70018	1.12E-01	2.43E-06	1.32E-06	2.31E-06	1.38E-06	1.1230E-01
520325.55	4258692.89	642068.381	0.54847	0.38984	0.53118	0.41722	1.11E-01	1.29E-06	8.00E-07	1.25E-06	8.21E-07	1.1137E-01
520226.54	4258693.05	639146.7769	1.1371	0.69147	1.07491	0.74946	1.11E-01	2.67E-06	1.42E-06	2.52E-06	1.48E-06	1.1087E-01
520285.96	4258702.95	630959.6637	0.71756	0.46523	0.69024	0.50115	1.09E-01	1.68E-06	9.54E-07	1.62E-06	9.87E-07	1.0944E-01
520276.06	4258702.97	630957.2012	0.7694	0.49114	0.73836	0.52988	1.09E-01	1.81E-06	1.01E-06	1.73E-06	1.04E-06	1.0944E-01
520335.45	4258692.87	630938.432	0.51801	0.37153	0.50211	0.39707	1.09E-01	1.22E-06	7.62E-07	1.18E-06	7.82E-07	1.0944E-01
520266.16	4258702.98	630036.8694	0.82794	0.51957	0.79239	0.56129	1.09E-01	1.94E-06	1.07E-06	1.86E-06	1.10E-06	1.0928E-01
520295.86	4258702.94	629016.2959	0.6711	0.44135	0.64686	0.47468	1.09E-01	1.58E-06	9.05E-07	1.52E-06	9.34E-07	1.0910E-01
520256.26	4258703	627344.6224	0.89421	0.55071	0.85319	0.59556	1.09E-01	2.10E-06	1.13E-06	2.00E-06	1.17E-06	1.0882E-01
520216.64	4258693.07	626935.9391	1.2529	0.74154	1.17902	0.80314	1.09E-01	2.94E-06	1.52E-06	2.77E-06	1.58E-06	1.0875E-01
520305.77	4258702.92	624933.273	0.62914	0.41927	0.60745	0.45023	1.08E-01	1.48E-06	8.60E-07	1.43E-06	8.86E-07	1.0840E-01
520246.36	4258703.02	622952.3412	0.96996	0.58507	0.92233	0.63309	1.08E-01	2.28E-06	1.20E-06	2.17E-06	1.25E-06	1.0806E-01
520315.67	4258702.9	618385.3726	0.59112	0.39882	0.57155	0.42761	1.07E-01	1.39E-06	8.18E-07	1.34E-06	8.42E-07	1.0726E-01
520236.46	4258703.03	616231.652	1.05663	0.62291	1.00088	0.67408	1.07E-01	2.48E-06	1.28E-06	2.35E-06	1.33E-06	1.0689E-01
520345.35	4258692.85	615114.5187	0.48991	0.35441	0.47519	0.37827	1.07E-01	1.15E-06	7.27E-07	1.12E-06	7.45E-07	1.0669E-01
520206.74	4258693.08	611044.6617	1.39025	0.79675	1.30102	0.86205	1.06E-01	3.26E-06	1.63E-06	3.05E-06	1.70E-06	1.0599E-01
520325.57	4258702.89	610001.1955	0.5568	0.37996	0.53899	0.40674	1.06E-01	1.31E-06	7.79E-07	1.27E-06	8.01E-07	1.0581E-01
520226.56	4258703.05	607387.9481	1.15843	0.6654	1.09288	0.71947	1.05E-01	2.72E-06	1.36E-06	2.57E-06	1.42E-06	1.0536E-01
520335.47	4258702.87	599219.393	0.52565	0.36253	0.50934	0.3875	1.04E-01	1.23E-06	7.44E-07	1.20E-06	7.63E-07	1.0394E-01
520216.66	4258703.07	595412.1692	1.27692	0.71237	1.19948	0.76912	1.03E-01	3.00E-06	1.46E-06	2.82E-06	1.51E-06	1.0328E-01
520355.25	4258692.84	594099.7587	0.46433	0.33858	0.45059	0.36092	1.03E-01	1.09E-06	6.94E-07	1.06E-06	7.10E-07	1.0305E-01
520196.84	4258693.1	589909.9555	1.55429	0.85851	1.44609	0.92722	1.02E-01	3.65E-06	1.76E-06	3.39E-06	1.83E-06	1.0233E-01
520345.37	4258702.85	583195.2902	0.49683	0.34617	0.48175	0.36946	1.01E-01	1.17E-06	7.10E-07	1.13E-06	7.27E-07	1.0116E-01
520206.76	4258703.08	579527.2475	1.4173	0.76346	1.32431	0.82309	1.01E-01	3.33E-06	1.57E-06	3.11E-06	1.62E-06	1.0053E-01
520157.12	4258646.05	572750.5551	2.41391	1.62136	2.20438	1.77451	9.93E-02	5.67E-06	3.33E-06	5.18E-06	3.49E-06	9.9359E-02
520365.15	4258692.82	564099.0537	0.44038	0.32363	0.42748	0.34458	9.78E-02	1.03E-06	6.64E-07	1.00E-06	6.78E-07	9.7844E-02
520355.27	4258702.84	562308.3214	0.4705	0.33099	0.45646	0.35275	9.75E-02	1.10E-06	6.79E-07	1.07E-06	6.94E-07	9.7533E-02
520186.94	4258693.12	561775.8411	1.75507	0.92751	1.62237	0.99969	9.74E-02	4.12E-06	1.90E-06	3.81E-06	1.97E-06	9.7449E-02
520157.12	4258655.32	561759.9611	2.48739	1.52577	2.26179	1.65906	9.74E-02	5.84E-06	3.13E-06	5.31E-06	3.27E-06	9.7452E-02
520196.86	4258703.1	558250.8976	1.58571	0.81999	1.47332	0.88255	9.68E-02	3.72E-06	1.68E-06	3.46E-06	1.74E-06	9.6837E-02
520147.12	4258646.05	551368.5226	2.90149	1.83714	2.61828	2.00195	9.56E-02	6.81E-06	3.77E-06	6.15E-06	3.94E-06	9.5653E-02
520147.12	4258655.32	539010.2038	2.98985	1.71437	2.6866	1.85484	9.35E-02	7.02E-06	3.52E-06	6.31E-06	3.65E-06	9.3509E-02
520365.17	4258702.82	534151.4274	0.44628	0.31685	0.4331	0.33721	9.26E-02	1.05E-06	6.50E-07	1.02E-06	6.64E-07	9.2650E-02
520157.12	4258664.6	531634.1877	2.55475	1.43574	2.31624	1.55154	9.22E-02	6.00E-06	2.94E-06	5.44E-06	3.05E-06	9.2227E-02
520186.96	4258703.12	529735.306	1.79066	0.88188	1.65298	0.94795	9.19E-02	4.20E-06	1.81E-06	3.88E-06	1.87E-06	9.1892E-02
520177.04	4258693.13	525404.7531	2.00342	1.00358	1.83797	1.07998	9.11E-02	4.70E-06	2.06E-06	4.31E-06	2.13E-06	9.1142E-02
520137.12	4258646.05	525153.9319	3.57866	2.09768	3.18247	2.27288	9.11E-02	8.40E-06	4.30E-06	7.47E-06	4.47E-06	9.1110E-02
520375.05	4258692.8	523276.3796	0.41865	0.30989	0.40644	0.32958	9.08E-02	9.83E-07	6.36E-07	9.54E-07	6.49E-07	9.0763E-02
520137.12	4258655.32	512025.5326	3.6851	1.93506	3.26165	2.08215	8.88E-02	8.65E-06	3.97E-06	7.66E-06	4.10E-06	8.8833E-02
520276.1	4258722.97	505674.2331	0.79371	0.46183	0.75976	0.49782	8.77E-02	1.86E-06	9.47E-07	1.78E-06	9.80E-07	8.7712E-02
520286	4258722.95	505256.639	0.73952	0.43808	0.70971	0.47189	8.76E-02	1.74E-06	8.98E-07	1.67E-06	9.29E-07	8.7640E-02
520266.2	4258722.98	504669.1133	0.85464	0.48778	0.8158	0.52592	8.75E-02	2.01E-06	1.00E-06	1.92E-06	1.04E-06	8.7539E-02
520295.9	4258722.94	503301.2402	0.69121	0.41641	0.66492	0.44806	8.73E-02	1.62E-06	8.54E-07	1.56E-06	8.82E-07	8.7300E-02
520147.12	4258664.6	502477.166	3.06715	1.599	2.74954	1.72011	8.72E-02	7.20E-06	3.28E-06	6.46E-06	3.39E-06	8.7173E-02
520256.29	4258723	502068.1672	0.92375	0.51606	0.87902	0.55632	8.71E-02	2.17E-06	1.06E-06	2.06E-06	1.10E-06	8.7088E-02
520305.8	4258722.92	499711.4967	0.64774	0.39649	0.6244	0.42605	8.67E-02	1.52E-06	8.13E-07	1.47E-06	8.39E-07	8.6677E-02
520246.39	4258723.02	497859.4119	1.00257	0.54684	0.95073	0.58917	8.64E-02	2.35E-06	1.12E-06	2.23E-06	1.16E-06	8.6358E-02
520375.07	4258702.8	495316.0666	0.42383	0.30359	0.41136	0.32267	8.59E-02	9.95E-07	6.23E-07	9.66E-07	6.35E-07	8.5914E-02
520315.7	4258722.9	493976.8157	0.60825	0.37772	0.58724	0.40533	8.57E-02	1.43E-06	7.75E-07	1.38E-06	7.98E-07	8.5682E-02
520157.12	4258673.87	493534.2778	2.61469	1.34986	2.36669	1.45215	8.56E-02	6.14E-06	2.77E-06	5.56E-06	2.86E-06	8.5619E-02
520127.12	4258646.05	492895.6744	4.55641	2.41345	3.98368	2.59237	8.55E-02	1.07E-05	4.95E-06	9.35E-06	5.10E-06	8.5521E-02
520236.49	4258723.03	491916.287	1.09317	0.58035	1.03274	0.62471	8.53E-02	2.57E-06	1.19E-06	2.42E-06	1.23E-06	8.5328E-02
520177.05	4258703.13	491915.5288	2.04404	0.94969	1.87246	1.02006	8.53E-02	4.80E-06	1.95E-06	4.40E-06	2.01E-06	8.5334E-02
520325.6	4258722.89	485086.5142	0.57235	0.36042	0.55332	0.38619	8.41E-02	1.34E-06	7.39E-07	1.30E-06	7.60E-07	8.4140E-02
520226.59	4258723.05	483881.6868	1.19826	0.61692	1.12752	0.66328	8.39E-02	2.81E-06	1.27E-06	2.65E-06	1.31E-06	8.3935E-02
520127.12	4258655.32	480354.9216	4.68376	2.19799	4.07203	2.34136	8.33E-02	1.10E-05	4.51E-06	9.56E-06	4.61E-06	8.3345E-02
520167.14	4258693.15	479970.9033	2.31789	1.08767	2.10702	1.16908	8.32E-02	5.44E-06	2.23E-06	4.95E-06	2.30E-06	8.3264E-02
520335.5	4258722.87	473811.8752	0.53964	0.34439	0.52227	0.36844	8.22E-02	1.27E-06	7.06E-07	1.23E-06	7.25E-07	8.2184E-02
520137.12	4258664.6	473513.4601	3.77541	1.78691	3.33266	1.91154	8.21E-02	8.86E-06	3.66E-06	7.82E-06	3.76E-06	8.2153E-02
520216.69	4258723.07	473418.3444	1.32151	0.65686	1.23821	0.70529	8.21E-02	3.10E-06	1.35E-06	2.91E-06	1.39E-06	8.2121E-02
520384.96	4258692.79	467816.7544	0.39843	0.29701	0.38682	0.31554	8.11E-02	9.35E-07	6.09E-07	9.08E-07	6.21E-07	8.1144E-02
520157.12	4258683.15	461931.6033	2.67282	1.26628	2.40997	1.36004	8.01E-02	6.27E-06	2.60E-06	5.66E-06	2.68E-06	8.0137E-02
520206.79	4258723.08	459749.9231	1.46709	0.69966	1.36788	0.75072	7.97E-02	3.44E-06	1.43E-06	3.21E-06	1.48E-06	7.9751E-02
520345.4	4258722.85	459676.8086	0.50982	0.32951	0.49383	0.35197	7.97E-02	1.20E-06	6.76E-07	1.16E-06	6.93E-07	7.9733E-02
520147.12	4258673.87	458448.1957	3.13449	1.49094	2.80621	1.59781	7.95E-02	7.36E-06	3.06E-06	6.59E-06	3.15E-06	7.9536E-02
520117.12	4258646.05	453337.2361	6.02456	2.80275	5.18464	2.95182	7.86E-02	1.41E-05	5.75E-06	1.22E-05	5.81E-06	7.8667E-02
520384.97	4258702.79	444201.6386	0.40308	0.2912	0.39121	0.30911	7.70E-02	9.46E-07	5.97E-07	9.18E-07	6.08E-07	7.7048E-02
520286.01	4258732.95	443470.6967	0.74861	0.42495	0.71744	0.45747	7.69E-02	1.76E-06	8.72E-07	1.68E-06	9.01E-07	7.6923E-02
520276.11	4258732.97	443321.6464	0.80306	0.44739	0.76758	0.48176	7.69E-02	1.89E-06	9.18E-07	1.80E-06	9.48E-07	7.6898E-02
520295.91	4258732.94	443194.7901	0.70049	0.40463	0.67307	0.43525	7.69E-02	1.64E-06	8.30E-07	1.58E-06	8.57E-07	7.6875E-02
520117.12	4258655.32	442679.2421	6.17731	2.51752	5.27774	2.61964	7.68E-02	1.45E-05	5.16E-06	1.24E-05	5.16E-06	7.6818E-02
520196.89	4258723.1	441936.3227	1.64127	0.74603	1.52191	0.80023	7.67E-02	3.85E-06	1.53E-06	3.57E-06	1.58E-06	7.6662E-02
520266.21	4258732.98	441922.7961	0.8643	0.47181	0.82376	0.50799	7.66E-02	2.03E-06	9.68E-07	1.93E-06	1.00E-06	7.6655E-02
520355.3	4258722.84	441578.9503	0.48248	0.31564	0.46764	0.33663	7.66E-02	1.13E-06	6.47E-07	1.10E-06	6.63E-07	7.6593E-02
520127.12	4258664.6	441242.8549	4.78308	2.01127	4.15275	2.12313	7.65E-02	1.12E-05	4.12E-06	9.75E-06	4.18E-06	7.6561E-02
520256.31	4258733	440473.4092	0.93504	0.49867	0.88843	0.53664	7.64E-02	2.20E-06	1.02E-06	2.09E-06	1.06E-06	7.6404E-02
520305.82	4258732.92	439595.7048	0.65618	0.3856	0.63191	0.41433	7.62E-02	1.54E-06	7.91E-07	1.48E-06	8.16E-07	7.6251E-02
520246.41	4258733.02	436140.439	1.01423	0.52751	0.96051	0.56717	7.56E-02	2.38E-06	1.08E-06	2.25E-06	1.12E-06	7.5653E-02
520236.51	4258733.03	430262.5705	1.10508	0.55874	1.04291	0.60012	7.46E-02	2.59E-06	1.15E-06	2.45E-06	1.18E-06	7.4634E-02
520315.72	4258732.9	430094.4625	0.61423	0.36682	0.59234	0.39379	7.46E-02	1.44E-06	7.52E-07	1.39E-06	7.75E-07	7.4602E-02
520226.61	4258733.05	425077.4163	1.2144	0.59309	1.14168	0.63637	7.37E-02	2.85E-06	1.22E-06	2.68E-06	1.25E-06	7.3736E-02
520137.12	4258673.87	425012.9196	3.84051	1.65525	3.3984	1.75984	7.37E-02	9.02E-06	3.39E-06	7.98E-06	3.46E-06	7.3740E-02
520325.62	4258732.89	422924.2617	0.57832	0.35049	0.55854	0.37573	7.34E-02	1.36E-06	7.19E-07	1.31E-06	7.40E-07	7.3358E-02
520147.12	4258683.15	422825.3067	3.20665	1.38833	2.8509	1.48633	7.33E-02	7.53E-06	2.85E-06	6.69E-06	2.93E-06	7.3357E-02
520160.07	4258700.23	421059.4477	2.63003	1.10318	2.36922	1.18257	7.30E-02	6.17E-06	2.26E-06	5.56E-06	2.33E-06	7.3047E-02
520365.2	4258722.82	419786.6962	0.45753	0.30285	0.44368	0.32246	7.28E-02	1.07E-06	6.21E-07	1.04E-06	6.35E-07	7.2813E-02
520186.99	4258723.12	418859.9409	1.85237	0.79609	1.70623	0.85397	7.26E-02	4.35E-06	1.63E-06	4.01E-06	1.68E-06	7.2661E-02
520216.71	4258733.07	416895.7376	1.34162	0.6299	1.25594	0.67537	7.23E-02	3.15E-06	1.29E-06	2.95E-06	1.33E-06	7.2317E-02
520335.52	4258732.87	412508.9499	0.5451	0.33513	0.5271	0.35875	7.15E-02	1.28E-06	6.87E-07	1.24E-06	7.06E-07	7.1552E-02
520117.12	4258664.6	405962.6887	6.2821	2.2804	5.36663	2.34026	7.04E-02	1.47E-05	4.68E-06	1.26E-05	4.61E-06	7.0449E-02
520107.12	4258646.05	405286.502	8.29137	3.27618	7.12267	3.30505	7.03E-02	1.95E-05	6.72E-06	1.67E-05	6.51E-06	7.0345E-02
520206.81	4258733.08	403304.9696	1.48556	0.66809	1.38397	0.71652	7.00E-02	3.49E-06	1.37E-06	3.25E-06	1.41E-06	6.9961E-02
520394.86	4258692.77	402093.9677	0.37942	0.28482	0.36831	0.30228	6.97E-02	8.91E-07	5.84E-07	8.65E-07	5.95E-07	6.9744E-02
520345.42	4258732.85	398873.3084	0.51451	0.32073	0.498	0.34282	6.92E-02	1.21E-06	6.58E-07	1.17E-06	6.75E-07	6.9186E-02
520107.12	4258655.32	396695.3815	8.46977	2.89289	7.213	2.87536	6.88E-02	1.99E-05	5.93E-06	1.69E-05	5.66E-06	6.8853E-02
520276.13	4258742.97	393455.3145	0.81425	0.43442	0.77748	0.46701	6.82E-02	1.91E-06	8.91E-07	1.83E-06	9.19E-07	6.8249E-02
520286.03	4258742.95	393424.8123	0.75885	0.41304	0.72651	0.44405	6.82E-02	1.78E-06	8.47E-07	1.71E-06	8.74E-07	6.8243E-02
520295.93	4258742.94	392026.7775	0.70941	0.3935	0.68093	0.42289	6.80E-02	1.67E-06	8.07E-07	1.60E-06	8.32E-07	6.8000E-02
520127.12	4258673.87	392001.7998	4.82933	1.85072	4.22761	1.93337	6.80E-02	1.13E-05	3.80E-06	9.93E-06	3.81E-06	6.8020E-02
520266.23	4258742.98	391799.814	0.87593	0.45746	0.83403	0.49154	6.80E-02	2.06E-06	9.38E-07	1.96E-06	9.68E-07	6.7962E-02
520375.11	4258722.8	390522.566	0.43414	0.29067	0.42107	0.30901	6.77E-02	1.02E-06	5.96E-07	9.89E-07	6.08E-07	6.7738E-02
520256.33	4258743	390273.9548	0.94759	0.48275	0.89956	0.51832	6.77E-02	2.22E-06	9.90E-07	2.11E-06	1.02E-06	6.7698E-02
520177.09	4258723.13	390188.0308	2.11218	0.85123	1.93009	0.91256	6.77E-02	4.96E-06	1.75E-06	4.53E-06	1.80E-06	6.7689E-02
520305.83	4258742.92	388393.5673	0.66434	0.37519	0.6391	0.40297	6.74E-02	1.56E-06	7.69E-07	1.50E-06	7.93E-07	6.7370E-02
520137.12	4258683.15	388111.7385	3.93849	1.53176	3.44433	1.62481	6.73E-02	9.25E-06	3.14E-06	8.09E-06	3.20E-06	6.7340E-02
520246.43	4258743.02	386888.3886	1.02862	0.50985	0.9734	0.54694	6.71E-02	2.41E-06	1.05E-06	2.29E-06	1.08E-06	6.7111E-02
520196.91	4258733.1	386868.8806	1.65823	0.70949	1.53631	0.76131	6.71E-02	3.89E-06	1.46E-06	3.61E-06	1.50E-06	6.7111E-02
520394.87	4258702.77	383280.803	0.38378	0.27957	0.37241	0.29641	6.65E-02	9.01E-07	5.73E-07	8.74E-07	5.83E-07	6.6481E-02
520355.32	4258732.84	382917.3022	0.48694	0.30754	0.47163	0.32819	6.64E-02	1.14E-06	6.31E-07	1.11E-06	6.46E-07	6.6419E-02
520236.53	4258743.03	382285.2374	1.12206	0.539	1.05818	0.57776	6.63E-02	2.63E-06	1.11E-06	2.48E-06	1.14E-06	6.6313E-02
520315.73	4258742.9	379516.2051	0.6214	0.357	0.59862	0.38323	6.58E-02	1.46E-06	7.32E-07	1.41E-06	7.54E-07	6.5830E-02
520226.63	4258743.05	377159.099	1.23258	0.57048	1.15802	0.61121	6.54E-02	2.89E-06	1.17E-06	2.72E-06	1.20E-06	6.5425E-02
520325.63	4258742.89	372767.896	0.58501	0.34135	0.56444	0.36601	6.47E-02	1.37E-06	7.00E-07	1.33E-06	7.20E-07	6.4659E-02
520216.72	4258743.07	369290.478	1.36068	0.60388	1.2729	0.64707	6.41E-02	3.19E-06	1.24E-06	2.99E-06	1.27E-06	6.4060E-02
520187.01	4258733.12	367383.6721	1.86951	0.75494	1.7206	0.81017	6.37E-02	4.39E-06	1.55E-06	4.04E-06	1.59E-06	6.3733E-02
520107.12	4258664.6	364666.488	8.58552	2.58252	7.30115	2.52874	6.32E-02	2.02E-05	5.30E-06	1.71E-05	4.98E-06	6.3297E-02
520365.22	4258732.82	364491.551	0.46206	0.29545	0.44773	0.31478	6.32E-02	1.08E-06	6.06E-07	1.05E-06	6.20E-07	6.3223E-02
520335.53	4258742.87	363255.4372	0.55134	0.32663	0.53264	0.34978	6.30E-02	1.29E-06	6.70E-07	1.25E-06	6.89E-07	6.3009E-02
520117.12	4258673.87	358682.5779	6.27831	2.08017	5.44927	2.10424	6.22E-02	1.47E-05	4.27E-06	1.28E-05	4.14E-06	6.2248E-02
520206.82	4258743.08	357457.2179	1.50677	0.63879	1.40259	0.68501	6.20E-02	3.54E-06	1.31E-06	3.29E-06	1.35E-06	6.2009E-02
520142.99	4258697.3	357304.0426	3.5693	1.30295	3.14066	1.38187	6.20E-02	8.38E-06	2.67E-06	7.37E-06	2.72E-06	6.1994E-02
520127.12	4258683.15	356214.8165	4.97931	1.70276	4.27691	1.76981	6.18E-02	1.17E-05	3.49E-06	1.00E-05	3.48E-06	6.1813E-02
520385.01	4258722.79	354960.1158	0.41245	0.27924	0.40003	0.2964	6.16E-02	9.68E-07	5.73E-07	9.39E-07	5.83E-07	6.1569E-02
520345.44	4258742.85	351174.4886	0.52041	0.31286	0.50328	0.33457	6.09E-02	1.22E-06	6.42E-07	1.18E-06	6.59E-07	6.0913E-02
520276.15	4258752.97	350226.7969	0.82382	0.42162	0.78592	0.45238	6.07E-02	1.93E-06	8.65E-07	1.85E-06	8.91E-07	6.0751E-02
520286.05	4258752.95	349840.2368	0.76761	0.40127	0.73414	0.43073	6.07E-02	1.80E-06	8.23E-07	1.72E-06	8.48E-07	6.0683E-02
520266.25	4258752.98	349714.4292	0.8874	0.44361	0.84432	0.47567	6.07E-02	2.08E-06	9.10E-07	1.98E-06	9.36E-07	6.0662E-02
520295.95	4258752.94	348899.204	0.71784	0.38263	0.68827	0.41072	6.05E-02	1.69E-06	7.85E-07	1.62E-06	8.08E-07	6.0520E-02
520256.34	4258753	348163.1831	0.95986	0.46728	0.91064	0.50068	6.04E-02	2.25E-06	9.58E-07	2.14E-06	9.86E-07	6.0394E-02
520097.12	4258646.05	347956.3173	11.65187	3.77005	10.63734	3.54717	6.04E-02	2.74E-05	7.73E-06	2.50E-05	6.98E-06	6.0418E-02
520305.85	4258752.92	345341.9954	0.67218	0.36519	0.64593	0.39188	5.99E-02	1.58E-06	7.49E-07	1.52E-06	7.71E-07	5.9903E-02
520246.44	4258753.02	345010.8408	1.04171	0.49242	0.98527	0.52729	5.98E-02	2.45E-06	1.01E-06	2.31E-06	1.04E-06	5.9847E-02
520177.1	4258733.13	344232.1051	2.13034	0.80545	1.94512	0.86335	5.97E-02	5.00E-06	1.65E-06	4.57E-06	1.70E-06	5.9718E-02
520196.92	4258743.1	343214.1268	1.68112	0.67672	1.5561	0.72611	5.95E-02	3.95E-06	1.39E-06	3.65E-06	1.43E-06	5.9539E-02
520097.12	4258655.32	340656.94	11.84468	3.25763	10.70451	3.03674	5.91E-02	2.78E-05	6.68E-06	2.51E-05	5.98E-06	5.9151E-02
520236.54	4258753.03	340539.5144	1.13551	0.51913	1.07039	0.55578	5.91E-02	2.67E-06	1.06E-06	2.51E-06	1.09E-06	5.9072E-02
520375.12	4258732.8	338741.735	0.43783	0.28355	0.42435	0.30163	5.88E-02	1.03E-06	5.82E-07	9.96E-07	5.94E-07	5.8756E-02
520315.75	4258752.9	337567.1678	0.62872	0.34781	0.60503	0.37316	5.85E-02	1.48E-06	7.13E-07	1.42E-06	7.35E-07	5.8554E-02
520355.34	4258742.84	336783.4346	0.49229	0.30014	0.47644	0.32047	5.84E-02	1.16E-06	6.16E-07	1.12E-06	6.31E-07	5.8417E-02
520226.64	4258753.05	335861.3664	1.24752	0.54802	1.1714	0.58689	5.83E-02	2.93E-06	1.12E-06	2.75E-06	1.16E-06	5.8262E-02
520325.65	4258752.89	330900.4631	0.5915	0.33265	0.5701	0.35662	5.74E-02	1.39E-06	6.82E-07	1.34E-06	7.02E-07	5.7397E-02
520216.74	4258753.07	329414.4198	1.37801	0.57874	1.28823	0.62015	5.71E-02	3.24E-06	1.19E-06	3.02E-06	1.22E-06	5.7144E-02
520187.02	4258743.12	326444.1806	1.89284	0.71852	1.74055	0.7707	5.66E-02	4.44E-06	1.47E-06	4.09E-06	1.52E-06	5.6632E-02
520117.12	4258683.15	324716.8062	6.51238	1.89936	5.5032	1.90713	5.63E-02	1.53E-05	3.90E-06	1.29E-05	3.75E-06	5.6357E-02
520335.55	4258752.87	322074.6451	0.55725	0.31843	0.53781	0.34105	5.59E-02	1.31E-06	6.53E-07	1.26E-06	6.71E-07	5.5866E-02
520107.12	4258673.87	321083.8887	8.40645	2.32693	7.38238	2.24471	5.57E-02	1.97E-05	4.77E-06	1.73E-05	4.42E-06	5.5737E-02
520365.24	4258742.82	320208.0844	0.46676	0.28843	0.45197	0.30747	5.55E-02	1.10E-06	5.92E-07	1.06E-06	6.05E-07	5.5542E-02
520206.84	4258753.08	318642.7183	1.52406	0.61073	1.41773	0.65507	5.53E-02	3.58E-06	1.25E-06	3.33E-06	1.29E-06	5.5277E-02
520167.2	4258733.15	318486.6464	2.45598	0.86208	2.22171	0.92062	5.52E-02	5.77E-06	1.77E-06	5.22E-06	1.81E-06	5.5255E-02
520276.16	4258762.97	313868.4802	0.83324	0.40924	0.79438	0.43826	5.44E-02	1.96E-06	8.39E-07	1.86E-06	8.63E-07	5.4445E-02
520266.26	4258762.98	313520.6912	0.89759	0.42988	0.85357	0.46009	5.44E-02	2.11E-06	8.82E-07	2.00E-06	9.06E-07	5.4385E-02
520286.06	4258762.95	313078.043	0.77594	0.38991	0.74151	0.41779	5.43E-02	1.82E-06	8.00E-07	1.74E-06	8.22E-07	5.4307E-02
520097.12	4258664.6	312508.3724	11.80095	2.85555	10.77015	2.63932	5.42E-02	2.77E-05	5.86E-06	2.53E-05	5.20E-06	5.4267E-02
520295.96	4258762.94	312494.4961	0.72614	0.37234	0.69561	0.39906	5.42E-02	1.70E-06	7.64E-07	1.63E-06	7.86E-07	5.4206E-02
520256.36	4258763	311613.6424	0.96948	0.45157	0.91945	0.48313	5.40E-02	2.28E-06	9.26E-07	2.16E-06	9.51E-07	5.4054E-02
520135.92	4258704.38	311567.5546	4.18531	1.32404	3.635	1.38081	5.40E-02	9.83E-06	2.72E-06	8.53E-06	2.72E-06	5.4064E-02
520345.45	4258752.85	311480.473	0.5261	0.30528	0.50829	0.32656	5.40E-02	1.24E-06	6.26E-07	1.19E-06	6.43E-07	5.4029E-02
520314.49	4258473.05	309388.376	0.4091	0.59145	0.40726	0.64915	5.37E-02	9.60E-07	1.21E-06	9.56E-07	1.28E-06	5.3666E-02
520324.28	4258473.08	309380.531	0.3929	0.55447	0.39097	0.60731	5.37E-02	9.22E-07	1.14E-06	9.18E-07	1.20E-06	5.3665E-02
520385.02	4258732.79	309128.6763	0.41544	0.27236	0.40266	0.2893	5.36E-02	9.75E-07	5.59E-07	9.45E-07	5.69E-07	5.3620E-02
520305.87	4258762.92	309021.4444	0.67971	0.35555	0.65248	0.3811	5.36E-02	1.60E-06	7.29E-07	1.53E-06	7.50E-07	5.3603E-02
520246.46	4258763.02	308951.7955	1.05222	0.47477	0.99494	0.50793	5.36E-02	2.47E-06	9.74E-07	2.34E-06	1.00E-06	5.3593E-02
520334.07	4258473.11	308859.1791	0.37762	0.52078	0.37559	0.56927	5.36E-02	8.87E-07	1.07E-06	8.82E-07	1.12E-06	5.3574E-02
520304.7	4258473.02	308781.8041	0.42627	0.63235	0.4245	0.69548	5.36E-02	1.00E-06	1.30E-06	9.97E-07	1.37E-06	5.3561E-02
520158.35	4258729.5	307585.4136	2.82364	0.93886	2.52774	0.9971	5.33E-02	6.63E-06	1.93E-06	5.93E-06	1.96E-06	5.3366E-02
520294.91	4258472.99	307507.9439	0.44459	0.67825	0.44285	0.74746	5.33E-02	1.04E-06	1.39E-06	1.04E-06	1.47E-06	5.3341E-02

520177.12	4258743.13	307433.964	2.15529	0.76532	1.96619	0.81915	5.33E-02	5.06E-06	1.57E-06	4.62E-06	1.61E-06	5.3336E-02
520343.86	4258473.14	307369.3703	0.36323	0.49071	0.36119	0.53516	5.33E-02	8.53E-07	1.01E-06	8.48E-07	1.05E-06	5.3316E-02
520196.94	4258753.1	306508.537	1.7	0.64589	1.57248	0.69295	5.32E-02	3.99E-06	1.32E-06	3.69E-06	1.36E-06	5.3173E-02
520285.12	4258472.96	305923.0394	0.46418	0.72976	0.46237	0.80594	5.31E-02	1.09E-06	1.50E-06	1.09E-06	1.59E-06	5.3066E-02
520236.56	4258763.03	305242.9034	1.14743	0.49943	1.08134	0.53454	5.29E-02	2.69E-06	1.02E-06	2.54E-06	1.05E-06	5.2950E-02
520353.64	4258473.18	304906.1484	0.34956	0.46374	0.34766	0.50442	5.29E-02	8.21E-07	9.51E-07	8.16E-07	9.93E-07	5.2888E-02
520120.79	4258692	304057.1432	5.94848	1.6873	5.04001	1.70436	5.27E-02	1.40E-05	3.46E-06	1.18E-05	3.36E-06	5.2770E-02
520275.33	4258472.93	303845.8375	0.48512	0.7875	0.48306	0.87185	5.27E-02	1.14E-06	1.62E-06	1.13E-06	1.72E-06	5.2706E-02
520315.77	4258762.9	302711.3836	0.6364	0.33922	0.61179	0.3636	5.25E-02	1.49E-06	6.96E-07	1.44E-06	7.16E-07	5.2508E-02
520265.55	4258472.9	301433.2026	0.50759	0.85278	0.50514	0.94681	5.23E-02	1.19E-06	1.75E-06	1.19E-06	1.86E-06	5.2288E-02
520226.66	4258763.05	301251.3709	1.2613	0.52631	1.18384	0.5637	5.23E-02	2.96E-06	1.08E-06	2.78E-06	1.11E-06	5.2259E-02
520411.9	4258689.91	301035.6197	0.34861	0.26683	0.33828	0.28283	5.22E-02	8.18E-07	5.47E-07	7.94E-07	5.57E-07	5.2216E-02
520363.43	4258473.21	300053.3675	0.33664	0.43866	0.3348	0.47603	5.20E-02	7.90E-07	9.00E-07	7.86E-07	9.37E-07	5.2046E-02
520375.14	4258742.8	298699.69	0.4422	0.277	0.42831	0.29484	5.18E-02	1.04E-06	5.68E-07	1.01E-06	5.80E-07	5.1811E-02
520355.35	4258752.84	298671.9701	0.49749	0.293	0.48105	0.313	5.18E-02	1.17E-06	6.01E-07	1.13E-06	6.16E-07	5.1807E-02
520255.76	4258472.87	298393.792	0.53165	0.92636	0.52869	1.03215	5.18E-02	1.25E-06	1.90E-06	1.24E-06	2.03E-06	5.1761E-02
520325.67	4258762.89	296118.0267	0.59816	0.32449	0.57593	0.34765	5.14E-02	1.40E-06	6.66E-07	1.35E-06	6.84E-07	5.1364E-02
520216.76	4258763.07	295750.1791	1.39413	0.55483	1.30253	0.59474	5.13E-02	3.27E-06	1.14E-06	3.06E-06	1.17E-06	5.1305E-02
520245.97	4258472.84	294852.677	0.55746	1.01014	0.55415	1.13019	5.11E-02	1.31E-06	2.07E-06	1.30E-06	2.22E-06	5.1148E-02
520373.22	4258473.24	294038.7965	0.32441	0.41565	0.32263	0.45004	5.10E-02	7.62E-07	8.52E-07	7.57E-07	8.86E-07	5.1003E-02
520149.5	4258725.84	293506.6039	3.28357	1.02766	2.90592	1.08172	5.09E-02	7.71E-06	2.11E-06	6.82E-06	2.13E-06	5.0926E-02
520324.31	4258463.08	292757.9722	0.38593	0.5623	0.38497	0.61518	5.08E-02	9.06E-07	1.15E-06	9.04E-07	1.21E-06	5.0782E-02
520314.52	4258463.05	292651.8782	0.40143	0.60011	0.40051	0.65781	5.08E-02	9.42E-07	1.23E-06	9.40E-07	1.29E-06	5.0764E-02
520187.04	4258753.12	292520.9451	1.91434	0.68489	1.75888	0.73404	5.07E-02	4.49E-06	1.40E-06	4.13E-06	1.44E-06	5.0748E-02
520334.1	4258463.11	292254.7825	0.37132	0.52792	0.37021	0.57656	5.07E-02	8.72E-07	1.08E-06	8.69E-07	1.13E-06	5.0694E-02
520304.73	4258463.02	292020.5697	0.41787	0.64196	0.41688	0.70515	5.06E-02	9.81E-07	1.32E-06	9.79E-07	1.39E-06	5.0654E-02
520343.89	4258463.14	291048.6843	0.35748	0.4969	0.35625	0.54166	5.05E-02	8.39E-07	1.02E-06	8.36E-07	1.07E-06	5.0485E-02
520294.94	4258462.99	290883.374	0.43532	0.68855	0.43413	0.75807	5.05E-02	1.02E-06	1.41E-06	1.02E-06	1.49E-06	5.0457E-02
520107.12	4258683.15	290861.2075	8.83842	2.10028	7.43733	2.01516	5.04E-02	2.07E-05	4.31E-06	1.75E-05	3.97E-06	5.0495E-02
520236.18	4258472.81	290657.2599	0.58527	1.1071	0.58213	1.24422	5.04E-02	1.37E-06	2.27E-06	1.37E-06	2.45E-06	5.0421E-02
520408.97	4258706.94	290326.3214	0.36	0.26211	0.34908	0.27735	5.04E-02	8.45E-07	5.38E-07	8.20E-07	5.46E-07	5.0359E-02
520383.01	4258473.27	289318.9019	0.31291	0.39405	0.31103	0.42588	5.02E-02	7.35E-07	8.08E-07	7.30E-07	8.38E-07	5.0184E-02
520285.15	4258462.96	289266.1503	0.45389	0.74076	0.45236	0.81766	5.02E-02	1.07E-06	1.52E-06	1.06E-06	1.61E-06	5.0177E-02
520353.67	4258463.18	288080.5409	0.34433	0.46911	0.34309	0.51022	5.00E-02	8.08E-07	9.62E-07	8.05E-07	1.00E-06	4.9970E-02
520124.46	4258700.84	287791.9041	5.46281	1.5151	4.65242	1.53607	4.99E-02	1.28E-05	3.11E-06	1.09E-05	3.02E-06	4.9946E-02
520335.57	4258762.87	287744.711	0.56307	0.31067	0.54287	0.33264	4.99E-02	1.32E-06	6.37E-07	1.27E-06	6.55E-07	4.9912E-02
520275.37	4258462.93	287212.9599	0.47366	0.79909	0.47168	0.88478	4.98E-02	1.11E-06	1.64E-06	1.11E-06	1.74E-06	4.9821E-02
520167.22	4258743.15	286402.3925	2.48069	0.81779	2.2428	0.87084	4.97E-02	5.82E-06	1.68E-06	5.27E-06	1.71E-06	4.9690E-02
520206.86	4258763.08	286348.8114	1.54078	0.58452	1.43237	0.62704	4.97E-02	3.62E-06	1.20E-06	3.36E-06	1.23E-06	4.9675E-02
520226.39	4258472.78	286111.8106	0.61498	1.21923	0.61294	1.37703	4.96E-02	1.44E-06	2.50E-06	1.44E-06	2.71E-06	4.9633E-02
520265.58	4258462.9	284685.1689	0.49476	0.86524	0.49241	0.96126	4.94E-02	1.16E-06	1.77E-06	1.16E-06	1.89E-06	4.9383E-02
520365.25	4258752.82	284157.1373	0.47148	0.28169	0.45617	0.30045	4.93E-02	1.11E-06	5.78E-07	1.07E-06	5.91E-07	4.9289E-02
520276.18	4258772.97	283031.5062	0.84253	0.39716	0.80285	0.42461	4.91E-02	1.98E-06	8.15E-07	1.88E-06	8.36E-07	4.9096E-02
520087.12	4258646.05	283013.5226	12.31595	4.06718	18.58445	3.57844	4.91E-02	2.89E-05	8.34E-06	4.36E-05	7.04E-06	4.9175E-02
520266.28	4258772.98	282825.0237	0.90763	0.41643	0.8628	0.44508	4.91E-02	2.13E-06	8.54E-07	2.03E-06	8.76E-07	4.9061E-02
520363.46	4258463.21	282783.7456	0.33183	0.44359	0.3306	0.48138	4.90E-02	7.79E-07	9.10E-07	7.76E-07	9.48E-07	4.9051E-02
520286.08	4258772.95	282097.4704	0.78437	0.37894	0.74909	0.40532	4.89E-02	1.84E-06	7.77E-07	1.76E-06	7.98E-07	4.8934E-02
520255.79	4258462.87	281707.685	0.51729	0.93988	0.51479	1.04838	4.89E-02	1.21E-06	1.93E-06	1.21E-06	2.06E-06	4.8867E-02
520295.98	4258772.94	281385.0976	0.73397	0.36229	0.70254	0.38765	4.88E-02	1.72E-06	7.43E-07	1.65E-06	7.63E-07	4.8810E-02
520256.38	4258773	281346.1068	0.98064	0.43661	0.92975	0.46668	4.88E-02	2.30E-06	8.95E-07	2.18E-06	9.19E-07	4.8804E-02
520216.6	4258472.75	280661.851	0.64685	1.35315	0.64745	1.53474	4.87E-02	1.52E-06	2.78E-06	1.52E-06	3.02E-06	4.8688E-02
520097.12	4258673.87	279503.5641	11.5555	2.53205	10.81178	2.32385	4.85E-02	2.71E-05	5.19E-06	2.54E-05	4.57E-06	4.8541E-02
520246.48	4258773.02	279058.8694	1.06435	0.45804	1.00612	0.48985	4.84E-02	2.50E-06	9.39E-07	2.36E-06	9.64E-07	4.8408E-02
520087.12	4258636.77	278780.6896	12.06758	4.90768	18.62203	4.29346	4.84E-02	2.83E-05	1.01E-05	4.37E-05	8.45E-06	4.8444E-02
520392.8	4258473.3	278682.2932	0.30146	0.37277	0.29946	0.40235	4.83E-02	7.08E-07	7.65E-07	7.03E-07	7.92E-07	4.8339E-02
520345.47	4258762.85	278260.8142	0.53149	0.29799	0.51299	0.31876	4.83E-02	1.25E-06	6.11E-07	1.20E-06	6.27E-07	4.8267E-02
520246	4258462.84	278246.16	0.54133	1.02533	0.53925	1.14862	4.83E-02	1.27E-06	2.10E-06	1.27E-06	2.26E-06	4.8267E-02
520305.88	4258772.92	278160.5985	0.68702	0.34635	0.65894	0.37069	4.82E-02	1.61E-06	7.10E-07	1.55E-06	7.30E-07	4.8250E-02
520373.25	4258463.24	277646.9467	0.32002	0.42011	0.31875	0.45492	4.82E-02	7.51E-07	8.62E-07	7.48E-07	8.96E-07	4.8160E-02
520158.72	4258739.64	277462.8778	2.82169	0.88491	2.52898	0.9364	4.81E-02	6.62E-06	1.81E-06	5.94E-06	1.84E-06	4.8141E-02
520394.92	4258732.77	277030.9398	0.39498	0.26204	0.38276	0.2779	4.80E-02	9.27E-07	5.37E-07	8.99E-07	5.47E-07	4.8053E-02
520087.12	4258655.32	276702.3044	12.56411	3.45081	18.52842	3.04927	4.80E-02	2.95E-05	7.08E-06	4.35E-05	6.00E-06	4.8079E-02
520177.14	4258753.13	276595.2914	2.17715	0.72846	1.98474	0.77824	4.80E-02	5.11E-06	1.49E-06	4.66E-06	1.53E-06	4.7987E-02
520196.96	4258763.1	275708.4444	1.71663	0.61707	1.58692	0.66189	4.78E-02	4.03E-06	1.27E-06	3.73E-06	1.30E-06	4.7831E-02
520236.58	4258773.03	275511.2312	1.15945	0.48051	1.09237	0.51441	4.78E-02	2.72E-06	9.85E-07	2.56E-06	1.01E-06	4.7793E-02
520383.04	4258463.27	275426.5107	0.30893	0.39812	0.30743	0.43041	4.78E-02	7.25E-07	8.17E-07	7.22E-07	8.47E-07	4.7775E-02
520110.64	4258691.64	274769.7589	7.983	1.86847	6.69281	1.80934	4.77E-02	1.87E-05	3.83E-06	1.57E-05	3.56E-06	4.7699E-02
520206.81	4258472.72	274695.927	0.68054	1.51192	0.68543	1.72239	4.76E-02	1.60E-06	3.10E-06	1.61E-06	3.39E-06	4.7654E-02
520236.21	4258462.81	274259.0701	0.56692	1.1244	0.56619	1.26495	4.76E-02	1.33E-06	2.31E-06	1.33E-06	2.49E-06	4.7576E-02
520385.04	4258742.79	274102.0419	0.41932	0.26616	0.40616	0.28287	4.75E-02	9.84E-07	5.46E-07	9.54E-07	5.57E-07	4.7545E-02
520315.78	4258772.9	273086.3503	0.64383	0.33096	0.61843	0.35429	4.74E-02	1.51E-06	6.79E-07	1.45E-06	6.97E-07	4.7370E-02
520226.68	4258773.05	272257.0151	1.27559	0.50576	1.19673	0.54191	4.72E-02	2.99E-06	1.04E-06	2.81E-06	1.07E-06	4.7230E-02
520226.42	4258462.78	269761.4276	0.5941	1.23954	0.59577	1.40085	4.68E-02	1.39E-06	2.54E-06	1.40E-06	2.76E-06	4.6797E-02
520197.03	4258472.69	268126.0373	0.71572	1.70184	0.72647	1.94878	4.65E-02	1.68E-06	3.49E-06	1.71E-06	3.84E-06	4.6516E-02
520216.77	4258773.07	267204.2347	1.40914	0.53231	1.3158	0.57082	4.63E-02	3.31E-06	1.09E-06	3.09E-06	1.12E-06	4.6354E-02
520150.22	4258736.13	266751.1142	3.24743	0.96146	2.88296	1.00781	4.63E-02	7.62E-06	1.97E-06	6.77E-06	1.98E-06	4.6285E-02
520355.37	4258762.84	266747.0139	0.50227	0.28605	0.48521	0.30565	4.63E-02	1.18E-06	5.87E-07	1.14E-06	6.02E-07	4.6270E-02
520325.68	4258772.89	266699.392	0.6047	0.31669	0.58166	0.33898	4.63E-02	1.42E-06	6.50E-07	1.37E-06	6.67E-07	4.6262E-02
520343.92	4258453.14	266266.6656	0.35164	0.50334	0.35122	0.54809	4.62E-02	8.26E-07	1.03E-06	8.25E-07	1.08E-06	4.6187E-02
520402.59	4258473.33	266153.5945	0.2911	0.35503	0.28913	0.38244	4.62E-02	6.83E-07	7.28E-07	6.79E-07	7.53E-07	4.6166E-02
520375.16	4258752.8	265915.2296	0.44653	0.27068	0.43217	0.28827	4.61E-02	1.05E-06	5.55E-07	1.01E-06	5.67E-07	4.6125E-02
520392.83	4258463.3	265844.8651	0.29798	0.37658	0.29628	0.40661	4.61E-02	7.00E-07	7.72E-07	6.96E-07	8.00E-07	4.6113E-02
520216.63	4258462.75	264630.2358	0.62262	1.37672	0.62815	1.56159	4.59E-02	1.46E-06	2.82E-06	1.47E-06	3.07E-06	4.5908E-02
520187.06	4258763.12	263888.1242	1.93265	0.65366	1.77452	0.69983	4.58E-02	4.54E-06	1.34E-06	4.17E-06	1.38E-06	4.5782E-02
520353.71	4258453.18	262862.6688	0.33899	0.47476	0.33853	0.51597	4.56E-02	7.96E-07	9.74E-07	7.95E-07	1.02E-06	4.5596E-02
520114.16	4258700.13	261162.3457	7.24378	1.67766	6.08165	1.63611	4.53E-02	1.70E-05	3.44E-06	1.43E-05	3.22E-06	4.5335E-02
520187.24	4258472.66	260427.5878	0.75188	1.93561	0.76986	2.22636	4.52E-02	1.77E-06	3.97E-06	1.81E-06	4.38E-06	4.5182E-02
520335.58	4258772.87	259144.4665	0.56913	0.30342	0.54817	0.32464	4.49E-02	1.34E-06	6.22E-07	1.29E-06	6.39E-07	4.4951E-02
520206.87	4258773.08	259050.9688	1.55684	0.56011	1.44638	0.60083	4.49E-02	3.65E-06	1.15E-06	3.40E-06	1.18E-06	4.4941E-02
520363.49	4258453.21	258977.3742	0.32698	0.44862	0.32645	0.48664	4.49E-02	7.68E-07	9.20E-07	7.66E-07	9.58E-07	4.4922E-02
520206.85	4258462.72	258866.4044	0.65224	1.53977	0.6628	1.75299	4.49E-02	1.53E-06	3.16E-06	1.56E-06	3.45E-06	4.4909E-02
520087.12	4258664.6	258363.6032	12.74651	2.981	18.45586	2.64286	4.48E-02	2.99E-05	6.11E-06	4.33E-05	5.20E-06	4.4897E-02
520276.2	4258782.97	256676.296	0.85189	0.38539	0.81148	0.41149	4.45E-02	2.00E-06	7.90E-07	1.91E-06	8.10E-07	4.4525E-02
520141.73	4258732.63	256623.9795	3.83162	1.05025	3.35374	1.08578	4.45E-02	9.00E-06	2.15E-06	7.87E-06	2.14E-06	4.4531E-02
520266.3	4258782.98	256470.7656	0.91741	0.40324	0.87187	0.43061	4.45E-02	2.15E-06	8.27E-07	2.05E-06	8.48E-07	4.4490E-02
520286.1	4258782.95	255805.192	0.79317	0.36835	0.75714	0.39339	4.44E-02	1.86E-06	7.55E-07	1.78E-06	7.74E-07	4.4373E-02
520402.62	4258463.33	255598.8879	0.2879	0.35852	0.28618	0.38632	4.43E-02	6.76E-07	7.35E-07	6.72E-07	7.60E-07	4.4335E-02
520256.39	4258783	255383.1981	0.99169	0.42204	0.94	0.45097	4.43E-02	2.33E-06	8.66E-07	2.21E-06	8.88E-07	4.4301E-02
520296	4258782.94	254762.9701	0.74166	0.35254	0.70949	0.37661	4.42E-02	1.74E-06	7.23E-07	1.67E-06	7.41E-07	4.4192E-02
520373.28	4258453.24	254623.1671	0.31558	0.42463	0.31492	0.45975	4.42E-02	7.41E-07	8.71E-07	7.39E-07	9.05E-07	4.4166E-02
520246.49	4258783.02	253428.8549	1.07633	0.44189	1.01717	0.47267	4.40E-02	2.53E-06	9.06E-07	2.39E-06	9.30E-07	4.3963E-02
520097.12	4258683.15	253416.173	12.10931	2.26049	10.86067	2.07137	4.40E-02	2.84E-05	4.64E-06	2.55E-05	4.08E-06	4.4017E-02
520365.27	4258762.82	253285.2267	0.47519	0.27482	0.45935	0.29328	4.39E-02	1.12E-06	5.64E-07	1.08E-06	5.77E-07	4.3935E-02
520158.97	4258749.74	252598.3106	2.83966	0.83794	2.54412	0.88279	4.38E-02	6.67E-06	1.72E-06	5.97E-06	1.74E-06	4.3828E-02
520197.06	4258462.69	252291.6997	0.68262	1.73545	0.69883	1.98428	4.38E-02	1.60E-06	3.56E-06	1.64E-06	3.91E-06	4.3770E-02
520168.27	4258756.76	252093.1011	2.47285	0.75827	2.23646	0.8046	4.37E-02	5.81E-06	1.56E-06	5.25E-06	1.58E-06	4.3739E-02
520421.9	4258689.97	251744.1056	0.33274	0.25629	0.32273	0.27138	4.37E-02	7.81E-07	5.26E-07	7.58E-07	5.34E-07	4.3666E-02
520305.9	4258782.92	251702.0506	0.69403	0.3374	0.6652	0.36056	4.37E-02	1.63E-06	6.92E-07	1.56E-06	7.10E-07	4.3661E-02
520177.45	4258472.63	251409.8641	0.78793	2.22526	0.81346	2.56992	4.36E-02	1.85E-06	4.56E-06	1.91E-06	5.06E-06	4.3619E-02
520412.38	4258473.36	250663.1889	0.2812	0.33854	0.27923	0.36398	4.35E-02	6.60E-07	6.94E-07	6.56E-07	7.16E-07	4.3479E-02
520177.15	4258763.13	250529.6518	2.19726	0.69461	2.0017	0.74042	4.35E-02	5.16E-06	1.42E-06	4.70E-06	1.46E-06	4.3466E-02
520345.49	4258772.85	250493.5783	0.53688	0.2911	0.51768	0.31126	4.34E-02	1.26E-06	5.97E-07	1.22E-06	6.13E-07	4.3451E-02
520236.59	4258783.03	250375.0473	1.17258	0.46282	1.10432	0.4957	4.34E-02	2.75E-06	9.49E-07	2.59E-06	9.76E-07	4.3434E-02
520196.97	4258773.1	249691.0664	1.73257	0.59042	1.60063	0.63293	4.33E-02	4.07E-06	1.21E-06	3.76E-06	1.25E-06	4.3318E-02
520394.94	4258742.77	248131.206	0.39856	0.25623	0.38599	0.27189	4.30E-02	9.36E-07	5.26E-07	9.06E-07	5.35E-07	4.3040E-02
520226.69	4258783.05	247488.3872	1.2898	0.48642	1.20948	0.52142	4.29E-02	3.03E-06	9.98E-07	2.84E-06	1.03E-06	4.2934E-02
520315.8	4258782.9	247326.6836	0.6505	0.32281	0.62439	0.34507	4.29E-02	1.53E-06	6.62E-07	1.47E-06	6.79E-07	4.2902E-02
520416.03	4258714.03	245546.9875	0.35091	0.2519	0.34006	0.26619	4.26E-02	8.24E-07	5.17E-07	7.98E-07	5.24E-07	4.2592E-02
520409	4258726.94	245313.165	0.36732	0.25203	0.35587	0.2666	4.25E-02	8.62E-07	5.17E-07	8.35E-07	5.25E-07	4.2551E-02
520385.06	4258752.79	245159.6552	0.42313	0.26012	0.40956	0.27664	4.25E-02	9.93E-07	5.33E-07	9.62E-07	5.45E-07	4.2525E-02
520187.27	4258462.66	244788.8737	0.71282	1.97383	0.73481	2.26647	4.25E-02	1.67E-06	4.05E-06	1.73E-06	4.46E-06	4.2469E-02
520412.41	4258463.36	242978.2668	0.27828	0.34184	0.27654	0.36759	4.21E-02	6.53E-07	7.01E-07	6.49E-07	7.24E-07	4.2146E-02
520216.79	4258783.07	242787.2272	1.42308	0.51119	1.32805	0.54828	4.21E-02	3.34E-06	1.05E-06	3.12E-06	1.08E-06	4.2119E-02
520325.7	4258782.89	241450.8261	0.61084	0.30912	0.58709	0.33048	4.19E-02	1.43E-06	6.34E-07	1.38E-06	6.51E-07	4.1883E-02
520324.37	4258443.08	241223.2356	0.37195	0.57686	0.37164	0.62995	4.18E-02	8.73E-07	1.18E-06	8.72E-07	1.24E-06	4.1843E-02
520167.66	4258472.59	241140.7983	0.82249	2.58344	0.85457	3.00397	4.18E-02	1.93E-06	5.30E-06	2.01E-06	5.91E-06	4.1840E-02
520314.58	4258443.05	241009.1733	0.38607	0.61572	0.38544	0.67405	4.18E-02	9.06E-07	1.26E-06	9.05E-07	1.33E-06	4.1806E-02
520334.16	4258443.11	240904.8753	0.35857	0.54146	0.35845	0.59009	4.18E-02	8.42E-07	1.11E-06	8.42E-07	1.16E-06	4.1788E-02
520355.39	4258772.84	240272.4157	0.5072	0.27954	0.48948	0.29865	4.17E-02	1.19E-06	5.73E-07	1.15E-06	5.88E-07	4.1678E-02
520343.95	4258443.14	240008.861	0.34581	0.50959	0.34585	0.55425	4.16E-02	8.12E-07	1.05E-06	8.12E-07	1.09E-06	4.1632E-02
520187.07	4258773.12	239428.0909	1.94813	0.62463	1.78773	0.66779	4.15E-02	4.57E-06	1.28E-06	4.20E-06	1.31E-06	4.1539E-02
520295.01	4258442.99	239152.214	0.41672	0.70592	0.41535	0.77776	4.15E-02	9.78E-07	1.45E-06	9.75E-07	1.53E-06	4.1485E-02
520375.17	4258762.8	238062.0925	0.45019	0.26429	0.43534	0.28165	4.13E-02	1.06E-06	5.42E-07	1.02E-06	5.54E-07	4.1294E-02
520285.22	4258442.96	237575.2974	0.43336	0.75904	0.43185	0.83938	4.12E-02	1.02E-06	1.56E-06	1.01E-06	1.65E-06	4.1212E-02
520087.12	4258673.87	236446.3864	12.85658	2.6129	18.37158	2.32301	4.10E-02	3.02E-05	5.36E-06	4.31E-05	4.57E-06	4.1094E-02
520353.74	4258443.18	236268.6616	0.33357	0.4807	0.3338	0.5217	4.10E-02	7.83E-07	9.86E-07	7.84E-07	1.03E-06	4.0983E-02
520142.45	4258742.92	236238.9639	3.81046	0.98381	3.33999	1.01135	4.10E-02	8.95E-06	2.02E-06	7.84E-06	1.99E-06	4.0995E-02
520177.48	4258462.63	236179.818	0.74183	2.26684	0.76908	2.61455	4.10E-02	1.74E-06	4.65E-06	1.81E-06	5.15E-06	4.0978E-02
520206.89	4258783.08	235761.4634	1.5723	0.53741	1.45975	0.57633	4.09E-02	3.69E-06	1.10E-06	3.43E-06	1.13E-06	4.0901E-02
520275.43	4258442.93	235583.6796	0.45095	0.81889	0.44968	0.90908	4.09E-02	1.06E-06	1.68E-06	1.06E-06	1.79E-06	4.0866E-02
520335.6	4258782.87	234839.5472	0.57503	0.29643	0.55335	0.31687	4.07E-02	1.35E-06	6.08E-07	1.30E-06	6.24E-07	4.0736E-02
520103.97	4258699.66	233834.4791	9.93242	1.8214	8.39205	1.70369	4.06E-02	2.33E-05	3.74E-06	1.97E-05	3.35E-06	4.0608E-02
520266.31	4258792.98	233803.0397	0.92743	0.39044	0.88119	0.41683	4.06E-02	2.18E-06	8.01E-07	2.07E-06	8.21E-07	4.0558E-02
520363.53	4258443.21	233771.3798	0.32207	0.45387	0.32219	0.49182	4.05E-02	7.56E-07	9.31E-07	7.56E-07	9.68E-07	4.0550E-02
520276.21	4258792.97	233694.8542	0.86063	0.37373	0.81961	0.39873	4.05E-02	2.02E-06	7.66E-07	1.92E-06	7.85E-07	4.0539E-02
520265.64	4258442.9	233179.6908	0.46951	0.88695	0.46905	0.98842	4.04E-02	1.10E-06	1.82E-06	1.10E-06	1.95E-06	4.0450E-02
520286.11	4258792.95	232953.0811	0.80159	0.35789	0.76493	0.38178	4.04E-02	1.88E-06	7.34E-07	1.80E-06	7.52E-07	4.0410E-02
520403.39	4258739.27	232943.7265	0.38078	0.25008	0.36874	0.26497	4.04E-02	8.94E-07	5.13E-07	8.66E-07	5.22E-07	4.0406E-02
520422.16	4258473.39	232829.0632	0.27168	0.32303	0.26967	0.34671	4.04E-02	6.38E-07	6.63E-07	6.33E-07	6.82E-07	4.0386E-02
520256.41	4258793	232768.9396	1.00186	0.40774	0.94943	0.4358	4.04E-02	2.35E-06	8.36E-07	2.23E-06	8.58E-07	4.0379E-02
520296.01	4258792.94	231797.9577	0.7492	0.34303	0.71644	0.36593	4.02E-02	1.76E-06	7.04E-07	1.68E-06	7.20E-07	4.0209E-02
520246.51	4258793.02	230914.2593	1.08642	0.42603	1.02646	0.45598	4.01E-02	2.55E-06	8.74E-07	2.41E-06	8.98E-07	4.0058E-02
520159.16	4258759.81	230587.4727	2.85039	0.79497	2.55429	0.83382	4.00E-02	6.69E-06	1.63E-06	6.00E-06	1.64E-06	4.0010E-02
520255.85	4258442.87	230341.5274	0.48905	0.96474	0.49007	1.07913	4.00E-02	1.15E-06	1.98E-06	1.15E-06	2.12E-06	3.9958E-02
520373.31	4258443.24	230013.8374	0.31109	0.42939	0.31108	0.46455	3.99E-02	7.30E-07	8.81E-07	7.30E-07	9.14E-07	3.9898E-02
520157.87	4258472.56	229140.277	0.85374	3.03701	0.8927	3.56187	3.97E-02	2.00E-06	6.23E-06	2.10E-06	7.01E-06	3.9761E-02
520305.92	4258792.92	228842.1676	0.70076	0.32862	0.67128	0.35066	3.97E-02	1.65E-06	6.74E-07	1.58E-06	6.90E-07	3.9696E-02
520236.61	4258793.03	228491.5316	1.18452	0.44589	1.11517	0.47783	3.96E-02	2.78E-06	9.14E-07	2.62E-06	9.41E-07	3.9638E-02
520365.29	4258772.82	228327.6826	0.47952	0.26858	0.46309	0.28666	3.96E-02	1.13E-06	5.51E-07	1.09E-06	5.64E-07	3.9606E-02
520177.17	4258773.13	228256.5295	2.21527	0.66344	2.01675	0.70527	3.96E-02	5.20E-06	1.36E-06	4.73E-06	1.39E-06	3.9603E-02
520196.99	4258783.1	227712.5389	1.75002	0.56616	1.61535	0.6063	3.95E-02	4.11E-06	1.16E-06	3.79E-06	1.19E-06	3.9506E-02
520422.2	4258463.39	227705.8089	0.269	0.32608	0.26722	0.35	3.95E-02	6.32E-07	6.69E-07	6.27E-07	6.89E-07	3.9497E-02
520246.06	4258442.84	227052.7191	0.50951	1.05432	0.51275	1.18354	3.94E-02	1.20E-06	2.16E-06	1.20E-06	2.33E-06	3.9388E-02
520345.5	4258782.85	226910.6315	0.54213	0.28449	0.52224	0.304	3.94E-02	1.27E-06	5.83E-07	1.23E-06	5.98E-07	3.9360E-02
520167.69	4258462.59	226238.5309	0.76877	2.62853	0.80065	3.0537	3.92E-02	1.80E-06	5.39E-06	1.88E-06	6.01E-06	3.9255E-02
520226.71	4258793.05	225764.1542	1.30163	0.46798	1.22008	0.50184	3.92E-02	3.06E-06	9.60E-07	2.86E-06	9.88E-07	3.9166E-02
520315.82	4258792.9	224130.7746	0.65586	0.31449	0.62901	0.33572	3.89E-02	1.54E-06	6.45E-07	1.48E-06	6.61E-07	3.8879E-02
520394.96	4258752.77	223767.045	0.40208	0.25056	0.38913	0.26605	3.88E-02	9.44E-07	5.14E-07	9.14E-07	5.24E-07	3.8814E-02
520236.27	4258442.81	223291.0252	0.53079	1.15843	0.53698	1.30468	3.87E-02	1.25E-06	2.38E-06	1.26E-06	2.57E-06	3.8736E-02
520392.89	4258443.3	221798.9432	0.2908	0.38462	0.29005	0.41532	3.85E-02	6.83E-07	7.89E-07	6.81E-07	8.18E-07	3.8473E-02
520216.81	4258793.07	221662.4421	1.436	0.49141	1.33936	0.52708	3.84E-02	3.37E-06	1.01E-06	3.14E-06	1.04E-06	3.8455E-02
520385.07	4258762.79	221118.3891	0.42697	0.25436	0.41294	0.27067	3.84E-02	1.00E-06	5.22E-07	9.69E-07	5.33E-07	3.8355E-02
520426.01	4258704.08	220862.7594	0.3315	0.24669	0.32114	0.26063	3.83E-02	7.78E-07	5.06E-07	7.54E-07	5.13E-07	3.8310E-02
520226.49	4258442.78	219018.0638	0.55269	1.27989	0.56239	1.44609	3.80E-02	1.30E-06	2.62E-06	1.32E-06	2.85E-06	3.7996E-02
520325.72	4258792.89	218891.2945	0.61568	0.30145	0.59127	0.32185	3.80E-02	1.45E-06	6.18E-07	1.39E-06	6.34E-07	3.7970E-02
520187.09	4258783.12	218757.3466	1.96588	0.59838	1.80244	0.63844	3.79E-02	4.62E-06	1.23E-06	4.23E-06	1.26E-06	3.7954E-02
520355.4	4258782.84	217930.9565	0.5121	0.27335	0.49373	0.29192	3.78E-02	1.20E-06	5.61E-07	1.16E-06	5.75E-07	3.7803E-02
520142.97	4258753.13	217463.9697	3.79356	0.9257	3.33086	0.94615	3.77E-02	8.91E-06	1.90E-06	7.82E-06	1.86E-06	3.7739E-02
520324.4	4258433.08	217204.7836	0.36503	0.58297	0.36442	0.63679	3.77E-02	8.57E-07	1.20E-06	8.56E-07	1.25E-06	3.7677E-02
520334.19	4258433.11	216985.9437	0.35223	0.54727	0.35193	0.5963	3.76E-02	8.27E-07	1.12E-06	8.26E-07	1.17E-06	3.7639E-02
520314.61	4258433.05	216942.0134	0.37848	0.62238	0.37759	0.68177	3.76E-02	8.89E-07	1.28E-06	8.86E-07	1.34E-06	3.7632E-02
520411.84	4258735.77	216446.8957	0.36466	0.24449	0.35306	0.25863	3.75E-02	8.56E-07	5.01E-07	8.29E-07	5.09E-07	3.7544E-02
520343.98	4258433.14	216272.2938	0.33999	0.51552	0.34005	0.56023	3.75E-02	7.98E-07	1.06E-06	7.98E-07	1.10E-06	3.7515E-02
520167.27	4258773.15	216191.532	2.5482	0.70685	2.29926	0.74437	3.75E-02	5.98E-06	1.45E-06	5.40E-06	1.47E-06	3.7512E-02
520087.12	4258683.15	216011.222	14.7983	2.31685	18.28647	2.06507	3.75E-02	3.47E-05	4.75E-06	4.29E-05	4.07E-06	3.7553E-02
520206.91	4258793.08	215451.7602	1.5854	0.51609	1.4711	0.5532	3.74E-02	3.72E-06	1.06E-06	3.45E-06	1.09E-06	3.7378E-02
520295.04	4258432.99	215024.443	0.40759	0.71318	0.40645	0.78698	3.73E-02	9.57E-07	1.46E-06	9.54E-07	1.55E-06	3.7300E-02
520375.19	4258772.8	214824.5348	0.45377	0.25819	0.4384	0.27526	3.73E-02	1.07E-06	5.30E-07	1.03E-06	5.42E-07	3.7264E-02
520157.9	4258462.56	214683.9316	0.79189	3.08685	0.8307	3.61551	3.72E-02	1.86E-06	6.33E-06	1.95E-06	7.12E-06	3.7253E-02
520216.7	4258442.75	214173.0169	0.57494	1.42304	0.58844	1.61302	3.71E-02	1.35E-06	2.92E-06	1.38E-06	3.18E-06	3.7156E-02

520148.08	4258472.53	214158.7477	0.87805	3.61933	0.92759	4.29585	3.71E-02	2.06E-06	7.42E-06	2.18E-06	8.46E-06	3.7165E-02
520431.9	4258690.02	214080.6618	0.31853	0.24697	0.30884	0.26121	3.71E-02	7.48E-07	5.07E-07	7.25E-07	5.14E-07	3.7134E-02
520402.68	4258443.33	214077.0715	0.28121	0.36553	0.2803	0.39405	3.71E-02	6.60E-07	7.50E-07	6.58E-07	7.76E-07	3.7134E-02
520266.33	4258802.98	213740.7791	0.93603	0.3777	0.88919	0.40336	3.71E-02	2.20E-06	7.75E-07	2.09E-06	7.94E-07	3.7078E-02
520431.95	4258473.42	213557.8253	0.26262	0.30869	0.26057	0.33076	3.70E-02	6.17E-07	6.33E-07	6.12E-07	6.51E-07	3.7043E-02
520276.23	4258802.97	213446.4269	0.86832	0.36209	0.82678	0.38626	3.70E-02	2.04E-06	7.43E-07	1.94E-06	7.60E-07	3.7027E-02
520285.25	4258432.96	213441.1795	0.42328	0.7668	0.42252	0.84945	3.70E-02	9.94E-07	1.57E-06	9.92E-07	1.67E-06	3.7026E-02
520335.62	4258792.87	213154.6843	0.57976	0.28938	0.55742	0.30897	3.70E-02	1.36E-06	5.93E-07	1.31E-06	6.08E-07	3.6975E-02
520353.77	4258433.18	212840.5526	0.32816	0.4865	0.32868	0.5273	3.69E-02	7.70E-07	9.98E-07	7.72E-07	1.04E-06	3.6920E-02
520256.43	4258803	212799.6083	1.01055	0.39372	0.95747	0.42108	3.69E-02	2.37E-06	8.07E-07	2.25E-06	8.29E-07	3.6915E-02
520286.13	4258802.95	212483.1326	0.80825	0.34726	0.77113	0.37019	3.69E-02	1.90E-06	7.12E-07	1.81E-06	7.29E-07	3.6859E-02
520296.03	4258802.94	211715.2387	0.75628	0.33358	0.72299	0.35547	3.67E-02	1.78E-06	6.84E-07	1.70E-06	7.00E-07	3.6726E-02
520275.46	4258432.93	211392.3176	0.43976	0.82738	0.43986	0.92014	3.67E-02	1.03E-06	1.70E-06	1.03E-06	1.81E-06	3.6671E-02
520246.53	4258803.02	211116.0914	1.09511	0.4107	1.03444	0.43987	3.66E-02	2.57E-06	8.42E-07	2.43E-06	8.66E-07	3.6624E-02
520158.16	4258769.39	210946.5181	2.9192	0.76407	2.61193	0.79631	3.66E-02	6.85E-06	1.57E-06	6.13E-06	1.57E-06	3.6604E-02
520363.56	4258433.21	210907.3024	0.31713	0.45922	0.31765	0.49697	3.66E-02	7.45E-07	9.42E-07	7.46E-07	9.78E-07	3.6584E-02
520114.24	4258724.43	210876.955	7.37375	1.3774	6.20592	1.31766	3.66E-02	1.73E-05	2.82E-06	1.46E-05	2.59E-06	3.6613E-02
520431.98	4258463.42	210554.9306	0.26019	0.31163	0.25838	0.33387	3.65E-02	6.11E-07	6.39E-07	6.07E-07	6.57E-07	3.6522E-02
520265.67	4258432.9	209118.5107	0.45712	0.8971	0.4587	1.00122	3.63E-02	1.07E-06	1.84E-06	1.08E-06	1.97E-06	3.6277E-02
520236.63	4258803.03	209053.606	1.1939	0.42946	1.12368	0.46047	3.63E-02	2.80E-06	8.81E-07	2.64E-06	9.06E-07	3.6267E-02
520177.19	4258783.13	209003.0659	2.23167	0.6347	2.03036	0.67263	3.63E-02	5.24E-06	1.30E-06	4.77E-06	1.32E-06	3.6263E-02
520305.93	4258802.92	208960.6583	0.70728	0.32002	0.67727	0.34104	3.62E-02	1.66E-06	6.56E-07	1.59E-06	6.71E-07	3.6248E-02
520423.08	4258721.11	208727.7454	0.34177	0.24207	0.33093	0.25552	3.62E-02	8.02E-07	4.96E-07	7.77E-07	5.03E-07	3.6205E-02
520206.91	4258442.72	208708.8656	0.59705	1.59306	0.61427	1.81164	3.62E-02	1.40E-06	3.27E-06	1.44E-06	3.57E-06	3.6209E-02
520197.01	4258793.1	208512.9188	1.76477	0.54344	1.62783	0.58119	3.62E-02	4.14E-06	1.11E-06	3.82E-06	1.14E-06	3.6176E-02
520373.35	4258433.24	207710.5792	0.30655	0.43428	0.30705	0.46927	3.60E-02	7.20E-07	8.91E-07	7.21E-07	9.24E-07	3.6030E-02
520365.3	4258782.82	207489.7631	0.48412	0.26279	0.46705	0.28042	3.60E-02	1.14E-06	5.39E-07	1.10E-06	5.52E-07	3.5991E-02
520226.73	4258803.05	206564.5714	1.31089	0.45032	1.22841	0.48309	3.58E-02	3.08E-06	9.24E-07	2.88E-06	9.51E-07	3.5836E-02
520255.88	4258432.87	206349.1248	0.47518	0.97679	0.4788	1.09379	3.58E-02	1.12E-06	2.00E-06	1.12E-06	2.15E-06	3.5797E-02
520345.52	4258792.85	206066.8463	0.54641	0.27788	0.52589	0.29664	3.57E-02	1.28E-06	5.70E-07	1.23E-06	5.84E-07	3.5745E-02
520093.83	4258699.33	205898.5203	13.79158	1.91017	12.67456	1.72941	3.57E-02	3.24E-05	3.92E-06	2.98E-05	3.40E-06	3.5782E-02
520412.47	4258443.36	204975.2615	0.2721	0.3481	0.27103	0.37458	3.56E-02	6.39E-07	7.14E-07	6.36E-07	7.37E-07	3.5555E-02
520149.06	4258765.63	204575.5117	3.3925	0.82859	3.00749	0.85155	3.55E-02	7.96E-06	1.70E-06	7.06E-06	1.68E-06	3.5501E-02
520315.83	4258802.9	203792.3235	0.66007	0.30613	0.63274	0.32637	3.53E-02	1.55E-06	6.28E-07	1.49E-06	6.42E-07	3.5351E-02
520216.82	4258803.07	203255.2472	1.44832	0.47297	1.35013	0.50718	3.53E-02	3.40E-06	9.70E-07	3.17E-06	9.98E-07	3.5262E-02
520394.97	4258762.77	203214.8005	0.40563	0.24514	0.39227	0.26045	3.52E-02	9.52E-07	5.03E-07	9.21E-07	5.13E-07	3.5250E-02
520246.09	4258432.84	203127.0727	0.49386	1.06829	0.50005	1.20013	3.52E-02	1.16E-06	2.19E-06	1.17E-06	2.36E-06	3.5238E-02
520197.12	4258442.69	202538.6745	0.61856	1.79595	0.63886	2.05024	3.51E-02	1.45E-06	3.68E-06	1.50E-06	4.04E-06	3.5140E-02
520148.11	4258462.53	200932.1458	0.80881	3.67784	0.8592	4.35665	3.49E-02	1.90E-06	7.54E-06	2.02E-06	8.58E-06	3.4871E-02
520187.11	4258793.12	200787.8364	1.98234	0.57412	1.81606	0.61108	3.48E-02	4.65E-06	1.18E-06	4.26E-06	1.20E-06	3.4837E-02
520385.09	4258772.79	200559.1487	0.43046	0.24868	0.41595	0.26476	3.48E-02	1.01E-06	5.10E-07	9.77E-07	5.21E-07	3.4789E-02
520392.92	4258433.3	200428.8146	0.287	0.3886	0.28681	0.41934	3.48E-02	6.74E-07	7.97E-07	6.73E-07	8.25E-07	3.4766E-02
520236.31	4258432.81	199462.4937	0.51298	1.17466	0.52217	1.32345	3.46E-02	1.20E-06	2.41E-06	1.23E-06	2.61E-06	3.4603E-02
520325.73	4258802.89	199273.7708	0.61991	0.29381	0.59498	0.31331	3.46E-02	1.46E-06	6.03E-07	1.40E-06	6.17E-07	3.4567E-02
520167.29	4258783.15	198863.2449	2.5697	0.67594	2.31665	0.70867	3.45E-02	6.03E-06	1.39E-06	5.44E-06	1.40E-06	3.4506E-02
520139.95	4258761.88	198290.2813	4.05938	0.9026	3.54853	0.91046	3.44E-02	9.53E-06	1.85E-06	8.33E-06	1.79E-06	3.4414E-02
520355.42	4258792.84	198013.5413	0.51587	0.26707	0.4969	0.28501	3.43E-02	1.21E-06	5.48E-07	1.17E-06	5.61E-07	3.4348E-02
520206.92	4258803.08	197749.7573	1.59789	0.49629	1.4819	0.53155	3.43E-02	3.75E-06	1.02E-06	3.48E-06	1.05E-06	3.4308E-02
520138.29	4258472.5	197255.1718	0.8949	4.40995	0.96146	5.28675	3.42E-02	2.10E-06	9.04E-06	2.26E-06	1.04E-05	3.4237E-02
520324.43	4258423.08	196417.2477	0.35814	0.58896	0.35734	0.6438	3.41E-02	8.41E-07	1.21E-06	8.39E-07	1.27E-06	3.4072E-02
520334.22	4258423.11	196290.9018	0.3459	0.5531	0.34533	0.60277	3.40E-02	8.12E-07	1.13E-06	8.11E-07	1.19E-06	3.4050E-02
520266.35	4258812.98	196118.2727	0.94412	0.36537	0.8967	0.39043	3.40E-02	2.22E-06	7.49E-07	2.11E-06	7.69E-07	3.4022E-02
520314.65	4258423.05	196098.8963	0.37096	0.62869	0.3701	0.68944	3.40E-02	8.71E-07	1.29E-06	8.69E-07	1.36E-06	3.4017E-02
520276.25	4258812.97	196025.8747	0.87684	0.35098	0.83472	0.3745	3.40E-02	2.06E-06	7.20E-07	1.96E-06	7.37E-07	3.4005E-02
520344.01	4258423.14	195698.1136	0.33417	0.5211	0.334	0.56615	3.39E-02	7.85E-07	1.07E-06	7.84E-07	1.11E-06	3.3947E-02
520375.21	4258782.8	195572.2458	0.45779	0.25264	0.44185	0.26935	3.39E-02	1.07E-06	5.18E-07	1.04E-06	5.30E-07	3.3924E-02
520187.33	4258442.66	195557.629	0.63883	2.04026	0.66172	2.33996	3.39E-02	1.50E-06	4.18E-06	1.55E-06	4.61E-06	3.3930E-02
520256.44	4258813	195392.1453	1.01941	0.38046	0.96562	0.40718	3.39E-02	2.39E-06	7.80E-07	2.27E-06	8.02E-07	3.3896E-02
520226.52	4258432.78	195301.4102	0.53233	1.29889	0.54473	1.46757	3.39E-02	1.25E-06	2.66E-06	1.28E-06	2.89E-06	3.3882E-02
520286.15	4258812.95	195224.8841	0.81657	0.33721	0.7789	0.35942	3.39E-02	1.92E-06	6.92E-07	1.83E-06	7.08E-07	3.3866E-02
520158.43	4258779.5	194741.8635	2.93539	0.72792	2.6243	0.75473	3.38E-02	6.89E-06	1.49E-06	6.16E-06	1.49E-06	3.3793E-02
520422.26	4258443.39	194401.6065	0.2634	0.33214	0.26221	0.3567	3.37E-02	6.18E-07	6.81E-07	6.16E-07	7.02E-07	3.3721E-02
520295.07	4258422.99	194161.071	0.39858	0.72086	0.39837	0.7965	3.37E-02	9.36E-07	1.48E-06	9.35E-07	1.57E-06	3.3681E-02
520296.05	4258812.94	194111.846	0.76305	0.32425	0.72932	0.34532	3.37E-02	1.79E-06	6.65E-07	1.71E-06	6.80E-07	3.3673E-02
520246.54	4258813.02	194066.3475	1.10517	0.39663	1.04359	0.42505	3.37E-02	2.59E-06	8.13E-07	2.45E-06	8.37E-07	3.3667E-02
520335.64	4258802.87	193919.9266	0.58328	0.28217	0.56043	0.30093	3.36E-02	1.37E-06	5.79E-07	1.32E-06	5.92E-07	3.3638E-02
520402.71	4258433.33	193422.1501	0.27762	0.36874	0.27722	0.39741	3.35E-02	6.52E-07	7.56E-07	6.51E-07	7.82E-07	3.3551E-02
520353.8	4258423.18	192785.843	0.32278	0.49193	0.32321	0.53277	3.34E-02	7.58E-07	1.01E-06	7.59E-07	1.05E-06	3.3441E-02
520285.28	4258422.96	192546.662	0.41332	0.77507	0.41402	0.85974	3.34E-02	9.70E-07	1.59E-06	9.72E-07	1.69E-06	3.3402E-02
520441.74	4258473.45	192412.8908	0.25395	0.29529	0.25184	0.31591	3.34E-02	5.96E-07	6.06E-07	5.91E-07	6.22E-07	3.3376E-02
520236.64	4258813.03	192406.3744	1.20554	0.41461	1.13412	0.4447	3.34E-02	2.83E-06	8.50E-07	2.66E-06	8.75E-07	3.3379E-02
520177.2	4258793.13	192359.1079	2.25003	0.60857	2.04536	0.64265	3.34E-02	5.28E-06	1.25E-06	4.80E-06	1.27E-06	3.3376E-02
520197.02	4258803.1	191554.9598	1.77648	0.52204	1.63785	0.55739	3.32E-02	4.17E-06	1.07E-06	3.85E-06	1.10E-06	3.3235E-02
520305.95	4258812.92	191547.2	0.71344	0.31148	0.68294	0.33162	3.32E-02	1.67E-06	6.39E-07	1.60E-06	6.53E-07	3.3228E-02
520363.59	4258423.21	191338.3338	0.31222	0.46434	0.31276	0.50201	3.32E-02	7.33E-07	9.52E-07	7.34E-07	9.88E-07	3.3190E-02
520216.73	4258432.75	190597.7787	0.55157	1.44442	0.56698	1.63709	3.31E-02	1.29E-06	2.96E-06	1.33E-06	3.22E-06	3.3067E-02
520275.49	4258422.93	190546.8685	0.42873	0.83705	0.43084	0.9318	3.30E-02	1.01E-06	1.72E-06	1.01E-06	1.83E-06	3.3055E-02
520226.74	4258813.05	190151.7661	1.32287	0.43432	1.23901	0.46592	3.30E-02	3.11E-06	8.91E-07	2.91E-06	9.17E-07	3.2989E-02
520149.58	4258775.84	189356.0931	3.38696	0.78499	3.00326	0.80261	3.28E-02	7.95E-06	1.61E-06	7.05E-06	1.58E-06	3.2861E-02
520436.01	4258704.14	189056.4673	0.31698	0.23785	0.30691	0.251	3.28E-02	7.44E-07	4.88E-07	7.21E-07	4.94E-07	3.2793E-02
520365.32	4258792.82	188808.2097	0.48746	0.2568	0.46983	0.27391	3.27E-02	1.14E-06	5.27E-07	1.10E-06	5.39E-07	3.2751E-02
520373.38	4258423.24	188580.9163	0.30203	0.43911	0.3027	0.47394	3.27E-02	7.09E-07	9.01E-07	7.11E-07	9.33E-07	3.2712E-02
520265.7	4258422.9	188322.7336	0.44481	0.90838	0.44882	1.01438	3.27E-02	1.04E-06	1.86E-06	1.05E-06	2.00E-06	3.2670E-02
520177.54	4258442.63	187623.7884	0.65717	2.33796	0.68318	2.69635	3.25E-02	1.54E-06	4.79E-06	1.60E-06	5.31E-06	3.2556E-02
520345.54	4258802.85	187559.4304	0.54951	0.27108	0.52846	0.28911	3.25E-02	1.29E-06	5.56E-07	1.24E-06	5.69E-07	3.2535E-02
520216.84	4258813.07	187056.5774	1.4594	0.45568	1.35981	0.48841	3.24E-02	3.43E-06	9.35E-07	3.19E-06	9.61E-07	3.2453E-02
520315.85	4258812.9	186296.7234	0.66429	0.2979	0.63655	0.31725	3.23E-02	1.56E-06	6.11E-07	1.49E-06	6.25E-07	3.2317E-02
520255.91	4258422.87	185610.8294	0.46134	0.98995	0.46765	1.10865	3.22E-02	1.08E-06	2.03E-06	1.10E-06	2.18E-06	3.2200E-02
520412.5	4258433.36	185599.7911	0.26877	0.3509	0.26818	0.37761	3.22E-02	6.31E-07	7.20E-07	6.30E-07	7.43E-07	3.2194E-02
520107.24	4258731.68	185526.4428	9.09798	1.35343	7.68892	1.26197	3.22E-02	2.14E-05	2.78E-06	1.81E-05	2.48E-06	3.2223E-02
520394.99	4258772.77	185488.7999	0.40896	0.23983	0.39515	0.25495	3.22E-02	9.60E-07	4.92E-07	9.28E-07	5.02E-07	3.2175E-02
520206.94	4258432.72	185320.941	0.57034	1.61671	0.58823	1.83868	3.21E-02	1.34E-06	3.32E-06	1.38E-06	3.62E-06	3.2153E-02
520138.33	4258462.5	184931.8488	0.81745	4.47154	0.88319	5.34522	3.21E-02	1.92E-06	9.17E-06	2.07E-06	1.05E-05	3.2099E-02
520187.12	4258803.12	184864.8822	1.99526	0.55126	1.82697	0.5852	3.21E-02	4.68E-06	1.13E-06	4.29E-06	1.15E-06	3.2075E-02
520140.73	4258772.19	184062.2678	4.01535	0.85006	3.51661	0.85345	3.19E-02	9.43E-06	1.74E-06	8.26E-06	1.68E-06	3.1946E-02
520167.3	4258793.15	183624.4795	2.59056	0.64743	2.3335	0.67564	3.18E-02	6.08E-06	1.33E-06	5.48E-06	1.33E-06	3.1863E-02
520411.07	4258756.11	183390.5332	0.37236	0.23475	0.36004	0.24865	3.18E-02	8.74E-07	4.81E-07	8.45E-07	4.89E-07	3.1811E-02
520385.11	4258782.79	183112.6465	0.43397	0.24332	0.41893	0.25912	3.18E-02	1.02E-06	4.99E-07	9.84E-07	5.10E-07	3.1763E-02
520428.73	4258728.78	183090.0379	0.33535	0.23381	0.32447	0.2466	3.18E-02	7.87E-07	4.80E-07	7.62E-07	4.85E-07	3.1759E-02
520246.13	4258422.84	182472.2597	0.47819	1.08341	0.48707	1.21672	3.16E-02	1.12E-06	2.22E-06	1.14E-06	2.40E-06	3.1656E-02
520206.94	4258813.08	182365.2289	1.61136	0.47811	1.49342	0.51146	3.16E-02	3.78E-06	9.81E-07	3.51E-06	1.01E-06	3.1640E-02
520325.75	4258812.89	182321.7009	0.62409	0.28635	0.59869	0.30498	3.16E-02	1.47E-06	5.87E-07	1.41E-06	6.00E-07	3.1627E-02
520392.95	4258423.3	182104.9377	0.2832	0.39288	0.28343	0.42344	3.16E-02	6.65E-07	8.06E-07	6.65E-07	8.34E-07	3.1588E-02
520441.9	4258690.08	182084.2742	0.30469	0.23783	0.29524	0.25126	3.16E-02	7.15E-07	4.88E-07	6.93E-07	4.95E-07	3.1584E-02
520432.05	4258443.42	181597.4737	0.25502	0.31715	0.25371	0.33999	3.15E-02	5.99E-07	6.50E-07	5.96E-07	6.69E-07	3.1500E-02
520121.74	4258754.36	180686.7276	6.0718	1.06469	5.19645	1.02563	3.13E-02	1.43E-05	2.18E-06	1.22E-05	2.02E-06	3.1370E-02
520266.36	4258822.98	180554.3231	0.95179	0.35353	0.90379	0.37807	3.13E-02	2.23E-06	7.25E-07	2.12E-06	7.44E-07	3.1322E-02
520276.26	4258822.97	180362.9385	0.88393	0.33997	0.84131	0.36299	3.13E-02	2.08E-06	6.97E-07	1.98E-06	7.15E-07	3.1289E-02
520355.44	4258802.84	180360.7595	0.51855	0.26062	0.49906	0.27791	3.13E-02	1.22E-06	5.35E-07	1.17E-06	5.47E-07	3.1286E-02
520158.65	4258789.58	180244.5667	2.9486	0.69461	2.63478	0.71656	3.13E-02	6.92E-06	1.42E-06	6.19E-06	1.41E-06	3.1279E-02
520256.46	4258823	180052.9254	1.02791	0.36787	0.9734	0.39397	3.12E-02	2.41E-06	7.54E-07	2.29E-06	7.76E-07	3.1236E-02
520286.16	4258822.95	179581.7543	0.82329	0.32711	0.78517	0.34875	3.11E-02	1.93E-06	6.71E-07	1.84E-06	6.87E-07	3.1153E-02
520197.15	4258432.69	179375.9124	0.58818	1.82128	0.60795	2.08036	3.11E-02	1.38E-06	3.74E-06	1.43E-06	4.10E-06	3.1123E-02
520246.56	4258823.02	178911.4446	1.11408	0.38319	1.05167	0.41085	3.10E-02	2.62E-06	7.86E-07	2.47E-06	8.09E-07	3.1038E-02
520236.34	4258422.81	178899.4429	0.49521	1.19195	0.50678	1.34212	3.10E-02	1.16E-06	2.44E-06	1.19E-06	2.64E-06	3.1037E-02
520375.22	4258792.8	178707.6055	0.46125	0.24713	0.44474	0.26342	3.10E-02	1.08E-06	5.07E-07	1.04E-06	5.19E-07	3.0999E-02
520324.47	4258413.08	178558.975	0.35132	0.59455	0.35068	0.65067	3.10E-02	8.25E-07	1.22E-06	8.23E-07	1.28E-06	3.0974E-02
520167.75	4258442.59	178540.1828	0.67267	2.70649	0.70409	3.14241	3.10E-02	1.58E-06	5.55E-06	1.65E-06	6.19E-06	3.0982E-02
520334.25	4258413.11	178513.645	0.33964	0.55841	0.33896	0.60909	3.10E-02	7.97E-07	1.15E-06	7.96E-07	1.20E-06	3.0966E-02
520296.06	4258822.94	178423.8032	0.76924	0.31493	0.73501	0.33537	3.09E-02	1.81E-06	6.46E-07	1.73E-06	6.60E-07	3.0952E-02
520314.68	4258413.05	178189.4228	0.36353	0.6349	0.36323	0.69712	3.09E-02	8.53E-07	1.30E-06	8.53E-07	1.37E-06	3.0911E-02
520344.04	4258413.14	178031.8951	0.32842	0.52604	0.32797	0.57184	3.09E-02	7.71E-07	1.08E-06	7.70E-07	1.13E-06	3.0883E-02
520177.22	4258803.13	177491.675	2.26229	0.58368	2.05577	0.61415	3.08E-02	5.31E-06	1.20E-06	4.83E-06	1.21E-06	3.0798E-02
520335.65	4258812.87	177422.0426	0.58695	0.2752	0.56361	0.29315	3.08E-02	1.38E-06	5.64E-07	1.32E-06	5.77E-07	3.0777E-02
520236.66	4258823.03	177393.4506	1.21438	0.40017	1.14205	0.42932	3.08E-02	2.85E-06	8.21E-07	2.68E-06	8.45E-07	3.0775E-02
520128.51	4258472.47	177073.1248	0.89933	5.50615	0.98413	6.65546	3.07E-02	2.11E-06	1.13E-05	2.31E-06	1.31E-05	3.0741E-02
520197.04	4258813.1	177018.7617	1.79251	0.50297	1.65129	0.53586	3.07E-02	4.21E-06	1.03E-06	3.88E-06	1.05E-06	3.0713E-02
520422.29	4258433.39	176898.9115	0.26043	0.3349	0.25967	0.35974	3.07E-02	6.11E-07	6.87E-07	6.10E-07	7.08E-07	3.0685E-02
520295.1	4258412.99	176221.1654	0.38967	0.72871	0.39092	0.80597	3.06E-02	9.15E-07	1.49E-06	9.18E-07	1.59E-06	3.0570E-02
520305.97	4258822.92	176139.1127	0.71918	0.30297	0.6882	0.32239	3.06E-02	1.69E-06	6.21E-07	1.62E-06	6.35E-07	3.0555E-02
520402.74	4258423.33	176057.6708	0.27412	0.37259	0.2742	0.40118	3.05E-02	6.44E-07	7.64E-07	6.44E-07	7.90E-07	3.0539E-02
520149.99	4258786	175979.8141	3.3971	0.74655	3.00982	0.75915	3.05E-02	7.98E-06	1.53E-06	7.07E-06	1.49E-06	3.0541E-02
520353.83	4258413.18	175928.4883	0.31752	0.49677	0.31759	0.5381	3.05E-02	7.45E-07	1.02E-06	7.46E-07	1.06E-06	3.0518E-02
520226.76	4258823.05	175469.4524	1.33266	0.41906	1.24767	0.44949	3.04E-02	3.13E-06	8.59E-07	2.93E-06	8.85E-07	3.0442E-02
520226.55	4258422.78	174863.0099	0.51212	1.31832	0.5262	1.48842	3.03E-02	1.20E-06	2.70E-06	1.24E-06	2.93E-06	3.0337E-02
520448.95	4258466.52	174759.6949	0.24639	0.28787	0.2444	0.30754	3.03E-02	5.78E-07	5.90E-07	5.74E-07	6.05E-07	3.0314E-02
520285.31	4258412.96	174654.1498	0.4035	0.78409	0.40608	0.87038	3.03E-02	9.47E-07	1.61E-06	9.53E-07	1.71E-06	3.0298E-02
520363.62	4258413.21	174273.3874	0.30729	0.46916	0.30762	0.50697	3.02E-02	7.21E-07	9.62E-07	7.22E-07	9.98E-07	3.0230E-02
520216.86	4258823.07	172748.7269	1.46987	0.43952	1.36893	0.47074	3.00E-02	3.45E-06	9.01E-07	3.21E-06	9.27E-07	2.9971E-02
520275.52	4258412.93	172748.4598	0.41784	0.84773	0.42215	0.94393	3.00E-02	9.81E-07	1.74E-06	9.91E-07	1.86E-06	2.9968E-02
520187.36	4258432.66	172682.1728	0.60461	2.0672	0.62643	2.3736	3.00E-02	1.42E-06	4.24E-06	1.47E-06	4.67E-06	2.9963E-02
520365.34	4258802.82	172275.3653	0.48991	0.25067	0.47175	0.26722	2.99E-02	1.15E-06	5.14E-07	1.11E-06	5.26E-07	2.9884E-02
520373.41	4258413.24	172051.1507	0.29751	0.44371	0.29805	0.47851	2.98E-02	6.98E-07	9.10E-07	7.00E-07	9.42E-07	2.9845E-02
520345.55	4258812.85	171701.9901	0.55278	0.26454	0.53123	0.28181	2.98E-02	1.30E-06	5.43E-07	1.25E-06	5.55E-07	2.9785E-02
520141.34	4258782.43	171316.7144	3.99191	0.80372	3.499	0.80306	2.97E-02	9.37E-06	1.65E-06	8.21E-06	1.58E-06	2.9735E-02
520315.87	4258822.9	171206.8967	0.66902	0.29001	0.64089	0.30857	2.97E-02	1.57E-06	5.95E-07	1.50E-06	6.07E-07	2.9699E-02
520187.14	4258813.12	171038.6619	2.0109	0.53058	1.83994	0.5615	2.97E-02	4.72E-06	1.09E-06	4.32E-06	1.11E-06	2.9677E-02
520112.64	4258750.6	170812.8866	7.73874	1.14697	6.58766	1.0782	2.96E-02	1.82E-05	2.35E-06	1.55E-05	2.12E-06	2.9665E-02
520265.73	4258412.9	170470.5302	0.43256	0.92029	0.43891	1.02762	2.96E-02	1.02E-06	1.89E-06	1.03E-06	2.02E-06	2.9573E-02
520216.76	4258422.75	170324.4876	0.52863	1.46615	0.54474	1.6604	2.95E-02	1.24E-06	3.01E-06	1.28E-06	3.27E-06	2.9551E-02
520395.01	4258782.77	170101.21	0.4121	0.23468	0.39781	0.24959	2.95E-02	9.67E-07	4.81E-07	9.34E-07	4.91E-07	2.9506E-02
520167.32	4258803.15	170085.5932	2.60848	0.62079	2.34812	0.64485	2.95E-02	6.12E-06	1.27E-06	5.51E-06	1.27E-06	2.9515E-02
520123.03	4258764.88	169650.1673	5.91506	0.99028	5.07327	0.95204	2.94E-02	1.39E-05	2.03E-06	1.19E-05	1.87E-06	2.9455E-02
520412.53	4258423.36	169270.4521	0.26552	0.35428	0.26542	0.38099	2.94E-02	6.23E-07	7.27E-07	6.23E-07	7.50E-07	2.9362E-02
520206.96	4258823.08	168588.3456	1.62215	0.46092	1.50271	0.49234	2.92E-02	3.81E-06	9.45E-07	3.53E-06	9.69E-07	2.9250E-02
520448.99	4258456.52	168176.5417	0.24425	0.29059	0.24248	0.31039	2.92E-02	5.73E-07	5.96E-07	5.69E-07	6.11E-07	2.9172E-02
520157.97	4258442.56	168175.3924	0.68413	3.17201	0.72439	3.71008	2.92E-02	1.61E-06	6.51E-06	1.70E-06	7.30E-06	2.9186E-02
520095.99	4258728.64	167844.6442	13.01932	1.43916	11.69057	1.308	2.91E-02	3.06E-05	2.95E-06	2.74E-05	2.57E-06	2.9175E-02
520255.94	4258412.87	167810.0799	0.44755	1.00335	0.45614	1.12326	2.91E-02	1.05E-06	2.06E-06	1.07E-06	2.21E-06	2.9112E-02
520385.12	4258792.79	167801.9582	0.43703	0.23802	0.42147	0.25348	2.91E-02	1.03E-06	4.88E-07	9.89E-07	4.99E-07	2.9107E-02
520325.77	4258822.89	167592.0061	0.62843	0.27911	0.60261	0.29695	2.91E-02	1.48E-06	5.72E-07	1.41E-06	5.85E-07	2.9072E-02
520158.82	4258799.64	167248.0655	2.96039	0.66389	2.64439	0.68145	2.90E-02	6.95E-06	1.36E-06	6.21E-06	1.34E-06	2.9024E-02
520266.38	4258832.98	167014.778	0.96043	0.34253	0.91171	0.36654	2.90E-02	2.25E-06	7.03E-07	2.14E-06	7.22E-07	2.8974E-02
520256.48	4258833	166650.4863	1.03734	0.35623	0.98198	0.3817	2.89E-02	2.44E-06	7.31E-07	2.31E-06	7.51E-07	2.8911E-02
520276.28	4258832.97	166579.6272	0.89102	0.32946	0.84787	0.35203	2.89E-02	2.09E-06	6.76E-07	1.99E-06	6.93E-07	2.8898E-02
520392.99	4258413.3	166319.7852	0.27935	0.39712	0.27976	0.42746	2.88E-02	6.56E-07	8.14E-07	6.57E-07	8.41E-07	2.8850E-02
520432.08	4258433.42	166042.6971	0.25226	0.31954	0.25132	0.34269	2.88E-02	5.92E-07	6.55E-07	5.90E-07	6.75E-07	2.8802E-02
520128.54	4258462.47	166017.3467	0.81489	5.56852	0.89267	6.7114	2.88E-02	1.91E-06	1.14E-05	2.10E-06	1.32E-05	2.8824E-02
520440.71	4258716.85	165790.251	0.31395	0.22879	0.30358	0.24104	2.88E-02	7.37E-07	4.69E-07	7.13E-07	4.74E-07	2.8758E-02
520246.58	4258833.02	165601.0368	1.12363	0.37077	1.06028	0.39766	2.87E-02	2.64E-06	7.60E-07	2.49E-06	7.83E-07	2.8729E-02
520286.18	4258832.95	165523.6448	0.82878	0.31709	0.79028	0.3383	2.87E-02	1.95E-06	6.50E-07	1.86E-06	6.66E-07	2.8714E-02
520355.45	4258812.84	165244.8812	0.52143	0.25445	0.50143	0.27103	2.87E-02	1.22E-06	5.22E-07	1.18E-06	5.34E-07	2.8664E-02
520206.97	4258422.72	165243.8241	0.54445	1.64045	0.56203	1.86453	2.87E-02	1.28E-06	3.36E-06	1.32E-06	3.67E-06	2.8670E-02
520452.1	4258479.64	165136.3289	0.24649	0.28079	0.24413	0.29995	2.86E-02	5.79E-07	5.76E-07	5.73E-07	5.90E-07	2.8644E-02
520177.57	4258432.63	165120.2584	0.61897	2.36679	0.64439	2.73397	2.86E-02	1.45E-06	4.85E-06	1.51E-06	5.38E-06	2.8653E-02
520246.16	4258412.84	164755.4324	0.46261	1.09873	0.4735	1.23306	2.86E-02	1.09E-06	2.25E-06	1.11E-06	2.43E-06	2.8583E-02
520177.24	4258813.13	164454.3171	2.27649	0.56091	2.06759	0.5879	2.85E-02	5.34E-06	1.15E-06	4.85E-06	1.16E-06	2.8536E-02
520296.08	4258832.94	164409.6044	0.7747	0.30571	0.73998	0.32568	2.85E-02	1.82E-06	6.27E-07	1.74E-06	6.41E-07	2.8521E-02
520138.36	4258452.5	164374.3073	0.74903	4.52758	0.81237	5.38973	2.85E-02	1.76E-06	9.29E-06	1.91E-06	1.06E-05	2.8534E-02
520444.24	4258708.41	164095.5656	0.30669	0.22924	0.29667	0.24158	2.85E-02	7.20E-07	4.70E-07	6.96E-07	4.76E-07	2.8464E-02
520099.76	4258737.74	164077.586	11.48798	1.32281	10.0204	1.21026	2.85E-02	2.70E-05	2.71E-06	2.35E-05	2.38E-06	2.8514E-02
520236.68	4258833.03	164049.9859	1.22257	0.38655	1.14938	0.41475	2.85E-02	2.87E-06	7.93E-07	2.70E-06	8.16E-07	2.8461E-02
520197.06	4258823.1	163855.5012	1.80361	0.48461	1.66075	0.51509	2.84E-02	4.23E-06	9.94E-07	3.90E-06	1.01E-06	2.8430E-02
520375.24	4258802.8	163729.2594	0.46398	0.24155	0.44694	0.25735	2.84E-02	1.09E-06	4.95E-07	1.05E-06	5.07E-07	2.8401E-02
520150.32	4258796.13	163574.4795	3.39472	0.71058	3.00881	0.71903	2.84E-02	7.97E-06	1.46E-06	7.06E-06	1.42E-06	2.8389E-02
520335.67	4258822.87	163213.9116	0.59103	0.26856	0.56723	0.28574	2.83E-02	1.39E-06	5.51E-07	1.33E-06	5.62E-07	2.8313E-02
520334.28	4258403.11	163172.4698	0.33345	0.56347	0.33306	0.61533	2.83E-02	7.83E-07	1.16E-06	7.82E-07	1.21E-06	2.8305E-02
520324.5	4258403.08	163133.9297	0.3446	0.59997	0.34459	0.65744	2.83E-02	8.09E-07	1.23E-06	8.09E-07	1.29E-06	2.8299E-02
520344.07	4258403.14	162790.5604	0.32274	0.53044	0.32223	0.5773	2.82E-02	7.58E-07	1.09E-06	7.56E-07	1.14E-06	2.8239E-02
520314.71	4258403.05	162714.8931	0.3562	0.64098	0.35693	0.70462	2.82E-02	8.36E-07	1.31E-06	8.38E-07	1.39E-06	2.8227E-02

520226.78	4258833.05	162372.7783	1.34136	0.40467	1.25535	0.43391	2.82E-02	3.15E-06	8.30E-07	2.95E-06	8.54E-07	2.8171E-02
520305.98	4258832.92	162337.9309	0.72446	0.29454	0.69304	0.31342	2.82E-02	1.70E-06	6.04E-07	1.63E-06	6.17E-07	2.8161E-02
520427.16	4258749.44	162079.8507	0.34395	0.22567	0.3324	0.23827	2.81E-02	8.07E-07	4.63E-07	7.80E-07	4.69E-07	2.8115E-02
520422.32	4258423.39	161721.2167	0.2574	0.33785	0.25712	0.36279	2.80E-02	6.04E-07	6.93E-07	6.04E-07	7.14E-07	2.8052E-02
520353.86	4258403.18	161425.883	0.31233	0.50109	0.31211	0.54328	2.80E-02	7.33E-07	1.03E-06	7.33E-07	1.07E-06	2.8002E-02
520236.37	4258412.81	161287.0097	0.4776	1.20912	0.49059	1.36027	2.80E-02	1.12E-06	2.48E-06	1.15E-06	2.68E-06	2.7982E-02
520447.78	4258699.98	161212.7576	0.2996	0.22936	0.28994	0.24187	2.80E-02	7.03E-07	4.70E-07	6.81E-07	4.76E-07	2.7964E-02
520114.17	4258761.23	161131.605	7.43267	1.06019	6.346	0.99672	2.79E-02	1.74E-05	2.17E-06	1.49E-05	1.96E-06	2.7984E-02
520402.77	4258413.33	161116.7456	0.2706	0.37655	0.27097	0.40492	2.79E-02	6.35E-07	7.72E-07	6.36E-07	7.97E-07	2.7948E-02
520295.13	4258402.99	160729.2521	0.3808	0.73683	0.38381	0.8154	2.79E-02	8.94E-07	1.51E-06	9.01E-07	1.61E-06	2.7883E-02
520216.87	4258833.07	160163.0211	1.48145	0.4246	1.37893	0.45427	2.78E-02	3.48E-06	8.71E-07	3.24E-06	8.94E-07	2.7788E-02
520141.83	4258792.63	159775.9844	3.97828	0.7621	3.48837	0.75788	2.77E-02	9.34E-06	1.56E-06	8.19E-06	1.49E-06	2.7733E-02
520197.18	4258422.69	159541.8069	0.55917	1.84696	0.57814	2.10875	2.77E-02	1.31E-06	3.79E-06	1.36E-06	4.15E-06	2.7682E-02
520363.65	4258403.21	159531.3285	0.30239	0.47358	0.30246	0.51182	2.77E-02	7.10E-07	9.71E-07	7.10E-07	1.01E-06	2.7673E-02
520285.34	4258402.96	159193.7486	0.39371	0.79378	0.39828	0.88119	2.76E-02	9.24E-07	1.63E-06	9.35E-07	1.73E-06	2.7617E-02
520124.03	4258775.29	159146.0857	5.7937	0.92604	4.98121	0.88817	2.76E-02	1.36E-05	1.90E-06	1.17E-05	1.75E-06	2.7632E-02
520436.03	4258735.77	158942.7222	0.32625	0.22491	0.31536	0.23699	2.76E-02	7.66E-07	4.61E-07	7.40E-07	4.67E-07	2.7570E-02
520187.16	4258823.12	158731.8014	2.02555	0.51127	1.85211	0.53929	2.75E-02	4.76E-06	1.05E-06	4.35E-06	1.06E-06	2.7543E-02
520365.35	4258812.82	158366.3472	0.49307	0.24513	0.47438	0.26106	2.75E-02	1.16E-06	5.03E-07	1.11E-06	5.14E-07	2.7471E-02
520315.88	4258832.9	158232.7206	0.67475	0.28265	0.64622	0.3006	2.74E-02	1.58E-06	5.80E-07	1.52E-06	5.92E-07	2.7449E-02
520167.34	4258813.15	158102.953	2.62789	0.59619	2.36368	0.61634	2.74E-02	6.17E-06	1.22E-06	5.55E-06	1.21E-06	2.7436E-02
520345.57	4258822.85	157987.8639	0.55628	0.25831	0.53427	0.27483	2.74E-02	1.31E-06	5.30E-07	1.25E-06	5.41E-07	2.7406E-02
520373.44	4258403.24	157685.0845	0.29299	0.44797	0.29326	0.483	2.73E-02	6.88E-07	9.19E-07	6.88E-07	9.51E-07	2.7353E-02
520226.58	4258412.78	157379.4303	0.49225	1.33715	0.50691	1.50844	2.73E-02	1.16E-06	2.74E-06	1.19E-06	2.97E-06	2.7305E-02
520275.55	4258402.93	157313.0647	0.40691	0.85871	0.4133	0.95587	2.73E-02	9.55E-07	1.76E-06	9.70E-07	1.88E-06	2.7291E-02
520451.31	4258691.54	157296.8495	0.29278	0.22925	0.28349	0.24191	2.73E-02	6.87E-07	4.70E-07	6.66E-07	4.76E-07	2.7285E-02
520410.65	4258776.29	156891.8701	0.37934	0.22539	0.36622	0.23904	2.72E-02	8.91E-07	4.62E-07	8.60E-07	4.71E-07	2.7215E-02
520395.02	4258792.77	156600.8931	0.41499	0.22968	0.4002	0.24431	2.72E-02	9.74E-07	4.71E-07	9.40E-07	4.81E-07	2.7165E-02
520167.78	4258432.59	156542.6314	0.63036	2.73836	0.66219	3.1838	2.72E-02	1.48E-06	5.62E-06	1.55E-06	6.27E-06	2.7167E-02
520206.97	4258833.08	156386.236	1.63337	0.44502	1.51231	0.47449	2.71E-02	3.83E-06	9.13E-07	3.55E-06	9.34E-07	2.7134E-02
520158.97	4258809.7	155740.5579	2.97708	0.63577	2.65712	0.64928	2.70E-02	6.99E-06	1.30E-06	6.24E-06	1.28E-06	2.7028E-02
520412.56	4258413.36	155285.7442	0.26227	0.35794	0.26255	0.38448	2.69E-02	6.16E-07	7.34E-07	6.16E-07	7.57E-07	2.6936E-02
520266.4	4258842.98	155169.1058	0.96982	0.33221	0.92032	0.3557	2.69E-02	2.28E-06	6.81E-07	2.16E-06	7.00E-07	2.6919E-02
520265.76	4258402.9	155076.7948	0.42032	0.93265	0.42866	1.04078	2.69E-02	9.87E-07	1.91E-06	1.01E-06	2.05E-06	2.6903E-02
520256.49	4258843	155005.8279	1.0485	0.34551	0.99208	0.37032	2.69E-02	2.46E-06	7.09E-07	2.33E-06	7.29E-07	2.6891E-02
520325.78	4258832.89	154878.9495	0.6335	0.2723	0.60727	0.28947	2.69E-02	1.49E-06	5.58E-07	1.43E-06	5.70E-07	2.6867E-02
520276.3	4258842.97	154621.7359	0.89926	0.31966	0.85547	0.34181	2.68E-02	2.11E-06	6.56E-07	2.01E-06	6.73E-07	2.6824E-02
520385.14	4258802.79	154372.2649	0.4398	0.23287	0.42371	0.24791	2.68E-02	1.03E-06	4.78E-07	9.95E-07	4.88E-07	2.6778E-02
520246.59	4258843.02	154194.1161	1.13672	0.35969	1.07197	0.38576	2.67E-02	2.67E-06	7.38E-07	2.52E-06	7.59E-07	2.6751E-02
520286.2	4258842.95	153511.0574	0.83603	0.30785	0.797	0.32868	2.66E-02	1.96E-06	6.31E-07	1.87E-06	6.47E-07	2.6631E-02
520187.39	4258422.66	153131.1284	0.57229	2.09389	0.59361	2.40414	2.66E-02	1.34E-06	4.29E-06	1.39E-06	4.73E-06	2.6572E-02
520216.79	4258412.75	153005.3456	0.50633	1.48665	0.52215	1.68252	2.65E-02	1.19E-06	3.05E-06	1.23E-06	3.31E-06	2.6547E-02
520177.25	4258823.13	152950.1348	2.2935	0.54014	2.08145	0.56381	2.65E-02	5.38E-06	1.11E-06	4.89E-06	1.11E-06	2.6541E-02
520432.11	4258423.42	152715.0051	0.24953	0.32239	0.24904	0.34568	2.65E-02	5.86E-07	6.61E-07	5.85E-07	6.80E-07	2.6490E-02
520393.02	4258403.3	152650.5683	0.27549	0.40122	0.27581	0.43145	2.65E-02	6.47E-07	8.23E-07	6.48E-07	8.49E-07	2.6480E-02
520150.6	4258806.24	152594.4842	3.40298	0.67815	3.01447	0.68275	2.65E-02	7.99E-06	1.39E-06	7.08E-06	1.34E-06	2.6485E-02
520118.72	4258472.44	152517.7663	0.88627	7.08298	0.98015	8.6398	2.65E-02	2.08E-06	1.45E-05	2.30E-06	1.70E-05	2.6489E-02
520255.98	4258402.87	152479.5048	0.43378	1.01708	0.44409	1.13767	2.64E-02	1.02E-06	2.09E-06	1.04E-06	2.24E-06	2.6453E-02
520105.32	4258757.57	152319.2289	9.64774	1.12318	8.28691	1.03584	2.64E-02	2.26E-05	2.30E-06	1.95E-05	2.04E-06	2.6466E-02
520355.47	4258822.84	152261.0484	0.5247	0.24869	0.50422	0.26459	2.64E-02	1.23E-06	5.10E-07	1.18E-06	5.21E-07	2.6412E-02
520296.1	4258842.93	152128.5715	0.78016	0.29684	0.74504	0.31643	2.64E-02	1.83E-06	6.09E-07	1.75E-06	6.23E-07	2.6391E-02
520197.07	4258833.1	152076.1735	1.81341	0.46736	1.66914	0.49548	2.64E-02	4.26E-06	9.59E-07	3.92E-06	9.75E-07	2.6387E-02
520115.37	4258771.71	151797.9818	7.19456	0.98609	6.16503	0.92653	2.63E-02	1.69E-05	2.02E-06	1.45E-05	1.82E-06	2.6364E-02
520335.69	4258832.87	150912.5228	0.59563	0.2623	0.5714	0.2788	2.62E-02	1.40E-06	5.38E-07	1.34E-06	5.49E-07	2.6179E-02
520375.26	4258812.8	150745.3246	0.46671	0.23626	0.44915	0.25151	2.61E-02	1.10E-06	4.85E-07	1.05E-06	4.95E-07	2.6149E-02
520403.63	4258789.21	150703.0679	0.39625	0.22455	0.38219	0.23857	2.61E-02	9.30E-07	4.61E-07	8.97E-07	4.70E-07	2.6142E-02
520306	4258842.92	150059.4357	0.7292	0.28624	0.69737	0.30469	2.60E-02	1.71E-06	5.87E-07	1.64E-06	6.00E-07	2.6032E-02
520334.32	4258393.11	149836.3786	0.32734	0.56833	0.32764	0.6214	2.60E-02	7.68E-07	1.17E-06	7.69E-07	1.22E-06	2.5992E-02
520324.53	4258393.08	149731.3687	0.33795	0.60557	0.33899	0.66426	2.60E-02	7.93E-07	1.24E-06	7.96E-07	1.31E-06	2.5974E-02
520344.1	4258393.14	149561.6051	0.3171	0.53508	0.31699	0.583	2.59E-02	7.44E-07	1.10E-06	7.44E-07	1.15E-06	2.5945E-02
520246.19	4258402.84	149510.9677	0.44716	1.11435	0.45927	1.24924	2.59E-02	1.05E-06	2.29E-06	1.08E-06	2.46E-06	2.5939E-02
520124.83	4258785.61	149407.023	5.70462	0.86974	4.91249	0.83206	2.59E-02	1.34E-05	1.78E-06	1.15E-05	1.64E-06	2.5942E-02
520314.74	4258393.05	149259.6493	0.34894	0.64708	0.351	0.71199	2.59E-02	8.19E-07	1.33E-06	8.24E-07	1.40E-06	2.5893E-02
520422.35	4258413.39	148739.318	0.25437	0.34109	0.25452	0.36593	2.58E-02	5.97E-07	7.00E-07	5.98E-07	7.20E-07	2.5801E-02
520353.89	4258393.18	148320.4757	0.3071	0.50536	0.307	0.54844	2.57E-02	7.21E-07	1.04E-06	7.21E-07	1.08E-06	2.5729E-02
520402.81	4258403.33	148209.2501	0.26704	0.38042	0.26744	0.40858	2.57E-02	6.27E-07	7.80E-07	6.28E-07	8.04E-07	2.5709E-02
520207	4258412.72	148124.6982	0.51959	1.66261	0.53638	1.88887	2.57E-02	1.22E-06	3.41E-06	1.26E-06	3.72E-06	2.5701E-02
520089.13	4258736.23	147759.5812	14.58609	1.353	16.51823	1.22199	2.56E-02	3.42E-05	2.77E-06	3.88E-05	2.41E-06	2.5706E-02
520187.17	4258833.12	147742.7018	2.04028	0.49331	1.86429	0.51852	2.56E-02	4.79E-06	1.01E-06	4.38E-06	1.02E-06	2.5636E-02
520295.16	4258392.99	147251.6963	0.37198	0.74494	0.37672	0.82458	2.55E-02	8.73E-07	1.53E-06	8.84E-07	1.62E-06	2.5545E-02
520167.35	4258823.15	147232.621	2.64254	0.57292	2.37578	0.58956	2.55E-02	6.20E-06	1.18E-06	5.58E-06	1.16E-06	2.5551E-02
520363.68	4258393.21	146970.5411	0.29761	0.47749	0.29752	0.51653	2.55E-02	6.99E-07	9.79E-07	6.98E-07	1.02E-06	2.5495E-02
520158	4258432.56	146868.2895	0.63772	3.208	0.67847	3.75427	2.55E-02	1.50E-06	6.58E-06	1.59E-06	7.39E-06	2.5491E-02
520128.57	4258452.47	146806.0032	0.74182	5.61888	0.81118	6.77607	2.55E-02	1.74E-06	1.15E-05	1.90E-06	1.33E-05	2.5491E-02
520365.37	4258822.82	146433.9009	0.49672	0.24002	0.47749	0.25536	2.54E-02	1.17E-06	4.92E-07	1.12E-06	5.03E-07	2.5402E-02
520236.4	4258402.81	146149.1926	0.46027	1.22624	0.47378	1.37808	2.53E-02	1.08E-06	2.51E-06	1.11E-06	2.71E-06	2.5356E-02
520345.59	4258832.85	146123.3206	0.56026	0.25245	0.5378	0.2683	2.53E-02	1.32E-06	5.18E-07	1.26E-06	5.28E-07	2.5348E-02
520177.6	4258422.63	145965.4693	0.58334	2.3962	0.60919	2.7671	2.53E-02	1.37E-06	4.91E-06	1.43E-06	5.45E-06	2.5330E-02
520285.37	4258392.96	145733.2519	0.3839	0.80313	0.39026	0.89145	2.53E-02	9.01E-07	1.65E-06	9.16E-07	1.75E-06	2.5282E-02
520092.8	4258745.07	145700.3488	14.41568	1.25954	13.64284	1.1415	2.53E-02	3.38E-05	2.58E-06	3.20E-05	2.25E-06	2.5342E-02
520447.67	4258724.17	145607.6892	0.30628	0.22066	0.29593	0.23215	2.53E-02	7.19E-07	4.53E-07	6.95E-07	4.57E-07	2.5257E-02
520133.86	4258799.33	145336.9438	4.70309	0.77217	4.08184	0.7506	2.52E-02	1.10E-05	1.58E-06	9.58E-06	1.48E-06	2.5232E-02
520373.47	4258393.24	145177.8448	0.28851	0.45185	0.28854	0.48738	2.52E-02	6.77E-07	9.27E-07	6.77E-07	9.59E-07	2.5184E-02
520158.34	4258819.43	145164.6811	3.02864	0.61309	2.69901	0.62224	2.52E-02	7.11E-06	1.26E-06	6.34E-06	1.22E-06	2.5194E-02
520395.04	4258802.77	144655.2246	0.41761	0.22481	0.40231	0.23911	2.51E-02	9.80E-07	4.61E-07	9.44E-07	4.71E-07	2.5093E-02
520106.71	4258768.14	144267.2424	9.24548	1.04026	7.94914	0.96037	2.50E-02	2.17E-05	2.13E-06	1.87E-05	1.89E-06	2.5067E-02
520412.23	4258785.64	144109.9565	0.37892	0.2198	0.36547	0.23318	2.50E-02	8.90E-07	4.51E-07	8.58E-07	4.59E-07	2.4998E-02
520256.51	4258853	143994.6232	1.05529	0.33473	0.99821	0.3589	2.50E-02	2.48E-06	6.87E-07	2.34E-06	7.06E-07	2.4981E-02
520275.58	4258392.93	143886.9739	0.39597	0.86949	0.40407	0.96736	2.50E-02	9.30E-07	1.78E-06	9.49E-07	1.90E-06	2.4962E-02
520266.41	4258852.98	143881.1911	0.9751	0.32184	0.92508	0.34479	2.50E-02	2.29E-06	6.60E-07	2.17E-06	6.79E-07	2.4961E-02
520246.61	4258853.02	143460.7105	1.14511	0.34847	1.07948	0.37376	2.49E-02	2.69E-06	7.15E-07	2.53E-06	7.36E-07	2.4889E-02
520276.31	4258852.97	143365.0733	0.90441	0.30987	0.86017	0.33157	2.49E-02	2.12E-06	6.36E-07	2.02E-06	6.53E-07	2.4871E-02
520412.59	4258403.36	143282.624	0.25903	0.36178	0.25948	0.38806	2.49E-02	6.08E-07	7.42E-07	6.09E-07	7.64E-07	2.4854E-02
520118.75	4258462.44	143271.7126	0.79869	7.14588	0.87893	8.69378	2.48E-02	1.88E-06	1.47E-05	2.06E-06	1.71E-05	2.4886E-02
520116.33	4258782.1	143012.7395	7.01585	0.92162	6.0282	0.86517	2.48E-02	1.65E-05	1.89E-06	1.42E-05	1.70E-06	2.4839E-02
520385.16	4258812.79	142821.9101	0.44286	0.22812	0.42623	0.24273	2.48E-02	1.04E-06	4.68E-07	1.00E-06	4.78E-07	2.4775E-02
520177.27	4258833.13	142729.3566	2.31241	0.52096	2.09661	0.54146	2.48E-02	5.43E-06	1.07E-06	4.92E-06	1.07E-06	2.4768E-02
520197.21	4258412.69	142672.4125	0.53165	1.87099	0.55001	2.13525	2.47E-02	1.25E-06	3.84E-06	1.29E-06	4.20E-06	2.4756E-02
520138.39	4258442.5	142657.91	0.68865	4.57433	0.74783	5.43922	2.47E-02	1.62E-06	9.38E-06	1.76E-06	1.07E-05	2.4767E-02
520454.54	4258707.77	142606.7493	0.29284	0.22125	0.28307	0.23294	2.47E-02	6.87E-07	4.54E-07	6.65E-07	4.59E-07	2.4737E-02
520286.21	4258852.95	142430.0322	0.84145	0.29869	0.80198	0.31916	2.47E-02	1.98E-06	6.13E-07	1.88E-06	6.28E-07	2.4709E-02
520434.59	4258756.37	142410.519	0.33416	0.21726	0.32269	0.22918	2.47E-02	7.85E-07	4.46E-07	7.58E-07	4.51E-07	2.4703E-02
520149.33	4258815.71	142385.9726	3.51531	0.6561	3.10369	0.65532	2.47E-02	8.25E-06	1.35E-06	7.29E-06	1.29E-06	2.4714E-02
520226.61	4258402.78	142367.2333	0.47287	1.35524	0.48729	1.52767	2.47E-02	1.11E-06	2.78E-06	1.14E-06	3.01E-06	2.4701E-02
520236.71	4258853.03	142269.1917	1.24608	0.36321	1.17011	0.3894	2.47E-02	2.93E-06	7.45E-07	2.75E-06	7.67E-07	2.4683E-02
520426.3	4258769.81	142267.4914	0.35103	0.21718	0.33877	0.22961	2.47E-02	8.24E-07	4.45E-07	7.95E-07	4.52E-07	2.4678E-02
520265.8	4258392.9	141700.6337	0.40808	0.94469	0.41788	1.05338	2.46E-02	9.58E-07	1.94E-06	9.81E-07	2.07E-06	2.4583E-02
520432.14	4258413.42	141174.8786	0.24675	0.32547	0.24673	0.34871	2.45E-02	5.79E-07	6.68E-07	5.79E-07	6.86E-07	2.4489E-02
520462.09	4258480.02	141035.9007	0.23838	0.2691	0.23593	0.28703	2.45E-02	5.60E-07	5.52E-07	5.54E-07	5.65E-07	2.4464E-02
520355.49	4258832.84	141023.7697	0.52843	0.2433	0.50747	0.25856	2.45E-02	1.24E-06	4.99E-07	1.19E-06	5.09E-07	2.4463E-02
520296.11	4258852.93	140917.674	0.78436	0.28806	0.74891	0.30732	2.44E-02	1.84E-06	5.91E-07	1.76E-06	6.05E-07	2.4446E-02
520393.05	4258393.3	140791.5988	0.27164	0.40505	0.27171	0.43536	2.44E-02	6.38E-07	8.31E-07	6.38E-07	8.57E-07	2.4423E-02
520226.81	4258853.05	140481.4378	1.36095	0.37912	1.27246	0.40583	2.44E-02	3.20E-06	7.78E-07	2.99E-06	7.99E-07	2.4374E-02
520403.49	4258799.27	139665.9496	0.39905	0.21989	0.38449	0.23366	2.42E-02	9.37E-07	4.51E-07	9.03E-07	4.60E-07	2.4227E-02
520443.25	4258742.78	139587.5631	0.31748	0.21657	0.30657	0.228	2.42E-02	7.45E-07	4.44E-07	7.20E-07	4.49E-07	2.4213E-02
520375.27	4258822.8	139465.0613	0.46963	0.23127	0.45156	0.24598	2.42E-02	1.10E-06	4.74E-07	1.06E-06	4.84E-07	2.4193E-02
520256.01	4258392.87	139166.3522	0.4201	1.03052	0.43144	1.15162	2.41E-02	9.86E-07	2.11E-06	1.01E-06	2.27E-06	2.4144E-02
520140.31	4258811.99	139122.2474	4.15809	0.7018	3.6317	0.68838	2.41E-02	9.76E-06	1.44E-06	8.53E-06	1.36E-06	2.4151E-02
520306.02	4258852.92	138843.0467	0.73238	0.27785	0.70031	0.29598	2.41E-02	1.72E-06	5.70E-07	1.64E-06	5.83E-07	2.4086E-02
520216.91	4258853.07	138400.9526	1.49709	0.39695	1.39255	0.42351	2.40E-02	3.51E-06	8.14E-07	3.27E-06	8.34E-07	2.4013E-02
520334.35	4258383.11	138164.5991	0.32128	0.57345	0.32263	0.62756	2.40E-02	7.54E-07	1.18E-06	7.57E-07	1.24E-06	2.3968E-02
520216.82	4258402.75	138153.5114	0.48481	1.50581	0.49989	1.7034	2.40E-02	1.14E-06	3.09E-06	1.17E-06	3.35E-06	2.3971E-02
520324.56	4258383.08	137987.982	0.33135	0.61116	0.33366	0.67092	2.39E-02	7.78E-07	1.25E-06	7.83E-07	1.32E-06	2.3938E-02
520344.14	4258383.14	137982.1753	0.31152	0.53962	0.31216	0.58858	2.39E-02	7.31E-07	1.11E-06	7.33E-07	1.16E-06	2.3936E-02
520167.82	4258422.59	137901.49	0.59132	2.76904	0.62407	3.21885	2.39E-02	1.39E-06	5.68E-06	1.47E-06	6.34E-06	2.3933E-02
520422.38	4258403.39	137622.618	0.25136	0.34464	0.25177	0.36922	2.39E-02	5.90E-07	7.07E-07	5.91E-07	7.27E-07	2.3873E-02
520167.37	4258833.15	137565.2154	2.66022	0.55139	2.38977	0.56474	2.39E-02	6.25E-06	1.13E-06	5.61E-06	1.11E-06	2.3874E-02
520314.77	4258383.05	137473.7618	0.34171	0.65347	0.34521	0.71938	2.38E-02	8.02E-07	1.34E-06	8.10E-07	1.42E-06	2.3849E-02
520402.84	4258393.33	137050.4745	0.26351	0.3842	0.26374	0.41228	2.38E-02	6.19E-07	7.88E-07	6.19E-07	8.12E-07	2.3774E-02
520353.92	4258383.18	136894.2414	0.30194	0.50946	0.30231	0.5535	2.37E-02	7.09E-07	1.04E-06	7.10E-07	1.09E-06	2.3747E-02
520187.42	4258412.66	136565.0515	0.54202	2.11907	0.56347	2.43245	2.37E-02	1.27E-06	4.35E-06	1.32E-06	4.79E-06	2.3698E-02
520098.06	4258764.57	136488.3389	12.19537	1.08323	10.84106	0.98809	2.37E-02	2.86E-05	2.22E-06	2.55E-05	1.95E-06	2.3732E-02
520461.41	4258691.37	136482.9838	0.2803	0.22107	0.27118	0.23304	2.37E-02	6.58E-07	4.53E-07	6.37E-07	4.59E-07	2.3675E-02
520315.92	4258852.9	136399.7536	0.68563	0.26819	0.65635	0.28528	2.37E-02	1.61E-06	5.50E-07	1.54E-06	5.62E-07	2.3662E-02
520107.83	4258778.6	136345.7679	8.89636	0.96813	7.67971	0.89436	2.36E-02	2.09E-05	1.99E-06	1.80E-05	1.76E-06	2.3691E-02
520246.22	4258392.84	136285.3693	0.43189	1.1292	0.44444	1.26464	2.36E-02	1.01E-06	2.32E-06	1.04E-06	2.49E-06	2.3645E-02
520345.6	4258842.85	136031.8228	0.56551	0.24719	0.54258	0.26248	2.36E-02	1.33E-06	5.07E-07	1.27E-06	5.17E-07	2.3598E-02
520207.01	4258853.08	135947.9031	1.65914	0.41677	1.53403	0.44227	2.36E-02	3.90E-06	8.55E-07	3.60E-06	8.71E-07	2.3589E-02
520148.21	4258432.53	135940.7685	0.63945	3.8176	0.68936	4.48555	2.36E-02	1.50E-06	7.83E-06	1.62E-06	8.83E-06	2.3598E-02
520363.71	4258383.21	135914.2793	0.29288	0.48118	0.29293	0.52116	2.36E-02	6.88E-07	9.87E-07	6.88E-07	1.03E-06	2.3577E-02
520365.39	4258832.82	135910.9158	0.50037	0.23508	0.48063	0.24985	2.36E-02	1.17E-06	4.82E-07	1.13E-06	4.92E-07	2.3576E-02
520158.52	4258829.5	135605.914	3.03022	0.58761	2.70086	0.59377	2.35E-02	7.11E-06	1.21E-06	6.34E-06	1.17E-06	2.3536E-02
520295.19	4258382.99	135448.0817	0.36313	0.75356	0.36947	0.83387	2.35E-02	8.53E-07	1.55E-06	8.67E-07	1.64E-06	2.3498E-02
520117.12	4258792.42	134902.8232	6.89148	0.86492	5.92645	0.81104	2.34E-02	1.62E-05	1.77E-06	1.39E-05	1.60E-06	2.3432E-02
520395.06	4258812.77	134428.9506	0.42068	0.22043	0.40485	0.23438	2.33E-02	9.88E-07	4.52E-07	9.50E-07	4.61E-07	2.3319E-02
520373.5	4258383.24	134317.1297	0.28411	0.45537	0.28408	0.49166	2.33E-02	6.67E-07	9.34E-07	6.67E-07	9.68E-07	2.3300E-02
520411.94	4258795.77	134241.0409	0.38205	0.21543	0.36813	0.22865	2.33E-02	8.97E-07	4.42E-07	8.64E-07	4.50E-07	2.3286E-02
520285.4	4258382.96	133948.8798	0.37407	0.81303	0.38194	0.90182	2.32E-02	8.78E-07	1.67E-06	8.97E-07	1.78E-06	2.3238E-02
520325.82	4258852.89	133574.651	0.64338	0.25898	0.61643	0.27516	2.32E-02	1.51E-06	5.31E-07	1.45E-06	5.42E-07	2.3172E-02
520256.53	4258863	133566.2145	1.05717	0.3238	0.99989	0.34734	2.32E-02	2.48E-06	6.64E-07	2.35E-06	6.84E-07	2.3173E-02
520207.03	4258402.72	133480.2583	0.49588	1.68355	0.51198	1.91182	2.32E-02	1.16E-06	3.45E-06	1.20E-06	3.76E-06	2.3161E-02
520266.43	4258862.98	133441.2596	0.97719	0.31142	0.92697	0.33385	2.31E-02	2.29E-06	6.39E-07	2.18E-06	6.57E-07	2.3151E-02
520459.82	4258441.13	133383.6994	0.23253	0.28047	0.23097	0.29917	2.31E-02	5.46E-07	5.75E-07	5.42E-07	5.89E-07	2.3137E-02
520149.67	4258825.84	133257.7514	3.50448	0.62675	3.0957	0.62338	2.31E-02	8.23E-06	1.29E-06	7.27E-06	1.23E-06	2.3131E-02
520246.63	4258863.02	133137.1734	1.14678	0.33697	1.08098	0.3615	2.31E-02	2.69E-06	6.91E-07	2.54E-06	7.12E-07	2.3099E-02
520236.43	4258392.81	133035.7203	0.44329	1.24248	0.4566	1.39504	2.31E-02	1.04E-06	2.55E-06	1.07E-06	2.75E-06	2.3082E-02
520276.33	4258862.97	132905.4437	0.90642	0.29993	0.86198	0.3212	2.31E-02	2.13E-06	6.15E-07	2.02E-06	6.32E-07	2.3057E-02
520197.11	4258853.1	132828.7304	1.84852	0.43809	1.69795	0.46146	2.30E-02	4.34E-06	8.98E-07	3.99E-06	9.08E-07	2.3049E-02
520059.93	4258627.94	132802.8499	5.59286	4.642	12.35612	3.75046	2.30E-02	1.31E-05	9.52E-06	2.90E-05	7.38E-06	2.3093E-02
520412.63	4258393.36	132635.8445	0.2557	0.36515	0.25606	0.39128	2.30E-02	6.00E-07	7.49E-07	6.01E-07	7.70E-07	2.3008E-02
520385.17	4258822.79	132514.9772	0.44565	0.22346	0.4285	0.2376	2.30E-02	1.05E-06	4.58E-07	1.01E-06	4.68E-07	2.2987E-02
520275.62	4258382.93	132135.461	0.38502	0.8805	0.39439	0.97869	2.29E-02	9.04E-07	1.81E-06	9.26E-07	1.93E-06	2.2924E-02
520466.13	4258469.97	132120.1216	0.23335	0.26655	0.23113	0.28405	2.29E-02	5.48E-07	5.47E-07	5.43E-07	5.59E-07	2.2918E-02
520236.73	4258863.03	132112.3092	1.24726	0.35101	1.1712	0.37624	2.29E-02	2.93E-06	7.20E-07	2.75E-06	7.41E-07	2.2921E-02
520286.23	4258862.95	132024.313	0.84359	0.2893	0.80391	0.30941	2.29E-02	1.98E-06	5.93E-07	1.89E-06	6.09E-07	2.2904E-02
520355.5	4258842.84	131450.8379	0.5333	0.23846	0.51183	0.25319	2.28E-02	1.25E-06	4.89E-07	1.20E-06	4.98E-07	2.2803E-02
520432.17	4258403.42	130978.2417	0.24392	0.32853	0.24423	0.35158	2.27E-02	5.73E-07	6.74E-07	5.73E-07	6.92E-07	2.2720E-02
520057.12	4258655.32	130734.2964	5.70157	2.80164	10.94094	2.46113	2.27E-02	1.34E-05	5.75E-06	2.57E-05	4.84E-06	2.2725E-02
520140.81	4258822.19	130661.148	4.14003	0.6681	3.61552	0.65295	2.27E-02	9.72E-06	1.37E-06	8.49E-06	1.29E-06	2.2683E-02
520296.13	4258862.93	130625.9686	0.7865	0.27915	0.75084	0.29811	2.27E-02	1.85E-06	5.73E-07	1.76E-06	5.87E-07	2.2661E-02
520226.83	4258863.05	130576.0649	1.36202	0.36625	1.27347	0.39167	2.26E-02	3.20E-06	7.51E-07	2.99E-06	7.71E-07	2.2656E-02
520393.08	4258383.3	130406.5107	0.26781	0.4084	0.26763	0.43905	2.26E-02	6.29E-07	8.38E-07	6.28E-07	8.64E-07	2.2621E-02
520057.12	4258664.6	130193.9881	5.88804	2.46504	11.27206	2.19759	2.26E-02	1.38E-05	5.06E-06	2.65E-05	4.33E-06	2.2631E-02
520429.44	4258778.52	130181.936	0.34806	0.21117	0.33559	0.22327	2.26E-02	8.17E-07	4.33E-07	7.88E-07	4.40E-07	2.2582E-02
520403.38	4258809.32	130089.266	0.4021	0.21563	0.38702	0.22913	2.26E-02	9.44E-07	4.42E-07	9.09E-07	4.51E-07	2.2566E-02
520122.29	4258804.55	130081.4844	6.10089	0.79324	5.24665	0.74935	2.26E-02	1.43E-05	1.63E-06	1.23E-05	1.48E-06	2.2592E-02
520265.83	4258382.9	129999.0607	0.39589	0.95716	0.40662	1.06602	2.25E-02	9.29E-07	1.96E-06	9.55E-07	2.10E-06	2.2554E-02
520099.33	4258775.09	129874.4156	11.71094	1.0061	10.34697	0.91907	2.25E-02	2.75E-05	2.06E-06	2.43E-05	1.81E-06	2.2582E-02
520177.64	4258412.63	129802.1145	0.55028	2.42296	0.57697	2.79704	2.25E-02	1.29E-06	4.97E-06	1.35E-06	5.51E-06	2.2527E-02
520375.29	4258832.8	129595.1651	0.47274	0.22656	0.45416	0.24073	2.25E-02	1.11E-06	4.65E-07	1.07E-06	4.74E-07	2.2481E-02
520057.12	4258646.05	129559.9686	5.48912	3.22165	10.57322	2.77667	2.25E-02	1.29E-05	6.61E-06	2.48E-05	5.47E-06	2.2521E-02
520226.64	4258392.78	129390.869	0.45412	1.37258	0.46786	1.54617	2.24E-02	1.07E-06	2.82E-06	1.10E-06	3.04E-06	2.2450E-02
520187.21	4258853.12	129258.4221	2.07616	0.46119	1.89315	0.48107	2.24E-02	4.87E-06	9.46E-07	4.44E-06	9.47E-07	2.2430E-02
520108.75	4258788.97	129114.4304	8.66986	0.9053	7.4867	0.83655	2.24E-02	2.04E-05	1.86E-06	1.76E-05	1.65E-06	2.2436E-02
520158.03	4258422.56	128932.8088	0.59548	3.24352	0.63631	3.79087	2.24E-02	1.40E-06	6.65E-06	1.49E-06	7.46E-06	2.2380E-02
520216.92	4258863.07	128716.6999	1.49732	0.38336	1.39294	0.40836	2.23E-02	3.52E-06	7.86E-07	3.27E-06	8.04E-07	2.2334E-02
520306.03	4258862.92	128696.6476	0.73437	0.2694	0.7021	0.2872	2.23E-02	1.72E-06	5.53E-07	1.65E-06	5.65E-07	2.2326E-02
520060.71	4258691.8	128620.7213	7.29848	1.83533	16.66343	1.67402	2.23E-02	1.71E-05	3.76E-06	3.91E-05	3.30E-06	2.2372E-02
520197.24	4258402.69	128274.2611	0.50567	1.89307	0.52391	2.15985	2.22E-02	1.19E-06	3.88E-06	1.23E-06	4.25E-06	2.2259E-02
520458.02	4258723.39	128226.9709	0.2923	0.21323	0.28215	0.22407	2.22E-02	6.86E-07	4.37E-07	6.62E-07	4.41E-07	2.2243E-02

520057.12	4258673.87	128011.2239	6.04053	2.19197	11.57685	1.97632	2.22E-02	1.42E-05	4.50E-06	2.72E-05	3.89E-06	2.2253E-02
520334.38	4258373.11	127864.2489	0.31527	0.57846	0.31781	0.63352	2.22E-02	7.40E-07	1.19E-06	7.46E-07	1.25E-06	2.2181E-02
520422.41	4258393.39	127823.5263	0.2483	0.34808	0.24875	0.37241	2.22E-02	5.83E-07	7.14E-07	5.84E-07	7.33E-07	2.2173E-02
520059.89	4258618.24	127798.949	5.0988	5.70599	11.54337	4.35416	2.22E-02	1.20E-05	1.17E-05	2.71E-05	8.57E-06	2.2225E-02
520344.17	4258373.14	127770.2899	0.306	0.5441	0.30764	0.59402	2.22E-02	7.18E-07	1.12E-06	7.22E-07	1.17E-06	2.2165E-02
520324.59	4258373.08	127629.4557	0.32477	0.61704	0.32841	0.67763	2.21E-02	7.62E-07	1.27E-06	7.71E-07	1.33E-06	2.2141E-02
520256.04	4258382.87	127533.4671	0.40657	1.0442	0.41831	1.16547	2.21E-02	9.54E-07	2.14E-06	9.82E-07	2.29E-06	2.2126E-02
520158.67	4258839.55	127217.8379	3.04657	0.5646	2.71257	0.56785	2.21E-02	7.15E-06	1.16E-06	6.37E-06	1.12E-06	2.2081E-02
520402.87	4258383.33	127188.3482	0.25996	0.38752	0.25992	0.41576	2.21E-02	6.10E-07	7.95E-07	6.10E-07	8.18E-07	2.2063E-02
520314.8	4258373.05	127073.5358	0.33447	0.66008	0.33936	0.72674	2.20E-02	7.85E-07	1.35E-06	7.97E-07	1.43E-06	2.2045E-02
520459.13	4258430.83	126994.4416	0.23085	0.28358	0.22957	0.30264	2.20E-02	5.42E-07	5.82E-07	5.39E-07	5.96E-07	2.2029E-02
520353.96	4258373.18	126877.1818	0.29684	0.51347	0.29798	0.55847	2.20E-02	6.97E-07	1.05E-06	7.00E-07	1.10E-06	2.2010E-02
520118.78	4258452.44	126849.2885	0.72405	7.19521	0.79178	8.75012	2.20E-02	1.70E-06	1.48E-05	1.86E-06	1.72E-05	2.2037E-02
520057.12	4258636.77	126816.4181	5.22246	3.7567	10.15607	3.15456	2.20E-02	1.23E-05	7.70E-06	2.38E-05	6.21E-06	2.2046E-02
520365.4	4258842.82	126667.0159	0.5043	0.23037	0.48408	0.24458	2.20E-02	1.18E-06	4.72E-07	1.14E-06	4.81E-07	2.1973E-02
520128.6	4258442.47	126557.8477	0.67831	5.65848	0.73882	6.83124	2.20E-02	1.59E-06	1.16E-05	1.73E-06	1.34E-05	2.1979E-02
520207.02	4258863.08	126553.3572	1.65869	0.40251	1.53401	0.42625	2.20E-02	3.89E-06	8.26E-07	3.60E-06	8.39E-07	2.1959E-02
520315.93	4258862.9	126408.9243	0.68729	0.26019	0.65784	0.27692	2.19E-02	1.61E-06	5.34E-07	1.54E-06	5.45E-07	2.1929E-02
520363.74	4258373.21	126036.6049	0.28817	0.48485	0.28874	0.52573	2.19E-02	6.77E-07	9.94E-07	6.78E-07	1.03E-06	2.1864E-02
520441.94	4258763.34	126023.0079	0.32461	0.2093	0.31324	0.22058	2.19E-02	7.62E-07	4.29E-07	7.35E-07	4.34E-07	2.1860E-02
520411.7	4258805.88	125442.1413	0.38516	0.2113	0.37073	0.22431	2.18E-02	9.04E-07	4.33E-07	8.70E-07	4.42E-07	2.1760E-02
520216.85	4258392.75	125343.656	0.46422	1.52426	0.47857	1.72346	2.17E-02	1.09E-06	3.13E-06	1.12E-06	3.39E-06	2.1749E-02
520177.3	4258853.13	125241.4161	2.35245	0.48594	2.12804	0.50067	2.17E-02	5.52E-06	9.97E-07	5.00E-06	9.86E-07	2.1735E-02
520395.07	4258822.77	125156.8251	0.42336	0.21606	0.407	0.22961	2.17E-02	9.94E-07	4.43E-07	9.56E-07	4.52E-07	2.1711E-02
520149.95	4258835.95	125051.7093	3.50389	0.59985	3.09445	0.59418	2.17E-02	8.23E-06	1.23E-06	7.26E-06	1.17E-06	2.1708E-02
520464.75	4258707.32	125010.7697	0.28009	0.21349	0.27043	0.22459	2.17E-02	6.58E-07	4.38E-07	6.35E-07	4.42E-07	2.1685E-02
520246.25	4258382.84	124735.8452	0.41691	1.14371	0.42928	1.27958	2.16E-02	9.79E-07	2.35E-06	1.01E-06	2.52E-06	2.1642E-02
520108.93	4258472.41	124717.3121	0.85546	9.53156	0.9477	11.54478	2.16E-02	2.01E-06	1.95E-05	2.22E-06	2.27E-05	2.1678E-02
520373.53	4258373.24	124685.1433	0.27974	0.45874	0.27998	0.49586	2.16E-02	6.57E-07	9.41E-07	6.57E-07	9.76E-07	2.1629E-02
520113.27	4258800.83	124659.5734	7.65586	0.83441	6.58663	0.77545	2.16E-02	1.80E-05	1.71E-06	1.55E-05	1.53E-06	2.1658E-02
520057.12	4258683.15	124562.5859	6.15111	1.96683	11.85848	1.78869	2.16E-02	1.44E-05	4.03E-06	2.78E-05	3.52E-06	2.1655E-02
520256.54	4258873	124507.0312	1.06138	0.3138	1.00363	0.33667	2.16E-02	2.49E-06	6.44E-07	2.36E-06	6.63E-07	2.1601E-02
520266.45	4258872.98	124422.7199	0.98177	0.30202	0.93109	0.32389	2.16E-02	2.30E-06	6.19E-07	2.19E-06	6.38E-07	2.1586E-02
520246.64	4258873.02	124089.674	1.15037	0.32634	1.08414	0.35001	2.15E-02	2.70E-06	6.69E-07	2.55E-06	6.89E-07	2.1529E-02
520276.35	4258872.97	123866.2553	0.91055	0.29095	0.86572	0.31171	2.15E-02	2.14E-06	5.97E-07	2.03E-06	6.14E-07	2.1489E-02
520325.83	4258862.89	123863.4979	0.64508	0.25156	0.61794	0.26735	2.15E-02	1.51E-06	5.16E-07	1.45E-06	5.26E-07	2.1488E-02
520197.12	4258863.1	123802.2529	1.84733	0.42292	1.69753	0.44431	2.15E-02	4.34E-06	8.67E-07	3.99E-06	8.75E-07	2.1483E-02
520450.43	4258749.82	123731.0592	0.30901	0.20868	0.29808	0.21952	2.15E-02	7.25E-07	4.28E-07	7.00E-07	4.32E-07	2.1463E-02
520138.42	4258432.5	123640.5487	0.63542	4.61588	0.68931	5.48525	2.14E-02	1.49E-06	9.47E-06	1.62E-06	1.08E-05	2.1468E-02
520285.44	4258372.96	123553.217	0.36419	0.82329	0.37322	0.91214	2.14E-02	8.55E-07	1.69E-06	8.76E-07	1.80E-06	2.1435E-02
520100.38	4258785.51	123490.5115	11.32571	0.93852	9.96805	0.85837	2.14E-02	2.66E-05	1.92E-06	2.34E-05	1.69E-06	2.1472E-02
520412.66	4258383.36	123347.5167	0.25241	0.36841	0.25253	0.39453	2.14E-02	5.93E-07	7.56E-07	5.93E-07	7.77E-07	2.1397E-02
520385.19	4258832.79	123269.4833	0.44817	0.21888	0.43052	0.23251	2.14E-02	1.05E-06	4.49E-07	1.01E-06	4.58E-07	2.1383E-02
520236.74	4258873.03	123266.9844	1.25177	0.34004	1.17514	0.36416	2.14E-02	2.94E-06	6.97E-07	2.76E-06	7.17E-07	2.1387E-02
520286.25	4258872.95	122910.5116	0.84671	0.28057	0.80674	0.30022	2.13E-02	1.99E-06	5.75E-07	1.89E-06	5.91E-07	2.1323E-02
520123.11	4258814.88	122889.9973	6.00755	0.74906	5.16491	0.70674	2.13E-02	1.41E-05	1.54E-06	1.21E-05	1.39E-06	2.1344E-02
520428.83	4258788.78	122863.8962	0.3517	0.20737	0.33885	0.21939	2.13E-02	8.26E-07	4.25E-07	7.96E-07	4.32E-07	2.1313E-02
520090.84	4258771.58	122794.2832	15.24834	1.03275	15.16187	0.93849	2.13E-02	3.58E-05	2.12E-06	3.56E-05	1.85E-06	2.1373E-02
520141.24	4258832.36	122738.3269	4.11508	0.63694	3.59592	0.62044	2.13E-02	9.66E-06	1.31E-06	8.44E-06	1.22E-06	2.1309E-02
520355.52	4258852.84	122620.1712	0.53727	0.23336	0.51538	0.24756	2.13E-02	1.26E-06	4.79E-07	1.21E-06	4.87E-07	2.1271E-02
520438.05	4258774.96	122523.0276	0.33344	0.20713	0.32155	0.21859	2.13E-02	7.83E-07	4.25E-07	7.55E-07	4.30E-07	2.1253E-02
520187.46	4258402.66	122499.8936	0.51377	2.14294	0.53585	2.4586	2.12E-02	1.21E-06	4.40E-06	1.26E-06	4.84E-06	2.1259E-02
520059.85	4258608.54	122497.0667	4.51414	7.14133	10.43773	5.02645	2.12E-02	1.06E-05	1.46E-05	2.45E-05	9.89E-06	2.1306E-02
520167.85	4258412.59	122261.8449	0.55552	2.79837	0.58896	3.25095	2.12E-02	1.30E-06	5.74E-06	1.38E-06	6.40E-06	2.1221E-02
520432.2	4258393.42	122061.6155	0.24109	0.33187	0.24155	0.35465	2.12E-02	5.66E-07	6.81E-07	5.67E-07	6.98E-07	2.1174E-02
520226.84	4258873.05	122014.593	1.36825	0.35504	1.27886	0.37911	2.12E-02	3.21E-06	7.28E-07	3.00E-06	7.46E-07	2.1171E-02
520275.65	4258372.93	121771.3296	0.37405	0.89211	0.3843	0.99014	2.11E-02	8.78E-07	1.83E-06	9.02E-07	1.95E-06	2.1126E-02
520296.15	4258872.93	121617.8877	0.78957	0.27088	0.75363	0.28945	2.11E-02	1.85E-06	5.56E-07	1.77E-06	5.70E-07	2.1099E-02
520236.46	4258382.81	121593.4244	0.42678	1.25777	0.43947	1.41116	2.11E-02	1.00E-06	2.58E-06	1.03E-06	2.78E-06	2.1097E-02
520393.11	4258373.3	121253.9375	0.26402	0.41161	0.26375	0.44278	2.10E-02	6.20E-07	8.44E-07	6.19E-07	8.72E-07	2.1034E-02
520335.74	4258862.87	121188.9067	0.60747	0.24357	0.58222	0.25859	2.10E-02	1.43E-06	5.00E-07	1.37E-06	5.09E-07	2.1023E-02
520375.31	4258842.8	121077.8574	0.47653	0.22226	0.45742	0.23595	2.10E-02	1.12E-06	4.56E-07	1.07E-06	4.64E-07	2.1004E-02
520167.4	4258853.15	120919.4209	2.6963	0.51213	2.4177	0.51978	2.10E-02	6.33E-06	1.05E-06	5.68E-06	1.02E-06	2.0987E-02
520207.06	4258392.72	120866.9456	0.47337	1.70277	0.48916	1.93316	2.10E-02	1.11E-06	3.49E-06	1.15E-06	3.81E-06	2.0973E-02
520187.22	4258863.12	120643.1101	2.07393	0.44494	1.89218	0.46268	2.09E-02	4.87E-06	9.13E-07	4.44E-06	9.11E-07	2.0936E-02
520216.94	4258873.07	120314.5132	1.50282	0.37138	1.39768	0.39474	2.09E-02	3.53E-06	7.62E-07	3.28E-06	7.77E-07	2.0876E-02
520458.69	4258420.62	120293.4796	0.22892	0.28646	0.22804	0.3058	2.09E-02	5.37E-07	5.88E-07	5.35E-07	6.02E-07	2.0867E-02
520306.05	4258872.92	120006.4859	0.73826	0.26184	0.70565	0.27935	2.08E-02	1.73E-06	5.37E-07	1.66E-06	5.50E-07	2.0819E-02
520265.86	4258372.9	119685.5135	0.38375	0.96991	0.39492	1.07853	2.08E-02	9.01E-07	1.99E-06	9.27E-07	2.12E-06	2.0765E-02
520471.48	4258691.25	119469.2905	0.26859	0.2134	0.25965	0.2247	2.07E-02	6.31E-07	4.38E-07	6.10E-07	4.42E-07	2.0724E-02
520422.44	4258383.39	119137.8277	0.24523	0.35132	0.24553	0.37553	2.07E-02	5.76E-07	7.21E-07	5.76E-07	7.39E-07	2.0667E-02
520104.26	4258797.11	119008.5514	9.94722	0.86876	8.66777	0.79766	2.06E-02	2.34E-05	1.78E-06	2.03E-05	1.57E-06	2.0689E-02
520148.24	4258422.53	118946.8435	0.59435	3.85489	0.64165	4.52308	2.06E-02	1.40E-06	7.91E-06	1.51E-06	8.90E-06	2.0650E-02
520472.09	4258480.39	118941.9821	0.23055	0.25794	0.22798	0.27476	2.06E-02	5.41E-07	5.29E-07	5.35E-07	5.41E-07	2.0632E-02
520334.41	4258363.11	118723.8996	0.30926	0.58396	0.31302	0.63968	2.06E-02	7.26E-07	1.20E-06	7.35E-07	1.26E-06	2.0596E-02
520344.2	4258363.15	118714.9168	0.3005	0.54881	0.30327	0.59951	2.06E-02	7.05E-07	1.13E-06	7.12E-07	1.18E-06	2.0594E-02
520402.9	4258373.33	118499.1541	0.25646	0.39065	0.25622	0.41926	2.06E-02	6.02E-07	8.01E-07	6.02E-07	8.25E-07	2.0556E-02
520324.62	4258363.08	118431.6281	0.31817	0.62327	0.32308	0.68443	2.05E-02	7.47E-07	1.28E-06	7.58E-07	1.35E-06	2.0546E-02
520207.04	4258873.08	118305.8339	1.66248	0.38948	1.53735	0.41136	2.05E-02	3.90E-06	7.99E-07	3.61E-06	8.10E-07	2.0529E-02
520114.26	4258811.23	118282.1445	7.49525	0.78532	6.43349	0.72982	2.05E-02	1.76E-05	1.61E-06	1.51E-05	1.44E-06	2.0551E-02
520226.67	4258382.78	118088.6024	0.43605	1.38894	0.44908	1.56372	2.05E-02	1.02E-06	2.85E-06	1.05E-06	3.08E-06	2.0490E-02
520353.99	4258363.18	117991.5186	0.2918	0.51758	0.29388	0.56342	2.05E-02	6.85E-07	1.06E-06	6.90E-07	1.11E-06	2.0469E-02
520365.42	4258852.82	117893.5438	0.50668	0.22518	0.48605	0.23885	2.04E-02	1.19E-06	4.62E-07	1.14E-06	4.70E-07	2.0451E-02
520315.95	4258872.9	117844.9876	0.6906	0.25298	0.66088	0.26944	2.04E-02	1.62E-06	5.19E-07	1.55E-06	5.30E-07	2.0444E-02
520314.83	4258363.05	117836.5265	0.3272	0.66702	0.33333	0.73415	2.04E-02	7.68E-07	1.37E-06	7.83E-07	1.45E-06	2.0443E-02
520108.96	4258462.41	117707.6003	0.76902	9.58585	0.84506	11.61428	2.04E-02	1.81E-06	1.97E-05	1.98E-06	2.29E-05	2.0462E-02
520092.01	4258782.06	117339.7232	14.77259	0.96193	14.31826	0.87563	2.04E-02	3.47E-05	1.97E-06	3.36E-05	1.72E-06	2.0424E-02
520256.07	4258372.87	117291.683	0.39319	1.05805	0.40488	1.17914	2.03E-02	9.23E-07	2.17E-06	9.51E-07	2.32E-06	2.0350E-02
520363.78	4258363.21	117140.166	0.28344	0.48863	0.28484	0.53025	2.03E-02	6.65E-07	1.00E-06	6.69E-07	1.04E-06	2.0321E-02
520177.32	4258863.13	117045.5749	2.34694	0.4682	2.12485	0.48074	2.03E-02	5.51E-06	9.60E-07	4.99E-06	9.46E-07	2.0313E-02
520305.04	4258363.02	116949.1769	0.3363	0.71606	0.34369	0.78974	2.03E-02	7.90E-07	1.47E-06	8.07E-07	1.55E-06	2.0289E-02
520059.81	4258598.85	116771.6907	3.78442	8.9405	8.72421	5.65802	2.03E-02	8.88E-06	1.83E-05	2.05E-05	1.11E-05	2.0312E-02
520467.75	4258434.52	116731.7623	0.22541	0.27218	0.22389	0.29004	2.02E-02	5.29E-07	5.58E-07	5.26E-07	5.71E-07	2.0249E-02
520395.09	4258832.77	116684.092	0.42556	0.21167	0.40871	0.22477	2.02E-02	9.99E-07	4.34E-07	9.60E-07	4.42E-07	2.0241E-02
520256.56	4258883	116508.0465	1.06715	0.30473	1.00873	0.32694	2.02E-02	2.51E-06	6.25E-07	2.37E-06	6.44E-07	2.0214E-02
520266.46	4258882.98	116398.5835	0.98726	0.29337	0.936	0.3147	2.02E-02	2.32E-06	6.02E-07	2.20E-06	6.19E-07	2.0195E-02
520473.34	4258463.05	116296.5474	0.22668	0.26021	0.22457	0.27691	2.02E-02	5.32E-07	5.34E-07	5.27E-07	5.45E-07	2.0173E-02
520246.66	4258883.02	116209.6131	1.15714	0.317	1.09006	0.33983	2.02E-02	2.72E-06	6.50E-07	2.56E-06	6.69E-07	2.0163E-02
520123.81	4258825.16	116178.2826	5.9324	0.70926	5.09729	0.66833	2.02E-02	1.39E-05	1.45E-06	1.20E-05	1.32E-06	2.0179E-02
520177.67	4258402.63	116133.059	0.51969	2.44863	0.54728	2.82496	2.01E-02	1.22E-06	5.02E-06	1.28E-06	5.56E-06	2.0156E-02
520437.28	4258785.28	116101.0763	0.3371	0.2034	0.3248	0.21483	2.01E-02	7.91E-07	4.17E-07	7.63E-07	4.23E-07	2.0140E-02
520373.56	4258363.24	116071.2179	0.27541	0.4621	0.27622	0.50001	2.01E-02	6.47E-07	9.48E-07	6.48E-07	9.84E-07	2.0135E-02
520197.28	4258392.69	115919.7878	0.48122	1.91323	0.49983	2.18238	2.01E-02	1.13E-06	3.92E-06	1.17E-06	4.30E-06	2.0116E-02
520276.36	4258882.97	115911.415	0.91613	0.28281	0.87076	0.30314	2.01E-02	2.15E-06	5.80E-07	2.04E-06	5.97E-07	2.0110E-02
520197.14	4258873.1	115852.6276	1.85088	0.40896	1.70073	0.42832	2.01E-02	4.35E-06	8.39E-07	3.99E-06	8.43E-07	2.0104E-02
520428.34	4258798.99	115832.2635	0.35498	0.20357	0.34171	0.21551	2.01E-02	8.33E-07	4.18E-07	8.02E-07	4.24E-07	2.0093E-02
520295.26	4258362.99	115774.6334	0.34538	0.77105	0.35399	0.85194	2.01E-02	8.11E-07	1.58E-06	8.31E-07	1.68E-06	2.0085E-02
520061.21	4258717.12	115629.3663	7.55732	1.43669	17.63332	1.32556	2.01E-02	1.77E-05	2.95E-06	4.14E-05	2.61E-06	2.0120E-02
520236.76	4258883.03	115514.2898	1.25938	0.33035	1.18172	0.35342	2.00E-02	2.96E-06	6.78E-07	2.77E-06	6.96E-07	2.0043E-02
520325.85	4258872.89	115430.1794	0.64775	0.24468	0.62038	0.26017	2.00E-02	1.52E-06	5.02E-07	1.46E-06	5.12E-07	2.0025E-02
520385.21	4258842.79	115283.0009	0.45132	0.21471	0.43315	0.22789	2.00E-02	1.06E-06	4.40E-07	1.02E-06	4.49E-07	1.9998E-02
520412.69	4258373.36	115118.8841	0.24913	0.37137	0.249	0.3977	2.00E-02	5.85E-07	7.62E-07	5.85E-07	7.83E-07	1.9970E-02
520461.66	4258738.63	115079.7257	0.29129	0.20514	0.28079	0.2154	2.00E-02	6.84E-07	4.21E-07	6.59E-07	4.24E-07	1.9962E-02
520286.26	4258882.95	115048.4904	0.85223	0.27289	0.81175	0.29219	2.00E-02	2.00E-06	5.60E-07	1.91E-06	5.75E-07	1.9960E-02
520446.65	4258771.39	114729.1854	0.31949	0.20296	0.30806	0.21383	1.99E-02	7.50E-07	4.16E-07	7.23E-07	4.21E-07	1.9902E-02
520246.28	4258372.84	114583.7415	0.40223	1.15847	0.41415	1.29436	1.99E-02	9.44E-07	2.38E-06	9.72E-07	2.55E-06	1.9881E-02
520226.86	4258883.05	114461.5989	1.37748	0.34503	1.28674	0.36784	1.99E-02	3.23E-06	7.08E-07	3.02E-06	7.24E-07	1.9861E-02
520285.47	4258362.96	114312.6785	0.35438	0.83305	0.36409	0.92197	1.98E-02	8.32E-07	1.71E-06	8.55E-07	1.81E-06	1.9832E-02
520216.88	4258382.75	114210.6964	0.44456	1.54172	0.4585	1.74241	1.98E-02	1.04E-06	3.16E-06	1.08E-06	3.43E-06	1.9818E-02
520355.54	4258862.84	114171.6069	0.53935	0.22771	0.51713	0.24142	1.98E-02	1.27E-06	4.67E-07	1.21E-06	4.75E-07	1.9806E-02
520432.23	4258383.42	114138.1713	0.23822	0.3349	0.23863	0.35747	1.98E-02	5.59E-07	6.87E-07	5.60E-07	7.04E-07	1.9799E-02
520158.06	4258412.56	113992.7823	0.55714	3.27538	0.59706	3.82522	1.98E-02	1.31E-06	6.72E-06	1.40E-06	7.53E-06	1.9788E-02
520296.17	4258882.93	113799.9688	0.79439	0.26351	0.758	0.28177	1.97E-02	1.86E-06	5.40E-07	1.78E-06	5.55E-07	1.9743E-02
520057.69	4258708.63	113753.036	6.34969	1.52196	12.77138	1.40367	1.97E-02	1.49E-05	3.12E-06	3.00E-05	2.76E-06	1.9781E-02
520468.29	4258722.81	113634.1804	0.27939	0.20604	0.26937	0.21631	1.97E-02	6.56E-07	4.23E-07	6.32E-07	4.26E-07	1.9711E-02
520095.25	4258793.39	113564.9744	13.38444	0.89426	12.31441	0.8159	1.97E-02	3.14E-05	1.83E-06	2.89E-05	1.61E-06	1.9761E-02
520105.4	4258807.57	113368.8308	9.64865	0.8156	8.36747	0.74953	1.97E-02	2.27E-05	1.67E-06	1.96E-05	1.48E-06	1.9709E-02
520167.42	4258863.15	113200.2549	2.6881	0.49288	2.41305	0.49842	1.96E-02	6.31E-06	1.01E-06	5.67E-06	9.81E-07	1.9648E-02
520393.14	4258363.3	113124.7898	0.26027	0.4146	0.26016	0.44641	1.96E-02	6.11E-07	8.50E-07	6.11E-07	8.79E-07	1.9624E-02
520335.75	4258872.87	113121.0629	0.61057	0.23733	0.58502	0.25204	1.96E-02	1.43E-06	4.87E-07	1.37E-06	4.96E-07	1.9624E-02
520187.24	4258873.12	113085.4786	2.07894	0.43009	1.89657	0.44569	1.96E-02	4.88E-06	8.82E-07	4.45E-06	8.77E-07	1.9625E-02
520375.32	4258852.8	113051.7155	0.47921	0.21762	0.45964	0.2308	1.96E-02	1.13E-06	4.46E-07	1.08E-06	4.54E-07	1.9611E-02
520216.96	4258883.07	112997.6094	1.51405	0.36097	1.40714	0.38286	1.96E-02	3.55E-06	7.40E-07	3.30E-06	7.54E-07	1.9607E-02
520275.68	4258362.93	112554.0575	0.36322	0.90282	0.37377	1.00087	1.95E-02	8.53E-07	1.85E-06	8.77E-07	1.97E-06	1.9528E-02
520306.07	4258882.92	112345.7591	0.74299	0.25488	0.70996	0.27216	1.95E-02	1.74E-06	5.23E-07	1.67E-06	5.36E-07	1.9490E-02
520467.07	4258424.21	112253.5207	0.22381	0.27506	0.22259	0.29327	1.95E-02	5.25E-07	5.64E-07	5.23E-07	5.77E-07	1.9472E-02
520115.09	4258821.56	112176.9083	7.35523	0.74127	6.30434	0.68881	1.95E-02	1.73E-05	1.52E-06	1.48E-05	1.36E-06	1.9492E-02
520158.32	4258859.39	111975.3068	3.0764	0.52349	2.73854	0.52181	1.94E-02	7.22E-06	1.07E-06	6.43E-06	1.03E-06	1.9437E-02
520054.16	4258700.13	111611.0321	5.6169	1.61282	9.94732	1.4881	1.94E-02	1.32E-05	3.31E-06	2.34E-05	2.93E-06	1.9401E-02
520236.49	4258372.81	111551.4125	0.41079	1.27314	0.42285	1.42697	1.93E-02	9.64E-07	2.61E-06	9.93E-07	2.81E-06	1.9355E-02
520422.48	4258373.39	111421.2067	0.24214	0.35441	0.24221	0.37863	1.93E-02	5.68E-07	7.27E-07	5.69E-07	7.45E-07	1.9328E-02
520207.06	4258883.08	111194.6568	1.67487	0.37838	1.54764	0.39854	1.93E-02	3.93E-06	7.76E-07	3.63E-06	7.85E-07	1.9295E-02
520402.93	4258363.33	110719.4093	0.25298	0.3936	0.25273	0.42274	1.92E-02	5.94E-07	8.07E-07	5.93E-07	8.32E-07	1.9207E-02
520059.77	4258589.15	110619.6087	3.04233	10.75058	6.37004	6.12036	1.92E-02	7.14E-06	2.20E-05	1.50E-05	1.20E-05	1.9243E-02
520344.23	4258353.15	110583.159	0.29496	0.55398	0.29889	0.60518	1.92E-02	6.92E-07	1.14E-06	7.02E-07	1.19E-06	1.9184E-02
520334.44	4258353.11	110557.5662	0.3032	0.58982	0.30814	0.64597	1.92E-02	7.12E-07	1.21E-06	7.23E-07	1.27E-06	1.9180E-02
520457.59	4258756.86	110540.1485	0.30083	0.20117	0.28985	0.21147	1.92E-02	7.06E-07	4.13E-07	6.80E-07	4.16E-07	1.9175E-02
520265.89	4258362.9	110498.9696	0.37183	0.98157	0.38289	1.09021	1.92E-02	8.73E-07	2.01E-06	8.99E-07	2.15E-06	1.9171E-02
520187.49	4258392.66	110470.0993	0.48739	2.16548	0.51034	2.48305	1.92E-02	1.14E-06	4.44E-06	1.20E-06	4.89E-06	1.9172E-02
520474.91	4258707	110392.3136	0.26822	0.20602	0.25862	0.2166	1.91E-02	6.30E-07	4.23E-07	6.07E-07	4.26E-07	1.9149E-02
520149.21	4258855.63	110360.0392	3.57183	0.55559	3.15019	0.54508	1.91E-02	8.39E-06	1.14E-06	7.40E-06	1.07E-06	1.9159E-02
520315.97	4258882.9	110339.6568	0.69493	0.24637	0.6648	0.26262	1.91E-02	1.63E-06	5.05E-07	1.56E-06	5.17E-07	1.9142E-02
520324.65	4258353.08	110210.8729	0.31153	0.62975	0.31756	0.69123	1.91E-02	7.31E-07	1.29E-06	7.46E-07	1.36E-06	1.9120E-02
520411.34	4258826.04	110123.8349	0.39062	0.20336	0.37519	0.21581	1.91E-02	9.17E-07	4.17E-07	8.81E-07	4.25E-07	1.9103E-02
520354.02	4258353.18	109968.9373	0.28672	0.52192	0.28988	0.56838	1.91E-02	6.73E-07	1.07E-06	6.81E-07	1.12E-06	1.9077E-02
520207.1	4258382.72	109942.8235	0.45206	1.721	0.46803	1.95303	1.91E-02	1.06E-06	3.53E-06	1.10E-06	3.84E-06	1.9079E-02
520436.66	4258795.55	109918.7996	0.34042	0.19962	0.32765	0.21101	1.91E-02	7.99E-07	4.09E-07	7.69E-07	4.15E-07	1.9067E-02
520124.41	4258835.4	109877.6637	5.86404	0.67307	5.03704	0.63345	1.91E-02	1.38E-05	1.38E-06	1.18E-05	1.25E-06	1.9086E-02
520177.34	4258873.13	109849.1619	2.35113	0.45201	2.1287	0.46237	1.91E-02	5.52E-06	9.27E-07	5.00E-06	9.10E-07	1.9065E-02
520128.63	4258432.47	109660.6478	0.62363	5.70127	0.67586	6.87447	1.90E-02	1.46E-06	1.17E-05	1.59E-06	1.35E-05	1.9048E-02
520314.86	4258353.05	109582.5538	0.31989	0.67437	0.32705	0.74167	1.90E-02	7.51E-07	1.38E-06	7.68E-07	1.46E-06	1.9011E-02
520365.44	4258862.82	109551.8987	0.50733	0.21951	0.48644	0.23259	1.90E-02	1.19E-06	4.50E-07	1.14E-06	4.58E-07	1.9005E-02
520118.81	4258442.44	109491.883	0.65995	7.23077	0.71673	8.80412	1.90E-02	1.55E-06	1.48E-05	1.68E-06	1.73E-05	1.9026E-02
520363.81	4258353.21	109351.7298	0.27881	0.49237	0.28113	0.53474	1.90E-02	6.55E-07	1.01E-06	6.60E-07	1.05E-06	1.8970E-02
520445.73	4258781.78	109336.8365	0.32322	0.19948	0.31142	0.21033	1.90E-02	7.59E-07	4.09E-07	7.31E-07	4.14E-07	1.8966E-02
520395.11	4258842.77	109318.4382	0.42825	0.20766	0.4109	0.22034	1.90E-02	1.01E-06	4.26E-07	9.65E-07	4.34E-07	1.8964E-02
520167.88	4258402.59	109133.1497	0.52272	2.82683	0.55632	3.28049	1.89E-02	1.23E-06	5.80E-06	1.31E-06	6.46E-06	1.8943E-02
520256.58	4258893	109097.975	1.07085	0.29585	1.01194	0.3173	1.89E-02	2.51E-06	6.07E-07	2.38E-06	6.25E-07	1.8929E-02
520266.48	4258892.98	109039.7121	0.99155	0.28501	0.93978	0.30576	1.89E-02	2.33E-06	5.85E-07	2.21E-06	6.02E-07	1.8918E-02
520197.16	4258883.1	108976.5265	1.86432	0.39699	1.71173	0.41442	1.89E-02	4.38E-06	8.14E-07	4.02E-06	8.16E-07	1.8912E-02
520246.68	4258893.02	108890.01	1.16146	0.30782	1.09377	0.32972	1.89E-02	2.73E-06	6.31E-07	2.57E-06	6.49E-07	1.8893E-02
520305.08	4258353.02	108677.0272	0.32825	0.72392	0.33647	0.7977	1.88E-02	7.71E-07	1.48E-06	7.90E-07	1.57E-06	1.8854E-02
520276.38	4258892.97	108578.5093	0.9203	0.27483	0.87446	0.2947	1.88E-02	2.16E-06	5.64E-07	2.05E-06	5.80E-07	1.8838E-02
520096.55	4258803.92	108559.0269	12.84618	0.83818	11.65184	0.76577	1.88E-02	3.02E-05	1.72E-06	2.74E-05	1.51E-06	1.8890E-02
520373.6	4258353.24	108477.3664	0.27114	0.46536	0.27269	0.50407	1.88E-02	6.37E-07	9.54E-07	6.40E-07	9.92E-07	1.8818E-02
520236.78	4258893.03	108363.0097	1.26515	0.32096	1.18665	0.34293	1.88E-02	2.97E-06	6.58E-07	2.79E-06	6.75E-07	1.8802E-02
520050.64	4258691.64	108241.8075	4.88251	1.71325	7.92564	1.57659	1.88E-02	1.15E-05	3.51E-06	1.86E-05	3.10E-06	1.8811E-02
520256.1	4258362.87	108204.8804	0.38014	1.0705	0.39136	1.19179	1.88E-02	8.92E-07	2.20E-06	9.19E-07	2.35E-06	1.8774E-02
520226.7	4258372.78	108187.3722	0.4187	1.40551	0.43132	1.58084	1.88E-02	9.83E-07	2.88E-06	1.01E-06	3.11E-06	1.8773E-02
520325.87	4258882.89	108174.3618	0.65204	0.23852	0.62427	0.25384	1.88E-02	1.53E-06	4.89E-07	1.47E-06	5.00E-07	1.8766E-02
520138.45	4258422.5	107950.0865	0.5883	4.65338	0.63638	5.52632	1.87E-02	1.38E-06	9.54E-06	1.49E-06	1.09E-05	1.8747E-02
520385.22	4258852.79	107913.0372	0.45392	0.21044	0.43528	0.22315	1.87E-02	1.07E-06	4.32E-07	1.02E-06	4.39E-07	1.8720E-02
520412.72	4258363.36	107844.4084	0.24591	0.37424	0.24564	0.40096	1.87E-02	5.77E-07	7.68E-07	5.77E-07	7.89E-07	1.8708E-02
520106.37	4258817.97	107795.6467	9.36398	0.76774	8.10522	0.70615	1.87E-02	2.20E-05	1.57E-06	1.90E-05	1.39E-06	1.8741E-02
520286.28	4258892.95	107775.2143	0.85625	0.26531	0.81535	0.28421	1.87E-02	2.01E-06	5.44E-07	1.91E-06	5.59E-07	1.8698E-02
520295.29	4258352.99	107493.4041	0.33656	0.77902	0.34568	0.86015	1.86E-02	7.90E-07	1.60E-06	8.12E-07	1.69E-06	1.8649E-02
520226.88	4258893.05	107451.5452	1.38403	0.33523	1.2923	0.35672	1.86E-02	3.25E-06	6.88E-07	3.03E-06	7.02E-07	1.8645E-02
520466.58	4258413.99	107394.1519	0.22203	0.27781	0.2212	0.29627	1.86E-02	5.21E-07	5.70E-07	5.19E-07	5.83E-07	1.8629E-02
520086.23	4258789.67	107325.5708	13.91869	0.908	19.87962	0.82876	1.86E-02	3.27E-05	1.86E-06	4.67E-05	1.63E-06	1.8698E-02
520455.26	4258767.83	107226.7585	0.30641	0.19872	0.29522	0.20906	1.86E-02	7.19E-07	4.08E-07	6.93E-07	4.12E-07	1.8600E-02

520432.26	4258373.42	107067.715	0.23536	0.33782	0.23556	0.3603	1.86E-02	5.53E-07	6.93E-07	5.53E-07	7.09E-07	1.8573E-02
520355.55	4258872.84	106709.0299	0.54181	0.22231	0.51927	0.23561	1.85E-02	1.27E-06	4.56E-07	1.22E-06	4.64E-07	1.8512E-02
520296.18	4258892.93	106623.0072	0.79831	0.25631	0.76152	0.27423	1.85E-02	1.87E-06	5.26E-07	1.79E-06	5.40E-07	1.8498E-02
520187.26	4258883.12	106453.2689	2.0928	0.41698	1.90775	0.43047	1.85E-02	4.91E-06	8.55E-07	4.48E-06	8.47E-07	1.8475E-02
520167.44	4258873.15	106406.0295	2.69201	0.47522	2.41676	0.47871	1.85E-02	6.32E-06	9.75E-07	5.67E-06	9.42E-07	1.8470E-02
520115.81	4258831.85	106378.5908	7.22662	0.7014	6.18938	0.65165	1.85E-02	1.70E-05	1.44E-06	1.45E-05	1.28E-06	1.8485E-02
520216.97	4258893.07	106151.8843	1.52146	0.35064	1.41338	0.37101	1.84E-02	3.57E-06	7.19E-07	3.32E-06	7.30E-07	1.8420E-02
520285.5	4258352.96	106055.4397	0.34467	0.84233	0.35458	0.93131	1.84E-02	8.09E-07	1.73E-06	8.32E-07	1.83E-06	1.8400E-02
520335.77	4258882.87	106038.401	0.61442	0.23151	0.5885	0.24602	1.84E-02	1.44E-06	4.75E-07	1.38E-06	4.84E-07	1.8396E-02
520403.77	4258839.18	105909.5252	0.40774	0.20277	0.39124	0.21512	1.84E-02	9.57E-07	4.16E-07	9.19E-07	4.23E-07	1.8372E-02
520393.17	4258353.3	105856.5985	0.25656	0.41739	0.25687	0.4499	1.84E-02	6.02E-07	8.56E-07	6.03E-07	8.86E-07	1.8363E-02
520476.37	4258438.21	105718.0657	0.22008	0.26173	0.21837	0.27844	1.83E-02	5.17E-07	5.37E-07	5.13E-07	5.48E-07	1.8338E-02
520246.31	4258362.84	105586.6476	0.38802	1.17167	0.39931	1.308	1.83E-02	9.11E-07	2.40E-06	9.37E-07	2.57E-06	1.8320E-02
520481.53	4258691.19	105423.489	0.25765	0.20602	0.2488	0.21672	1.83E-02	6.05E-07	4.23E-07	5.84E-07	4.27E-07	1.8287E-02
520375.34	4258862.8	105343.3661	0.48022	0.21249	0.46033	0.22512	1.83E-02	1.13E-06	4.36E-07	1.08E-06	4.43E-07	1.8274E-02
520158.47	4258869.45	105318.7525	3.07054	0.50323	2.73468	0.49986	1.83E-02	7.21E-06	1.03E-06	6.42E-06	9.84E-07	1.8283E-02
520197.31	4258382.69	105251.7771	0.45826	1.93329	0.47762	2.20383	1.83E-02	1.08E-06	3.97E-06	1.12E-06	4.34E-06	1.8266E-02
520306.08	4258892.92	105188.2415	0.74609	0.24788	0.71271	0.26484	1.82E-02	1.75E-06	5.08E-07	1.67E-06	5.21E-07	1.8249E-02
520108.99	4258452.41	104957.4952	0.69593	9.62409	0.75893	11.66282	1.82E-02	1.63E-06	1.97E-05	1.78E-06	2.30E-05	1.8251E-02
520148.27	4258412.53	104917.3067	0.55391	3.88845	0.59761	4.55859	1.82E-02	1.30E-06	7.97E-06	1.40E-06	8.97E-06	1.8217E-02
520047.12	4258664.6	104619.5494	3.95167	2.24575	6.12433	2.00939	1.81E-02	9.28E-06	4.61E-06	1.44E-05	3.96E-06	1.8178E-02
520047.12	4258673.87	104568.0113	4.08627	2.01746	6.30665	1.82703	1.81E-02	9.59E-06	4.14E-06	1.48E-05	3.60E-06	1.8169E-02
520207.07	4258893.08	104534.2599	1.68286	0.36735	1.55434	0.38582	1.81E-02	3.95E-06	7.53E-07	3.65E-06	7.59E-07	1.8140E-02
520422.51	4258363.39	104515.5423	0.2391	0.35692	0.23894	0.38141	1.81E-02	5.61E-07	7.32E-07	5.61E-07	7.51E-07	1.8130E-02
520177.7	4258392.63	104510.0708	0.49135	2.47247	0.51958	2.85055	1.81E-02	1.15E-06	5.07E-06	1.22E-06	5.61E-06	1.8140E-02
520216.92	4258372.75	104482.2261	0.42579	1.55912	0.43984	1.76035	1.81E-02	1.00E-06	3.20E-06	1.03E-06	3.47E-06	1.8131E-02
520061.4	4258741.7	104436.9872	8.15642	1.16717	18.12166	1.08754	1.81E-02	1.91E-05	2.39E-06	4.25E-05	2.14E-06	1.8180E-02
520275.71	4258352.93	104339.997	0.3526	0.91256	0.36293	1.01087	1.81E-02	8.28E-07	1.87E-06	8.52E-07	1.99E-06	1.8103E-02
520436.14	4258805.77	104073.9263	0.34345	0.19604	0.33029	0.20734	1.81E-02	8.06E-07	4.02E-07	7.75E-07	4.08E-07	1.8054E-02
520444.98	4258792.1	104015.6237	0.32663	0.19589	0.31436	0.20672	1.80E-02	7.67E-07	4.02E-07	7.38E-07	4.07E-07	1.8043E-02
520059.73	4258579.45	103971.4385	2.5146	12.03481	4.53985	6.47735	1.80E-02	5.90E-06	2.47E-05	1.07E-05	1.28E-05	1.8087E-02
520149.5	4258865.74	103872.5981	3.54739	0.5323	3.13273	0.52077	1.80E-02	8.33E-06	1.09E-06	7.35E-06	1.03E-06	1.8034E-02
520402.96	4258353.33	103748.6003	0.24953	0.39613	0.2495	0.42591	1.80E-02	5.86E-07	8.12E-07	5.86E-07	8.38E-07	1.7998E-02
520097.66	4258814.37	103621.0435	12.38413	0.78784	11.10901	0.72069	1.80E-02	2.91E-05	1.62E-06	2.61E-05	1.42E-06	1.8031E-02
520177.35	4258883.13	103568.4087	2.36872	0.4379	2.14252	0.44608	1.80E-02	5.56E-06	8.98E-07	5.03E-06	8.78E-07	1.7976E-02
520047.12	4258683.15	103482.8226	4.19826	1.82437	6.46955	1.66827	1.79E-02	9.86E-06	3.74E-06	1.52E-05	3.28E-06	1.7981E-02
520047.12	4258655.32	103478.4047	3.79612	2.51763	5.91625	2.21941	1.79E-02	8.91E-06	5.16E-06	1.39E-05	4.37E-06	1.7980E-02
520315.98	4258892.9	103434.6094	0.69843	0.23986	0.66793	0.25589	1.79E-02	1.64E-06	4.92E-07	1.57E-06	5.04E-07	1.7944E-02
520475.44	4258427.8	103394.8956	0.21877	0.2646	0.2173	0.28169	1.79E-02	5.14E-07	5.43E-07	5.10E-07	5.55E-07	1.7935E-02
520344.26	4258343.15	103174.9312	0.28938	0.55925	0.2944	0.61077	1.79E-02	6.79E-07	1.15E-06	6.91E-07	1.20E-06	1.7899E-02
520087.7	4258800.27	103108.3497	15.27936	0.85111	18.13949	0.77763	1.79E-02	3.59E-05	1.75E-06	4.26E-05	1.53E-06	1.7965E-02
520427.58	4258819.32	103072.2303	0.36076	0.19626	0.34662	0.20788	1.79E-02	8.47E-07	4.03E-07	8.14E-07	4.09E-07	1.7880E-02
520334.47	4258343.11	103047.2009	0.29705	0.59599	0.30309	0.65224	1.79E-02	6.97E-07	1.22E-06	7.12E-07	1.28E-06	1.7877E-02
520471.95	4258738	103012.2162	0.27837	0.19848	0.26801	0.20816	1.79E-02	6.54E-07	4.07E-07	6.29E-07	4.10E-07	1.7869E-02
520412.44	4258835.59	102951.565	0.39053	0.19895	0.37471	0.21102	1.79E-02	9.17E-07	4.08E-07	8.80E-07	4.15E-07	1.7859E-02
520121.89	4258844.36	102915.4704	6.22361	0.64937	5.33522	0.60765	1.79E-02	1.46E-05	1.33E-06	1.25E-05	1.20E-06	1.7880E-02
520354.05	4258343.18	102803.3622	0.28167	0.52636	0.28584	0.57331	1.78E-02	6.61E-07	1.08E-06	6.71E-07	1.13E-06	1.7834E-02
520454.18	4258778.28	102766.0557	0.31017	0.19553	0.2987	0.20584	1.78E-02	7.28E-07	4.01E-07	7.01E-07	4.05E-07	1.7827E-02
520324.68	4258343.08	102669.037	0.30477	0.63673	0.31182	0.69817	1.78E-02	7.16E-07	1.31E-06	7.32E-07	1.37E-06	1.7812E-02
520236.52	4258362.81	102668.3307	0.39539	1.28719	0.40697	1.44165	1.78E-02	9.28E-07	2.64E-06	9.55E-07	2.84E-06	1.7815E-02
520107.21	4258828.3	102646.0596	9.16981	0.72505	7.89922	0.66729	1.78E-02	2.15E-05	1.49E-06	1.85E-05	1.31E-06	1.7846E-02
520395.12	4258852.77	102622.6404	0.43079	0.2037	0.41295	0.21596	1.78E-02	1.01E-06	4.18E-07	9.69E-07	4.25E-07	1.7802E-02
520197.17	4258893.1	102577.8239	1.87423	0.38527	1.71993	0.40085	1.78E-02	4.40E-06	7.90E-07	4.04E-06	7.89E-07	1.7802E-02
520466.23	4258403.82	102494.768	0.22011	0.28062	0.21973	0.29916	1.78E-02	5.17E-07	5.76E-07	5.16E-07	5.89E-07	1.7779E-02
520256.59	4258903	102451.8826	1.0755	0.2877	1.01595	0.30841	1.78E-02	2.52E-06	5.90E-07	2.39E-06	6.07E-07	1.7776E-02
520140.53	4258862.04	102449.5091	4.20634	0.56284	3.66819	0.54172	1.78E-02	9.88E-06	1.15E-06	8.61E-06	1.07E-06	1.7790E-02
520365.45	4258872.82	102433.8188	0.50922	0.21442	0.48803	0.22705	1.78E-02	1.20E-06	4.40E-07	1.15E-06	4.47E-07	1.7770E-02
520265.92	4258352.9	102357.4291	0.36024	0.99195	0.37073	1.10107	1.78E-02	8.46E-07	2.03E-06	8.70E-07	2.17E-06	1.7759E-02
520266.5	4258902.98	102331.456	0.99535	0.27706	0.94307	0.29721	1.77E-02	2.34E-06	5.68E-07	2.21E-06	5.85E-07	1.7755E-02
520246.69	4258903.02	102285.0237	1.16641	0.29933	1.098	0.32031	1.77E-02	2.74E-06	6.14E-07	2.58E-06	6.31E-07	1.7747E-02
520363.84	4258343.21	102212.8483	0.27412	0.49638	0.27745	0.53923	1.77E-02	6.44E-07	1.02E-06	6.51E-07	1.06E-06	1.7732E-02
520054.46	4258724.97	102212.1665	5.84044	1.29142	10.27215	1.20498	1.77E-02	1.37E-05	2.65E-06	2.41E-05	2.37E-06	1.7771E-02
520481.25	4258457.95	102067.906	0.22008	0.25294	0.21801	0.2688	1.77E-02	5.17E-07	5.19E-07	5.12E-07	5.29E-07	1.7705E-02
520314.9	4258343.05	102018.4452	0.31246	0.68205	0.32049	0.74915	1.77E-02	7.34E-07	1.40E-06	7.52E-07	1.47E-06	1.7699E-02
520049.93	4258627.98	101877.4904	3.5615	3.85492	5.93579	3.16212	1.77E-02	8.36E-06	7.91E-06	1.39E-05	6.22E-06	1.7707E-02
520276.4	4258902.97	101863.42	0.92367	0.26717	0.8774	0.28653	1.77E-02	2.17E-06	5.48E-07	2.06E-06	5.64E-07	1.7673E-02
520236.79	4258903.03	101795.6751	1.26989	0.312	1.19066	0.33283	1.77E-02	2.98E-06	6.40E-07	2.80E-06	6.55E-07	1.7663E-02
520158.09	4258402.56	101540.4031	0.52226	3.305	0.56041	3.85602	1.76E-02	1.23E-06	6.78E-06	1.32E-06	7.59E-06	1.7629E-02
520325.88	4258892.89	101515.8007	0.65572	0.23245	0.62755	0.2476	1.76E-02	1.54E-06	4.77E-07	1.47E-06	4.87E-07	1.7611E-02
520373.63	4258343.24	101460.076	0.26681	0.46894	0.2693	0.50817	1.76E-02	6.26E-07	9.62E-07	6.32E-07	1.00E-06	1.7601E-02
520047.12	4258646.05	101298.2705	3.6197	2.84111	5.6737	2.46016	1.76E-02	8.50E-06	5.83E-06	1.33E-05	4.84E-06	1.7602E-02
520478.49	4258722.38	101292.2787	0.26744	0.19906	0.25746	0.20883	1.76E-02	6.28E-07	4.08E-07	6.04E-07	4.11E-07	1.7571E-02
520412.75	4258353.36	101230.0018	0.24269	0.37677	0.24249	0.40401	1.76E-02	5.70E-07	7.73E-07	5.69E-07	7.95E-07	1.7561E-02
520305.11	4258343.02	101165.3938	0.32013	0.73251	0.32897	0.80597	1.75E-02	7.52E-07	1.50E-06	7.72E-07	1.59E-06	1.7551E-02
520286.3	4258902.95	101138.7125	0.85974	0.25804	0.81842	0.27654	1.75E-02	2.02E-06	5.29E-07	1.92E-06	5.44E-07	1.7547E-02
520459.98	4258391.14	101047.8738	0.22138	0.29213	0.22161	0.31117	1.75E-02	5.20E-07	5.99E-07	5.20E-07	6.13E-07	1.7529E-02
520482.08	4258480.77	101039.6651	0.22306	0.24739	0.22034	0.2632	1.75E-02	5.24E-07	5.07E-07	5.17E-07	5.18E-07	1.7527E-02
520226.89	4258903.05	100976.7171	1.38884	0.32576	1.29635	0.34593	1.75E-02	3.26E-06	6.68E-07	3.04E-06	6.81E-07	1.7522E-02
520385.24	4258862.79	100771.2254	0.45495	0.20567	0.43594	0.21787	1.75E-02	1.07E-06	4.22E-07	1.02E-06	4.29E-07	1.7481E-02
520432.3	4258363.42	100707.6038	0.2325	0.34044	0.23246	0.36301	1.75E-02	5.46E-07	6.98E-07	5.46E-07	7.15E-07	1.7470E-02
520167.45	4258883.15	100473.3836	2.71315	0.45972	2.43274	0.46111	1.74E-02	6.37E-06	9.43E-07	5.71E-06	9.08E-07	1.7441E-02
520207.13	4258372.72	100415.6138	0.43186	1.73948	0.44851	1.97188	1.74E-02	1.01E-06	3.57E-06	1.05E-06	3.88E-06	1.7426E-02
520050.99	4258716.6	100360.4099	5.04562	1.36055	8.33612	1.26831	1.74E-02	1.18E-05	2.79E-06	1.96E-05	2.50E-06	1.7444E-02
520187.27	4258893.12	100264.0608	2.10211	0.40414	1.91544	0.41571	1.74E-02	4.94E-06	8.29E-07	4.50E-06	8.18E-07	1.7401E-02
520355.57	4258882.84	100166.7392	0.54498	0.21725	0.52207	0.23026	1.74E-02	1.28E-06	4.46E-07	1.23E-06	4.53E-07	1.7377E-02
520187.52	4258382.66	100126.9752	0.46278	2.18714	0.48658	2.5058	1.74E-02	1.09E-06	4.49E-06	1.14E-06	4.93E-06	1.7378E-02
520463.86	4258764.27	100122.8658	0.2941	0.19456	0.28311	0.20441	1.74E-02	6.90E-07	3.99E-07	6.65E-07	4.02E-07	1.7368E-02
520256.13	4258352.87	100102.2724	0.36753	1.08138	0.37802	1.20346	1.74E-02	8.63E-07	2.22E-06	8.87E-07	2.37E-06	1.7369E-02
520295.32	4258342.99	100070.3491	0.32768	0.78871	0.33712	0.8694	1.74E-02	7.69E-07	1.62E-06	7.91E-07	1.71E-06	1.7362E-02
520296.2	4258902.93	100040.4885	0.8014	0.24933	0.76424	0.26689	1.74E-02	1.88E-06	5.11E-07	1.79E-06	5.25E-07	1.7356E-02
520216.99	4258903.07	99766.34423	1.52518	0.34043	1.41652	0.3593	1.73E-02	3.58E-06	6.98E-07	3.33E-06	7.07E-07	1.7312E-02
520335.79	4258892.87	99569.04779	0.61787	0.22577	0.59158	0.24011	1.73E-02	1.45E-06	4.63E-07	1.39E-06	4.73E-07	1.7274E-02
520112.79	4258840.6	99549.78366	7.83442	0.67476	6.70481	0.62417	1.73E-02	1.84E-05	1.38E-06	1.57E-05	1.23E-06	1.7303E-02
520226.74	4258362.78	99446.65237	0.40209	1.42016	0.41463	1.59626	1.72E-02	9.44E-07	2.91E-06	9.73E-07	3.14E-06	1.7257E-02
520158.6	4258879.5	99427.12015	3.08084	0.4851	2.74193	0.48003	1.72E-02	7.23E-06	9.95E-07	6.44E-06	9.45E-07	1.7261E-02
520450.83	4258377.21	99387.2402	0.22394	0.30882	0.22445	0.32853	1.72E-02	5.26E-07	6.33E-07	5.27E-07	6.47E-07	1.7241E-02
520393.2	4258343.3	99321.91859	0.25289	0.42024	0.25381	0.4534	1.72E-02	5.94E-07	8.62E-07	5.96E-07	8.93E-07	1.7230E-02
520088.94	4258810.77	98905.23773	14.80654	0.80001	16.84123	0.73174	1.72E-02	3.48E-05	1.64E-06	3.95E-05	1.44E-06	1.7232E-02
520098.61	4258824.75	98787.58034	11.97909	0.7426	10.65881	0.68011	1.71E-02	2.81E-05	1.52E-06	2.50E-05	1.34E-06	1.7190E-02
520306.1	4258902.92	98708.47935	0.74899	0.24121	0.71527	0.25787	1.71E-02	1.76E-06	4.95E-07	1.68E-06	5.08E-07	1.7125E-02
520285.53	4258342.96	98604.7512	0.33495	0.85228	0.34485	0.94089	1.71E-02	7.86E-07	1.75E-06	8.10E-07	1.85E-06	1.7108E-02
520375.36	4258872.8	98579.24005	0.48174	0.20768	0.46151	0.21984	1.71E-02	1.13E-06	4.26E-07	1.08E-06	4.33E-07	1.7101E-02
520207.09	4258903.08	98325.10969	1.68687	0.35647	1.55776	0.37332	1.71E-02	3.96E-06	7.31E-07	3.66E-06	7.35E-07	1.7063E-02
520047.12	4258636.77	98308.77144	3.40868	3.22763	5.38755	2.73211	1.71E-02	8.00E-06	6.62E-06	1.26E-05	5.38E-06	1.7084E-02
520422.54	4258353.39	98308.45848	0.23607	0.35944	0.23585	0.38431	1.71E-02	5.54E-07	7.37E-07	5.54E-07	7.57E-07	1.7054E-02
520453.3	4258788.66	98245.48509	0.31359	0.19221	0.30178	0.20251	1.70E-02	7.36E-07	3.94E-07	7.08E-07	3.99E-07	1.7042E-02
520149.75	4258875.84	98159.67812	3.54914	0.51159	3.13225	0.4989	1.70E-02	8.33E-06	1.05E-06	7.35E-06	9.82E-07	1.7043E-02
520047.53	4258708.24	98153.1564	4.46991	1.43458	6.94217	1.33547	1.70E-02	1.05E-05	2.94E-06	1.63E-05	2.63E-06	1.7057E-02
520485.03	4258706.76	98123.54788	0.25708	0.19896	0.24758	0.20903	1.70E-02	6.04E-07	4.08E-07	5.81E-07	4.11E-07	1.7021E-02
520167.91	4258392.59	97976.36693	0.49244	2.85066	0.52544	3.30648	1.70E-02	1.16E-06	5.85E-06	1.23E-06	6.51E-06	1.7008E-02
520177.37	4258893.13	97752.05313	2.3831	0.4242	2.15391	0.43042	1.70E-02	5.59E-06	8.70E-07	5.06E-06	8.47E-07	1.6967E-02
520122.59	4258854.64	97660.61767	6.13487	0.61749	5.25412	0.57754	1.69E-02	1.44E-05	1.27E-06	1.23E-05	1.14E-06	1.6968E-02
520246.34	4258352.84	97576.4535	0.37436	1.18341	0.38503	1.32072	1.69E-02	8.79E-07	2.43E-06	9.04E-07	2.60E-06	1.6931E-02
520402.99	4258343.33	97479.05858	0.24611	0.39891	0.24654	0.42928	1.69E-02	5.78E-07	8.18E-07	5.79E-07	8.45E-07	1.6910E-02
520049.89	4258618.28	97427.77614	3.2211	4.48042	5.4233	3.53232	1.69E-02	7.56E-06	9.19E-06	1.27E-05	6.95E-06	1.6935E-02
520316	4258902.9	97054.46901	0.70092	0.23345	0.6701	0.2492	1.68E-02	1.65E-06	4.79E-07	1.57E-06	4.91E-07	1.6838E-02
520275.74	4258342.93	96964.02415	0.34206	0.92293	0.35204	1.02109	1.68E-02	8.03E-07	1.89E-06	8.26E-07	2.01E-06	1.6824E-02
520484.73	4258467.07	96942.34573	0.21905	0.24725	0.2167	0.26279	1.68E-02	5.14E-07	5.07E-07	5.09E-07	5.17E-07	1.6816E-02
520140.9	4258872.19	96884.88333	4.18811	0.53913	3.65181	0.5177	1.68E-02	9.83E-06	1.11E-06	8.57E-06	1.02E-06	1.6825E-02
520256.61	4258913	96780.93946	1.08535	0.28092	1.02462	0.30095	1.68E-02	2.55E-06	5.76E-07	2.41E-06	5.92E-07	1.6792E-02
520059.69	4258569.75	96770.19266	2.12571	12.82806	3.33569	6.85191	1.68E-02	4.99E-06	2.63E-05	7.83E-06	1.35E-05	1.6837E-02
520246.71	4258913.02	96640.07475	1.17725	0.29227	1.10745	0.31237	1.68E-02	2.76E-06	5.99E-07	2.60E-06	6.15E-07	1.6768E-02
520197.19	4258903.1	96583.35762	1.87886	0.37364	1.72392	0.38753	1.68E-02	4.41E-06	7.66E-07	4.05E-06	7.63E-07	1.6762E-02
520266.51	4258912.98	96565.97827	1.00328	0.27035	0.95008	0.28997	1.67E-02	2.36E-06	5.54E-07	2.23E-06	5.71E-07	1.6755E-02
520395.14	4258862.77	96475.16064	0.43306	0.19975	0.41474	0.21159	1.67E-02	1.02E-06	4.10E-07	9.74E-07	4.17E-07	1.6736E-02
520462.63	4258774.79	96469.64031	0.29787	0.19164	0.28667	0.20146	1.67E-02	6.99E-07	3.93E-07	6.73E-07	3.97E-07	1.6734E-02
520365.47	4258882.82	96389.89334	0.51261	0.20991	0.49098	0.22223	1.67E-02	1.20E-06	4.31E-07	1.15E-06	4.37E-07	1.6722E-02
520236.81	4258913.03	96202.71595	1.28187	0.30459	1.201	0.32434	1.67E-02	3.01E-06	6.25E-07	2.82E-06	6.38E-07	1.6693E-02
520429.77	4258828.42	96168.81832	0.35875	0.19166	0.34439	0.20294	1.67E-02	8.42E-07	3.93E-07	8.09E-07	3.99E-07	1.6682E-02
520276.41	4258912.97	96131.87099	0.93106	0.26073	0.88399	0.27971	1.67E-02	2.19E-06	5.35E-07	2.08E-06	5.51E-07	1.6679E-02
520099.14	4258472.38	96100.00321	0.81096	13.82781	0.89932	15.73937	1.67E-02	1.90E-06	2.84E-05	2.11E-06	3.10E-05	1.6731E-02
520459.61	4258380.96	96049.70161	0.21926	0.29533	0.21967	0.31414	1.67E-02	5.15E-07	6.06E-07	5.16E-07	6.18E-07	1.6662E-02
520103.68	4258836.84	96035.98539	10.23108	0.69487	8.8498	0.63807	1.67E-02	2.40E-05	1.43E-06	2.08E-05	1.26E-06	1.6704E-02
520128.66	4258422.47	95988.43063	0.57589	5.74265	0.62063	6.9111	1.66E-02	1.35E-06	1.18E-05	1.46E-06	1.36E-05	1.6677E-02
520197.34	4258372.69	95982.38955	0.4366	1.9531	0.45696	2.22342	1.66E-02	1.02E-06	4.01E-06	1.07E-06	4.38E-06	1.6658E-02
520468.95	4258394.98	95962.84011	0.21646	0.27936	0.21636	0.29751	1.66E-02	5.08E-07	5.73E-07	5.08E-07	5.86E-07	1.6646E-02
520216.95	4258362.75	95908.00982	0.408	1.57452	0.42245	1.77681	1.66E-02	9.58E-07	3.23E-06	9.92E-07	3.50E-06	1.6643E-02
520226.91	4258913.05	95462.97781	1.40215	0.31791	1.3077	0.33681	1.66E-02	3.29E-06	6.52E-07	3.07E-06	6.63E-07	1.6565E-02
520286.31	4258912.95	95452.19103	0.86655	0.25185	0.82453	0.27004	1.66E-02	2.03E-06	5.17E-07	1.94E-06	5.32E-07	1.6561E-02
520325.9	4258902.89	95330.93257	0.65834	0.2264	0.62983	0.24133	1.65E-02	1.55E-06	4.64E-07	1.48E-06	4.75E-07	1.6539E-02
520412.78	4258343.36	95268.7575	0.23951	0.37947	0.23961	0.40725	1.65E-02	5.62E-07	7.78E-07	5.63E-07	8.02E-07	1.6527E-02
520138.48	4258412.5	95164.07803	0.54639	4.68896	0.58872	5.55751	1.65E-02	1.28E-06	9.62E-06	1.38E-06	1.09E-05	1.6529E-02
520118.84	4258432.44	95079.08181	0.60527	7.26911	0.65297	8.84459	1.65E-02	1.42E-06	1.49E-05	1.53E-06	1.74E-05	1.6526E-02
520265.95	4258342.9	95033.395	0.34881	1.00283	0.35877	1.112	1.65E-02	8.19E-07	2.06E-06	8.42E-07	2.19E-06	1.6489E-02
520432.33	4258353.42	94959.85164	0.22968	0.34268	0.22947	0.36555	1.65E-02	5.39E-07	7.03E-07	5.39E-07	7.20E-07	1.6473E-02
520167.47	4258893.15	94939.90425	2.72872	0.44463	2.44473	0.4442	1.65E-02	6.41E-06	9.12E-07	5.74E-06	8.74E-07	1.6481E-02
520090.01	4258821.21	94777.94513	15.57065	0.75393	15.80948	0.69034	1.64E-02	3.66E-05	1.55E-06	3.71E-05	1.36E-06	1.6515E-02
520113.61	4258850.93	94725.20389	7.6777	0.64018	6.55437	0.59239	1.64E-02	1.80E-05	1.31E-06	1.54E-05	1.17E-06	1.6466E-02
520236.55	4258352.81	94654.0795	0.38056	1.30048	0.39202	1.45535	1.64E-02	8.93E-07	2.67E-06	9.20E-07	2.86E-06	1.6425E-02
520060.74	4258764.21	94591.0113	8.11071	0.98555	17.28105	0.92384	1.64E-02	1.90E-05	2.02E-06	4.06E-05	1.82E-06	1.6470E-02
520177.73	4258382.63	94575.47412	0.46512	2.49617	0.49356	2.87457	1.64E-02	1.09E-06	5.12E-06	1.16E-06	5.66E-06	1.6417E-02
520385.26	4258872.79	94516.84468	0.45654	0.20125	0.43714	0.21299	1.64E-02	1.07E-06	4.13E-07	1.03E-06	4.19E-07	1.6396E-02
520187.29	4258903.12	94495.58484	2.10671	0.39158	1.91948	0.40142	1.64E-02	4.95E-06	8.03E-07	4.51E-06	7.90E-07	1.6401E-02
520383.45	4258333.27	94411.5019	0.25578	0.44691	0.25831	0.48346	1.64E-02	6.00E-07	9.17E-07	6.06E-07	9.52E-07	1.6378E-02
520296.22	4258912.93	94405.93509	0.80743	0.24336	0.76965	0.26069	1.64E-02	1.90E-06	4.99E-07	1.81E-06	5.13E-07	1.6379E-02
520217.01	4258913.07	94336.38261	1.53933	0.33203	1.42844	0.34949	1.64E-02	3.61E-06	6.81E-07	3.35E-06	6.88E-07	1.6371E-02
520355.59	4258892.84	94295.79229	0.54837	0.21236	0.52506	0.22517	1.64E-02	1.29E-06	4.36E-07	1.23E-06	4.43E-07	1.6359E-02
520403.59	4258859.27	94234.63085	0.41386	0.1958	0.39632	0.20741	1.63E-02	9.72E-07	4.02E-07	9.30E-07	4.08E-07	1.6347E-02
520483.82	4258431.38	94233.45435	0.21381	0.25482	0.21214	0.27086	1.63E-02	5.02E-07	5.23E-07	4.98E-07	5.33E-07	1.6346E-02
520158.72	4258889.54	94204.99318	3.10761	0.46867	2.76018	0.46189	1.63E-02	7.30E-06	9.61E-07	6.48E-06	9.09E-07	1.6355E-02
520057	4258755.21	94155.39162	6.90518	1.03206	12.50685	0.97063	1.63E-02	1.62E-05	2.12E-06	2.94E-05	1.91E-06	1.6380E-02
520450.7	4258367.14	94065.73775	0.22151	0.31166	0.22188	0.33121	1.63E-02	5.20E-07	6.39E-07	5.21E-07	6.52E-07	1.6318E-02
520443.83	4258812.59	94029.4416	0.33247	0.18913	0.31956	0.19982	1.63E-02	7.81E-07	3.88E-07	7.50E-07	3.93E-07	1.6311E-02
520452.57	4258798.97	93776.5796	0.31674	0.18877	0.30448	0.19906	1.63E-02	7.44E-07	3.87E-07	7.15E-07	3.92E-07	1.6267E-02
520491.57	4258691.14	93631.08516	0.24734	0.1991	0.2386	0.20921	1.62E-02	5.81E-07	4.08E-07	5.60E-07	4.12E-07	1.6242E-02
520335.8	4258902.87	93523.20073	0.62025	0.21996	0.59359	0.23413	1.62E-02	1.46E-06	4.51E-07	1.39E-06	4.61E-07	1.6225E-02
520476.06	4258752.12	93395.89096	0.27638	0.19123	0.26582	0.20047	1.62E-02	6.49E-07	3.92E-07	6.24E-07	3.95E-07	1.6201E-02
520053.27	4258746.2	93380.67328	5.9247	1.08283	9.71313	1.02061	1.62E-02	1.39E-05	2.22E-06	2.28E-05	2.01E-06	1.6237E-02
520148.3	4258402.53	93359.99135	0.51753	3.91894	0.55708	4.59149	1.62E-02	1.21E-06	8.04E-06	1.31E-06	9.04E-06	1.6212E-02
520306.12	4258912.92	93147.42905	0.7544	0.23547	0.7201	0.25193	1.62E-02	1.77E-06	4.83E-07	1.69E-06	4.96E-07	1.6160E-02
520149.97	4258885.93	93072.65149	3.5719	0.49286	3.1453	0.47897	1.61E-02	8.39E-06	1.01E-06	7.38E-06	9.43E-07	1.6161E-02
520479.66	4258743.53	93054.92787	0.2704	0.19196	0.26012	0.2011	1.61E-02	6.35E-07	3.94E-07	6.11E-07	3.96E-07	1.6142E-02
520207.11	4258913.08	93027.7612	1.70279	0.34741	1.57098	0.36267	1.61E-02	4.00E-06	7.13E-07	3.69E-06	7.14E-07	1.6144E-02
520256.16	4258342.87	92849.88229	0.35523	1.09264	0.36518	1.21509	1.61E-02	8.34E-07	2.24E-06	8.57E-07	2.39E-06	1.6111E-02
520375.37	4258882.8	92798.45871	0.48452	0.20339	0.46387	0.21519	1.61E-02	1.14E-06	4.17E-07	1.09E-06	4.24E-07	1.6099E-02
520422.57	4258343.39	92689.30869	0.23309	0.36168	0.233	0.38705	1.61E-02	5.47E-07	7.42E-07	5.47E-07	7.62E-07	1.6079E-02
520049.85	4258608.59	92638.5658	2.83555	5.1694	4.76511	3.89594	1.61E-02	6.66E-06	1.06E-05	1.12E-05	7.67E-06	1.6104E-02
520483	4258421.02	92534.7754	0.21252	0.25755	0.21111	0.27392	1.60E-02	4.99E-07	5.28E-07	4.96E-07	5.39E-07	1.6052E-02
520483.26	4258734.93	92399.39344	0.26458	0.19244	0.25453	0.20157	1.60E-02	6.21E-07	3.95E-07	5.98E-07	3.97E-07	1.6028E-02
520177.39	4258903.13	92268.602	2.38984	0.41073	2.15967	0.41524	1.60E-02	5.61E-06	8.42E-07	5.07E-06	8.17E-07	1.6016E-02
520207.16	4258362.72	92050.87449	0.41285	1.75571	0.43026	1.98927	1.60E-02	9.69E-07	3.60E-06	1.01E-06	3.92E-06	1.5975E-02
520049.53	4258737.19	92023.02838	5.01796	1.14028	7.85534	1.07397	1.60E-02	1.18E-05	2.34E-06	1.84E-05	2.11E-06	1.5996E-02
520468.39	4258384.72	91871.16622	0.21461	0.28257	0.21482	0.30057	1.59E-02	5.04E-07	5.80E-07	5.04E-07	5.92E-07	1.5937E-02
520438.43	4258824.83	91870.75003	0.34343	0.18789	0.32973	0.19873	1.59E-02	8.06E-07	3.85E-07	7.74E-07	3.91E-07	1.5937E-02
520099.17	4258462.38	91804.13437	0.72841	13.82615	0.80114	15.79152	1.59E-02	1.71E-06	2.84E-05	1.88E-06	3.11E-05	1.5986E-02
520141.23	4258882.32	91796.71595	4.18074	0.51719	3.64263	0.49553	1.59E-02	9.82E-06	1.06E-06	8.55E-06	9.75E-07	1.5942E-02
520412.04	4258855.77	91759.18868	0.3961	0.19203	0.3793	0.20339	1.59E-02	9.30E-07	3.94E-07	8.90E-07	4.00E-07	1.5918E-02
520395.16	4258872.77	91691.52456	0.43729	0.19657	0.41853	0.20801	1.59E-02	1.03E-06	4.03E-07	9.83E-07	4.09E-07	1.5906E-02
520316.02	4258912.9	91593.31162	0.70579	0.22792	0.6744	0.2435	1.59E-02	1.66E-06	4.67E-07	1.58E-06	4.79E-07	1.5891E-02
520226.77	4258352.78	91592.27534	0.38625	1.43397	0.39908	1.61074	1.59E-02	9.07E-07	2.94E-06	9.37E-07	3.17E-06	1.5894E-02

520104.64	4258847.23	91579.267	9.91839	0.65803	8.54143	0.60481	1.59E-02	2.33E-05	1.35E-06	2.01E-05	1.19E-06	1.5930E-02
520486.85	4258726.34	91411.10498	0.25897	0.19266	0.2491	0.20187	1.59E-02	6.08E-07	3.95E-07	5.85E-07	3.97E-07	1.5857E-02
520256.63	4258923	91396.63196	1.09222	0.27398	1.03056	0.2932	1.59E-02	2.56E-06	5.62E-07	2.42E-06	5.77E-07	1.5858E-02
520197.21	4258913.1	91393.22591	1.89496	0.36365	1.73707	0.37581	1.59E-02	4.45E-06	7.46E-07	4.08E-06	7.40E-07	1.5862E-02
520109.02	4258442.41	91391.429	0.63348	9.64666	0.68592	11.70149	1.59E-02	1.49E-06	1.98E-05	1.61E-06	2.30E-05	1.5897E-02
520459.32	4258370.83	91338.06871	0.21706	0.29842	0.21748	0.31699	1.58E-02	5.10E-07	6.12E-07	5.11E-07	6.24E-07	1.5844E-02
520488.6	4258472.02	91304.88749	0.21703	0.2424	0.2145	0.25759	1.58E-02	5.10E-07	4.97E-07	5.04E-07	5.07E-07	1.5838E-02
520246.73	4258923.02	91279.6848	1.18471	0.28502	1.11386	0.30415	1.58E-02	2.78E-06	5.85E-07	2.61E-06	5.99E-07	1.5839E-02
520266.53	4258922.98	91214.15312	1.01004	0.26375	0.956	0.28273	1.58E-02	2.37E-06	5.41E-07	2.24E-06	5.57E-07	1.5826E-02
520187.55	4258372.66	91182.60501	0.43965	2.20928	0.46427	2.52605	1.58E-02	1.03E-06	4.53E-06	1.09E-06	4.97E-06	1.5827E-02
520040.59	4258691.51	91174.47535	3.44682	1.60192	4.93618	1.47694	1.58E-02	8.09E-06	3.29E-06	1.16E-05	2.91E-06	1.5840E-02
520429.32	4258838.61	91109.0773	0.36149	0.18826	0.34661	0.19931	1.58E-02	8.49E-07	3.86E-07	8.14E-07	3.92E-07	1.5805E-02
520158.12	4258392.56	91090.32943	0.49052	3.33074	0.5261	3.88495	1.58E-02	1.15E-06	6.83E-06	1.24E-06	7.65E-06	1.5816E-02
520365.49	4258892.82	90964.66024	0.51628	0.20555	0.49419	0.21766	1.58E-02	1.21E-06	4.22E-07	1.16E-06	4.28E-07	1.5781E-02
520236.83	4258923.03	90917.19894	1.29041	0.29701	1.20831	0.31563	1.58E-02	3.03E-06	6.09E-07	2.84E-06	6.21E-07	1.5776E-02
520276.43	4258922.97	90754.39344	0.93672	0.25428	0.88898	0.27276	1.57E-02	2.20E-06	5.22E-07	2.09E-06	5.37E-07	1.5746E-02
520471.08	4258771.29	90502.74106	0.28623	0.18789	0.27533	0.19724	1.57E-02	6.72E-07	3.85E-07	6.46E-07	3.88E-07	1.5699E-02
520246.37	4258342.84	90414.12545	0.36117	1.19492	0.37152	1.33295	1.57E-02	8.48E-07	2.45E-06	8.72E-07	2.62E-06	1.5689E-02
520344.32	4258323.15	90306.55992	0.27797	0.57035	0.28482	0.62162	1.57E-02	6.53E-07	1.17E-06	6.69E-07	1.22E-06	1.5667E-02
520354.11	4258323.18	90305.3834	0.27136	0.53591	0.27733	0.58313	1.57E-02	6.37E-07	1.10E-06	6.51E-07	1.15E-06	1.5667E-02
520226.93	4258923.05	90214.92463	1.41082	0.30982	1.31505	0.32744	1.56E-02	3.31E-06	6.35E-07	3.09E-06	6.45E-07	1.5655E-02
520045.8	4258728.19	90190.3446	4.30977	1.20126	6.51248	1.12936	1.56E-02	1.01E-05	2.46E-06	1.53E-05	2.22E-06	1.5673E-02
520477.93	4258398.82	90168.37894	0.21157	0.26766	0.21111	0.28486	1.56E-02	4.97E-07	5.49E-07	4.96E-07	5.61E-07	1.5641E-02
520482.39	4258410.74	90164.668	0.21104	0.26014	0.20999	0.27677	1.56E-02	4.95E-07	5.34E-07	4.93E-07	5.45E-07	1.5641E-02
520114.34	4258861.23	90160.59153	7.54222	0.60858	6.42382	0.56332	1.56E-02	1.77E-05	1.25E-06	1.51E-05	1.11E-06	1.5673E-02
520325.92	4258912.89	90075.15973	0.66334	0.22124	0.63427	0.23605	1.56E-02	1.56E-06	4.54E-07	1.49E-06	4.65E-07	1.5627E-02
520334.53	4258323.11	90069.56293	0.28457	0.6084	0.29223	0.66411	1.56E-02	6.68E-07	1.25E-06	6.86E-07	1.31E-06	1.5626E-02
520286.33	4258922.95	90048.57052	0.87107	0.24553	0.8285	0.26332	1.56E-02	2.04E-06	5.04E-07	1.95E-06	5.18E-07	1.5624E-02
520490.45	4258717.75	90047.13237	0.25353	0.19258	0.24382	0.20195	1.56E-02	5.95E-07	3.95E-07	5.72E-07	3.98E-07	1.5620E-02
520432.36	4258343.42	89740.79249	0.22688	0.34492	0.22667	0.36818	1.56E-02	5.33E-07	7.07E-07	5.32E-07	7.25E-07	1.5568E-02
520167.49	4258903.15	89736.84271	2.7367	0.42994	2.45142	0.428	1.56E-02	6.42E-06	8.82E-07	5.76E-06	8.43E-07	1.5578E-02
520324.75	4258323.08	89512.95878	0.29103	0.65064	0.29948	0.71103	1.55E-02	6.83E-07	1.33E-06	7.03E-07	1.40E-06	1.5530E-02
520187.31	4258913.12	89485.2593	2.12464	0.38069	1.93382	0.38874	1.55E-02	4.99E-06	7.81E-07	4.54E-06	7.65E-07	1.5532E-02
520217.02	4258923.07	89284.40069	1.55144	0.32363	1.43865	0.33967	1.55E-02	3.64E-06	6.64E-07	3.38E-06	6.69E-07	1.5494E-02
520403.52	4258869.31	89246.1977	0.41708	0.19247	0.39907	0.20369	1.55E-02	9.79E-07	3.95E-07	9.37E-07	4.01E-07	1.5482E-02
520450.6	4258357.08	89231.29642	0.21908	0.31417	0.21921	0.33373	1.55E-02	5.14E-07	6.44E-07	5.15E-07	6.57E-07	1.5479E-02
520385.27	4258882.79	89160.50774	0.45927	0.19732	0.43942	0.2087	1.55E-02	1.08E-06	4.05E-07	1.03E-06	4.11E-07	1.5467E-02
520296.23	4258922.93	89132.05118	0.81224	0.23743	0.77392	0.25444	1.55E-02	1.91E-06	4.87E-07	1.82E-06	5.01E-07	1.5464E-02
520420.49	4258852.28	89090.57918	0.37957	0.1884	0.36345	0.19948	1.55E-02	8.91E-07	3.86E-07	8.53E-07	3.93E-07	1.5455E-02
520059.65	4258560.06	89049.42614	1.77752	13.22401	2.51946	7.13694	1.54E-02	4.17E-06	2.71E-05	5.91E-06	1.40E-05	1.5496E-02
520158.83	4258899.58	88988.80677	3.10129	0.45178	2.75656	0.44394	1.54E-02	7.28E-06	9.27E-07	6.47E-06	8.74E-07	1.5450E-02
520355.6	4258902.84	88837.2435	0.55113	0.2074	0.52743	0.22004	1.54E-02	1.29E-06	4.25E-07	1.24E-06	4.33E-07	1.5412E-02
520167.94	4258382.59	88598.34995	0.46478	2.87664	0.49659	3.3318	1.54E-02	1.09E-06	5.90E-06	1.17E-06	6.56E-06	1.5382E-02
520314.96	4258323.05	88545.19382	0.2972	0.69777	0.30643	0.76297	1.54E-02	6.98E-07	1.43E-06	7.19E-07	1.50E-06	1.5362E-02
520095.67	4258843.53	88450.65162	13.18314	0.67038	11.92996	0.61488	1.53E-02	3.09E-05	1.37E-06	2.80E-05	1.21E-06	1.5403E-02
520216.98	4258352.75	88323.72354	0.39123	1.58806	0.40619	1.79221	1.53E-02	9.18E-07	3.26E-06	9.54E-07	3.53E-06	1.5328E-02
520494.05	4258709.16	88318.59411	0.24823	0.19246	0.23878	0.202	1.53E-02	5.83E-07	3.95E-07	5.61E-07	3.98E-07	1.5320E-02
520085.47	4258829.33	88286.42159	15.98889	0.71469	20.56115	0.65689	1.53E-02	3.75E-05	1.47E-06	4.83E-05	1.29E-06	1.5401E-02
520335.82	4258912.87	88245.9786	0.62385	0.21475	0.59673	0.22877	1.53E-02	1.46E-06	4.40E-07	1.40E-06	4.50E-07	1.5310E-02
520150.18	4258896	88098.71859	3.56582	0.47428	3.14053	0.45972	1.53E-02	8.37E-06	9.73E-07	7.37E-06	9.05E-07	1.5298E-02
520042.06	4258719.18	88079.22885	3.81068	1.26618	5.52515	1.18798	1.53E-02	8.95E-06	2.60E-06	1.30E-05	2.34E-06	1.5304E-02
520306.13	4258922.92	88011.20841	0.75927	0.22988	0.72444	0.24607	1.53E-02	1.78E-06	4.71E-07	1.70E-06	4.84E-07	1.5270E-02
520207.12	4258923.08	88004.07784	1.71365	0.3382	1.58003	0.35194	1.53E-02	4.02E-06	6.94E-07	3.71E-06	6.93E-07	1.5273E-02
520467.94	4258374.52	87897.41161	0.21265	0.28581	0.21301	0.30356	1.52E-02	4.99E-07	5.86E-07	5.00E-07	5.98E-07	1.5248E-02
520197.37	4258362.69	87841.00388	0.41632	1.97076	0.43748	2.2416	1.52E-02	9.77E-07	4.04E-06	1.03E-06	4.41E-06	1.5246E-02
520305.17	4258323.02	87817.86469	0.30366	0.74945	0.31313	0.82111	1.52E-02	7.13E-07	1.54E-06	7.35E-07	1.62E-06	1.5236E-02
520375.39	4258892.8	87732.05128	0.48809	0.19941	0.46695	0.21097	1.52E-02	1.15E-06	4.09E-07	1.10E-06	4.15E-07	1.5220E-02
520049.81	4258598.89	87562.19374	2.42919	5.83157	3.9813	4.20921	1.52E-02	5.70E-06	1.20E-05	9.35E-06	8.29E-06	1.5223E-02
520236.59	4258342.81	87547.55459	0.36642	1.31245	0.37799	1.46802	1.52E-02	8.60E-07	2.69E-06	8.87E-07	2.89E-06	1.5192E-02
520447.1	4258821.24	87541.10433	0.32898	0.18428	0.31596	0.19464	1.52E-02	7.72E-07	3.78E-07	7.42E-07	3.83E-07	1.5186E-02
520491.66	4258459.42	87478.20388	0.21308	0.24206	0.21086	0.2569	1.52E-02	5.00E-07	4.96E-07	4.95E-07	5.06E-07	1.5175E-02
520177.4	4258913.13	87409.09588	2.40783	0.39855	2.17371	0.40135	1.52E-02	5.65E-06	8.17E-07	5.10E-06	7.90E-07	1.5173E-02
520105.49	4258857.57	87372.27633	9.66473	0.62454	8.28388	0.57452	1.52E-02	2.27E-05	1.28E-06	1.94E-05	1.13E-06	1.5199E-02
520469.94	4258781.77	87327.94343	0.28969	0.18498	0.27853	0.19432	1.51E-02	6.80E-07	3.79E-07	6.54E-07	3.83E-07	1.5149E-02
520437.87	4258835.07	87317.46788	0.34624	0.18461	0.33204	0.19528	1.51E-02	8.13E-07	3.79E-07	7.80E-07	3.84E-07	1.5147E-02
520141.52	4258892.43	87086.77204	4.17626	0.49676	3.63679	0.47496	1.51E-02	9.80E-06	1.02E-06	8.54E-06	9.35E-07	1.5125E-02
520477.17	4258388.48	87075.35925	0.20999	0.27079	0.20991	0.28797	1.51E-02	4.93E-07	5.55E-07	4.93E-07	5.67E-07	1.5105E-02
520459.09	4258360.72	86962.16101	0.21484	0.30114	0.21509	0.3196	1.51E-02	5.04E-07	6.18E-07	5.05E-07	6.29E-07	1.5085E-02
520411.88	4258865.85	86891.71084	0.39885	0.1887	0.38158	0.19969	1.51E-02	9.36E-07	3.87E-07	8.96E-07	3.93E-07	1.5074E-02
520492.07	4258481.14	86835.28691	0.21587	0.23761	0.21301	0.25246	1.51E-02	5.07E-07	4.87E-07	5.00E-07	4.97E-07	1.5063E-02
520295.38	4258322.99	86753.41351	0.30983	0.80705	0.31937	0.88589	1.50E-02	7.27E-07	1.66E-06	7.50E-07	1.74E-06	1.5052E-02
520316.03	4258922.9	86716.32667	0.71144	0.22283	0.67948	0.23821	1.50E-02	1.67E-06	4.57E-07	1.60E-06	4.69E-07	1.5045E-02
520395.17	4258882.77	86698.81126	0.43949	0.19317	0.42076	0.20419	1.50E-02	1.03E-06	3.96E-07	9.88E-07	4.02E-07	1.5040E-02
520197.22	4258923.1	86477.99166	1.90566	0.35362	1.74591	0.36421	1.50E-02	4.47E-06	7.25E-07	4.10E-06	7.17E-07	1.5009E-02
520428.93	4258848.78	86388.47358	0.36403	0.18499	0.34867	0.19577	1.50E-02	8.55E-07	3.79E-07	8.19E-07	3.85E-07	1.4986E-02
520037.12	4258683.15	86313.46727	3.00815	1.69355	4.21178	1.54866	1.50E-02	7.06E-06	3.47E-06	9.89E-06	3.05E-06	1.4994E-02
520497.64	4258700.57	86271.46949	0.2431	0.19251	0.23404	0.20212	1.50E-02	5.71E-07	3.95E-07	5.49E-07	3.98E-07	1.4965E-02
520037.12	4258673.87	86096.63812	2.90821	1.85608	4.08675	1.68053	1.49E-02	6.83E-06	3.81E-06	9.59E-06	3.31E-06	1.4957E-02
520256.65	4258933	86042.7521	1.09249	0.26659	1.03055	0.28505	1.49E-02	2.56E-06	5.47E-07	2.42E-06	5.61E-07	1.4930E-02
520057.47	4258780.46	86029.12259	7.2075	0.87184	13.11518	0.82308	1.49E-02	1.69E-05	1.79E-06	3.08E-05	1.62E-06	1.4972E-02
520177.76	4258372.63	86025.76706	0.44063	2.52017	0.46895	2.89536	1.49E-02	1.03E-06	5.17E-06	1.10E-06	5.70E-06	1.4934E-02
520246.74	4258933.02	85910.82024	1.18414	0.27722	1.11313	0.29545	1.49E-02	2.78E-06	5.69E-07	2.61E-06	5.82E-07	1.4907E-02
520266.55	4258932.98	85866.65109	1.01048	0.25663	0.95612	0.27498	1.49E-02	2.37E-06	5.26E-07	2.24E-06	5.41E-07	1.4899E-02
520114.98	4258871.48	85837.87886	7.42133	0.57961	6.31078	0.53665	1.49E-02	1.74E-05	1.19E-06	1.48E-05	1.06E-06	1.4923E-02
520365.5	4258902.82	85798.09204	0.51889	0.20095	0.49639	0.21286	1.49E-02	1.22E-06	4.12E-07	1.17E-06	4.19E-07	1.4885E-02
520053.81	4258771.61	85731.45593	6.21284	0.90891	10.19945	0.86073	1.49E-02	1.46E-05	1.86E-06	2.39E-05	1.69E-06	1.4912E-02
520236.84	4258933.03	85622.1762	1.29024	0.28892	1.20801	0.30652	1.49E-02	3.03E-06	5.93E-07	2.84E-06	6.03E-07	1.4858E-02
520285.59	4258322.96	85538.141	0.31585	0.87097	0.3252	0.95849	1.48E-02	7.42E-07	1.79E-06	7.63E-07	1.89E-06	1.4841E-02
520276.45	4258932.97	85463.26966	0.93767	0.24747	0.88956	0.26544	1.48E-02	2.20E-06	5.08E-07	2.09E-06	5.23E-07	1.4829E-02
520038.33	4258710.17	85274.87608	3.35222	1.33676	4.70555	1.24884	1.48E-02	7.87E-06	2.74E-06	1.10E-05	2.46E-06	1.4815E-02
520325.93	4258922.89	85245.59613	0.66805	0.21621	0.63846	0.23081	1.48E-02	1.57E-06	4.43E-07	1.50E-06	4.54E-07	1.4789E-02
520354.14	4258313.18	85182.76945	0.26637	0.54042	0.27281	0.58796	1.48E-02	6.25E-07	1.11E-06	6.40E-07	1.16E-06	1.4778E-02
520050.14	4258762.77	85136.84696	5.39066	0.94867	8.26461	0.90042	1.48E-02	1.27E-05	1.95E-06	1.94E-05	1.77E-06	1.4802E-02
520037.12	4258664.6	85112.04839	2.79532	2.04192	3.94425	1.82776	1.48E-02	6.56E-06	4.19E-06	9.26E-06	3.60E-06	1.4786E-02
520167.5	4258913.15	85079.41046	2.7555	0.41645	2.4657	0.41302	1.48E-02	6.47E-06	8.54E-07	5.79E-06	8.13E-07	1.4771E-02
520460.08	4258805.86	85022.84143	0.30734	0.18211	0.29512	0.19189	1.47E-02	7.22E-07	3.73E-07	6.93E-07	3.78E-07	1.4749E-02
520363.93	4258313.21	85003.97983	0.26019	0.50869	0.26584	0.55255	1.47E-02	6.11E-07	1.04E-06	6.24E-07	1.09E-06	1.4747E-02
520344.35	4258313.15	84955.34521	0.27238	0.57569	0.2797	0.62693	1.47E-02	6.39E-07	1.18E-06	6.57E-07	1.23E-06	1.4739E-02
520226.94	4258933.05	84908.49075	1.40791	0.30099	1.3125	0.31752	1.47E-02	3.31E-06	6.17E-07	3.08E-06	6.25E-07	1.4735E-02
520128.69	4258412.47	84869.28826	0.53388	5.78203	0.57204	6.93622	1.47E-02	1.25E-06	1.19E-05	1.34E-06	1.37E-05	1.4748E-02
520086.7	4258839.83	84846.84843	15.5131	0.67659	18.79702	0.62227	1.47E-02	3.64E-05	1.39E-06	4.41E-05	1.22E-06	1.4799E-02
520483.06	4258759.36	84829.09194	0.26959	0.18473	0.25902	0.19354	1.47E-02	6.33E-07	3.79E-07	6.08E-07	3.81E-07	1.4715E-02
520420.24	4258862.39	84813.92287	0.38247	0.18536	0.36599	0.19612	1.47E-02	8.98E-07	3.80E-07	8.59E-07	3.86E-07	1.4713E-02
520286.35	4258932.95	84772.50759	0.8717	0.23888	0.82879	0.25625	1.47E-02	2.05E-06	4.90E-07	1.95E-06	5.04E-07	1.4708E-02
520187.32	4258923.12	84741.35392	2.13655	0.36982	1.94354	0.37629	1.47E-02	5.02E-06	7.58E-07	4.56E-06	7.41E-07	1.4709E-02
520138.51	4258402.5	84689.81628	0.50906	4.72078	0.54585	5.58806	1.47E-02	1.20E-06	9.68E-06	1.28E-06	1.10E-05	1.4712E-02
520207.19	4258352.72	84675.16876	0.39503	1.7698	0.41307	2.00566	1.47E-02	9.27E-07	3.63E-06	9.70E-07	3.95E-06	1.4696E-02
520096.64	4258853.92	84649.24094	12.79461	0.63582	11.3963	0.58375	1.47E-02	3.00E-05	1.30E-06	2.68E-05	1.15E-06	1.4741E-02
520226.8	4258342.78	84608.7405	0.37117	1.44683	0.38455	1.62425	1.47E-02	8.71E-07	2.97E-06	9.03E-07	3.20E-06	1.4683E-02
520486.59	4258750.92	84584.79065	0.26399	0.18544	0.25367	0.19413	1.47E-02	6.20E-07	3.80E-07	5.96E-07	3.82E-07	1.4673E-02
520334.57	4258313.11	84577.71676	0.27838	0.61442	0.28644	0.66981	1.47E-02	6.54E-07	1.26E-06	6.72E-07	1.32E-06	1.4674E-02
520373.72	4258313.24	84481.01086	0.25395	0.47998	0.25888	0.52032	1.47E-02	5.96E-07	9.84E-07	6.08E-07	1.02E-06	1.4656E-02
520158.45	4258909.41	84423.11546	3.14453	0.43791	2.78975	0.42853	1.46E-02	7.38E-06	8.98E-07	6.55E-06	8.44E-07	1.4658E-02
520385.29	4258892.79	84420.26823	0.46258	0.19364	0.44224	0.20474	1.46E-02	1.09E-06	3.97E-07	1.04E-06	4.03E-07	1.4645E-02
520046.47	4258753.92	84226.81337	4.706	0.99228	6.88273	0.94258	1.46E-02	1.10E-05	2.04E-06	1.62E-05	1.86E-06	1.4640E-02
520217.04	4258933.07	84164.13002	1.55042	0.31456	1.43789	0.32938	1.46E-02	3.64E-06	6.45E-07	3.38E-06	6.48E-07	1.4606E-02
520490.12	4258742.49	84094.04676	0.25851	0.18602	0.24843	0.19465	1.46E-02	6.07E-07	3.82E-07	5.83E-07	3.83E-07	1.4588E-02
520467.58	4258364.35	84072.84981	0.21063	0.28877	0.21095	0.30631	1.46E-02	4.94E-07	5.92E-07	4.95E-07	6.03E-07	1.4584E-02
520324.78	4258313.08	84043.90616	0.28434	0.65718	0.29295	0.71726	1.46E-02	6.68E-07	1.35E-06	6.88E-07	1.41E-06	1.4581E-02
520469	4258792.16	84036.50388	0.29284	0.18196	0.28137	0.19129	1.46E-02	6.87E-07	3.73E-07	6.61E-07	3.77E-07	1.4578E-02
520296.25	4258932.93	83924.57811	0.81299	0.23103	0.77432	0.24769	1.46E-02	1.91E-06	4.74E-07	1.82E-06	4.88E-07	1.4561E-02
520501.24	4258691.98	83912.43596	0.23812	0.19253	0.22946	0.20211	1.46E-02	5.59E-07	3.95E-07	5.39E-07	3.98E-07	1.4556E-02
520486.91	4258402.66	83895.79415	0.20675	0.25673	0.2059	0.27297	1.46E-02	4.85E-07	5.27E-07	4.83E-07	5.37E-07	1.4553E-02
520476.56	4258378.21	83890.01941	0.20826	0.27413	0.20848	0.2911	1.46E-02	4.89E-07	5.62E-07	4.89E-07	5.73E-07	1.4552E-02
520275.8	4258322.93	83879.73668	0.32137	0.94295	0.33071	1.03988	1.45E-02	7.54E-07	1.93E-06	7.76E-07	2.05E-06	1.4554E-02
520355.62	4258912.84	83849.80489	0.55374	0.20256	0.52963	0.21506	1.45E-02	1.30E-06	4.15E-07	1.24E-06	4.23E-07	1.4547E-02
520383.51	4258313.27	83845.36076	0.24786	0.45358	0.25198	0.49083	1.45E-02	5.82E-07	9.30E-07	5.92E-07	9.66E-07	1.4546E-02
520062.79	4258799.98	83784.65051	9.1055	0.78993	17.2231	0.74233	1.45E-02	2.14E-05	1.62E-06	4.04E-05	1.46E-06	1.4597E-02
520118.87	4258422.44	83548.15397	0.55801	7.30821	0.59824	8.88098	1.45E-02	1.31E-06	1.50E-05	1.40E-06	1.75E-05	1.4526E-02
520446.42	4258831.53	83485.86277	0.33184	0.18118	0.31839	0.19143	1.45E-02	7.79E-07	3.72E-07	7.47E-07	3.77E-07	1.4483E-02
520149.41	4258905.68	83439.71275	3.62542	0.45927	3.18866	0.44337	1.45E-02	8.51E-06	9.42E-07	7.49E-06	8.73E-07	1.4490E-02
520187.58	4258362.66	83355.63517	0.41815	2.22831	0.44301	2.54502	1.45E-02	9.82E-07	4.57E-06	1.04E-06	5.01E-06	1.4469E-02
520037.12	4258655.32	83343.36916	2.66772	2.25418	3.78072	1.99134	1.45E-02	6.26E-06	4.62E-06	8.88E-06	3.92E-06	1.4479E-02
520314.99	4258313.05	83342.88378	0.29021	0.70441	0.29916	0.76989	1.45E-02	6.81E-07	1.44E-06	7.02E-07	1.52E-06	1.4460E-02
520493.65	4258734.05	83340.7498	0.25318	0.18641	0.24332	0.19506	1.45E-02	5.94E-07	3.82E-07	5.71E-07	3.84E-07	1.4457E-02
520099.2	4258452.38	83321.50609	0.65953	13.82893	0.72015	15.83704	1.45E-02	1.55E-06	2.84E-05	1.69E-06	3.12E-05	1.4515E-02
520106.23	4258867.87	83315.69847	9.42837	0.59373	8.05927	0.54667	1.45E-02	2.21E-05	1.22E-06	1.89E-05	1.08E-06	1.4494E-02
520495	4258468.18	83231.41901	0.21203	0.23691	0.20952	0.2515	1.44E-02	4.98E-07	4.86E-07	4.92E-07	4.95E-07	1.4438E-02
520455.76	4258817.66	83217.08052	0.31543	0.18071	0.30293	0.19061	1.44E-02	7.41E-07	3.71E-07	7.11E-07	3.75E-07	1.4436E-02
520207.14	4258933.08	83054.71724	1.71329	0.3286	1.58002	0.34105	1.44E-02	4.02E-06	6.74E-07	3.71E-06	6.71E-07	1.4415E-02
520437.38	4258845.28	83034.34485	0.34882	0.18151	0.3342	0.19196	1.44E-02	8.19E-07	3.72E-07	7.85E-07	3.78E-07	1.4404E-02
520393.3	4258313.3	83003.82002	0.24186	0.42934	0.24517	0.46378	1.44E-02	5.68E-07	8.81E-07	5.76E-07	9.13E-07	1.4400E-02
520306.15	4258932.92	82899.00474	0.76019	0.22377	0.72501	0.23967	1.44E-02	1.78E-06	4.59E-07	1.70E-06	4.72E-07	1.4383E-02
520458.9	4258350.62	82855.9088	0.2126	0.30362	0.21261	0.3221	1.44E-02	4.99E-07	6.23E-07	4.99E-07	6.34E-07	1.4373E-02
520375.41	4258902.8	82853.60398	0.49052	0.19513	0.46898	0.20646	1.44E-02	1.15E-06	4.00E-07	1.10E-06	4.06E-07	1.4374E-02
520042.8	4258745.07	82846.17439	4.07594	1.04073	5.84402	0.98707	1.44E-02	9.57E-06	2.13E-06	1.37E-05	1.94E-06	1.4397E-02
520411.74	4258875.91	82803.16042	0.40161	0.18608	0.38461	0.19664	1.44E-02	9.43E-07	3.82E-07	9.03E-07	3.87E-07	1.4364E-02
520177.42	4258923.13	82794.58077	2.41723	0.38651	2.18155	0.38786	1.44E-02	5.67E-06	7.93E-07	5.12E-06	7.63E-07	1.4373E-02
520495.45	4258443.49	82555.90289	0.20817	0.24115	0.20617	0.25574	1.43E-02	4.89E-07	4.95E-07	4.84E-07	5.03E-07	1.4321E-02
520305.2	4258313.02	82491.35942	0.29597	0.75659	0.30499	0.82843	1.43E-02	6.95E-07	1.55E-06	7.16E-07	1.63E-06	1.4312E-02
520140.36	4258901.94	82405.12918	4.27268	0.48066	3.71478	0.45779	1.43E-02	1.00E-05	9.86E-07	8.72E-06	9.01E-07	1.4313E-02
520497.18	4258725.62	82302.39617	0.24801	0.18655	0.23834	0.19532	1.43E-02	5.82E-07	3.83E-07	5.60E-07	3.84E-07	1.4277E-02
520158.15	4258382.56	82267.44232	0.46154	3.35636	0.49418	3.91005	1.43E-02	1.08E-06	6.88E-06	1.16E-06	7.70E-06	1.4286E-02
520478.26	4258778.32	82248.59079	0.27871	0.18147	0.26782	0.19038	1.43E-02	6.54E-07	3.72E-07	6.29E-07	3.75E-07	1.4268E-02
520049.77	4258589.19	82228.50204	2.0809	6.38381	3.25707	4.47122	1.43E-02	4.89E-06	1.31E-05	7.65E-06	8.80E-06	1.4297E-02
520266.01	4258322.9	82170.65121	0.32676	1.02313	0.33608	1.13193	1.43E-02	7.67E-07	2.10E-06	7.89E-07	2.23E-06	1.4258E-02
520428.6	4258858.92	82002.68045	0.36632	0.18205	0.35074	0.19252	1.42E-02	8.60E-07	3.73E-07	8.23E-07	3.79E-07	1.4225E-02
520395.19	4258892.77	81896.94468	0.44144	0.18926	0.42224	0.19994	1.42E-02	1.04E-06	3.88E-07	9.91E-07	3.94E-07	1.4207E-02
520485.94	4258392.24	81822.02517	0.20542	0.25989	0.20501	0.27623	1.42E-02	4.82E-07	5.33E-07	4.81E-07	5.44E-07	1.4194E-02
520115.55	4258881.71	81808.27427	7.33325	0.55303	6.2202	0.51215	1.42E-02	1.72E-05	1.13E-06	1.46E-05	1.01E-06	1.4223E-02
520403.09	4258313.33	81751.41791	0.23586	0.40733	0.2385	0.43901	1.42E-02	5.54E-07	8.35E-07	5.60E-07	8.64E-07	1.4182E-02
520197.24	4258933.1	81731.72212	1.90703	0.34348	1.74753	0.35272	1.42E-02	4.48E-06	7.04E-07	4.10E-06	6.94E-07	1.4186E-02
520034.59	4258701.16	81703.93805	2.93956	1.41209	4.02786	1.31096	1.42E-02	6.90E-06	2.90E-06	9.46E-06	2.58E-06	1.4193E-02
520316.05	4258932.9	81624.55234	0.71173	0.21685	0.67943	0.23195	1.42E-02	1.67E-06	4.45E-07	1.60E-06	4.57E-07	1.4162E-02
520217.01	4258342.75	81575.5016	0.37524	1.60193	0.39097	1.80665	1.41E-02	8.81E-07	3.29E-06	9.18E-07	3.56E-06	1.4158E-02
520087.78	4258850.27	81476.47694	15.04291	0.64178	17.44691	0.59066	1.41E-02	3.53E-05	1.32E-06	4.10E-05	1.16E-06	1.4210E-02
520295.41	4258312.99	81380.73934	0.30149	0.81458	0.31044	0.89367	1.41E-02	7.08E-07	1.67E-06	7.29E-07	1.76E-06	1.4120E-02
520256.66	4258943	81291.92058	1.09521	0.25991	1.03274	0.27756	1.41E-02	2.57E-06	5.33E-07	2.42E-06	5.46E-07	1.4106E-02
520246.76	4258943.02	81166.27409	1.18659	0.27017	1.1151	0.28748	1.41E-02	2.79E-06	5.54E-07	2.62E-06	5.66E-07	1.4084E-02
520365.52	4258912.82	81147.82944	0.52176	0.19653	0.49883	0.20833	1.41E-02	1.22E-06	4.03E-07	1.17E-06	4.10E-07	1.4078E-02
520266.56	4258942.98	81134.46542	1.01329	0.25024	0.95841	0.26792	1.41E-02	2.38E-06	5.13E-07	2.25E-06	5.27E-07	1.4078E-02
520039.13	4258736.23	81052.56127	3.55864	1.09235	5.01452	1.03304	1.41E-02	8.35E-06	2.24E-06	1.18E-05	2.03E-06	1.4083E-02
520097.49	4258864.26	80982.896	12.46281	0.60418	10.9551	0.55523	1.40E-02	2.93E-05	1.24E-06	2.57E-05	1.09E-06	1.4103E-02
520236.86	4258943.03	80944.23784	1.29354	0.2816	1.21075	0.29816	1.40E-02	3.04E-06	5.78E-07	2.84E-06	5.87E-07	1.4046E-02
520037.12	4258646.05	80887.11257	2.52398	2.49403	3.59196	2.17033	1.40E-02	5.93E-06	5.12E-06	8.43E-06	4.27E-06	1.4053E-02
520059.6	4258550.36	80817.46227	1.49072	13.34975	1.96939	7.34557	1.40E-02	3.50E-06	2.74E-05	4.62E-06	1.45E-05	1.4067E-02
520276.46	4258942.97	80809.58029	0.94111	0.24144	0.89244	0.25887	1.40E-02	2.21E-06	4.95E-07	2.10E-06	5.10E-07	1.4021E-02
520197.4	4258352.69	80753.1912	0.39744	1.98598	0.41894	2.25921	1.40E-02	9.33E-07	4.07E-06	9.84E-07	4.45E-06	1.4017E-02
520476.07	4258367.98	80692.46465	0.20644	0.2771	0.20675	0.29385	1.40E-02	4.85E-07	5.68E-07	4.85E-07	5.78E-07	1.3998E-02
520167.52	4258923.15	80671.83565	2.76565	0.40326	2.47405	0.39863	1.40E-02	6.49E-06	8.27E-07	5.81E-06	7.85E-07	1.4006E-02
520167.97	4258372.59	80530.32436	0.43913	2.90317	0.46937	3.35295	1.40E-02	1.03E-06	5.95E-06	1.10E-06	6.60E-06	1.3982E-02
520467.28	4258354.21	80431.83298	0.20857	0.29137	0.2087	0.30882	1.40E-02	4.90E-07	5.98E-07	4.90E-07	6.08E-07	1.3953E-02
520325.95	4258932.89	80352.51111	0.66911	0.21066	0.63912	0.22504	1.39E-02	1.57E-06	4.32E-07	1.50E-06	4.43E-07	1.3941E-02
520354.17	4258303.18	80305.34096	0.2612	0.54533	0.26808	0.59276	1.39E-02	6.13E-07	1.12E-06	6.29E-07	1.17E-06	1.3932E-02
520226.96	4258943.05	80291.39967	1.41118	0.29321	1.31526	0.30859	1.39E-02	3.31E-06	6.01E-07	3.09E-06	6.07E-07	1.3934E-02
520412.87	4258313.36	80255.96082	0.22999	0.38706	0.23199	0.41622	1.39E-02	5.40E-07	7.94E-07	5.45E-07	8.19E-07	1.3923E-02
520363.96	4258303.21	80240.57502	0.25548	0.51301	0.26165	0.55693	1.39E-02	6.00E-07	1.05E-06	6.14E-07	1.10E-06	1.3921E-02
520403.89	4258889.17	80213.6144	0.42073	0.18584	0.40271	0.19624	1.39E-02	9.88E-07	3.81E-07	9.45E-07	3.86E-07	1.3915E-02
520286.36	4258942.95	80212.24273	0.8755	0.23316	0.83203	0.25013	1.39E-02	2.06E-06	4.78E-07	1.95E-06	4.92E-07	1.3917E-02
520158.57	4258919.46	80184.84079	3.15667	0.42326	2.7994	0.41297	1.39E-02	7.41E-06	8.68E-07	6.57E-06	8.13E-07	1.3923E-02

520187.34	4258933.12	80126.97819	2.13587	0.35878	1.94382	0.36395	1.39E-02	5.01E-06	7.36E-07	4.56E-06	7.16E-07	1.3909E-02
520109.05	4258432.41	80126.01377	0.58058	9.67626	0.6247	11.73287	1.39E-02	1.36E-06	1.98E-05	1.47E-06	2.31E-05	1.3943E-02
520285.62	4258312.96	80121.11756	0.30683	0.87886	0.31559	0.9667	1.39E-02	7.20E-07	1.80E-06	7.41E-07	1.90E-06	1.3902E-02
520256.23	4258322.87	80043.96576	0.33155	1.11416	0.34147	1.23588	1.39E-02	7.78E-07	2.29E-06	8.02E-07	2.43E-06	1.3890E-02
520344.39	4258303.15	79979.58935	0.2667	0.58118	0.27436	0.63209	1.39E-02	6.26E-07	1.19E-06	6.44E-07	1.24E-06	1.3876E-02
520385.31	4258902.79	79844.22355	0.46486	0.18966	0.44413	0.20051	1.38E-02	1.09E-06	3.89E-07	1.04E-06	3.95E-07	1.3852E-02
520373.75	4258303.24	79827.35624	0.24965	0.48382	0.25515	0.52432	1.38E-02	5.86E-07	9.92E-07	5.99E-07	1.03E-06	1.3849E-02
520039.93	4258628.02	79775.93649	2.41343	3.19592	3.54716	2.66784	1.38E-02	5.67E-06	6.55E-06	8.33E-06	5.25E-06	1.3863E-02
520454.97	4258827.99	79634.16971	0.31831	0.17775	0.30546	0.18757	1.38E-02	7.47E-07	3.65E-07	7.17E-07	3.69E-07	1.3814E-02
520445.83	4258841.78	79624.06708	0.33447	0.17816	0.3206	0.18825	1.38E-02	7.85E-07	3.65E-07	7.53E-07	3.71E-07	1.3813E-02
520217.06	4258943.07	79598.74258	1.55311	0.30621	1.44023	0.31982	1.38E-02	3.65E-06	6.28E-07	3.38E-06	6.30E-07	1.3814E-02
520106.9	4258878.14	79592.53197	9.27436	0.56579	7.88558	0.52127	1.38E-02	2.18E-05	1.16E-06	1.85E-05	1.03E-06	1.3847E-02
520334.6	4258303.11	79571.2515	0.27221	0.62044	0.28043	0.67543	1.38E-02	6.39E-07	1.27E-06	6.58E-07	1.33E-06	1.3805E-02
520485.18	4258381.89	79435.61216	0.20392	0.26292	0.20387	0.27919	1.38E-02	4.79E-07	5.39E-07	4.79E-07	5.50E-07	1.3780E-02
520296.27	4258942.93	79403.39654	0.81626	0.22547	0.77708	0.24181	1.38E-02	1.92E-06	4.62E-07	1.82E-06	4.76E-07	1.3777E-02
520504.24	4258708.75	79354.08959	0.23819	0.1863	0.22894	0.19538	1.38E-02	5.59E-07	3.82E-07	5.37E-07	3.85E-07	1.3765E-02
520149.63	4258915.77	79352.06123	3.6386	0.44297	3.19633	0.4266	1.38E-02	8.54E-06	9.08E-07	7.50E-06	8.40E-07	1.3781E-02
520355.64	4258922.84	79292.56644	0.55628	0.19786	0.53174	0.21024	1.38E-02	1.31E-06	4.06E-07	1.25E-06	4.14E-07	1.3756E-02
520383.54	4258303.27	79269.90217	0.24389	0.45703	0.24865	0.49448	1.37E-02	5.73E-07	9.37E-07	5.84E-07	9.73E-07	1.3752E-02
520122.26	4258894.47	79223.38425	6.21394	0.51791	5.29762	0.48235	1.37E-02	1.46E-05	1.06E-06	1.24E-05	9.50E-07	1.3770E-02
520035.46	4258727.38	79056.73053	3.17942	1.14665	4.3631	1.08125	1.37E-02	7.46E-06	2.35E-06	1.02E-05	2.13E-06	1.3734E-02
520436.96	4258855.46	79034.08975	0.35115	0.1786	0.33628	0.18878	1.37E-02	8.24E-07	3.66E-07	7.89E-07	3.72E-07	1.3710E-02
520324.81	4258303.08	79029.16922	0.27767	0.66362	0.28623	0.72332	1.37E-02	6.52E-07	1.36E-06	6.72E-07	1.42E-06	1.3711E-02
520498.73	4258472.76	78962.63874	0.21011	0.23264	0.20742	0.24691	1.37E-02	4.93E-07	4.77E-07	4.87E-07	4.86E-07	1.3698E-02
520464.43	4258814.07	78957.92413	0.30273	0.17716	0.29053	0.18661	1.37E-02	7.11E-07	3.63E-07	6.82E-07	3.67E-07	1.3697E-02
520275.83	4258312.93	78693.36112	0.31196	0.95034	0.32056	1.04871	1.36E-02	7.32E-07	1.95E-06	7.53E-07	2.06E-06	1.3655E-02
520460.13	4258341.14	78645.5454	0.20967	0.3039	0.20955	0.3223	1.36E-02	4.92E-07	6.23E-07	4.92E-07	6.34E-07	1.3643E-02
520207.16	4258943.08	78627.4054	1.71736	0.31979	1.58363	0.33095	1.36E-02	4.03E-06	6.56E-07	3.72E-06	6.51E-07	1.3647E-02
520177.79	4258362.63	78607.96467	0.418	2.54047	0.44545	2.9151	1.36E-02	9.81E-07	5.21E-06	1.05E-06	5.74E-06	1.3647E-02
520422.66	4258313.39	78547.58632	0.22426	0.36824	0.22566	0.3951	1.36E-02	5.26E-07	7.55E-07	5.30E-07	7.78E-07	1.3626E-02
520050.47	4258787.67	78493.0757	5.58704	0.80977	8.52941	0.77145	1.36E-02	1.31E-05	1.66E-06	2.00E-05	1.52E-06	1.3651E-02
520393.33	4258303.3	78478.34033	0.23816	0.43252	0.24219	0.46715	1.36E-02	5.59E-07	8.87E-07	5.69E-07	9.20E-07	1.3615E-02
520306.17	4258942.92	78431.78803	0.76306	0.21838	0.72739	0.234	1.36E-02	1.79E-06	4.48E-07	1.71E-06	4.61E-07	1.3608E-02
520375.42	4258912.8	78394.92152	0.49293	0.19092	0.47098	0.20209	1.36E-02	1.16E-06	3.92E-07	1.11E-06	3.98E-07	1.3600E-02
520177.44	4258933.13	78330.79093	2.41362	0.37444	2.17996	0.37465	1.36E-02	5.67E-06	7.68E-07	5.12E-06	7.37E-07	1.3598E-02
520315.02	4258303.05	78316.24048	0.28301	0.71123	0.2917	0.77638	1.36E-02	6.64E-07	1.46E-06	6.85E-07	1.53E-06	1.3588E-02
520140.68	4258912.07	78280.52614	4.25323	0.4621	3.69915	0.43945	1.36E-02	9.99E-06	9.48E-07	8.68E-06	8.65E-07	1.3598E-02
520412.58	4258885.57	78250.13456	0.40134	0.18236	0.38438	0.19252	1.36E-02	9.42E-07	3.74E-07	9.02E-07	3.79E-07	1.3575E-02
520088.74	4258860.65	78206.10544	16.02295	0.60987	16.37517	0.56171	1.36E-02	3.76E-05	1.25E-06	3.84E-05	1.11E-06	1.3643E-02
520207.22	4258342.72	78147.29737	0.37809	1.78474	0.39683	2.02086	1.36E-02	8.88E-07	3.66E-06	9.32E-07	3.98E-06	1.3564E-02
520046.85	4258778.96	78054.39662	4.901	0.84193	7.12507	0.8038	1.35E-02	1.15E-05	1.73E-06	1.67E-05	1.58E-06	1.3570E-02
520246.44	4258322.84	77964.37974	0.33621	1.21648	0.34696	1.35504	1.35E-02	7.89E-07	2.49E-06	8.15E-07	2.67E-06	1.3529E-02
520037.12	4258636.77	77919.31872	2.36049	2.7619	3.37405	2.36154	1.35E-02	5.54E-06	5.66E-06	7.92E-06	4.65E-06	1.3539E-02
520428.3	4258869.05	77886.73301	0.36857	0.17885	0.3525	0.18903	1.35E-02	8.65E-07	3.67E-07	8.28E-07	3.72E-07	1.3512E-02
520475.66	4258357.8	77565.92053	0.20456	0.27989	0.20479	0.29645	1.35E-02	4.80E-07	5.74E-07	4.81E-07	5.84E-07	1.3456E-02
520395.21	4258902.77	77500.39846	0.44325	0.18545	0.42372	0.19583	1.34E-02	1.04E-06	3.80E-07	9.95E-07	3.85E-07	1.3445E-02
520197.26	4258943.1	77485.29514	1.91419	0.33419	1.7537	0.34208	1.34E-02	4.49E-06	6.85E-07	4.12E-06	6.73E-07	1.3449E-02
520305.23	4258303.02	77479.08522	0.28826	0.76367	0.29683	0.83537	1.34E-02	6.77E-07	1.57E-06	6.97E-07	1.64E-06	1.3443E-02
520507.78	4258700.32	77468.08167	0.23346	0.18628	0.22457	0.19541	1.34E-02	5.48E-07	3.82E-07	5.27E-07	3.85E-07	1.3438E-02
520098.24	4258874.57	77417.46248	12.15308	0.57499	10.5781	0.52892	1.34E-02	2.85E-05	1.18E-06	2.48E-05	1.04E-06	1.3483E-02
520403.12	4258303.33	77411.59075	0.23246	0.41009	0.23581	0.44206	1.34E-02	5.46E-07	8.41E-07	5.54E-07	8.70E-07	1.3429E-02
520030.86	4258692.16	77403.4986	2.57417	1.49019	3.46039	1.37293	1.34E-02	6.04E-06	3.06E-06	8.12E-06	2.70E-06	1.3445E-02
520495.89	4258406.5	77380.79645	0.20196	0.24645	0.20076	0.26172	1.34E-02	4.74E-07	5.05E-07	4.71E-07	5.15E-07	1.3423E-02
520043.24	4258770.25	77368.64241	4.32457	0.87654	6.06921	0.8378	1.34E-02	1.02E-05	1.80E-06	1.42E-05	1.65E-06	1.3447E-02
520113.21	4258890.74	77365.35578	7.808	0.53266	6.60339	0.49243	1.34E-02	1.83E-05	1.09E-06	1.55E-05	9.69E-07	1.3455E-02
520493.54	4258758.26	77224.65896	0.25772	0.17913	0.24735	0.18743	1.34E-02	6.05E-07	3.67E-07	5.81E-07	3.69E-07	1.3396E-02
520316.07	4258942.9	77222.23292	0.71416	0.21161	0.68139	0.22648	1.34E-02	1.68E-06	4.34E-07	1.60E-06	4.46E-07	1.3398E-02
520256.68	4258953	77145.54208	1.10197	0.25412	1.03864	0.27095	1.34E-02	2.59E-06	5.21E-07	2.44E-06	5.33E-07	1.3387E-02
520266.58	4258952.98	77040.60969	1.02017	0.24479	0.96443	0.26176	1.34E-02	2.40E-06	5.02E-07	2.26E-06	5.15E-07	1.3368E-02
520246.78	4258953.02	77033.96563	1.19408	0.26413	1.1216	0.2805	1.34E-02	2.80E-06	5.42E-07	2.63E-06	5.52E-07	1.3368E-02
520266.05	4258312.9	76944.84649	0.31663	1.03088	0.32552	1.1411	1.33E-02	7.43E-07	2.11E-06	7.64E-07	2.25E-06	1.3352E-02
520498.55	4258417.66	76927.8609	0.20218	0.24199	0.2006	0.25678	1.33E-02	4.75E-07	4.96E-07	4.71E-07	5.05E-07	1.3345E-02
520484.55	4258371.61	76913.90397	0.2023	0.26598	0.20249	0.28205	1.33E-02	4.75E-07	5.46E-07	4.75E-07	5.55E-07	1.3342E-02
520497.01	4258749.96	76854.22454	0.25258	0.17974	0.24242	0.18795	1.33E-02	5.93E-07	3.69E-07	5.69E-07	3.70E-07	1.3332E-02
520365.54	4258922.82	76842.902	0.52433	0.19216	0.50096	0.20386	1.33E-02	1.23E-06	3.94E-07	1.18E-06	4.01E-07	1.3331E-02
520236.88	4258953.03	76756.58558	1.2998	0.27496	1.21615	0.29049	1.33E-02	3.05E-06	5.64E-07	2.86E-06	5.72E-07	1.3320E-02
520055.61	4258807.01	76755.09214	6.85081	0.7368	11.62339	0.6997	1.33E-02	1.61E-05	1.51E-06	2.73E-05	1.38E-06	1.3359E-02
520276.48	4258952.97	76682.1285	0.94657	0.23605	0.89719	0.2529	1.33E-02	2.22E-06	4.84E-07	2.11E-06	4.98E-07	1.3305E-02
520049.73	4258579.49	76635.26388	1.80328	6.83525	2.68075	4.70097	1.33E-02	4.23E-06	1.40E-05	6.29E-06	9.25E-06	1.3326E-02
520476.32	4258799.14	76598.81114	0.28475	0.17575	0.27333	0.18465	1.33E-02	6.69E-07	3.60E-07	6.42E-07	3.63E-07	1.3288E-02
520187.61	4258352.66	76567.33172	0.39821	2.24465	0.42266	2.56378	1.33E-02	9.35E-07	4.60E-06	9.92E-07	5.05E-06	1.3292E-02
520432.45	4258313.42	76546.89046	0.21865	0.35085	0.21953	0.37555	1.33E-02	5.13E-07	7.20E-07	5.15E-07	7.39E-07	1.3279E-02
520031.79	4258718.53	76520.60235	2.82848	1.20472	3.79988	1.13079	1.33E-02	6.64E-06	2.47E-06	8.92E-06	2.23E-06	1.3292E-02
520167.54	4258933.15	76446.35243	2.76438	0.39035	2.47459	0.38475	1.33E-02	6.49E-06	8.01E-07	5.81E-06	7.57E-07	1.3273E-02
520039.63	4258761.54	76401.44978	3.83276	0.91431	5.24334	0.87365	1.33E-02	9.00E-06	1.88E-06	1.23E-05	1.72E-06	1.3276E-02
520469.11	4258344.98	76399.46786	0.20551	0.29094	0.20546	0.30814	1.33E-02	4.82E-07	5.97E-07	4.82E-07	6.07E-07	1.3253E-02
520295.44	4258302.99	76388.51946	0.29324	0.82185	0.30166	0.90105	1.32E-02	6.88E-07	1.69E-06	7.08E-07	1.77E-06	1.3254E-02
520494.72	4258395.99	76276.86134	0.2009	0.24965	0.20013	0.26514	1.32E-02	4.72E-07	5.12E-07	4.70E-07	5.22E-07	1.3232E-02
520226.98	4258953.05	76237.01047	1.42038	0.28643	1.3232	0.30069	1.32E-02	3.33E-06	5.87E-07	3.11E-06	5.92E-07	1.3231E-02
520454.28	4258838.28	76180.19624	0.32097	0.17484	0.30774	0.18455	1.32E-02	7.54E-07	3.59E-07	7.22E-07	3.63E-07	1.3215E-02
520412.91	4258303.36	76172.2929	0.22689	0.38932	0.22953	0.4189	1.32E-02	5.33E-07	7.98E-07	5.39E-07	8.25E-07	1.3214E-02
520286.38	4258952.95	76092.47681	0.88012	0.22789	0.83602	0.2444	1.32E-02	2.07E-06	4.67E-07	1.96E-06	4.81E-07	1.3203E-02
520138.54	4258392.5	76027.56458	0.47575	4.7484	0.50733	5.62239	1.32E-02	1.12E-06	9.74E-06	1.19E-06	1.11E-05	1.3210E-02
520325.97	4258942.89	76017.28085	0.67117	0.20558	0.64071	0.21975	1.32E-02	1.58E-06	4.22E-07	1.50E-06	4.33E-07	1.3189E-02
520158.68	4258929.5	76001.6616	3.14859	0.40883	2.79418	0.3979	1.32E-02	7.39E-06	8.38E-07	6.56E-06	7.83E-07	1.3198E-02
520403.81	4258899.21	75992.59783	0.42272	0.18223	0.40427	0.19233	1.32E-02	9.92E-07	3.74E-07	9.49E-07	3.79E-07	1.3183E-02
520187.36	4258943.12	75973.73844	2.14094	0.34858	1.94853	0.35246	1.32E-02	5.03E-06	7.15E-07	4.57E-06	6.94E-07	1.3188E-02
520445.32	4258852	75969.32815	0.33688	0.17524	0.32266	0.18512	1.32E-02	7.91E-07	3.59E-07	7.58E-07	3.64E-07	1.3179E-02
520501.93	4258460.52	75951.76887	0.20639	0.23203	0.20399	0.24597	1.32E-02	4.85E-07	4.76E-07	4.79E-07	4.84E-07	1.3175E-02
520421.28	4258881.97	75911.09358	0.3838	0.17823	0.36659	0.18829	1.32E-02	9.01E-07	3.66E-07	8.61E-07	3.71E-07	1.3169E-02
520463.52	4258824.45	75831.00993	0.3056	0.1744	0.29321	0.1838	1.32E-02	7.17E-07	3.58E-07	6.88E-07	3.62E-07	1.3155E-02
520363.99	4258293.21	75819.93839	0.2507	0.5175	0.25727	0.56129	1.32E-02	5.89E-07	1.06E-06	6.04E-07	1.10E-06	1.3154E-02
520039.89	4258618.32	75816.89227	2.18261	3.55246	3.20466	2.89523	1.32E-02	5.12E-06	7.29E-06	7.52E-06	5.70E-06	1.3176E-02
520354.21	4258293.18	75763.00651	0.25594	0.55038	0.26316	0.59747	1.31E-02	6.01E-07	1.13E-06	6.18E-07	1.18E-06	1.3144E-02
520128.72	4258402.47	75722.37547	0.49649	5.81651	0.52906	6.95403	1.31E-02	1.17E-06	1.19E-05	1.24E-06	1.37E-05	1.3162E-02
520385.32	4258912.79	75586.71947	0.46683	0.18565	0.44572	0.19628	1.31E-02	1.10E-06	3.81E-07	1.05E-06	3.86E-07	1.3113E-02
520217.07	4258953.07	75556.66473	1.56182	0.29877	1.44772	0.31117	1.31E-02	3.67E-06	6.13E-07	3.40E-06	6.13E-07	1.3113E-02
520502.07	4258481.52	75536.02711	0.20897	0.22825	0.20593	0.24224	1.31E-02	4.91E-07	4.68E-07	4.83E-07	4.77E-07	1.3103E-02
520373.78	4258293.24	75528.79499	0.24528	0.4878	0.25126	0.5283	1.31E-02	5.76E-07	1.00E-06	5.90E-07	1.04E-06	1.3103E-02
520503.97	4258733.34	75469.4977	0.2426	0.18056	0.2329	0.18881	1.31E-02	5.70E-07	3.70E-07	5.47E-07	3.72E-07	1.3092E-02
520344.42	4258293.15	75420.53629	0.26102	0.58667	0.26884	0.63718	1.31E-02	6.13E-07	1.20E-06	6.31E-07	1.25E-06	1.3085E-02
520236.65	4258322.81	75401.00747	0.33995	1.33482	0.35255	1.49105	1.31E-02	7.98E-07	2.74E-06	8.28E-07	2.94E-06	1.3085E-02
520149.83	4258925.84	75366.93052	3.63076	0.42717	3.19091	0.41056	1.31E-02	8.52E-06	8.76E-07	7.49E-06	8.08E-07	1.3090E-02
520511.31	4258691.88	75365.9069	0.22891	0.18619	0.22034	0.19527	1.31E-02	5.37E-07	3.82E-07	5.17E-07	3.84E-07	1.3074E-02
520296.28	4258952.93	75338.84159	0.82056	0.22038	0.78079	0.23637	1.31E-02	1.93E-06	4.52E-07	1.83E-06	4.65E-07	1.3072E-02
520104.16	4258887	75300.2271	10.10179	0.54366	8.57809	0.50072	1.31E-02	2.37E-05	1.12E-06	2.01E-05	9.86E-07	1.3106E-02
520058.16	4258818.05	75272.16268	7.62198	0.69903	14.115	0.66257	1.31E-02	1.79E-05	1.43E-06	3.31E-05	1.30E-06	1.3109E-02
520285.65	4258302.96	75156.19859	0.29805	0.88627	0.30631	0.9745	1.30E-02	7.00E-07	1.82E-06	7.19E-07	1.92E-06	1.3041E-02
520485.42	4258785.36	75101.85031	0.27145	0.17541	0.26062	0.1839	1.30E-02	6.37E-07	3.60E-07	6.12E-07	3.62E-07	1.3028E-02
520355.65	4258932.84	75066.0684	0.55847	0.19327	0.53347	0.20553	1.30E-02	1.31E-06	3.96E-07	1.25E-06	4.05E-07	1.3023E-02
520383.57	4258293.27	75060.64076	0.23987	0.46059	0.24518	0.49812	1.30E-02	5.63E-07	9.45E-07	5.76E-07	9.81E-07	1.3022E-02
520036.02	4258752.83	75050.24888	3.38228	0.95608	4.58254	0.91135	1.30E-02	7.94E-06	1.96E-06	1.08E-05	1.79E-06	1.3040E-02
520089.59	4258871	75039.22448	15.72186	0.58037	15.50529	0.535	1.30E-02	3.69E-05	1.19E-06	3.64E-05	1.05E-06	1.3091E-02
520502.59	4258436.39	75020.34348	0.20256	0.23519	0.20055	0.24923	1.30E-02	4.76E-07	4.82E-07	4.71E-07	4.91E-07	1.3014E-02
520334.63	4258293.11	75009.00662	0.2661	0.6263	0.27426	0.68091	1.30E-02	6.25E-07	1.28E-06	6.44E-07	1.34E-06	1.3014E-02
520256.26	4258312.87	74969.22689	0.32091	1.12196	0.33059	1.24591	1.30E-02	7.53E-07	2.30E-06	7.76E-07	2.45E-06	1.3009E-02
520473.09	4258810.48	74861.36577	0.29072	0.17375	0.27888	0.18276	1.30E-02	6.83E-07	3.56E-07	6.55E-07	3.60E-07	1.2986E-02
520158.18	4258372.56	74757.83843	0.43497	3.38278	0.46459	3.9306	1.30E-02	1.02E-06	6.94E-06	1.09E-06	7.74E-06	1.2983E-02
520493.79	4258385.58	74689.22515	0.19962	0.25255	0.19925	0.26809	1.30E-02	4.69E-07	5.18E-07	4.68E-07	5.28E-07	1.2956E-02
520207.17	4258953.08	74642.16494	1.72594	0.31171	1.591	0.32161	1.29E-02	4.05E-06	6.39E-07	3.74E-06	6.33E-07	1.2955E-02
520422.69	4258303.39	74633.91322	0.22138	0.37028	0.2234	0.39757	1.29E-02	5.20E-07	7.59E-07	5.24E-07	7.83E-07	1.2947E-02
520140.98	4258922.19	74510.57663	4.24523	0.44483	3.69181	0.42242	1.29E-02	9.97E-06	9.12E-07	8.67E-06	8.32E-07	1.2944E-02
520197.43	4258342.69	74468.70069	0.37953	2.0021	0.40128	2.27492	1.29E-02	8.91E-07	4.11E-06	9.42E-07	4.48E-06	1.2927E-02
520324.84	4258293.08	74429.72358	0.27106	0.66986	0.27939	0.72918	1.29E-02	6.36E-07	1.37E-06	6.56E-07	1.44E-06	1.2914E-02
520507.45	4258725.04	74424.95008	0.23785	0.18059	0.22832	0.18898	1.29E-02	5.58E-07	3.70E-07	5.36E-07	3.72E-07	1.2911E-02
520306.18	4258952.92	74410.60542	0.76677	0.21342	0.73054	0.22876	1.29E-02	1.80E-06	4.38E-07	1.72E-06	4.50E-07	1.2911E-02
520393.36	4258293.3	74400.34664	0.23448	0.43564	0.23909	0.47045	1.29E-02	5.50E-07	8.93E-07	5.61E-07	9.26E-07	1.2907E-02
520118.9	4258412.44	74368.84836	0.51686	7.34987	0.55101	8.90376	1.29E-02	1.21E-06	1.51E-05	1.29E-06	1.75E-05	1.2934E-02
520177.45	4258943.13	74363.35587	2.42152	0.36349	2.18704	0.36251	1.29E-02	5.68E-06	7.45E-07	5.13E-06	7.14E-07	1.2910E-02
520484.04	4258361.38	74329.02332	0.2006	0.2688	0.20083	0.28465	1.29E-02	4.71E-07	5.51E-07	4.71E-07	5.60E-07	1.2894E-02
520375.44	4258922.8	74286.04518	0.49518	0.18676	0.47282	0.19781	1.29E-02	1.16E-06	3.83E-07	1.11E-06	3.89E-07	1.2888E-02
520412.42	4258895.64	74253.06182	0.40336	0.17899	0.38603	0.18884	1.29E-02	9.47E-07	3.67E-07	9.06E-07	3.72E-07	1.2881E-02
520442.24	4258313.45	74208.60134	0.21313	0.33489	0.21363	0.35755	1.29E-02	5.00E-07	6.87E-07	5.02E-07	7.04E-07	1.2874E-02
520099.23	4258442.38	74145.44306	0.60121	13.83618	0.65228	15.87986	1.29E-02	1.41E-06	2.84E-05	1.53E-06	3.13E-05	1.2923E-02
520113.85	4258901	73741.63813	7.63126	0.50878	6.47059	0.47072	1.28E-02	1.79E-05	1.04E-06	1.52E-05	9.27E-07	1.2825E-02
520315.05	4258293.05	73707.98484	0.27592	0.71775	0.28422	0.78262	1.28E-02	6.48E-07	1.47E-06	6.67E-07	1.54E-06	1.2789E-02
520275.87	4258302.93	73683.33507	0.30253	0.9582	0.31091	1.05683	1.28E-02	7.10E-07	1.97E-06	7.30E-07	2.08E-06	1.2786E-02
520478.09	4258348.82	73637.53636	0.20134	0.27882	0.20144	0.29499	1.28E-02	4.73E-07	5.72E-07	4.73E-07	5.81E-07	1.2774E-02
520197.27	4258953.1	73566.49119	1.92181	0.32535	1.76036	0.33197	1.28E-02	4.51E-06	6.67E-07	4.13E-06	6.53E-07	1.2770E-02
520168	4258362.6	73564.39921	0.41557	2.92447	0.44361	3.3734	1.28E-02	9.76E-07	6.00E-06	1.04E-06	6.64E-06	1.2774E-02
520429.98	4258878.37	73497.89285	0.36703	0.17482	0.35059	0.18467	1.27E-02	8.62E-07	3.59E-07	8.23E-07	3.64E-07	1.2750E-02
520403.15	4258293.33	73454.41056	0.22907	0.41288	0.23304	0.44507	1.27E-02	5.38E-07	8.47E-07	5.47E-07	8.76E-07	1.2743E-02
520395.22	4258912.77	73444.12269	0.44498	0.18165	0.42512	0.19179	1.27E-02	1.04E-06	3.73E-07	9.98E-07	3.78E-07	1.2741E-02
520316.08	4258952.9	73443.53345	0.7191	0.20712	0.68573	0.22177	1.27E-02	1.69E-06	4.25E-07	1.61E-06	4.37E-07	1.2743E-02
520028.13	4258709.69	73429.87436	2.51027	1.2658	3.31777	1.18093	1.27E-02	5.89E-06	2.60E-06	7.79E-06	2.32E-06	1.2755E-02
520095.11	4258883.27	73247.94411	13.41912	0.55083	11.92286	0.50742	1.27E-02	3.15E-05	1.13E-06	2.80E-05	9.99E-07	1.2766E-02
520032.4	4258744.12	73238.47406	2.97135	1.00074	4.00913	0.94988	1.27E-02	6.98E-06	2.05E-06	9.41E-06	1.87E-06	1.2723E-02
520450.96	4258317.18	73194.4279	0.20922	0.32099	0.20931	0.3418	1.27E-02	4.91E-07	6.58E-07	4.91E-07	6.73E-07	1.2698E-02
520468.73	4258334.8	73056.66198	0.20342	0.29364	0.2033	0.31087	1.27E-02	4.78E-07	6.02E-07	4.77E-07	6.12E-07	1.2674E-02
520256.7	4258963	73017.30338	1.10257	0.24788	1.03889	0.26393	1.27E-02	2.59E-06	5.08E-07	2.44E-06	5.20E-07	1.2671E-02
520246.79	4258963.02	72902.84138	1.1942	0.25751	1.12147	0.27302	1.26E-02	2.80E-06	5.28E-07	2.63E-06	5.37E-07	1.2651E-02
520305.26	4258293.02	72874.23839	0.28069	0.77037	0.28878	0.842	1.26E-02	6.59E-07	1.58E-06	6.78E-07	1.66E-06	1.2644E-02
520453.68	4258848.54	72872.26498	0.32342	0.17201	0.30984	0.18156	1.26E-02	7.59E-07	3.53E-07	7.27E-07	3.57E-07	1.2642E-02
520266.6	4258962.98	72869.13162	1.02006	0.23871	0.964	0.25501	1.26E-02	2.39E-06	4.90E-07	2.26E-06	5.02E-07	1.2644E-02
520432.48	4258303.42	72852.2952	0.21597	0.35265	0.21742	0.37781	1.26E-02	5.07E-07	7.23E-07	5.10E-07	7.44E-07	1.2638E-02
520246.47	4258312.84	72828.53137	0.32476	1.22523	0.33575	1.36538	1.26E-02	7.62E-07	2.51E-06	7.88E-07	2.69E-06	1.2639E-02
520493.04	4258375.25	72827.57084	0.1982	0.25553	0.19816	0.27095	1.26E-02	4.65E-07	5.24E-07	4.65E-07	5.33E-07	1.2634E-02
520462.73	4258834.79	72756.78283	0.30828	0.17161	0.29558	0.18093	1.26E-02	7.24E-07	3.52E-07	6.94E-07	3.56E-07	1.2621E-02
520236.89	4258963.03	72703.30296	1.30106	0.26813	1.21711	0.28271	1.26E-02	3.05E-06	5.50E-07	2.86E-06	5.57E-07	1.2617E-02
520365.55	4258932.82	72687.32106	0.52565	0.1876	0.50187	0.19917	1.26E-02	1.23E-06	3.85E-07	1.18E-06	3.92E-07	1.2610E-02
520226.86	4258322.78	72668.13219	0.34301	1.47111	0.35798	1.64796	1.26E-02	8.05E-07	3.02E-06	8.40E-07	3.24E-06	1.2612E-02
520167.55	4258943.15	72640.93147	2.7728	0.37838	2.48222	0.37184	1.26E-02	6.51E-06	7.76E-07	5.83E-06	7.32E-07	1.2613E-02
520276.5	4258962.97	72521.61579	0.94642	0.23016	0.89668	0.24645	1.26E-02	2.22E-06	4.72E-07	2.11E-06	4.85E-07	1.2584E-02
520444.87	4258862.19	72508.12744	0.33913	0.17237	0.32455	0.18202	1.26E-02	7.96E-07	3.54E-07	7.62E-07	3.58E-07	1.2578E-02
520505.17	4258469.04	72409.0705	0.2053	0.22732	0.20262	0.24105	1.26E-02	4.82E-07	4.66E-07	4.76E-07	4.75E-07	1.2561E-02
520027.12	4258683.15	72383.67715	2.2452	1.5684	2.97529	1.43252	1.26E-02	5.27E-06	3.22E-06	6.99E-06	2.82E-06	1.2573E-02
520412.94	4258293.36	72320.23758	0.22373	0.39189	0.22704	0.42169	1.25E-02	5.25E-07	8.04E-07	5.33E-07	8.30E-07	1.2546E-02
520187.37	4258953.12	72279.60941	2.15505	0.33932	1.96034	0.34191	1.25E-02	5.06E-06	6.96E-07	4.60E-06	6.73E-07	1.2548E-02
520059.56	4258540.66	72255.47644	1.26617	13.34593	1.59225	7.51885	1.25E-02	2.97E-06	2.74E-05	3.74E-06	1.48E-05	1.2581E-02
520158.79	4258939.53	72254.00075	3.15168	0.39545	2.79757	0.38393	1.25E-02	7.40E-06	8.11E-07	6.57E-06	7.56E-07	1.2548E-02
520226.99	4258963.05	72239.41138	1.4218	0.2792	1.32438	0.29243	1.25E-02	3.34E-06	5.73E-07	3.11E-06	5.76E-07	1.2537E-02
520421.02	4258892.08	72160.74402	0.3859	0.17506	0.36829	0.18482	1.25E-02	9.06E-07	3.59E-07	8.65E-07	3.64E-07	1.2518E-02
520177.82	4258352.63	72140.68335	0.39708	2.55821	0.42306	2.93462	1.25E-02	9.32E-07	5.25E-06	9.93E-07	5.78E-06	1.2525E-02
520472.06	4258820.91	72136.80447	0.29362	0.17116	0.28165	0.18014	1.25E-02	6.89E-07	3.51E-07	6.61E-07	3.55E-07	1.2514E-02
520403.75	4258909.24	72090.41399	0.42454	0.17865	0.40573	0.18848	1.25E-02	9.97E-07	3.66E-07	9.53E-07	3.71E-07	1.2506E-02
520266.08	4258302.9	71976.06451	0.30664	1.03916	0.3156	1.14973	1.25E-02	7.20E-07	2.13E-06	7.41E-07	2.26E-06	1.2490E-02
520286.4	4258962.95	71953.63287	0.87978	0.22214	0.83532	0.23817	1.25E-02	2.07E-06	4.56E-07	1.96E-06	4.69E-07	1.2485E-02
520043.45	4258794.86	71882.07167	4.45511	0.75478	6.22755	0.72426	1.25E-02	1.05E-05	1.55E-06	1.46E-05	1.43E-06	1.2496E-02
520104.9	4258897.3	71868.46738	9.79092	0.51861	8.32661	0.4782	1.25E-02	2.30E-05	1.06E-06	1.95E-05	9.41E-07	1.2510E-02
520459.68	4258320.92	71815.63945	0.20531	0.30798	0.20518	0.32706	1.25E-02	4.82E-07	6.32E-07	4.82E-07	6.44E-07	1.2458E-02
520295.47	4258292.99	71756.52355	0.28513	0.82885	0.29314	0.90802	1.24E-02	6.69E-07	1.70E-06	6.88E-07	1.79E-06	1.2451E-02
520385.34	4258922.79	71727.86457	0.469	0.18178	0.44752	0.19226	1.24E-02	1.10E-06	3.73E-07	1.05E-06	3.78E-07	1.2444E-02
520364.03	4258283.21	71681.27339	0.24584	0.52217	0.25271	0.56557	1.24E-02	5.77E-07	1.07E-06	5.93E-07	1.11E-06	1.2436E-02
520514.4	4258708.42	71641.66466	0.22876	0.18043	0.21973	0.18907	1.24E-02	5.37E-07	3.70E-07	5.16E-07	3.72E-07	1.2428E-02
520150.02	4258935.91	71595.17556	3.6139	0.41204	3.18082	0.39534	1.24E-02	8.48E-06	8.45E-07	7.47E-06	7.78E-07	1.2435E-02
520039.85	4258608.63	71588.3185	1.94447	3.89281	2.82138	3.10539	1.24E-02	4.56E-06	7.98E-06	6.62E-06	6.11E-06	1.2442E-02
520354.24	4258283.18	71582.06369	0.25069	0.55545	0.25806	0.6021	1.24E-02	5.89E-07	1.14E-06	6.06E-07	1.19E-06	1.2419E-02
520217.09	4258963.07	71565.51181	1.56084	0.29088	1.44699	0.30222	1.24E-02	3.66E-06	5.97E-07	3.40E-06	5.95E-07	1.2421E-02
520373.81	4258283.24	71561.47992	0.24089	0.49184	0.24719	0.53223	1.24E-02	5.66E-07	1.01E-06	5.80E-07	1.05E-06	1.2415E-02
520027.12	4258673.87	71471.82176	2.15949	1.70166	2.87135	1.54021	1.24E-02	5.07E-06	3.49E-06	6.74E-06	3.03E-06	1.2415E-02

520028.79	4258735.41	71417.85438	2.69044	1.04649	3.55652	0.99022	1.24E-02	6.32E-06	2.15E-06	8.35E-06	1.95E-06	1.2406E-02
520039.88	4258786.27	71365.23448	3.97141	0.78326	5.39742	0.75236	1.24E-02	9.32E-06	1.61E-06	1.27E-05	1.48E-06	1.2403E-02
520296.3	4258962.93	71292.11391	0.82087	0.2149	0.78068	0.23051	1.24E-02	1.93E-06	4.41E-07	1.83E-06	4.54E-07	1.2370E-02
520344.45	4258283.15	71251.34477	0.25538	0.59202	0.26316	0.64215	1.24E-02	6.00E-07	1.21E-06	6.18E-07	1.26E-06	1.2362E-02
520383.6	4258283.27	71188.49988	0.23583	0.46421	0.24156	0.50172	1.23E-02	5.54E-07	9.52E-07	5.67E-07	9.88E-07	1.2350E-02
520109.08	4258422.41	71182.74741	0.53535	9.71718	0.57288	11.77283	1.23E-02	1.26E-06	1.99E-05	1.34E-06	2.32E-05	1.2392E-02
520355.67	4258942.84	71151.98925	0.56033	0.18881	0.53486	0.20094	1.23E-02	1.32E-06	3.87E-07	1.26E-06	3.96E-07	1.2344E-02
520504.86	4258410.35	71016.76731	0.19731	0.2372	0.19582	0.25149	1.23E-02	4.63E-07	4.86E-07	4.60E-07	4.95E-07	1.2319E-02
520422.73	4258293.39	70985.39176	0.21847	0.37247	0.22113	0.40007	1.23E-02	5.13E-07	7.64E-07	5.19E-07	7.88E-07	1.2315E-02
520438.67	4258874.77	70949.3572	0.35128	0.17157	0.33564	0.18117	1.23E-02	8.25E-07	3.52E-07	7.88E-07	3.57E-07	1.2308E-02
520497.07	4258773.76	70942.08348	0.25654	0.17282	0.24614	0.18083	1.23E-02	6.02E-07	3.54E-07	5.78E-07	3.56E-07	1.2306E-02
520481.76	4258806.89	70936.74089	0.27935	0.17047	0.26788	0.17905	1.23E-02	6.56E-07	3.50E-07	6.29E-07	3.52E-07	1.2306E-02
520141.25	4258932.29	70854.49252	4.21801	0.4283	3.67377	0.40625	1.23E-02	9.90E-06	8.78E-07	8.62E-06	8.00E-07	1.2310E-02
520049.05	4258814.29	70850.9085	5.44229	0.69011	8.0621	0.66066	1.23E-02	1.28E-05	1.42E-06	1.89E-05	1.30E-06	1.2323E-02
520086.06	4258879.53	70828.60964	14.04818	0.5539	18.67299	0.51233	1.23E-02	3.30E-05	1.14E-06	4.38E-05	1.01E-06	1.2364E-02
520334.66	4258283.11	70803.91405	0.26002	0.63198	0.26798	0.68622	1.23E-02	6.10E-07	1.30E-06	6.29E-07	1.35E-06	1.2285E-02
520492.42	4258364.97	70802.12089	0.19666	0.25839	0.19682	0.27361	1.23E-02	4.62E-07	5.30E-07	4.62E-07	5.39E-07	1.2282E-02
520177.47	4258953.13	70790.48061	2.43639	0.35333	2.19944	0.35121	1.23E-02	5.72E-06	7.25E-07	5.16E-06	6.91E-07	1.2291E-02
520049.69	4258569.8	70769.13705	1.56866	7.16762	2.19599	4.91445	1.23E-02	3.68E-06	1.47E-05	5.16E-06	9.67E-06	1.2308E-02
520442.27	4258303.45	70760.31357	0.21063	0.33652	0.21162	0.35964	1.23E-02	4.94E-07	6.90E-07	4.97E-07	7.08E-07	1.2275E-02
520477.57	4258338.58	70748.22631	0.19945	0.28169	0.19943	0.29778	1.23E-02	4.68E-07	5.78E-07	4.68E-07	5.86E-07	1.2273E-02
520207.19	4258963.08	70709.51854	1.72329	0.30319	1.58913	0.31201	1.23E-02	4.05E-06	6.22E-07	3.73E-06	6.14E-07	1.2273E-02
520503.5	4258399.75	70657.41896	0.19644	0.24022	0.19533	0.25481	1.23E-02	4.61E-07	4.93E-07	4.59E-07	5.02E-07	1.2257E-02
520036.32	4258777.68	70630.14412	3.55422	0.81389	4.72927	0.78179	1.23E-02	8.34E-06	1.67E-06	1.11E-05	1.54E-06	1.2273E-02
520393.39	4258283.3	70602.1046	0.23075	0.43893	0.23586	0.47375	1.22E-02	5.42E-07	9.00E-07	5.54E-07	9.33E-07	1.2249E-02
520187.64	4258342.66	70569.30035	0.3794	2.2621	0.40326	2.5799	1.22E-02	8.91E-07	4.64E-06	9.47E-07	5.08E-06	1.2251E-02
520285.69	4258292.96	70543.19626	0.28944	0.8934	0.29744	0.98178	1.22E-02	6.80E-07	1.83E-06	6.98E-07	1.93E-06	1.2241E-02
520412.27	4258905.71	70518.01334	0.40546	0.17557	0.38753	0.18515	1.22E-02	9.52E-07	3.60E-07	9.10E-07	3.64E-07	1.2234E-02
520503.94	4258757.36	70504.66167	0.24671	0.17388	0.23661	0.18171	1.22E-02	5.79E-07	3.57E-07	5.55E-07	3.58E-07	1.2231E-02
520487.07	4258352.66	70503.46663	0.19725	0.26705	0.1974	0.28242	1.22E-02	4.63E-07	5.48E-07	4.63E-07	5.56E-07	1.2231E-02
520306.2	4258962.92	70462.66968	0.76752	0.20818	0.73083	0.22323	1.22E-02	1.80E-06	4.27E-07	1.72E-06	4.39E-07	1.2226E-02
520236.68	4258312.81	70433.71435	0.32793	1.34388	0.34089	1.50222	1.22E-02	7.70E-07	2.76E-06	8.00E-07	2.96E-06	1.2224E-02
520114.42	4258911.23	70403.41389	7.50828	0.48691	6.36939	0.45075	1.22E-02	1.76E-05	9.99E-07	1.50E-05	8.87E-07	1.2246E-02
520375.46	4258932.8	70383.8913	0.49667	0.18251	0.47391	0.19344	1.22E-02	1.17E-06	3.74E-07	1.11E-06	3.81E-07	1.2211E-02
520324.87	4258283.08	70237.42513	0.26459	0.67574	0.27253	0.73485	1.22E-02	6.21E-07	1.39E-06	6.40E-07	1.45E-06	1.2186E-02
520256.29	4258302.87	70094.33392	0.31038	1.1305	0.32038	1.25498	1.22E-02	7.29E-07	2.32E-06	7.52E-07	2.47E-06	1.2164E-02
520095.96	4258893.61	70073.95213	13.03243	0.52549	11.43155	0.48454	1.22E-02	3.06E-05	1.08E-06	2.68E-05	9.54E-07	1.2213E-02
520507.37	4258749.16	70052.04587	0.24194	0.17438	0.23204	0.18216	1.22E-02	5.68E-07	3.58E-07	5.45E-07	3.59E-07	1.2152E-02
520027.12	4258664.6	70021.54012	2.06541	1.84842	2.75386	1.65694	1.21E-02	4.85E-06	3.79E-06	6.47E-06	3.26E-06	1.2163E-02
520450.89	4258307.14	69946.85261	0.20691	0.32256	0.20736	0.34387	1.21E-02	4.86E-07	6.62E-07	4.87E-07	6.77E-07	1.2134E-02
520217.07	4258322.75	69933.87479	0.34547	1.62853	0.36284	1.83168	1.21E-02	8.11E-07	3.34E-06	8.52E-07	3.61E-06	1.2138E-02
520429.63	4258888.52	69895.48641	0.36905	0.17171	0.35215	0.18127	1.21E-02	8.66E-07	3.52E-07	8.27E-07	3.57E-07	1.2125E-02
520502.41	4258389.27	69787.01199	0.19536	0.24312	0.19467	0.25786	1.21E-02	4.59E-07	4.99E-07	4.57E-07	5.08E-07	1.2106E-02
520024.46	4258700.84	69781.83533	2.22368	1.32825	2.89884	1.23058	1.21E-02	5.22E-06	2.72E-06	6.81E-06	2.42E-06	1.2121E-02
520462.04	4258845.08	69781.02814	0.31075	0.16886	0.29773	0.17807	1.21E-02	7.30E-07	3.46E-07	6.99E-07	3.51E-07	1.2105E-02
520197.29	4258963.1	69778.64747	1.92115	0.31642	1.76056	0.32196	1.21E-02	4.51E-06	6.49E-07	4.13E-06	6.34E-07	1.2113E-02
520403.18	4258283.33	69753.56669	0.22561	0.41587	0.23015	0.4481	1.21E-02	5.30E-07	8.53E-07	5.40E-07	8.82E-07	1.2101E-02
520395.24	4258922.77	69687.35492	0.44659	0.17786	0.42638	0.18781	1.21E-02	1.05E-06	3.65E-07	1.00E-06	3.70E-07	1.2090E-02
520032.76	4258769.08	69651.60082	3.18997	0.84693	4.17786	0.8126	1.21E-02	7.49E-06	1.74E-06	9.81E-06	1.60E-06	1.2101E-02
520315.08	4258283.05	69514.88171	0.26902	0.72379	0.27683	0.78864	1.21E-02	6.32E-07	1.48E-06	6.50E-07	1.55E-06	1.2061E-02
520345.79	4258952.85	69445.29775	0.59758	0.18999	0.57021	0.20261	1.20E-02	1.40E-06	3.90E-07	1.34E-06	3.99E-07	1.2049E-02
520471.18	4258831.29	69409.13885	0.2963	0.16847	0.28408	0.17741	1.20E-02	6.96E-07	3.46E-07	6.67E-07	3.49E-07	1.2041E-02
520432.51	4258293.42	69404.99645	0.21328	0.35458	0.21534	0.3801	1.20E-02	5.01E-07	7.27E-07	5.06E-07	7.48E-07	1.2040E-02
520256.71	4258973	69332.78075	1.10582	0.24226	1.04159	0.25753	1.20E-02	2.60E-06	4.97E-07	2.45E-06	5.07E-07	1.2032E-02
520050.82	4258825.02	69280.05516	5.78377	0.65605	8.89386	0.62733	1.20E-02	1.36E-05	1.35E-06	2.09E-05	1.23E-06	1.2053E-02
520246.81	4258973.02	69243.85845	1.19798	0.25165	1.12467	0.26628	1.20E-02	2.81E-06	5.16E-07	2.64E-06	5.24E-07	1.2017E-02
520266.61	4258972.98	69197.40448	1.02317	0.23336	0.96655	0.24896	1.20E-02	2.40E-06	4.79E-07	2.27E-06	4.90E-07	1.2008E-02
520167.57	4258953.15	69163.4176	2.78485	0.36708	2.49273	0.35971	1.20E-02	6.54E-06	7.53E-07	5.85E-06	7.08E-07	1.2010E-02
520025.18	4258726.7	69148.81582	2.42133	1.09467	3.14766	1.03122	1.20E-02	5.68E-06	2.25E-06	7.39E-06	2.03E-06	1.2011E-02
520275.9	4258292.93	69075.85183	0.29339	0.96577	0.30179	1.06454	1.20E-02	6.89E-07	1.98E-06	7.09E-07	2.10E-06	1.1986E-02
520365.57	4258942.82	69073.5244	0.52817	0.18354	0.50391	0.19503	1.20E-02	1.24E-06	3.76E-07	1.18E-06	3.84E-07	1.1984E-02
520236.91	4258973.03	68971.36231	1.30241	0.2616	1.21818	0.27526	1.20E-02	3.06E-06	5.37E-07	2.86E-06	5.42E-07	1.1970E-02
520508.82	4258473.37	68948.15442	0.20342	0.22335	0.20055	0.23681	1.20E-02	4.78E-07	4.58E-07	4.71E-07	4.66E-07	1.1961E-02
520276.51	4258972.97	68843.98807	0.94879	0.22495	0.89852	0.24064	1.19E-02	2.23E-06	4.61E-07	2.11E-06	4.74E-07	1.1946E-02
520492.57	4258792.41	68842.1122	0.26449	0.1695	0.25365	0.17763	1.19E-02	6.21E-07	3.48E-07	5.95E-07	3.50E-07	1.1942E-02
520412.97	4258283.36	68833.76723	0.2206	0.39434	0.22445	0.42436	1.19E-02	5.18E-07	8.09E-07	5.27E-07	8.35E-07	1.1942E-02
520459.51	4258310.83	68812.64333	0.20319	0.30954	0.20324	0.32916	1.19E-02	4.77E-07	6.35E-07	4.77E-07	6.48E-07	1.1937E-02
520158.47	4258949.39	68804.59835	3.18073	0.38363	2.82222	0.37136	1.19E-02	7.47E-06	7.87E-07	6.63E-06	7.31E-07	1.1949E-02
520138.58	4258382.5	68796.33599	0.44579	4.77466	0.47287	5.64604	1.19E-02	1.05E-06	9.79E-06	1.11E-06	1.11E-05	1.1955E-02
520420.79	4258902.18	68665.32267	0.3879	0.17212	0.3701	0.18157	1.19E-02	9.11E-07	3.53E-07	8.69E-07	3.57E-07	1.1912E-02
520105.57	4258907.57	68632.40515	9.51588	0.49522	8.10751	0.45717	1.19E-02	2.23E-05	1.02E-06	1.90E-05	9.00E-07	1.1947E-02
520227.01	4258973.05	68598.51732	1.42484	0.27246	1.32701	0.28469	1.19E-02	3.35E-06	5.59E-07	3.12E-06	5.60E-07	1.1906E-02
520514.24	4258732.76	68596.51	0.23274	0.17493	0.22322	0.18282	1.19E-02	5.46E-07	3.59E-07	5.24E-07	3.60E-07	1.1900E-02
520187.39	4258963.12	68592.34235	2.15336	0.32967	1.96013	0.33126	1.19E-02	5.06E-06	6.76E-07	4.60E-06	6.52E-07	1.1908E-02
520305.29	4258283.02	68588.16073	0.27323	0.77682	0.28094	0.84826	1.19E-02	6.41E-07	1.59E-06	6.60E-07	1.67E-06	1.1901E-02
520501.53	4258378.88	68547.89768	0.19412	0.2459	0.19382	0.26064	1.19E-02	4.56E-07	5.04E-07	4.55E-07	5.13E-07	1.1891E-02
520480.61	4258817.37	68547.60049	0.28232	0.16795	0.27066	0.17653	1.19E-02	6.63E-07	3.44E-07	6.35E-07	3.47E-07	1.1891E-02
520403.69	4258919.27	68477.00097	0.42627	0.1751	0.40714	0.1847	1.19E-02	1.00E-06	3.59E-07	9.56E-07	3.64E-07	1.1880E-02
520286.41	4258972.95	68359.63046	0.8827	0.21722	0.83765	0.23277	1.19E-02	2.07E-06	4.46E-07	1.97E-06	4.58E-07	1.1862E-02
520029.19	4258760.49	68348.30521	2.85681	0.88315	3.71783	0.84486	1.19E-02	6.71E-06	1.81E-06	8.73E-06	1.66E-06	1.1874E-02
520447.37	4258871.17	68310.96164	0.33647	0.16835	0.3216	0.17769	1.18E-02	7.90E-07	3.45E-07	7.55E-07	3.50E-07	1.1850E-02
520158.21	4258362.56	68301.13401	0.41072	3.40506	0.43711	3.95121	1.18E-02	9.64E-07	6.98E-06	1.03E-06	7.78E-06	1.1863E-02
520385.36	4258932.79	68233.39609	0.47144	0.17805	0.44959	0.18842	1.18E-02	1.11E-06	3.65E-07	1.06E-06	3.71E-07	1.1838E-02
520486.41	4258342.37	68186.18428	0.19557	0.27014	0.19562	0.28536	1.18E-02	4.59E-07	5.54E-07	4.59E-07	5.62E-07	1.1829E-02
520128.76	4258392.47	68174.93712	0.46336	5.83713	0.49082	6.99866	1.18E-02	1.09E-06	1.20E-05	1.15E-06	1.38E-05	1.1853E-02
520149.36	4258945.63	68149.17364	3.66653	0.39958	3.22456	0.38226	1.18E-02	8.61E-06	8.20E-07	7.57E-06	7.52E-07	1.1838E-02
520087.01	4258889.92	68087.5125	15.52568	0.52874	17.48178	0.48935	1.18E-02	3.64E-05	1.08E-06	4.10E-05	9.63E-07	1.1889E-02
520027.12	4258655.32	68057.89442	1.96193	2.00876	2.62136	1.78219	1.18E-02	4.61E-06	4.12E-06	6.15E-06	3.51E-06	1.1823E-02
520217.11	4258973.07	68041.16092	1.56651	0.2839	1.45198	0.29416	1.18E-02	3.68E-06	5.82E-07	3.41E-06	5.79E-07	1.1810E-02
520521.36	4258691.81	68034.16547	0.22023	0.18014	0.21176	0.18876	1.18E-02	5.17E-07	3.69E-07	4.97E-07	3.72E-07	1.1802E-02
520246.5	4258302.84	68032.23737	0.31363	1.23436	0.32519	1.37487	1.18E-02	7.36E-07	2.53E-06	7.63E-07	2.71E-06	1.1807E-02
520364.06	4258273.21	67916.75887	0.24102	0.5267	0.248	0.56976	1.18E-02	5.66E-07	1.08E-06	5.82E-07	1.12E-06	1.1783E-02
520226.89	4258312.78	67895.59349	0.33042	1.48053	0.34568	1.66022	1.18E-02	7.76E-07	3.04E-06	8.12E-07	3.27E-06	1.1784E-02
520373.85	4258273.24	67852.18843	0.23642	0.49599	0.24297	0.53609	1.18E-02	5.55E-07	1.02E-06	5.70E-07	1.06E-06	1.1772E-02
520354.27	4258273.18	67796.3755	0.24551	0.56027	0.25282	0.60661	1.18E-02	5.76E-07	1.15E-06	5.94E-07	1.19E-06	1.1762E-02
520296.32	4258972.93	67741.52632	0.82349	0.21012	0.78272	0.22534	1.17E-02	1.93E-06	4.31E-07	1.84E-06	4.44E-07	1.1754E-02
520438.23	4258884.96	67696.70348	0.35344	0.16853	0.3373	0.17788	1.17E-02	8.30E-07	3.46E-07	7.92E-07	3.50E-07	1.1744E-02
520355.69	4258952.84	67686.12223	0.56291	0.18471	0.53695	0.1967	1.17E-02	1.32E-06	3.79E-07	1.26E-06	3.87E-07	1.1743E-02
520422.76	4258283.39	67590.65824	0.21554	0.37479	0.2188	0.40259	1.17E-02	5.06E-07	7.69E-07	5.14E-07	7.92E-07	1.1726E-02
520052.37	4258835.65	67556.71051	6.08535	0.62441	9.76329	0.59647	1.17E-02	1.43E-05	1.28E-06	2.29E-05	1.17E-06	1.1757E-02
520442.3	4258293.45	67538.0819	0.20812	0.33822	0.20968	0.36172	1.17E-02	4.89E-07	6.94E-07	4.92E-07	7.12E-07	1.1717E-02
520383.63	4258273.27	67512.85794	0.23168	0.46812	0.23778	0.50533	1.17E-02	5.44E-07	9.60E-07	5.58E-07	9.95E-07	1.1713E-02
520168.03	4258352.6	67504.78011	0.39391	2.94239	0.41934	3.3937	1.17E-02	9.25E-07	6.03E-06	9.84E-07	6.68E-06	1.1723E-02
520295.51	4258282.99	67500.63187	0.27724	0.83535	0.28497	0.91454	1.17E-02	6.51E-07	1.71E-06	6.69E-07	1.80E-06	1.1713E-02
520344.48	4258273.15	67473.69235	0.24987	0.59706	0.25738	0.64699	1.17E-02	5.87E-07	1.22E-06	6.04E-07	1.27E-06	1.1707E-02
520140.25	4258941.88	67470.77132	4.31533	0.41514	3.75202	0.39269	1.17E-02	1.01E-05	8.51E-07	8.81E-06	7.73E-07	1.1723E-02
520266.11	4258292.9	67425.01761	0.297	1.04705	0.30624	1.15779	1.17E-02	6.97E-07	2.15E-06	7.19E-07	2.28E-06	1.1700E-02
520335.9	4258962.87	67419.34687	0.63678	0.19101	0.60725	0.2041	1.17E-02	1.49E-06	3.92E-07	1.43E-06	4.02E-07	1.1697E-02
520468.13	4258314.52	67358.55545	0.19948	0.29735	0.19928	0.31539	1.17E-02	4.68E-07	6.10E-07	4.68E-07	6.21E-07	1.1685E-02
520114.95	4258921.44	67273.58845	7.40312	0.46664	6.2837	0.4322	1.17E-02	1.74E-05	9.57E-07	1.48E-05	8.51E-07	1.1702E-02
520207.21	4258973.08	67266.71059	1.73008	0.29576	1.59516	0.30346	1.17E-02	4.06E-06	6.07E-07	3.74E-06	5.97E-07	1.1676E-02
520177.49	4258963.13	67225.33608	2.4331	0.34287	2.19856	0.33992	1.17E-02	5.71E-06	7.03E-07	5.16E-06	6.69E-07	1.1672E-02
520490.42	4258803.31	67186.07901	0.26861	0.16726	0.25749	0.17545	1.17E-02	6.31E-07	3.43E-07	6.05E-07	3.45E-07	1.1655E-02
520039.81	4258598.93	67166.03637	1.71612	4.18897	2.44419	3.28564	1.16E-02	4.03E-06	8.59E-06	5.74E-06	6.47E-06	1.1674E-02
520496.04	4258356.5	67078.66314	0.19318	0.256	0.19332	0.27071	1.16E-02	4.54E-07	5.25E-07	4.54E-07	5.33E-07	1.1636E-02
520500.8	4258368.55	67065.01065	0.19276	0.24873	0.19275	0.26332	1.16E-02	4.53E-07	5.10E-07	4.53E-07	5.18E-07	1.1634E-02
520412.14	4258915.77	67037.98023	0.40737	0.17215	0.38889	0.1815	1.16E-02	9.56E-07	3.53E-07	9.13E-07	3.57E-07	1.1630E-02
520334.69	4258273.11	67025.98398	0.25414	0.6372	0.26168	0.6914	1.16E-02	5.97E-07	1.31E-06	6.14E-07	1.36E-06	1.1629E-02
520393.42	4258273.3	67020.78113	0.22692	0.44246	0.23249	0.47707	1.16E-02	5.33E-07	9.07E-07	5.46E-07	9.39E-07	1.1627E-02
520096.72	4258903.92	67014.99478	12.62655	0.50175	11.00146	0.46318	1.16E-02	2.96E-05	1.03E-06	2.58E-05	9.12E-07	1.1681E-02
520461.44	4258855.34	66913.50231	0.31304	0.16616	0.29969	0.17523	1.16E-02	7.35E-07	3.41E-07	7.04E-07	3.45E-07	1.1608E-02
520375.47	4258942.8	66900.505	0.49876	0.17856	0.47557	0.18942	1.16E-02	1.17E-06	3.66E-07	1.12E-06	3.73E-07	1.1607E-02
520450.83	4258297.1	66846.34587	0.20458	0.32427	0.20553	0.34601	1.16E-02	4.80E-07	6.65E-07	4.83E-07	6.81E-07	1.1597E-02
520207.28	4258322.72	66804.2752	0.34649	1.81472	0.36645	2.04556	1.16E-02	8.13E-07	3.72E-06	8.60E-07	4.03E-06	1.1596E-02
520470.4	4258841.62	66742.30132	0.29879	0.16581	0.28629	0.17468	1.16E-02	7.01E-07	3.40E-07	6.72E-07	3.44E-07	1.1578E-02
520118.94	4258402.44	66727.24285	0.48045	7.38365	0.5096	8.91	1.16E-02	1.13E-06	1.51E-05	1.20E-06	1.75E-05	1.1609E-02
520025.63	4258751.9	66682.22047	2.54787	0.92172	3.31277	0.87782	1.16E-02	5.98E-06	1.89E-06	7.78E-06	1.73E-06	1.1583E-02
520512.12	4258461.42	66679.69661	0.19995	0.22268	0.19738	0.2358	1.16E-02	4.69E-07	4.57E-07	4.63E-07	4.64E-07	1.1567E-02
520429.31	4258898.66	66569.60073	0.37101	0.16872	0.35375	0.17799	1.15E-02	8.71E-07	3.46E-07	8.30E-07	3.50E-07	1.1549E-02
520177.85	4258342.63	66473.54191	0.37748	2.57704	0.40185	2.95076	1.15E-02	8.86E-07	5.29E-06	9.43E-07	5.81E-06	1.1542E-02
520021.57	4258717.99	66458.6131	2.17388	1.14433	2.78436	1.07234	1.15E-02	5.10E-06	2.35E-06	6.54E-06	2.11E-06	1.1543E-02
520324.9	4258273.08	66406.98762	0.25827	0.6812	0.26573	0.74031	1.15E-02	6.06E-07	1.40E-06	6.24E-07	1.46E-06	1.1522E-02
520521.1	4258716.36	66367.67141	0.22406	0.17495	0.215	0.1831	1.15E-02	5.26E-07	3.59E-07	5.05E-07	3.60E-07	1.1513E-02
520197.31	4258973.1	66357.38838	1.92534	0.30817	1.76463	0.31263	1.15E-02	4.52E-06	6.32E-07	4.14E-06	6.15E-07	1.1519E-02
520403.21	4258273.33	66357.09375	0.22214	0.41886	0.22713	0.45109	1.15E-02	5.22E-07	8.59E-07	5.33E-07	8.88E-07	1.1512E-02
520512.06	4258481.89	66312.22942	0.20233	0.21944	0.19912	0.23262	1.15E-02	4.75E-07	4.50E-07	4.67E-07	4.58E-07	1.1503E-02
520285.72	4258282.96	66293.51468	0.28109	0.90021	0.28904	0.98869	1.15E-02	6.60E-07	1.85E-06	6.79E-07	1.95E-06	1.1503E-02
520099.26	4258432.38	66246.05501	0.5517	13.86168	0.59523	15.91144	1.15E-02	1.30E-06	2.84E-05	1.40E-06	3.13E-05	1.1553E-02
520395.26	4258932.77	66213.65843	0.44808	0.17413	0.42758	0.18393	1.15E-02	1.05E-06	3.57E-07	1.00E-06	3.62E-07	1.1487E-02
520345.8	4258962.85	66176.33859	0.59981	0.18607	0.57234	0.19851	1.15E-02	1.41E-06	3.82E-07	1.34E-06	3.91E-07	1.1482E-02
520432.55	4258283.42	66176.27132	0.21055	0.35665	0.21323	0.38241	1.15E-02	4.94E-07	7.31E-07	5.01E-07	7.53E-07	1.1480E-02
520479.62	4258827.79	66156.733	0.28502	0.16541	0.27318	0.17397	1.15E-02	6.69E-07	3.39E-07	6.41E-07	3.42E-07	1.1477E-02
520365.59	4258952.82	66098.07055	0.53202	0.17999	0.50738	0.19137	1.15E-02	1.25E-06	3.69E-07	1.19E-06	3.77E-07	1.1468E-02
520036.17	4258801.44	66032.06856	3.62419	0.70783	4.79642	0.68289	1.15E-02	8.51E-06	1.45E-06	1.13E-05	1.34E-06	1.1476E-02
520459.36	4258300.75	65906.74014	0.20103	0.3112	0.20145	0.33128	1.14E-02	4.72E-07	6.38E-07	4.73E-07	6.52E-07	1.1433E-02
520106.18	4258917.82	65783.13274	9.40007	0.47465	7.97682	0.43842	1.14E-02	2.21E-05	9.73E-07	1.87E-05	8.63E-07	1.1452E-02
520236.71	4258302.81	65765.37016	0.31622	1.35357	0.32982	1.51215	1.14E-02	7.42E-07	2.78E-06	7.74E-07	2.98E-06	1.1414E-02
520053.74	4258846.21	65743.21763	6.40646	0.59484	10.72055	0.56781	1.14E-02	1.50E-05	1.22E-06	2.52E-05	1.12E-06	1.1445E-02
520167.59	4258963.15	65742.18441	2.78105	0.3558	2.49206	0.34783	1.14E-02	6.53E-06	7.30E-07	5.85E-06	6.85E-07	1.1416E-02
520027.12	4258646.05	65653.08603	1.84887	2.18087	2.47343	1.91373	1.14E-02	4.34E-06	4.47E-06	5.81E-06	3.77E-06	1.1406E-02
520456.07	4258867.56	65642.11288	0.32256	0.1652	0.30842	0.17427	1.14E-02	7.57E-07	3.39E-07	7.24E-07	3.43E-07	1.1387E-02
520256.32	4258292.87	65635.54699	0.30024	1.13871	0.31074	1.26344	1.14E-02	7.05E-07	2.34E-06	7.30E-07	2.49E-06	1.1390E-02
520020.79	4258692	65633.36835	1.96546	1.38942	2.53132	1.27805	1.14E-02	4.61E-06	2.85E-06	5.94E-06	2.52E-06	1.1400E-02
520315.11	4258273.05	65569.84347	0.26216	0.72966	0.2696	0.79429	1.14E-02	6.15E-07	1.50E-06	6.33E-07	1.56E-06	1.1377E-02
520476.75	4258318.21	65542.8319	0.19575	0.28592	0.1955	0.30248	1.14E-02	4.60E-07	5.86E-07	4.59E-07	5.95E-07	1.1370E-02
520413	4258273.36	65503.32213	0.21736	0.39715	0.22175	0.42716	1.14E-02	5.10E-07	8.15E-07	5.21E-07	8.41E-07	1.1364E-02
520158.57	4258959.43	65471.78454	3.17595	0.37128	2.82081	0.35868	1.14E-02	7.46E-06	7.61E-07	6.62E-06	7.06E-07	1.1371E-02
520087.87	4258900.27	65442.37231	15.23026	0.50535	16.54014	0.46802	1.14E-02	3.58E-05	1.04E-06	3.88E-05	9.21E-07	1.1427E-02
520032.4	4258792.34	65405.0401	3.24496	0.73558	4.22096	0.70951	1.13E-02	7.62E-06	1.51E-06	9.91E-06	1.40E-06	1.1365E-02
520420.59	4258912.28	65392.80037	0.38976	0.16894	0.3716	0.17813	1.13E-02	9.15E-07	3.46E-07	8.72E-07	3.51E-07	1.1345E-02
520326.02	4258972.89	65346.5309	0.67945	0.19218	0.64747	0.20573	1.13E-02	1.60E-06	3.94E-07	1.52E-06	4.05E-07	1.1338E-02
520446.84	4258881.39	65342.3547	0.33872	0.16541	0.32332	0.17454	1.13E-02	7.95E-07	3.39E-07	7.59E-07	3.44E-07	1.1336E-02
520041.85	4258821.31	65297.38129	4.32005	0.64827	5.95521	0.62472	1.13E-02	1.01E-05	1.33E-06	1.40E-05	1.23E-06	1.1352E-02
520495.25	4258346.15	65252.13538	0.19172	0.25898	0.19179	0.2735	1.13E-02	4.50E-07	5.31E-07	4.50E-07	5.38E-07	1.1320E-02
520187.41	4258973.12	65214.91631	2.15378	0.32055	1.96154	0.32119	1.13E-02	5.06E-06	6.57E-07	4.61E-06	6.32E-07	1.1322E-02
520217.1	4258312.75	65205.17484	0.33203	1.63937	0.34962	1.84404	1.13E-02	7.79E-07	3.36E-06	8.21E-07	3.63E-06	1.1318E-02
520507.49	4258772.83	65143.92133	0.24558	0.16788	0.23549	0.17543	1.13E-02	5.77E-07	3.44E-07	5.53E-07	3.45E-07	1.1301E-02
520489.16	4258813.84	65120.71342	0.27161	0.16477	0.26028	0.17297	1.13E-02	6.38E-07	3.38E-07	6.11E-07	3.40E-07	1.1297E-02
520403.64	4258929.3	65102.80736	0.42794	0.17151	0.40835	0.18095	1.13E-02	1.00E-06	3.52E-07	9.59E-07	3.56E-07	1.1294E-02
520385.37	4258942.79	65100.47988	0.47404	0.17446	0.45182	0.18474	1.13E-02	1.11E-06	3.58E-07	1.06E-06	3.64E-07	1.1294E-02
520149.56	4258955.71	64995.38742	3.66618	0.38622	3.22538	0.36889	1.13E-02	8.61E-06	7.92E-07	7.57E-06	7.26E-07	1.1291E-02
520524.54	4258708.16	64965.74142	0.21991	0.17483	0.21112	0.18306	1.13E-02	5.16E-07	3.59E-07	4.96E-07	3.60E-07	1.1270E-02
520275.93	4258282.93	64924.67495	0.28467	0.97257	0.29318	1.07187	1.13E-02	6.68E-07	1.99E-06	6.88E-07	2.11E-06	1.1266E-02
520510.88	4258764.72	64917.89809	0.24097	0.16845	0.23105	0.1759	1.13E-02	5.66E-07	3.45E-07	5.42E-07	3.46E-07	1.1262E-02
520022.07	4258743.3	64887.8951	2.30741	0.96113	2.96702	0.9117	1.13E-02	5.42E-06	1.97E-06	6.97E-06	1.79E-06	1.1271E-02
520049.65	4258560.1	64712.33512	1.35979	7.40139	1.80865	5.08338	1.12E-02	3.19E-06	1.52E-05	4.25E-06	1.00E-05	1.1257E-02
520467.89	4258304.4	64641.90467	0.19746	0.29908	0.19751	0.31754	1.12E-02	4.64E-07	6.13E-07	4.64E-07	6.25E-07	1.1214E-02
520355.7	4258962.84	64628.84307	0.56521	0.18117	0.5395	0.19298	1.12E-02	1.33E-06	3.72E-07	1.27E-06	3.80E-07	1.1213E-02
520305.32	4258273.02	64606.98068	0.26592	0.78293	0.27338	0.85413	1.12E-02	6.24E-07	1.61E-06	6.42E-07	1.68E-06	1.1210E-02
520437.84	4258895.13	64594.51902	0.35544	0.1657	0.33895	0.17478	1.12E-02	8.34E-07	3.40E-07	7.96E-07	3.44E-07	1.1206E-02
520028.63	4258783.24	64550.46512	2.91721	0.76526	3.73952	0.73727	1.12E-02	6.85E-06	1.57E-06	8.78E-06	1.45E-06	1.1215E-02
520442.33	4258283.45	64528.05353	0.20561	0.33999	0.20775	0.36379	1.12E-02	4.83E-07	6.97E-07	4.88E-07	7.16E-07	1.1194E-02
520140.55	4258951.99	64438.24372	4.30436	0.40056	3.74591	0.37852	1.12E-02	1.01E-05	8.22E-07	8.79E-06	7.45E-07	1.1197E-02
520422.79	4258273.39	64410.3397	0.21256	0.37726	0.21639	0.40512	1.12E-02	4.99E-07	7.74E-07	5.08E-07	7.97E-07	1.1174E-02
520364.09	4258263.21	64399.64015	0.23617	0.53124	0.24315	0.57385	1.12E-02	5.54E-07	1.09E-06	5.71E-07	1.13E-06	1.1173E-02
520373.88	4258263.24	64362.75175	0.2319	0.50028	0.23859	0.53992	1.12E-02	5.44E-07	1.03E-06	5.60E-07	1.06E-06	1.1167E-02
520335.92	4258972.87	64262.77211	0.63877	0.18705	0.60914	0.19993	1.11E-02	1.50E-06	3.84E-07	1.43E-06	3.94E-07	1.1150E-02
520354.3	4258263.18	64253.98329	0.24033	0.56504	0.24747	0.61097	1.11E-02	5.64E-07	1.16E-06	5.81E-07	1.20E-06	1.1148E-02
520097.41	4258914.2	64230.86681	12.32647	0.48005	10.6813	0.44357	1.11E-02	2.89E-05	9.85E-07	2.51E-05	8.73E-07	1.1196E-02
520383.67	4258263.27	64147.34873	0.22753	0.47191	0.23385	0.50882	1.11E-02	5.34E-07	9.68E-07	5.49E-07	1.00E-06	1.1129E-02

520109.12	4258412.41	64059.94829	0.49613	9.76209	0.52838	11.79485	1.11E-02	1.16E-06	2.00E-05	1.24E-06	2.32E-05	1.1157E-02
520517.67	4258748.5	64053.48207	0.23203	0.16926	0.22241	0.17664	1.11E-02	5.45E-07	3.47E-07	5.22E-07	3.48E-07	1.1112E-02
520177.5	4258973.13	64027.29189	2.43929	0.33327	2.20485	0.32946	1.11E-02	5.73E-06	6.84E-07	5.18E-06	6.49E-07	1.1117E-02
520375.49	4258952.8	63973.74825	0.5023	0.17512	0.47869	0.1859	1.11E-02	1.18E-06	3.59E-07	1.12E-06	3.66E-07	1.1099E-02
520112.94	4258930.6	63958.55402	7.79797	0.45014	6.6155	0.4167	1.11E-02	1.83E-05	9.23E-07	1.55E-05	8.20E-07	1.1129E-02
520043.52	4258832	63955.53049	4.55647	0.617	6.40691	0.59431	1.11E-02	1.07E-05	1.27E-06	1.50E-05	1.17E-06	1.1121E-02
520344.51	4258263.15	63925.68401	0.24436	0.60198	0.25154	0.65164	1.11E-02	5.74E-07	1.23E-06	5.91E-07	1.28E-06	1.1091E-02
520451.31	4258287.29	63917.58639	0.20205	0.3251	0.2035	0.34711	1.11E-02	4.74E-07	6.67E-07	4.78E-07	6.83E-07	1.1089E-02
520054.96	4258856.71	63870.77833	6.71133	0.56739	11.76173	0.54129	1.11E-02	1.58E-05	1.16E-06	2.76E-05	1.07E-06	1.1124E-02
520029.93	4258628.06	63823.44766	1.73978	2.66306	2.36914	2.26801	1.11E-02	4.08E-06	5.46E-06	5.56E-06	4.46E-06	1.1089E-02
520412.02	4258925.83	63819.55135	0.40907	0.16881	0.39028	0.17796	1.11E-02	9.60E-07	3.46E-07	9.16E-07	3.50E-07	1.1072E-02
520478.76	4258838.16	63785.0792	0.28749	0.16288	0.27547	0.17139	1.11E-02	6.75E-07	3.34E-07	6.47E-07	3.37E-07	1.1065E-02
520393.45	4258263.3	63724.40756	0.22308	0.44596	0.22897	0.48033	1.11E-02	5.24E-07	9.15E-07	5.38E-07	9.46E-07	1.1056E-02
520246.53	4258292.84	63691.28425	0.30299	1.24295	0.31515	1.38379	1.10E-02	7.11E-07	2.55E-06	7.40E-07	2.72E-06	1.1054E-02
520515.3	4258469.76	63651.13446	0.19883	0.21834	0.19596	0.23127	1.10E-02	4.67E-07	4.48E-07	4.60E-07	4.55E-07	1.1042E-02
520499.09	4258799.72	63607.67095	0.25842	0.1642	0.24769	0.172	1.10E-02	6.07E-07	3.37E-07	5.81E-07	3.39E-07	1.1034E-02
520059.52	4258530.96	63578.99187	1.09112	13.28282	1.32468	7.65591	1.10E-02	2.56E-06	2.72E-05	3.11E-06	1.51E-05	1.1075E-02
520429.03	4258908.78	63574.03288	0.37301	0.16582	0.35546	0.17482	1.10E-02	8.76E-07	3.40E-07	8.35E-07	3.44E-07	1.1029E-02
520295.54	4258272.99	63526.15713	0.26951	0.84164	0.27718	0.92064	1.10E-02	6.33E-07	1.73E-06	6.51E-07	1.81E-06	1.1023E-02
520197.49	4258322.69	63512.19159	0.34622	2.03507	0.36802	2.29825	1.10E-02	8.13E-07	4.17E-06	8.64E-07	4.52E-06	1.1026E-02
520334.72	4258263.11	63450.61533	0.24826	0.6423	0.25539	0.69631	1.10E-02	5.83E-07	1.32E-06	6.00E-07	1.37E-06	1.1009E-02
520505.02	4258360.35	63447.12707	0.18913	0.24596	0.18919	0.26001	1.10E-02	4.44E-07	5.04E-07	4.44E-07	5.12E-07	1.1007E-02
520024.85	4258774.14	63442.27128	2.62765	0.79695	3.32931	0.76613	1.10E-02	6.17E-06	1.63E-06	7.82E-06	1.51E-06	1.1021E-02
520266.14	4258282.9	63358.07748	0.28785	1.05401	0.29739	1.16551	1.10E-02	6.76E-07	2.16E-06	6.98E-07	2.29E-06	1.0995E-02
520226.92	4258302.78	63341.99738	0.31805	1.49118	0.33389	1.67045	1.10E-02	7.47E-07	3.06E-06	7.84E-07	3.29E-06	1.0994E-02
520017.96	4258709.28	63312.58018	1.94396	1.1946	2.46491	1.11272	1.10E-02	4.56E-06	2.45E-06	5.79E-06	2.19E-06	1.0996E-02
520432.58	4258273.42	63187.52179	0.20782	0.35875	0.21106	0.38468	1.10E-02	4.88E-07	7.36E-07	4.96E-07	7.57E-07	1.0962E-02
520403.24	4258263.33	63154.1056	0.2186	0.42203	0.22398	0.45408	1.10E-02	5.13E-07	8.66E-07	5.26E-07	8.94E-07	1.0957E-02
520494.57	4258335.85	63151.45531	0.19004	0.26218	0.19011	0.27642	1.10E-02	4.46E-07	5.38E-07	4.46E-07	5.44E-07	1.0955E-02
520476.42	4258308.05	63116.51471	0.19389	0.28764	0.19372	0.30462	1.09E-02	4.55E-07	5.90E-07	4.55E-07	6.00E-07	1.0949E-02
520316.13	4258982.9	63070.3292	0.72521	0.19342	0.69023	0.20733	1.09E-02	1.70E-06	3.97E-07	1.62E-06	4.08E-07	1.0943E-02
520460.29	4258291.14	63051.47066	0.19845	0.31125	0.19928	0.33156	1.09E-02	4.66E-07	6.38E-07	4.68E-07	6.53E-07	1.0938E-02
520488.07	4258824.29	63012.95449	0.27435	0.16232	0.26282	0.17052	1.09E-02	6.44E-07	3.33E-07	6.17E-07	3.36E-07	1.0931E-02
520395.27	4258942.77	63003.73247	0.44945	0.17048	0.42875	0.18017	1.09E-02	1.06E-06	3.50E-07	1.01E-06	3.55E-07	1.0930E-02
520464.77	4258863.96	62963.87777	0.30949	0.16211	0.29601	0.1709	1.09E-02	7.27E-07	3.32E-07	6.95E-07	3.36E-07	1.0923E-02
520345.82	4258972.85	62946.85057	0.60106	0.18204	0.57343	0.1943	1.09E-02	1.41E-06	3.73E-07	1.35E-06	3.82E-07	1.0921E-02
520256.75	4258993	62932.58317	1.11493	0.23211	1.04949	0.24583	1.09E-02	2.62E-06	4.76E-07	2.46E-06	4.84E-07	1.0921E-02
520455.44	4258877.83	62920.80106	0.32489	0.16242	0.31023	0.1713	1.09E-02	7.63E-07	3.33E-07	7.28E-07	3.37E-07	1.0915E-02
520365.6	4258962.82	62919.96573	0.53351	0.17627	0.50876	0.18751	1.09E-02	1.25E-06	3.62E-07	1.19E-06	3.69E-07	1.0916E-02
520027.12	4258636.77	62917.32357	1.72569	2.36234	2.3111	2.04783	1.09E-02	4.05E-06	4.84E-06	5.43E-06	4.03E-06	1.0931E-02
520517.32	4258423.32	62915.68398	0.19194	0.22428	0.19001	0.23713	1.09E-02	4.51E-07	4.60E-07	4.46E-07	4.67E-07	1.0914E-02
520148.43	4258362.53	62902.85888	0.40364	4.01685	0.42677	4.69858	1.09E-02	9.48E-07	8.24E-06	1.00E-06	9.25E-06	1.0930E-02
520088.64	4258910.58	62896.04374	14.95675	0.48363	15.80866	0.44822	1.09E-02	3.51E-05	9.92E-07	3.71E-05	8.82E-07	1.0983E-02
520246.84	4258993.02	62885.32253	1.20911	0.24104	1.13444	0.25399	1.09E-02	2.84E-06	4.94E-07	2.66E-06	5.00E-07	1.0914E-02
520058.92	4258868.33	62864.21256	7.93548	0.5435	16.4273	0.51675	1.09E-02	1.86E-05	1.11E-06	3.86E-05	1.02E-06	1.0963E-02
520266.65	4258992.98	62843.35441	1.03173	0.22373	0.97392	0.23794	1.09E-02	2.42E-06	4.59E-07	2.29E-06	4.68E-07	1.0906E-02
520018.5	4258734.71	62830.74122	2.09531	1.00158	2.65827	0.94602	1.09E-02	4.92E-06	2.05E-06	6.24E-06	1.86E-06	1.0913E-02
520324.93	4258263.08	62767.88528	0.25196	0.68658	0.25905	0.74544	1.09E-02	5.92E-07	1.41E-06	6.08E-07	1.47E-06	1.0891E-02
520236.94	4258993.03	62717.48341	1.31651	0.25056	1.23068	0.26238	1.09E-02	3.09E-06	5.14E-07	2.89E-06	5.16E-07	1.0885E-02
520158.25	4258352.56	62715.68744	0.38856	3.42407	0.41173	3.97105	1.09E-02	9.12E-07	7.02E-06	9.67E-07	7.82E-06	1.0894E-02
520138.61	4258372.5	62676.54897	0.41876	4.80034	0.44195	5.66578	1.09E-02	9.83E-07	9.85E-06	1.04E-06	1.12E-05	1.0894E-02
520167.6	4258973.15	62638.40908	2.78477	0.34527	2.49709	0.33673	1.09E-02	6.54E-06	7.08E-07	5.86E-06	6.63E-07	1.0878E-02
520039.77	4258589.23	62606.54953	1.52089	4.44824	2.12594	3.4428	1.09E-02	3.57E-06	9.12E-06	4.99E-06	6.78E-06	1.0883E-02
520276.55	4258992.97	62583.282	0.95738	0.21584	0.90589	0.2303	1.09E-02	2.25E-06	4.43E-07	2.13E-06	4.53E-07	1.0860E-02
520524.46	4258732.28	62581.08206	0.22351	0.16962	0.21423	0.17716	1.09E-02	5.25E-07	3.48E-07	5.03E-07	3.49E-07	1.0856E-02
520103.83	4258926.84	62540.81202	10.07805	0.45699	8.5717	0.42235	1.08E-02	2.37E-05	9.37E-07	2.01E-05	8.31E-07	1.0893E-02
520045	4258842.6	62494.3978	4.80901	0.58784	6.87773	0.56603	1.08E-02	1.13E-05	1.21E-06	1.61E-05	1.11E-06	1.0869E-02
520413.03	4258263.36	62429.75984	0.21411	0.39996	0.21893	0.42989	1.08E-02	5.03E-07	8.20E-07	5.14E-07	8.46E-07	1.0831E-02
520446.36	4258891.6	62416.16613	0.34069	0.16266	0.32492	0.17154	1.08E-02	8.00E-07	3.34E-07	7.63E-07	3.38E-07	1.0828E-02
520227.04	4258993.05	62408.99238	1.43969	0.26063	1.3404	0.27089	1.08E-02	3.38E-06	5.35E-07	3.15E-06	5.33E-07	1.0832E-02
520207.31	4258312.72	62380.48029	0.33261	1.82541	0.35207	2.05987	1.08E-02	7.81E-07	3.74E-06	8.27E-07	4.05E-06	1.0829E-02
520158.67	4258969.46	62344.29272	3.16653	0.3594	2.81678	0.34661	1.08E-02	7.43E-06	7.37E-07	6.61E-06	6.82E-07	1.0829E-02
520420.4	4258922.36	62342.41717	0.39149	0.1659	0.37312	0.17484	1.08E-02	9.19E-07	3.40E-07	8.76E-07	3.44E-07	1.0815E-02
520285.75	4258272.96	62338.53696	0.27294	0.90678	0.28106	0.99506	1.08E-02	6.41E-07	1.86E-06	6.60E-07	1.96E-06	1.0817E-02
520326.03	4258982.89	62281.97224	0.68119	0.18812	0.64894	0.20145	1.08E-02	1.60E-06	3.86E-07	1.52E-06	3.97E-07	1.0806E-02
520168.07	4258342.6	62219.68018	0.37377	2.96195	0.39673	3.40981	1.08E-02	8.77E-07	6.07E-06	9.31E-07	6.71E-06	1.0806E-02
520286.45	4258992.95	62162.86827	0.89062	0.20845	0.84432	0.22295	1.08E-02	2.09E-06	4.28E-07	1.98E-06	4.39E-07	1.0787E-02
520385.39	4258952.79	62133.95622	0.47581	0.17081	0.45333	0.18102	1.08E-02	1.12E-06	3.50E-07	1.06E-06	3.56E-07	1.0780E-02
520504.08	4258349.93	62078.29481	0.18785	0.24884	0.18795	0.26271	1.08E-02	4.41E-07	5.10E-07	4.41E-07	5.17E-07	1.0769E-02
520021.08	4258765.04	62059.98996	2.36812	0.83094	2.97885	0.79612	1.08E-02	5.56E-06	1.70E-06	6.99E-06	1.57E-06	1.0780E-02
520315.14	4258263.05	61985.07822	0.25556	0.73499	0.26263	0.79973	1.08E-02	6.00E-07	1.51E-06	6.17E-07	1.57E-06	1.0755E-02
520149.75	4258965.78	61950.42781	3.65174	0.37327	3.21761	0.35607	1.07E-02	8.57E-06	7.66E-07	7.55E-06	7.01E-07	1.0763E-02
520403.99	4258939.16	61939.50887	0.42848	0.16791	0.40873	0.17719	1.07E-02	1.01E-06	3.44E-07	9.60E-07	3.49E-07	1.0746E-02
520217.14	4258993.07	61915.78896	1.58163	0.27116	1.46578	0.27935	1.07E-02	3.71E-06	5.56E-07	3.44E-06	5.50E-07	1.0747E-02
520128.79	4258382.47	61893.12564	0.43384	5.86707	0.45725	7.02077	1.07E-02	1.02E-06	1.20E-05	1.07E-06	1.38E-05	1.0763E-02
520469.27	4258294.98	61872.67636	0.19482	0.29844	0.19516	0.31708	1.07E-02	4.57E-07	6.12E-07	4.58E-07	6.24E-07	1.0734E-02
520497.71	4258810.3	61848.10751	0.26144	0.16184	0.25051	0.16965	1.07E-02	6.14E-07	3.32E-07	5.88E-07	3.34E-07	1.0729E-02
520442.37	4258273.45	61791.98181	0.20314	0.34146	0.20578	0.36559	1.07E-02	4.77E-07	7.00E-07	4.83E-07	7.20E-07	1.0720E-02
520531.4	4258691.76	61710.06088	0.21201	0.17463	0.20376	0.18278	1.07E-02	4.98E-07	3.58E-07	4.78E-07	3.60E-07	1.0705E-02
520437.48	4258905.28	61687.96499	0.35732	0.16289	0.34052	0.17171	1.07E-02	8.39E-07	3.34E-07	7.99E-07	3.38E-07	1.0702E-02
520256.35	4258282.87	61637.69433	0.29062	1.1461	0.30158	1.27154	1.07E-02	6.82E-07	2.35E-06	7.08E-07	2.50E-06	1.0697E-02
520296.35	4258992.93	61590.31538	0.83039	0.20155	0.78837	0.21591	1.07E-02	1.95E-06	4.13E-07	1.85E-06	4.25E-07	1.0687E-02
520236.74	4258292.81	61514.31578	0.30499	1.36299	0.31921	1.52132	1.07E-02	7.16E-07	2.80E-06	7.49E-07	2.99E-06	1.0677E-02
520140.82	4258962.09	61507.27769	4.28663	0.38662	3.73443	0.36504	1.07E-02	1.01E-05	7.93E-07	8.77E-06	7.19E-07	1.0688E-02
520422.82	4258263.39	61498.14818	0.20958	0.37967	0.21386	0.40757	1.07E-02	4.92E-07	7.79E-07	5.02E-07	8.02E-07	1.0669E-02
520355.72	4258972.84	61491.88925	0.56649	0.17715	0.54028	0.18881	1.07E-02	1.33E-06	3.63E-07	1.27E-06	3.72E-07	1.0669E-02
520478	4258848.48	61457.09731	0.28978	0.16037	0.27754	0.1688	1.07E-02	6.80E-07	3.29E-07	6.52E-07	3.32E-07	1.0661E-02
520484.95	4258311.7	61453.09128	0.19043	0.2766	0.19008	0.29236	1.07E-02	4.47E-07	5.67E-07	4.46E-07	5.76E-07	1.0661E-02
520113.51	4258940.83	61305.11653	7.72282	0.43262	6.54205	0.40061	1.06E-02	1.81E-05	8.87E-07	1.54E-05	7.89E-07	1.0668E-02
520451.24	4258277.25	61288.09589	0.19978	0.32662	0.20175	0.34902	1.06E-02	4.69E-07	6.70E-07	4.74E-07	6.87E-07	1.0632E-02
520207.24	4258993.08	61252.26998	1.74697	0.28208	1.61067	0.28766	1.06E-02	4.10E-06	5.79E-07	3.78E-06	5.66E-07	1.0633E-02
520094.73	4258923.08	61228.16265	13.53111	0.46187	11.91497	0.42737	1.06E-02	3.18E-05	9.47E-07	2.80E-05	8.41E-07	1.0681E-02
520335.94	4258982.87	61161.39489	0.63996	0.18295	0.60996	0.19566	1.06E-02	1.50E-06	3.75E-07	1.43E-06	3.85E-07	1.0612E-02
520373.91	4258253.24	61117.06306	0.22737	0.50451	0.23409	0.54361	1.06E-02	5.34E-07	1.03E-06	5.50E-07	1.07E-06	1.0604E-02
520375.51	4258962.8	61109.80503	0.50419	0.1716	0.48043	0.18228	1.06E-02	1.18E-06	3.52E-07	1.13E-06	3.59E-07	1.0602E-02
520364.12	4258253.21	61103.08537	0.23132	0.53573	0.23818	0.5778	1.06E-02	5.43E-07	1.10E-06	5.59E-07	1.14E-06	1.0601E-02
520017.12	4258683.15	61048.83775	1.73178	1.44644	2.20619	1.32151	1.06E-02	4.07E-06	2.97E-06	5.18E-06	2.60E-06	1.0603E-02
520305.36	4258263.02	61028.76903	0.25894	0.78832	0.26619	0.85974	1.06E-02	6.08E-07	1.62E-06	6.25E-07	1.69E-06	1.0590E-02
520275.96	4258272.93	60999.14107	0.27609	0.97952	0.28501	1.07849	1.06E-02	6.48E-07	2.01E-06	6.69E-07	2.12E-06	1.0585E-02
520383.7	4258253.27	60995.20939	0.22335	0.47577	0.22978	0.51227	1.06E-02	5.24E-07	9.76E-07	5.39E-07	1.01E-06	1.0582E-02
520060.17	4258878.84	60954.5146	8.40351	0.51965	15.98008	0.4938	1.06E-02	1.97E-05	1.07E-06	3.75E-05	9.72E-07	1.0632E-02
520046.31	4258853.13	60931.93116	5.04025	0.56088	7.35846	0.53984	1.06E-02	1.18E-05	1.15E-06	1.73E-05	1.06E-06	1.0600E-02
520354.33	4258253.18	60930.94621	0.23516	0.56971	0.24206	0.61516	1.06E-02	5.52E-07	1.17E-06	5.68E-07	1.21E-06	1.0572E-02
520487.12	4258834.69	60908.88332	0.27681	0.15998	0.26518	0.16815	1.06E-02	6.50E-07	3.28E-07	6.23E-07	3.31E-07	1.0566E-02
520306.25	4258992.92	60881.19705	0.77588	0.19513	0.7374	0.20919	1.06E-02	1.82E-06	4.00E-07	1.73E-06	4.12E-07	1.0564E-02
520029.16	4258808.65	60878.26095	3.03102	0.66469	3.88562	0.64347	1.06E-02	7.12E-06	1.36E-06	9.12E-06	1.27E-06	1.0578E-02
520217.13	4258302.75	60843.9057	0.31912	1.65061	0.33688	1.85493	1.06E-02	7.49E-07	3.39E-06	7.91E-07	3.65E-06	1.0562E-02
520428.78	4258918.89	60748.95181	0.37484	0.16292	0.35704	0.17167	1.05E-02	8.80E-07	3.34E-07	8.38E-07	3.38E-07	1.0539E-02
520520.79	4258432.44	60712.0833	0.19113	0.21997	0.189	0.23243	1.05E-02	4.49E-07	4.51E-07	4.44E-07	4.58E-07	1.0532E-02
520412.71	4258935.55	60706.98703	0.4089	0.16527	0.38994	0.17421	1.05E-02	9.60E-07	3.39E-07	9.15E-07	3.43E-07	1.0532E-02
520393.48	4258253.3	60678.50541	0.21923	0.44944	0.22531	0.48351	1.05E-02	5.15E-07	9.22E-07	5.29E-07	9.52E-07	1.0527E-02
520344.54	4258253.15	60573.0528	0.23885	0.60682	0.24572	0.65605	1.05E-02	5.61E-07	1.24E-06	5.77E-07	1.29E-06	1.0510E-02
520460.11	4258281.05	60518.04289	0.19635	0.31289	0.19769	0.33361	1.05E-02	4.61E-07	6.42E-07	4.64E-07	6.57E-07	1.0499E-02
520503.29	4258339.58	60485.83599	0.18641	0.25185	0.18649	0.26546	1.05E-02	4.38E-07	5.17E-07	4.38E-07	5.23E-07	1.0493E-02
520464.05	4258874.27	60485.74454	0.31183	0.1595	0.29791	0.16813	1.05E-02	7.32E-07	3.27E-07	6.99E-07	3.31E-07	1.0493E-02
520531.26	4258716.06	60451.79148	0.21544	0.16958	0.20664	0.17736	1.05E-02	5.06E-07	3.48E-07	4.85E-07	3.49E-07	1.0487E-02
520014.94	4258726.12	60428.39726	1.89633	1.04302	2.37919	0.98022	1.05E-02	4.45E-06	2.14E-06	5.59E-06	1.93E-06	1.0495E-02
520478.24	4258298.82	60416.64116	0.19118	0.28648	0.19117	0.30354	1.05E-02	4.49E-07	5.88E-07	4.49E-07	5.98E-07	1.0481E-02
520197.34	4258993.1	60401.13693	1.94135	0.2932	1.77954	0.29563	1.05E-02	4.56E-06	6.01E-07	4.18E-06	5.82E-07	1.0486E-02
520118.97	4258392.44	60398.83816	0.44817	7.4066	0.47298	8.95933	1.05E-02	1.05E-06	1.52E-05	1.11E-06	1.76E-05	1.0511E-02
520432.61	4258263.42	60383.15569	0.20506	0.36096	0.2088	0.38694	1.05E-02	4.81E-07	7.40E-07	4.90E-07	7.62E-07	1.0476E-02
520034.67	4258828.34	60372.2201	3.55253	0.6103	4.66205	0.59124	1.05E-02	8.34E-06	1.25E-06	1.09E-05	1.16E-06	1.0493E-02
520187.71	4258322.66	60336.87622	0.34504	2.29579	0.36695	2.60542	1.05E-02	8.10E-07	4.71E-06	8.61E-07	5.13E-06	1.0477E-02
520473.46	4258860.36	60330.64339	0.29718	0.15915	0.28436	0.16763	1.05E-02	6.98E-07	3.26E-07	6.68E-07	3.30E-07	1.0466E-02
520029.89	4258618.37	60326.79516	1.58299	2.87004	2.1453	2.41176	1.05E-02	3.72E-06	5.89E-06	5.04E-06	4.75E-06	1.0483E-02
520454.88	4258888.07	60310.89067	0.32694	0.15978	0.31192	0.16844	1.05E-02	7.68E-07	3.28E-07	7.32E-07	3.32E-07	1.0463E-02
520316.15	4258992.9	60256.17561	0.72732	0.18944	0.69196	0.20306	1.05E-02	1.71E-06	3.89E-07	1.62E-06	4.00E-07	1.0455E-02
520025.45	4258799.68	60235.81354	2.74633	0.68951	3.47487	0.66685	1.04E-02	6.45E-06	1.41E-06	8.16E-06	1.31E-06	1.0465E-02
520511.37	4258787.48	60224.54275	0.24389	0.162	0.23379	0.16932	1.04E-02	5.73E-07	3.32E-07	5.49E-07	3.33E-07	1.0447E-02
520017.31	4258755.94	60223.79578	2.10953	0.86781	2.66719	0.82666	1.04E-02	4.95E-06	1.78E-06	6.26E-06	1.63E-06	1.0460E-02
520403.27	4258253.33	60215.93819	0.21506	0.42514	0.22069	0.457	1.04E-02	5.05E-07	8.72E-07	5.18E-07	9.00E-07	1.0447E-02
520515	4258778.83	60122.96496	0.23907	0.1627	0.22919	0.1699	1.04E-02	5.61E-07	3.34E-07	5.38E-07	3.34E-07	1.0430E-02
520334.75	4258253.12	60074.56342	0.24242	0.64727	0.24921	0.70094	1.04E-02	5.69E-07	1.33E-06	5.85E-07	1.38E-06	1.0424E-02
520519.65	4258396.65	60054.19496	0.18697	0.22595	0.18567	0.23905	1.04E-02	4.39E-07	4.63E-07	4.36E-07	4.71E-07	1.0418E-02
520049.87	4258864.6	60052.19627	5.67077	0.53752	8.83531	0.51591	1.04E-02	1.33E-05	1.10E-06	2.07E-05	1.02E-06	1.0452E-02
520256.76	4259003	60044.81827	1.11763	0.22724	1.05195	0.24022	1.04E-02	2.62E-06	4.66E-07	2.47E-06	4.73E-07	1.0421E-02
520104.49	4258937.11	60020.77732	9.91854	0.43878	8.4191	0.40577	1.04E-02	2.33E-05	9.00E-07	1.98E-05	7.99E-07	1.0455E-02
520496.52	4258820.8	60012.47659	0.26418	0.15951	0.25311	0.16733	1.04E-02	6.20E-07	3.27E-07	5.94E-07	3.29E-07	1.0411E-02
520395.29	4258952.77	60004.38903	0.45071	0.16684	0.42972	0.17646	1.04E-02	1.06E-06	3.42E-07	1.01E-06	3.47E-07	1.0410E-02
520266.66	4259002.98	59973.97724	1.0341	0.21914	0.9761	0.23266	1.04E-02	2.43E-06	4.49E-07	2.29E-06	4.58E-07	1.0408E-02
520246.86	4259003.02	59968.58496	1.2118	0.23585	1.13689	0.24801	1.04E-02	2.84E-06	4.84E-07	2.67E-06	4.88E-07	1.0408E-02
520295.57	4258262.99	59957.10428	0.26216	0.84725	0.26981	0.92655	1.04E-02	6.15E-07	1.74E-06	6.33E-07	1.82E-06	1.0404E-02
520345.84	4258982.85	59921.64882	0.60228	0.17796	0.57395	0.19007	1.04E-02	1.41E-06	3.65E-07	1.35E-06	3.74E-07	1.0397E-02
520365.62	4258972.82	59911.84877	0.53468	0.17245	0.5096	0.18356	1.04E-02	1.26E-06	3.54E-07	1.20E-06	3.61E-07	1.0395E-02
520518.62	4258770.18	59907.19542	0.23437	0.1633	0.22467	0.1704	1.04E-02	5.50E-07	3.35E-07	5.27E-07	3.35E-07	1.0392E-02
520099.3	4258422.38	59821.70777	0.50937	13.90391	0.54689	15.93435	1.04E-02	1.20E-06	2.85E-05	1.28E-06	3.14E-05	1.0438E-02
520518.51	4258386.15	59813.7668	0.18607	0.22853	0.18517	0.24182	1.04E-02	4.37E-07	4.69E-07	4.35E-07	4.76E-07	1.0376E-02
520017.12	4258673.87	59807.47258	1.66012	1.55246	2.11824	1.40835	1.04E-02	3.90E-06	3.18E-06	4.97E-06	2.77E-06	1.0388E-02
520445.93	4258901.78	59790.10747	0.34268	0.16005	0.32664	0.16868	1.04E-02	8.05E-07	3.28E-07	7.67E-07	3.32E-07	1.0373E-02
520085.62	4258919.33	59761.71853	15.99824	0.46354	18.61698	0.43094	1.04E-02	3.76E-05	9.51E-07	4.37E-05	8.48E-07	1.0448E-02
520236.96	4259003.03	59741.05518	1.31855	0.24493	1.23243	0.25593	1.04E-02	3.10E-06	5.02E-07	2.89E-06	5.04E-07	1.0369E-02
520014.34	4258700.57	59740.05953	1.73331	1.24463	2.18128	1.15125	1.04E-02	4.07E-06	2.55E-06	5.12E-06	2.27E-06	1.0376E-02
520246.56	4258282.84	59712.52472	0.29277	1.25134	0.30555	1.39202	1.04E-02	6.87E-07	2.57E-06	7.17E-07	2.74E-06	1.0364E-02
520276.56	4259002.97	59692.3919	0.95936	0.21137	0.90747	0.22522	1.04E-02	2.25E-06	4.34E-07	2.13E-06	4.43E-07	1.0359E-02
520514	4258364.19	59621.27917	0.18508	0.23643	0.185	0.24985	1.03E-02	4.35E-07	4.85E-07	4.34E-07	4.92E-07	1.0343E-02
520158.77	4258979.5	59611.36486	3.18006	0.34871	2.8285	0.33559	1.03E-02	7.47E-06	7.15E-07	6.64E-06	6.61E-07	1.0355E-02
520413.06	4258253.36	59578.52976	0.21083	0.40278	0.21599	0.43257	1.03E-02	4.95E-07	8.26E-07	5.07E-07	8.52E-07	1.0336E-02
520522.24	4258761.53	59563.60959	0.22979	0.16372	0.2202	0.17075	1.03E-02	5.39E-07	3.36E-07	5.17E-07	3.36E-07	1.0333E-02
520227.06	4259003.05	59503.60707	1.44228	0.25473	1.34288	0.2641	1.03E-02	3.39E-06	5.22E-07	3.15E-06	5.20E-07	1.0328E-02
520266.17	4258272.9	59495.57991	0.27885	1.06136	0.28898	1.1724	1.03E-02	6.55E-07	2.18E-06	6.78E-07	2.31E-06	1.0325E-02
520468.98	4258284.84	59491.49228	0.19287	0.30012	0.19367	0.31919	1.03E-02	4.53E-07	6.16E-07	4.55E-07	6.28E-07	1.0321E-02
520493.47	4258315.35	59482.06403	0.18695	0.26627	0.18659	0.28088	1.03E-02	4.39E-07	5.46E-07	4.38E-07	5.53E-07	1.0319E-02
520187.44	4258993.12	59429.73347	2.17346	0.30441	1.97962	0.30319	1.03E-02	5.10E-06	6.24E-07	4.65E-06	5.97E-07	1.0319E-02
520324.96	4258253.08	59400.83531	0.2458	0.69158	0.25258	0.7503	1.03E-02	5.77E-07	1.42E-06	5.93E-07	1.48E-06	1.0307E-02
520021.73	4258790.72	59387.2426	2.49441	0.71578	3.11991	0.69106	1.03E-02	5.86E-06	1.47E-06	7.32E-06	1.36E-06	1.0316E-02
520421.42	4258931.94	59370.54775	0.3904	0.1627	0.37256	0.17133	1.03E-02	9.17E-07	3.34E-07	8.75E-07	3.37E-07	1.0300E-02
520197.53	4258312.69	59369.72395	0.33188	2.04568	0.35235	2.31477	1.03E-02	7.79E-07	4.20E-06	8.27E-07	4.56E-06	1.0308E-02
520286.46	4259002.95	59340.97477	0.89257	0.2042	0.84589	0.21816	1.03E-02	2.10E-06	4.19E-07	1.99E-06	4.29E-07	1.0297E-02
520326.05	4258992.89	59325.90602	0.68224	0.18412	0.64968	0.19722	1.03E-02	1.60E-06	3.78E-07	1.53E-06	3.88E-07	1.0294E-02
520517.56	4258375.73	59260.27556	0.18503	0.23105	0.18453	0.24439	1.03E-02	4.34E-07	4.74E-07	4.33E-07	4.81E-07	1.0280E-02
520226.95	4258292.78	59236.13929	0.3063	1.50129	0.32251	1.68002	1.03E-02	7.19E-07	3.08E-06	7.57E-07	3.31E-06	1.0282E-02
520036.25	4258838.99	59235.15309	3.7425	0.58141	4.94835	0.56343	1.03E-02	8.79E-06	1.19E-06	1.16E-05	1.11E-06	1.0297E-02
520385.41	4258962.79	59192.92594	0.47704	0.16733	0.45446	0.17744	1.03E-02	1.12E-06	3.43E-07	1.07E-06	3.49E-07	1.0270E-02
520149.92	4258975.84	59192.81748	3.65224	0.36132	3.21992	0.34417	1.03E-02	8.57E-06	7.41E-07	7.56E-06	6.77E-07	1.0284E-02
520442.4	4258263.45	59089.03885	0.20054	0.34368	0.20376	0.36785	1.02E-02	4.71E-07	7.05E-07	4.78E-07	7.24E-07	1.0251E-02
520525.86	4258752.88	59080.91057	0.22528	0.16399	0.2158	0.17102	1.02E-02	5.29E-07	3.36E-07	5.07E-07	3.37E-07	1.0249E-02
520522.26	4258462.18	59080.2337	0.19378	0.21404	0.19104	0.2264	1.02E-02	4.55E-07	4.39E-07	4.49E-07	4.46E-07	1.0249E-02
520061.31	4258889.3	59046.48343	8.7725	0.49757	17.52718	0.47255	1.02E-02	2.06E-05	1.02E-06	4.11E-05	9.30E-07	1.0305E-02
520403.93	4258949.19	59040.95467	0.4299	0.16445	0.40989	0.17363	1.02E-02	1.01E-06	3.37E-07	9.62E-07	3.42E-07	1.0243E-02
520437.16	4258915.42	58964.89374	0.3591	0.16011	0.34202	0.16867	1.02E-02	8.43E-07	3.28E-07	8.03E-07	3.32E-07	1.0229E-02
520217.16	4259003.07	58920.49491	1.58271	0.26462	1.46658	0.27194	1.02E-02	3.72E-06	5.43E-07	3.44E-06	5.35E-07	1.0228E-02
520114.03	4258951.04	58881.21726	7.71107	0.41652	6.49863	0.38574	1.02E-02	1.81E-05	8.54E-07	1.53E-05	7.59E-07	1.0248E-02
520487.22	4258302.66	58881.09549	0.18768	0.27476	0.18733	0.29057	1.02E-02	4.41E-07	5.64E-07	4.40E-07	5.72E-07	1.0215E-02
520296.37	4259002.93	58835.9912	0.8323	0.19748	0.78989	0.21137	1.02E-02	1.95E-06	4.05E-07	1.85E-06	4.16E-07	1.0209E-02
520285.78	4258262.96	58784.04053	0.2652	0.91264	0.27352	1.00119	1.02E-02	6.23E-07	1.87E-06	6.42E-07	1.97E-06	1.0201E-02
520095.48	4258933.39	58783.21893	13.20616	0.44299	11.55912	0.41022	1.02E-02	3.10E-05	9.09E-07	2.71E-05	8.08E-07	1.0256E-02
520451.17	4258267.21	58769.34393	0.19747	0.32835	0.19996	0.351	1.02E-02	4.64E-07	6.73E-07	4.69E-07	6.91E-07	1.0196E-02
520422.85	4258253.39	58768.47442	0.20657	0.38216	0.21122	0.41001	1.02E-02	4.85E-07	7.84E-07	4.96E-07	8.07E-07	1.0196E-02
520141.06	4258972.19	58761.70625	4.27111	0.37347	3.72554	0.35236	1.02E-02	1.00E-05	7.66E-07	8.75E-06	6.94E-07	1.0212E-02
520506.26	4258806.76	58722.47205	0.25178	0.15907	0.24131	0.16651	1.02E-02	5.91E-07	3.26E-07	5.67E-07	3.28E-07	1.0187E-02

520315.18	4258253.05	58622.96968	0.24907	0.74003	0.25595	0.80474	1.02E-02	5.85E-07	1.52E-06	6.01E-07	1.58E-06	1.0172E-02
520355.74	4258982.84	58565.30284	0.56766	0.1732	0.54075	0.18473	1.02E-02	1.33E-06	3.55E-07	1.27E-06	3.64E-07	1.0161E-02
520049.6	4258550.4	58504.54961	1.18236	7.54373	1.50489	5.2306	1.01E-02	2.78E-06	1.55E-05	3.53E-06	1.03E-05	1.0179E-02
520529.48	4258744.23	58454.55511	0.22091	0.16427	0.21159	0.17135	1.01E-02	5.19E-07	3.37E-07	4.97E-07	3.37E-07	1.0140E-02
520051.23	4258875.15	58422.17105	5.97633	0.51423	9.63062	0.49323	1.01E-02	1.40E-05	1.05E-06	2.26E-05	9.71E-07	1.0172E-02
520524.27	4258441.57	58353.97248	0.19025	0.21565	0.18792	0.22779	1.01E-02	4.47E-07	4.42E-07	4.41E-07	4.48E-07	1.0123E-02
520013.53	4258746.84	58340.73755	1.91565	0.90432	2.39682	0.85773	1.01E-02	4.50E-06	1.85E-06	5.63E-06	1.69E-06	1.0133E-02
520018.01	4258781.76	58318.50919	2.26729	0.74366	2.81123	0.71613	1.01E-02	5.32E-06	1.53E-06	6.60E-06	1.41E-06	1.0130E-02
520335.95	4258992.87	58285.84273	0.64102	0.17901	0.61061	0.19153	1.01E-02	1.50E-06	3.67E-07	1.43E-06	3.77E-07	1.0113E-02
520477.85	4258288.64	58255.52816	0.1894	0.28812	0.18973	0.30565	1.01E-02	4.45E-07	5.91E-07	4.45E-07	6.02E-07	1.0106E-02
520207.26	4259003.08	58234.73666	1.74543	0.2749	1.60936	0.27965	1.01E-02	4.10E-06	5.64E-07	3.78E-06	5.50E-07	1.0110E-02
520375.52	4258972.8	58227.78853	0.50531	0.16798	0.48132	0.17855	1.01E-02	1.19E-06	3.45E-07	1.13E-06	3.51E-07	1.0102E-02
520207.35	4258302.72	58223.24539	0.31916	1.837	0.33817	2.07121	1.01E-02	7.49E-07	3.77E-06	7.94E-07	4.08E-06	1.0108E-02
520017.12	4258664.6	58187.86172	1.58231	1.66595	2.02276	1.49974	1.01E-02	3.71E-06	3.42E-06	4.75E-06	2.95E-06	1.0107E-02
520306.27	4259002.92	58186.01607	0.77778	0.19119	0.73885	0.20487	1.01E-02	1.83E-06	3.92E-07	1.73E-06	4.03E-07	1.0096E-02
520524.45	4258416.19	58167.17724	0.18701	0.21901	0.18509	0.2314	1.01E-02	4.39E-07	4.49E-07	4.35E-07	4.56E-07	1.0091E-02
520373.94	4258243.24	58146.60235	0.22291	0.5085	0.22949	0.54719	1.01E-02	5.23E-07	1.04E-06	5.39E-07	1.08E-06	1.0088E-02
520459.95	4258270.97	58127.85537	0.19423	0.31454	0.1961	0.33559	1.01E-02	4.56E-07	6.45E-07	4.60E-07	6.61E-07	1.0084E-02
520463.4	4258884.54	58118.53856	0.31393	0.15692	0.29963	0.16536	1.01E-02	7.37E-07	3.22E-07	7.03E-07	3.26E-07	1.0082E-02
520472.65	4258870.71	58077.79841	0.29954	0.15664	0.2863	0.16501	1.01E-02	7.03E-07	3.21E-07	6.72E-07	3.25E-07	1.0075E-02
520383.73	4258243.27	58053.81823	0.21916	0.47958	0.22559	0.51561	1.01E-02	5.15E-07	9.84E-07	5.30E-07	1.01E-06	1.0072E-02
520364.15	4258243.21	58044.0473	0.22651	0.54002	0.23316	0.58158	1.01E-02	5.32E-07	1.11E-06	5.47E-07	1.14E-06	1.0071E-02
520109.15	4258402.41	58017.62765	0.46145	9.8017	0.48933	11.79989	1.01E-02	1.08E-06	2.01E-05	1.15E-06	2.32E-05	1.0108E-02
520037.65	4258849.56	57968.82987	3.92074	0.55472	5.23294	0.5376	1.01E-02	9.20E-06	1.14E-06	1.23E-05	1.06E-06	1.0078E-02
520412.57	4258945.61	57952.45915	0.41032	0.16208	0.39138	0.17087	1.01E-02	9.63E-07	3.32E-07	9.19E-07	3.36E-07	1.0054E-02
520039.73	4258579.53	57942.50988	1.35497	4.68102	1.84768	3.58376	1.00E-02	3.18E-06	9.60E-06	4.34E-06	7.05E-06	1.0074E-02
520158.28	4258342.56	57844.71869	0.36811	3.44421	0.3884	3.98681	1.00E-02	8.64E-07	7.06E-06	9.12E-07	7.85E-06	1.0050E-02
520354.36	4258243.18	57834.69559	0.23004	0.57416	0.23665	0.61915	1.00E-02	5.40E-07	1.18E-06	5.56E-07	1.22E-06	1.0035E-02
520256.38	4258272.87	57834.48873	0.28115	1.15405	0.29281	1.2786	1.00E-02	6.60E-07	2.37E-06	6.87E-07	2.52E-06	1.0037E-02
520148.46	4258352.53	57830.77037	0.3813	4.03717	0.40117	4.71787	1.00E-02	8.95E-07	8.28E-06	9.42E-07	9.29E-06	1.0050E-02
520393.52	4258243.3	57821.53805	0.21535	0.4529	0.22152	0.48659	1.00E-02	5.06E-07	9.29E-07	5.20E-07	9.58E-07	1.0032E-02
520454.38	4258898.28	57782.7481	0.32883	0.15722	0.31353	0.16566	1.00E-02	7.72E-07	3.22E-07	7.36E-07	3.26E-07	1.0024E-02
520432.64	4258253.42	57775.27534	0.20227	0.36318	0.20643	0.38916	1.00E-02	4.75E-07	7.45E-07	4.85E-07	7.66E-07	1.0023E-02
520430.14	4258928.33	57761.76049	0.37346	0.15951	0.35557	0.16799	1.00E-02	8.77E-07	3.27E-07	8.35E-07	3.31E-07	1.0021E-02
520482.16	4258856.76	57752.49356	0.28556	0.15627	0.27335	0.16444	1.00E-02	6.70E-07	3.20E-07	6.42E-07	3.24E-07	1.0019E-02
520538.05	4258699.84	57737.18318	0.20786	0.1694	0.19959	0.17721	1.00E-02	4.88E-07	3.47E-07	4.69E-07	3.49E-07	1.0016E-02
520105.1	4258947.35	57715.93437	9.84747	0.42215	8.31439	0.3905	1.00E-02	2.31E-05	8.66E-07	1.95E-05	7.69E-07	1.0055E-02
520011.37	4258717.52	57705.59409	1.71294	1.08346	2.1246	1.01345	1.00E-02	4.02E-06	2.22E-06	4.99E-06	1.99E-06	1.0022E-02
520305.39	4258253.02	57683.13089	0.25213	0.7935	0.25934	0.86502	1.00E-02	5.92E-07	1.63E-06	6.09E-07	1.70E-06	1.0009E-02
520533.11	4258735.58	57668.50777	0.21663	0.16451	0.20754	0.17168	1.00E-02	5.09E-07	3.37E-07	4.87E-07	3.38E-07	1.0004E-02
520236.77	4258282.81	57637.57982	0.29425	1.37211	0.30898	1.52974	1.00E-02	6.91E-07	2.81E-06	7.25E-07	3.01E-06	1.0004E-02
520086.47	4258929.67	57523.21176	15.66034	0.4448	17.7428	0.41371	9.98E-03	3.68E-05	9.12E-07	4.17E-05	8.14E-07	1.0057E-02
520275.99	4258262.93	57490.54318	0.26797	0.98565	0.27727	1.0849	9.97E-03	6.29E-07	2.02E-06	6.51E-07	2.14E-06	9.9769E-03
520344.57	4258243.15	57482.89694	0.23347	0.6113	0.23998	0.66027	9.97E-03	5.48E-07	1.25E-06	5.63E-07	1.30E-06	9.9738E-03
520197.36	4259003.1	57467.10817	1.93841	0.28549	1.77764	0.28716	9.97E-03	4.55E-06	5.86E-07	4.17E-06	5.65E-07	9.9773E-03
520138.64	4258362.5	57445.63148	0.39439	4.82252	0.41414	5.68892	9.96E-03	9.26E-07	9.89E-06	9.72E-07	1.12E-05	9.9867E-03
520316.17	4259002.9	57443.95927	0.72834	0.1854	0.69238	0.19874	9.96E-03	1.71E-06	3.80E-07	1.63E-06	3.91E-07	9.9675E-03
520403.3	4258243.33	57437.01179	0.21146	0.42834	0.21728	0.45989	9.96E-03	4.96E-07	8.78E-07	5.10E-07	9.05E-07	9.9650E-03
520502	4258319	57288.18359	0.18347	0.25643	0.18321	0.27004	9.94E-03	4.31E-07	5.26E-07	4.30E-07	5.32E-07	9.9383E-03
520256.78	4259013	57287.34267	1.11932	0.22251	1.05347	0.23479	9.94E-03	2.63E-06	4.56E-07	2.47E-06	4.62E-07	9.9422E-03
520246.88	4259013.02	57251.41552	1.2139	0.23087	1.1389	0.24227	9.93E-03	2.85E-06	4.73E-07	2.67E-06	4.77E-07	9.9365E-03
520468.73	4258274.72	57240.25749	0.19091	0.30174	0.19222	0.3212	9.93E-03	4.48E-07	6.19E-07	4.51E-07	6.32E-07	9.9302E-03
520395.31	4258962.77	57218.03947	0.45184	0.16331	0.43062	0.17286	9.92E-03	1.06E-06	3.35E-07	1.01E-06	3.40E-07	9.9270E-03
520040.82	4258860.86	57215.39045	4.30631	0.53134	5.92596	0.51411	9.92E-03	1.01E-05	1.09E-06	1.39E-05	1.01E-06	9.9499E-03
520266.68	4259012.98	57189.51256	1.03549	0.21458	0.97714	0.22746	9.92E-03	2.43E-06	4.40E-07	2.29E-06	4.48E-07	9.9249E-03
520062.34	4258899.72	57151.61917	9.15261	0.47684	16.05601	0.45271	9.91E-03	2.15E-05	9.78E-07	3.77E-05	8.91E-07	9.9737E-03
520345.85	4258992.85	57144.16506	0.60323	0.1742	0.57471	0.18614	9.91E-03	1.42E-06	3.57E-07	1.35E-06	3.66E-07	9.9149E-03
520504.97	4258817.3	57138.00906	0.25453	0.15681	0.24391	0.16427	9.91E-03	5.98E-07	3.22E-07	5.73E-07	3.23E-07	9.9121E-03
520445.55	4258911.95	57125.97621	0.34427	0.15732	0.32794	0.16571	9.91E-03	8.08E-07	3.23E-07	7.70E-07	3.26E-07	9.9105E-03
520365.64	4258982.82	57116.00614	0.53571	0.16875	0.51027	0.17972	9.91E-03	1.26E-06	3.46E-07	1.20E-06	3.54E-07	9.9097E-03
520014.29	4258772.79	57027.0168	2.06299	0.77295	2.5388	0.74194	9.89E-03	4.84E-06	1.59E-06	5.96E-06	1.46E-06	9.9049E-03
520236.98	4259013.03	57024.14394	1.32098	0.23962	1.23473	0.24981	9.89E-03	3.10E-06	4.91E-07	2.90E-06	4.92E-07	9.8976E-03
520334.78	4258243.12	56978.27025	0.23675	0.65181	0.24321	0.70536	9.88E-03	5.56E-07	1.34E-06	5.71E-07	1.39E-06	9.8865E-03
520496.2	4258306.51	56969.14968	0.18411	0.26413	0.18367	0.27868	9.88E-03	4.32E-07	5.42E-07	4.31E-07	5.49E-07	9.8830E-03
520276.58	4259012.97	56958.11556	0.96075	0.20708	0.90851	0.22033	9.88E-03	2.26E-06	4.25E-07	2.13E-06	4.34E-07	9.8844E-03
520486.72	4258292.44	56928.73071	0.18603	0.27648	0.18589	0.29273	9.87E-03	4.37E-07	5.67E-07	4.36E-07	5.76E-07	9.8760E-03
520217.17	4258292.75	56900.82495	0.30684	1.66126	0.32453	1.86482	9.87E-03	7.20E-07	3.41E-06	7.62E-07	3.67E-06	9.8777E-03
520413.09	4258243.36	56880.08465	0.20749	0.40571	0.21292	0.43524	9.87E-03	4.87E-07	8.32E-07	5.00E-07	8.57E-07	9.8683E-03
520052.46	4258885.65	56759.42128	6.26509	0.4925	10.47565	0.4721	9.84E-03	1.47E-05	1.01E-06	2.46E-05	9.29E-07	9.8859E-03
520227.08	4259013.05	56752.64962	1.44424	0.24898	1.34468	0.25752	9.84E-03	3.39E-06	5.11E-07	3.16E-06	5.07E-07	9.8511E-03
520177.92	4258322.63	56740.21173	0.34179	2.61419	0.36282	2.97154	9.84E-03	8.02E-07	5.36E-06	8.52E-07	5.85E-06	9.8542E-03
520536.73	4258726.93	56722.75178	0.21249	0.1645	0.20361	0.17181	9.84E-03	4.99E-07	3.37E-07	4.78E-07	3.38E-07	9.8400E-03
520421.21	4258942.04	56721.43005	0.39198	0.15964	0.374	0.16811	9.84E-03	9.20E-07	3.27E-07	8.78E-07	3.31E-07	9.8405E-03
520029.85	4258608.67	56667.42939	1.43258	3.05372	1.9179	2.54288	9.83E-03	3.36E-06	6.26E-06	4.50E-06	5.01E-06	9.8478E-03
520295.6	4258252.99	56659.44609	0.25506	0.85251	0.26283	0.9321	9.83E-03	5.99E-07	1.75E-06	6.17E-07	1.83E-06	9.8321E-03
520442.43	4258253.45	56635.37232	0.19799	0.34559	0.20163	0.36984	9.82E-03	4.65E-07	7.09E-07	4.73E-07	7.28E-07	9.8255E-03
520286.48	4259012.95	56603.10453	0.89375	0.20006	0.84663	0.21348	9.82E-03	2.10E-06	4.10E-07	1.99E-06	4.20E-07	9.8225E-03
520525.39	4258470.4	56579.49844	0.19269	0.21012	0.18965	0.2223	9.81E-03	4.52E-07	4.31E-07	4.45E-07	4.38E-07	9.8152E-03
520187.46	4259003.12	56578.65129	2.1685	0.2961	1.9769	0.29424	9.81E-03	5.09E-06	6.07E-07	4.64E-06	5.79E-07	9.8242E-03
520326.07	4259002.89	56574.51594	0.68321	0.18014	0.64997	0.19301	9.81E-03	1.60E-06	3.69E-07	1.53E-06	3.80E-07	9.8165E-03
520128.82	4258372.47	56555.99102	0.40709	5.90104	0.42745	7.00157	9.81E-03	9.56E-07	1.21E-05	1.00E-06	1.38E-05	9.8372E-03
520096.17	4258943.67	56508.48178	12.94703	0.42555	11.28113	0.39433	9.80E-03	3.04E-05	8.73E-07	2.65E-05	7.76E-07	9.8597E-03
520385.42	4258972.79	56463.61346	0.47809	0.16383	0.45538	0.17385	9.79E-03	1.12E-06	3.36E-07	1.07E-06	3.42E-07	9.7962E-03
520451.12	4258257.17	56355.49635	0.19509	0.33033	0.19811	0.3531	9.77E-03	4.58E-07	6.77E-07	4.65E-07	6.95E-07	9.7769E-03
520403.88	4258959.22	56334.2741	0.43119	0.16104	0.41093	0.17015	9.77E-03	1.01E-06	3.30E-07	9.65E-07	3.35E-07	9.7736E-03
520325	4258243.08	56327.48117	0.23987	0.69606	0.24638	0.7549	9.77E-03	5.63E-07	1.43E-06	5.78E-07	1.49E-06	9.7738E-03
520022.15	4258815.84	56318.6066	2.58888	0.62587	3.23065	0.60742	9.77E-03	6.08E-06	1.28E-06	7.58E-06	1.20E-06	9.7843E-03
520494.57	4258841.62	56295.14169	0.26894	0.15493	0.25767	0.16271	9.76E-03	6.31E-07	3.18E-07	6.05E-07	3.20E-07	9.7660E-03
520114.51	4258961.23	56289.13152	7.53376	0.40029	6.39801	0.37107	9.76E-03	1.77E-05	8.21E-07	1.50E-05	7.30E-07	9.7974E-03
520527.85	4258425.11	56268.26537	0.18626	0.21487	0.18411	0.22688	9.76E-03	4.37E-07	4.41E-07	4.32E-07	4.47E-07	9.7612E-03
520217.18	4259013.07	56244.0665	1.58544	0.25856	1.46932	0.26502	9.76E-03	3.72E-06	5.30E-07	3.45E-06	5.22E-07	9.7635E-03
520017.12	4258655.32	56220.07633	1.49953	1.78457	1.91759	1.59487	9.75E-03	3.52E-06	3.66E-06	4.50E-06	3.14E-06	9.7659E-03
520187.74	4258312.66	56218.8975	0.32981	2.30899	0.35	2.61994	9.75E-03	7.74E-07	4.74E-06	8.22E-07	5.16E-06	9.7624E-03
520541.44	4258691.73	56204.97161	0.20425	0.16927	0.1962	0.17699	9.75E-03	4.80E-07	3.47E-07	4.61E-07	3.48E-07	9.7501E-03
520009.76	4258737.74	56175.10011	1.73775	0.94156	2.1517	0.88881	9.74E-03	4.08E-06	1.93E-06	5.05E-06	1.75E-06	9.7561E-03
520422.88	4258243.39	56172.08589	0.20348	0.38482	0.20847	0.41246	9.74E-03	4.78E-07	7.89E-07	4.89E-07	8.12E-07	9.7454E-03
520477.51	4258278.48	56169.30548	0.18759	0.2897	0.18836	0.30766	9.74E-03	4.40E-07	5.94E-07	4.42E-07	6.06E-07	9.7444E-03
520140.2	4258981.82	56165.98561	4.34414	0.36245	3.79007	0.34134	9.74E-03	1.02E-05	7.43E-07	8.90E-06	6.72E-07	9.7622E-03
520296.38	4259012.93	56125.70219	0.83337	0.19342	0.79036	0.20686	9.73E-03	1.96E-06	3.97E-07	1.86E-06	4.07E-07	9.7394E-03
520246.59	4258272.84	56061.10856	0.28294	1.25953	0.29629	1.39954	9.72E-03	6.64E-07	2.58E-06	6.96E-07	2.75E-06	9.7302E-03
520266.2	4258262.9	56042.30271	0.27034	1.06788	0.28096	1.17907	9.72E-03	6.35E-07	2.19E-06	6.60E-07	2.32E-06	9.7261E-03
520438.86	4258924.73	56006.34258	0.35714	0.1567	0.34002	0.16499	9.71E-03	8.38E-07	3.21E-07	7.98E-07	3.25E-07	9.7163E-03
520027.5	4258835.38	55982.13246	2.99278	0.57601	3.78373	0.56023	9.71E-03	7.03E-06	1.18E-06	8.88E-06	1.10E-06	9.7280E-03
520471.93	4258881.01	55924.82844	0.30168	0.15418	0.28811	0.16239	9.70E-03	7.08E-07	3.16E-07	6.76E-07	3.20E-07	9.7019E-03
520010.73	4258691.86	55892.38768	1.54426	1.2899	1.92483	1.18653	9.69E-03	3.63E-06	2.65E-06	4.52E-06	2.34E-06	9.7074E-03
520522.98	4258368.03	55888.84787	0.18117	0.22714	0.18075	0.24003	9.69E-03	4.25E-07	4.66E-07	4.24E-07	4.72E-07	9.6955E-03
520355.75	4258992.84	55884.57771	0.56853	0.1696	0.54154	0.18097	9.69E-03	1.33E-06	3.48E-07	1.27E-06	3.56E-07	9.6962E-03
520459.82	4258260.89	55857.72888	0.19207	0.31623	0.19446	0.33753	9.69E-03	4.51E-07	6.49E-07	4.57E-07	6.64E-07	9.6905E-03
520042.28	4258871.46	55845.68983	4.50945	0.50857	6.33086	0.49178	9.69E-03	1.06E-05	1.04E-06	1.49E-05	9.68E-07	9.7136E-03
520462.83	4258894.79	55775.2243	0.31583	0.15447	0.30126	0.16271	9.67E-03	7.41E-07	3.17E-07	7.07E-07	3.20E-07	9.6760E-03
520518.38	4258794.68	55761.86858	0.23802	0.15701	0.22817	0.16401	9.67E-03	5.59E-07	3.22E-07	5.36E-07	3.23E-07	9.6734E-03
520481.26	4258867.14	55716.15816	0.28792	0.15387	0.27535	0.16195	9.66E-03	6.76E-07	3.16E-07	6.46E-07	3.19E-07	9.6657E-03
520521.96	4258786.15	55683.61827	0.23349	0.15761	0.22381	0.16451	9.66E-03	5.48E-07	3.23E-07	5.25E-07	3.24E-07	9.6598E-03
520207.27	4259013.08	55651.95105	1.75042	0.26854	1.61422	0.27242	9.65E-03	4.11E-06	5.51E-07	3.79E-06	5.36E-07	9.6616E-03
520018.48	4258807	55645.58616	2.35913	0.64839	2.92373	0.62813	9.65E-03	5.54E-06	1.33E-06	6.86E-06	1.24E-06	9.6664E-03
520526.99	4258389.78	55638.43616	0.18219	0.22021	0.18091	0.23285	9.65E-03	4.28E-07	4.52E-07	4.25E-07	4.58E-07	9.6520E-03
520540.35	4258718.28	55618.53092	0.20849	0.16438	0.19984	0.17181	9.65E-03	4.89E-07	3.37E-07	4.69E-07	3.38E-07	9.6484E-03
520335.97	4259002.87	55598.81809	0.64192	0.17515	0.61089	0.1875	9.64E-03	1.51E-06	3.59E-07	1.43E-06	3.69E-07	9.6470E-03
520177.55	4259003.13	55588.47438	2.44821	0.30651	2.21714	0.30078	9.64E-03	5.75E-06	6.29E-07	5.21E-06	5.92E-07	9.6537E-03
520375.54	4258982.8	55565.28695	0.50624	0.16449	0.48213	0.17492	9.64E-03	1.19E-06	3.37E-07	1.13E-06	3.44E-07	9.6405E-03
520315.21	4258243.05	55525.25621	0.2428	0.74472	0.24959	0.80954	9.63E-03	5.70E-07	1.53E-06	5.86E-07	1.59E-06	9.6349E-03
520226.98	4258282.78	55518.47751	0.29511	1.51092	0.31148	1.68898	9.63E-03	6.93E-07	3.10E-06	7.31E-07	3.32E-06	9.6373E-03
520525.53	4258777.61	55515.6609	0.22904	0.15822	0.21954	0.16501	9.63E-03	5.38E-07	3.24E-07	5.15E-07	3.25E-07	9.6306E-03
520503.84	4258827.77	55510.17626	0.25702	0.15461	0.24633	0.16206	9.63E-03	6.03E-07	3.17E-07	5.78E-07	3.19E-07	9.6298E-03
520285.81	4258252.96	55497.129	0.25772	0.91819	0.26636	1.0069	9.63E-03	6.05E-07	1.88E-06	6.25E-07	1.98E-06	9.6308E-03
520306.28	4259012.92	55495.69075	0.77868	0.18721	0.73908	0.20051	9.63E-03	1.83E-06	3.84E-07	1.74E-06	3.95E-07	9.6298E-03
520010.58	4258763.83	55469.08837	1.87321	0.80399	2.29964	0.76835	9.62E-03	4.40E-06	1.65E-06	5.40E-06	1.51E-06	9.6338E-03
520525.94	4258379.31	55462.46055	0.1813	0.22262	0.18041	0.23539	9.62E-03	4.26E-07	4.57E-07	4.24E-07	4.63E-07	9.6215E-03
520197.56	4258302.69	55432.80448	0.31796	2.05783	0.33726	2.32715	9.61E-03	7.46E-07	4.22E-06	7.92E-07	4.58E-06	9.6249E-03
520087.24	4258939.98	55367.98779	15.32321	0.42726	17.03636	0.39759	9.60E-03	3.60E-05	8.76E-07	4.00E-05	7.83E-07	9.6810E-03
520412.45	4258955.67	55344.17464	0.41174	0.15883	0.39257	0.16753	9.60E-03	9.67E-07	3.26E-07	9.22E-07	3.30E-07	9.6017E-03
520521.76	4258357.5	55324.42432	0.18021	0.23006	0.18009	0.24282	9.60E-03	4.23E-07	4.72E-07	4.23E-07	4.78E-07	9.5976E-03
520105.65	4258957.57	55319.85693	9.63781	0.40572	8.17073	0.37565	9.59E-03	2.26E-05	8.32E-07	1.92E-05	7.39E-07	9.6384E-03
520373.97	4258233.24	55318.88772	0.21842	0.51246	0.22482	0.5506	9.59E-03	5.13E-07	1.05E-06	5.28E-07	1.08E-06	9.5980E-03
520495.6	4258296.23	55272.70413	0.1826	0.26582	0.18222	0.28077	9.59E-03	4.29E-07	5.45E-07	4.28E-07	5.53E-07	9.5888E-03
520432.67	4258243.42	55269.35837	0.19939	0.36562	0.20396	0.39142	9.59E-03	4.68E-07	7.50E-07	4.79E-07	7.71E-07	9.5887E-03
520383.76	4258233.27	55265.3729	0.21493	0.48337	0.2213	0.51882	9.59E-03	5.05E-07	9.91E-07	5.20E-07	1.02E-06	9.5886E-03
520490.86	4258853.16	55255.76993	0.27458	0.15351	0.26297	0.16135	9.58E-03	6.45E-07	3.15E-07	6.17E-07	3.18E-07	9.5858E-03
520429.85	4258938.46	55255.44435	0.37515	0.15663	0.35708	0.16493	9.58E-03	8.81E-07	3.21E-07	8.38E-07	3.25E-07	9.5862E-03
520453.93	4258908.48	55247.95448	0.33032	0.15458	0.31475	0.16278	9.58E-03	7.75E-07	3.17E-07	7.39E-07	3.20E-07	9.5847E-03
520529.1	4258769.08	55240.90524	0.22471	0.15862	0.21529	0.16535	9.58E-03	5.28E-07	3.25E-07	5.05E-07	3.25E-07	9.5830E-03
520364.18	4258233.21	55211.0645	0.22178	0.54404	0.22814	0.5852	9.58E-03	5.21E-07	1.12E-06	5.36E-07	1.15E-06	9.5794E-03
520059.48	4258521.27	55174.71735	0.9535	13.20721	1.12797	7.76162	9.57E-03	2.24E-06	2.71E-05	2.65E-06	1.53E-05	9.6171E-03
520119	4258382.44	55120.09386	0.41956	7.43683	0.44093	8.97942	9.56E-03	9.85E-07	1.53E-05	1.04E-06	1.77E-05	9.5953E-03
520393.55	4258233.3	55114.21399	0.21142	0.45643	0.21761	0.4896	9.56E-03	4.96E-07	9.36E-07	5.11E-07	9.64E-07	9.5622E-03
520468.51	4258264.61	55109.86718	0.18895	0.30334	0.19076	0.32313	9.56E-03	4.44E-07	6.22E-07	4.48E-07	6.36E-07	9.5607E-03
520053.57	4258896.1	55084.76948	6.56251	0.47211	11.38423	0.45235	9.55E-03	1.54E-05	9.68E-07	2.67E-05	8.90E-07	9.5982E-03
520486.29	4258282.24	55030.58841	0.18437	0.27804	0.18457	0.29473	9.54E-03	4.33E-07	5.70E-07	4.33E-07	5.80E-07	9.5468E-03
520029	4258845.99	55001.34692	3.1306	0.54959	3.98	0.5349	9.54E-03	7.35E-06	1.13E-06	9.34E-06	1.05E-06	9.5586E-03
520197.37	4259013.1	54961.07069	1.94523	0.27872	1.78424	0.27955	9.53E-03	4.57E-06	5.72E-07	4.19E-06	5.50E-07	9.5426E-03
520354.39	4258233.18	54959.24128	0.22502	0.57832	0.23131	0.62295	9.53E-03	5.28E-07	1.19E-06	5.43E-07	1.23E-06	9.5359E-03
520505.18	4258310.35	54854.16267	0.18056	0.25398	0.18014	0.26745	9.51E-03	4.24E-07	5.21E-07	4.23E-07	5.26E-07	9.5161E-03
520532.68	4258760.54	54852.46608	0.22041	0.15897	0.21111	0.16565	9.51E-03	5.17E-07	3.26E-07	4.96E-07	3.26E-07	9.5156E-03
520014.81	4258798.15	54823.22833	2.16152	0.67172	2.65239	0.64943	9.51E-03	5.07E-06	1.38E-06	6.23E-06	1.28E-06	9.5228E-03
520403.34	4258233.33	54819.42834	0.20782	0.43155	0.21374	0.46267	9.51E-03	4.88E-07	8.85E-07	5.02E-07	9.11E-07	9.5110E-03
520316.18	4259012.9	54784.52835	0.72909	0.18148	0.6924	0.19451	9.50E-03	1.71E-06	3.72E-07	1.63E-06	3.83E-07	9.5062E-03
520121.9	4258974.27	54710.93677	6.33363	0.38084	5.4023	0.354	9.49E-03	1.49E-05	7.81E-07	1.27E-05	6.97E-07	9.5184E-03
520256.8	4259023	54662.35306	1.12047	0.21777	1.054	0.22938	9.48E-03	2.63E-06	4.47E-07	2.47E-06	4.52E-07	9.4869E-03
520007.81	4258708.93	54647.78964	1.54217	1.12376	1.89899	1.04523	9.48E-03	3.62E-06	2.30E-06	4.46E-06	2.06E-06	9.4909E-03
520246.89	4259023.02	54639.62011	1.21534	0.22593	1.1399	0.23661	9.48E-03	2.85E-06	4.63E-07	2.68E-06	4.66E-07	9.4835E-03
520395.32	4258972.77	54604.90258	0.45292	0.15982	0.43132	0.16931	9.47E-03	1.06E-06	3.28E-07	1.01E-06	3.33E-07	9.4737E-03
520305.42	4258243.02	54604.86763	0.24556	0.79829	0.25285	0.87001	9.47E-03	5.76E-07	1.64E-06	5.94E-07	1.71E-06	9.4755E-03
520266.7	4259022.98	54590.20778	1.03661	0.21013	0.97768	0.22238	9.47E-03	2.43E-06	4.31E-07	2.30E-06	4.38E-07	9.4740E-03
520344.6	4258233.15	54578.89585	0.22816	0.61555	0.23438	0.66424	9.47E-03	5.36E-07	1.26E-06	5.50E-07	1.31E-06	9.4701E-03
520099.33	4258412.38	54552.31934	0.47264	13.96792	0.50533	15.87652	9.46E-03	1.11E-06	2.86E-05	1.19E-06	3.13E-05	9.5240E-03
520345.87	4259002.85	54523.14052	0.60411	0.17042	0.57488	0.18222	9.46E-03	1.42E-06	3.50E-07	1.35E-06	3.59E-07	9.4603E-03
520520.73	4258347.04	54520.01029	0.17911	0.23288	0.17916	0.24542	9.46E-03	4.20E-07	4.78E-07	4.21E-07	4.83E-07	9.4580E-03
520365.65	4258992.82	54507.92984	0.53664	0.16516	0.51078	0.176	9.45E-03	1.26E-06	3.39E-07	1.20E-06	3.46E-07	9.4573E-03
520167.65	4259003.15	54485.89842	2.79117	0.31631	2.5094	0.30656	9.45E-03	6.55E-06	6.49E-07	5.89E-06	6.03E-07	9.4640E-03
520256.41	4258262.87	54482.89744	0.27229	1.16089	0.28441	1.2857	9.45E-03	6.39E-07	2.38E-06	6.68E-07	2.53E-06	9.4560E-03
520207.38	4258292.72	54451.92118	0.3064	1.84843	0.32475	2.08181	9.44E-03	7.19E-07	3.79E-06	7.62E-07	4.10E-06	9.4538E-03
520236.99	4259023.03	54447.17011	1.32274	0.23444	1.23629	0.24387	9.44E-03	3.11E-06	4.81E-07	2.90E-06	4.80E-07	9.4506E-03
520043.6	4258882	54423.00133	4.72261	0.48716	6.74383	0.47085	9.44E-03	1.11E-05	9.99E-07	1.58E-05	9.27E-07	9.4683E-03
520513.42	4258813.8	54385.6573	0.24537	0.15417	0.23519	0.16129	9.43E-03	5.76E-07	3.16E-07	5.52E-07	3.17E-07	9.4347E-03
520276.6	4259022.97	54374.10246	0.96175	0.20285	0.90894	0.21552	9.43E-03	2.26E-06	4.16E-07	2.13E-06	4.24E-07	9.4362E-03
520543.97	4258709.63	54368.80228	0.2046	0.16427	0.19622	0.17176	9.43E-03	4.80E-07	3.37E-07	4.61E-07	3.38E-07	9.4316E-03
520031.77	4258857.13	54357.61776	3.38104	0.52581	4.35564	0.51165	9.43E-03	7.94E-06	1.08E-06	1.02E-05	1.01E-06	9.4483E-03
520536.25	4258752.01	54349.70991	0.21625	0.15928	0.20709	0.16598	9.43E-03	5.08E-07	3.27E-07	4.86E-07	3.27E-07	9.4284E-03
520413.12	4258233.36	54347.69065	0.20411	0.40866	0.20973	0.43783	9.43E-03	4.79E-07	8.38E-07	4.92E-07	8.62E-07	9.4290E-03
520158.59	4258999.41	54327.38081	3.18476	0.32825	2.83982	0.31484	9.42E-03	7.48E-06	6.73E-07	6.67E-06	6.20E-07	9.4383E-03
520096.8	4258953.92	54322.69424	12.70579	0.40919	11.03961	0.37943	9.42E-03	2.98E-05	8.39E-07	2.59E-05	7.47E-07	9.4794E-03
520276.02	4258252.93	54249.92706	0.26014	0.99152	0.26989	1.09085	9.41E-03	6.11E-07	2.03E-06	6.34E-07	2.15E-06	9.4148E-03
520531.25	4258434.03	54248.55186	0.18542	0.21086	0.18309	0.22255	9.41E-03	4.35E-07	4.32E-07	4.30E-07	4.38E-07	9.4109E-03
520442.46	4258243.45	54243.46305	0.19532	0.3478	0.19942	0.3719	9.41E-03	4.59E-07	7.13E-07	4.68E-07	7.32E-07	9.4107E-03
520058.31	4258908.05	54223.42773	7.86047	0.45494	16.71729	0.43408	9.40E-03	1.85E-05	9.33E-07	3.92E-05	8.54E-07	9.4643E-03
520421.02	4258952.12	54217.64144	0.39358	0.15653	0.37527	0.16489	9.40E-03	9.24E-07	3.21E-07	8.81E-07	3.25E-07	9.4063E-03
520227.09	4259023.05	54209.21421	1.4462	0.24354	1.34675	0.25127	9.40E-03	3.40E-06	4.99E-07	3.16E-06	4.95E-07	9.4099E-03
520447.57	4258921.12	54177.8653	0.34171	0.15389	0.32539	0.16199	9.40E-03	8.02E-07	3.16E-07	7.64E-07	3.19E-07	9.3991E-03
520477.2	4258268.34	54173.86173	0.18577	0.29126	0.18704	0.30959	9.40E-03	4.36E-07	5.97E-07	4.39E-07	6.09E-07	9.3983E-03
520236.8	4258272.81	54163.88751	0.28409	1.38047	0.29908	1.53797	9.39E-03	6.67E-07	2.83E-06	7.02E-07	3.03E-06	9.4017E-03

520187.47	4259013.12	54119.0162	2.17614	0.28876	1.98433	0.28616	9.39E-03	5.11E-06	5.92E-07	4.66E-06	5.63E-07	9.3976E-03
520334.82	4258233.12	54078.7613	0.23118	0.65604	0.23742	0.70947	9.38E-03	5.43E-07	1.35E-06	5.57E-07	1.40E-06	9.3836E-03
520451.08	4258247.14	54075.35954	0.19268	0.33234	0.19616	0.35514	9.38E-03	4.52E-07	6.82E-07	4.61E-07	6.99E-07	9.3814E-03
520149.52	4258995.67	54073.61223	3.68338	0.33976	3.25293	0.32266	9.38E-03	8.65E-06	6.97E-07	7.64E-06	6.35E-07	9.3964E-03
520286.5	4259022.95	54042.35966	0.89464	0.196	0.84688	0.2089	9.37E-03	2.10E-06	4.02E-07	1.99E-06	4.11E-07	9.3783E-03
520326.08	4259012.89	54010.12892	0.68405	0.17624	0.64992	0.18888	9.37E-03	1.61E-06	3.61E-07	1.53E-06	3.72E-07	9.3717E-03
520531.6	4258409.1	53984.24051	0.18228	0.21374	0.18035	0.22572	9.36E-03	4.28E-07	4.38E-07	4.23E-07	4.44E-07	9.3651E-03
520017.12	4258646.05	53967.56951	1.41155	1.90682	1.80477	1.69131	9.36E-03	3.31E-06	3.91E-06	4.24E-06	3.33E-06	9.3752E-03
520385.44	4258982.79	53916.18569	0.479	0.16041	0.45612	0.17033	9.35E-03	1.12E-06	3.29E-07	1.07E-06	3.35E-07	9.3544E-03
520471.28	4258891.29	53848.75812	0.30366	0.15188	0.28986	0.15991	9.34E-03	7.13E-07	3.11E-07	6.80E-07	3.15E-07	9.3418E-03
520011.14	4258789.3	53805.49525	1.98003	0.69627	2.41165	0.67137	9.33E-03	4.65E-06	1.43E-06	5.66E-06	1.32E-06	9.3454E-03
520403.83	4258969.25	53790.40734	0.43242	0.15764	0.41177	0.16672	9.33E-03	1.02E-06	3.23E-07	9.67E-07	3.28E-07	9.3323E-03
520217.19	4259023.07	53787.7566	1.58822	0.25283	1.47242	0.25845	9.33E-03	3.73E-06	5.19E-07	3.46E-06	5.09E-07	9.3375E-03
520480.45	4258877.48	53759.34302	0.29009	0.1515	0.27721	0.15947	9.32E-03	6.81E-07	3.11E-07	6.51E-07	3.14E-07	9.3263E-03
520112.75	4258970.5	53737.75876	7.87503	0.38687	6.6966	0.35868	9.32E-03	1.85E-05	7.93E-07	1.57E-05	7.06E-07	9.3563E-03
520422.91	4258233.39	53728.94688	0.20035	0.38751	0.20559	0.41486	9.32E-03	4.70E-07	7.95E-07	4.83E-07	8.17E-07	9.3216E-03
520539.82	4258743.47	53721.31583	0.21222	0.15953	0.20323	0.1663	9.32E-03	4.98E-07	3.27E-07	4.77E-07	3.27E-07	9.3193E-03
520005.99	4258728.64	53703.78316	1.57224	0.97872	1.92789	0.91919	9.31E-03	3.69E-06	2.01E-06	4.53E-06	1.81E-06	9.3267E-03
520459.7	4258250.83	53677.71601	0.18987	0.31812	0.19276	0.33954	9.31E-03	4.46E-07	6.52E-07	4.53E-07	6.68E-07	9.3124E-03
520295.63	4258242.99	53604.11725	0.24818	0.85747	0.2562	0.93728	9.30E-03	5.83E-07	1.76E-06	6.01E-07	1.85E-06	9.3022E-03
520438.49	4258934.88	53602.84072	0.35876	0.15396	0.34145	0.16204	9.30E-03	8.42E-07	3.16E-07	8.02E-07	3.19E-07	9.2994E-03
520296.4	4259022.93	53596.15361	0.83417	0.18953	0.79051	0.2025	9.30E-03	1.96E-06	3.89E-07	1.86E-06	3.99E-07	9.3006E-03
520495.06	4258285.99	53585.14354	0.18108	0.26734	0.1809	0.28274	9.29E-03	4.25E-07	5.48E-07	4.25E-07	5.57E-07	9.2961E-03
520519.84	4258336.65	53573.26708	0.17792	0.23549	0.17797	0.2478	9.29E-03	4.18E-07	4.83E-07	4.18E-07	4.88E-07	9.2938E-03
520006.86	4258754.86	53564.82096	1.68996	0.83626	2.07927	0.79457	9.29E-03	3.97E-06	1.72E-06	4.88E-06	1.56E-06	9.3027E-03
520462.31	4258905.01	53542.38223	0.31757	0.15204	0.30277	0.16007	9.29E-03	7.46E-07	3.12E-07	7.11E-07	3.15E-07	9.2888E-03
520531.22	4258459.82	53523.11921	0.18823	0.2074	0.18542	0.2191	9.28E-03	4.42E-07	4.25E-07	4.35E-07	4.31E-07	9.2851E-03
520489.86	4258863.58	53430.41337	0.27695	0.15123	0.26504	0.15902	9.27E-03	6.50E-07	3.10E-07	6.22E-07	3.13E-07	9.2692E-03
520325.03	4258233.08	53424.24383	0.23403	0.7004	0.24045	0.75921	9.27E-03	5.49E-07	1.44E-06	5.64E-07	1.49E-06	9.2702E-03
520148.49	4258342.53	53417.9575	0.36086	4.0575	0.37792	4.73336	9.27E-03	8.47E-07	8.32E-06	8.87E-07	9.32E-06	9.2845E-03
520504.47	4258300.03	53400.32952	0.17918	0.25584	0.1787	0.26961	9.26E-03	4.21E-07	5.25E-07	4.20E-07	5.31E-07	9.2639E-03
520355.77	4259002.84	53346.95439	0.56936	0.16596	0.54173	0.1772	9.25E-03	1.34E-06	3.40E-07	1.27E-06	3.49E-07	9.2561E-03
520087.95	4258950.27	53298.27414	16.50572	0.41077	16.44111	0.38246	9.24E-03	3.88E-05	8.42E-07	3.86E-05	7.53E-07	9.3233E-03
520217.2	4258282.75	53276.37	0.29508	1.6721	0.31255	1.87362	9.24E-03	6.93E-07	3.43E-06	7.34E-07	3.69E-06	9.2491E-03
520207.29	4259023.08	53274.97654	1.75388	0.26248	1.61844	0.26552	9.24E-03	4.12E-06	5.38E-07	3.80E-06	5.23E-07	9.2493E-03
520033.34	4258867.77	53249.14449	3.53878	0.50332	4.61327	0.4897	9.24E-03	8.31E-06	1.03E-06	1.08E-05	9.64E-07	9.2570E-03
520039.69	4258569.84	53207.87675	1.2109	4.86356	1.59274	3.7197	9.23E-03	2.84E-06	9.97E-06	3.74E-06	7.32E-06	9.2525E-03
520177.57	4259013.13	53197.21512	2.45643	0.29855	2.22534	0.29226	9.23E-03	5.77E-06	6.12E-07	5.22E-06	5.75E-07	9.2390E-03
520485.9	4258272.06	53194.3661	0.18273	0.27909	0.18331	0.29628	9.23E-03	4.29E-07	5.72E-07	4.30E-07	5.83E-07	9.2283E-03
520168.13	4258322.6	53169.01698	0.33731	3.00231	0.35601	3.42576	9.22E-03	7.92E-07	6.16E-06	8.36E-07	6.74E-06	9.2365E-03
520335.99	4259012.87	53096.19728	0.64271	0.17135	0.6108	0.18352	9.21E-03	1.51E-06	3.51E-07	1.43E-06	3.61E-07	9.2129E-03
520375.56	4258992.8	53059.77155	0.5071	0.16101	0.48262	0.17133	9.20E-03	1.19E-06	3.30E-07	1.13E-06	3.37E-07	9.2060E-03
520468.31	4258254.52	53043.61475	0.18692	0.30508	0.18926	0.32506	9.20E-03	4.39E-07	6.26E-07	4.44E-07	6.40E-07	9.2023E-03
520306.3	4259022.92	53027.64203	0.77944	0.18346	0.7392	0.19636	9.20E-03	1.83E-06	3.76E-07	1.74E-06	3.87E-07	9.2017E-03
520547.59	4258700.97	52990.64375	0.20083	0.16422	0.19273	0.17166	9.19E-03	4.71E-07	3.37E-07	4.52E-07	3.38E-07	9.1926E-03
520177.95	4258312.63	52979.38933	0.3264	2.6264	0.34499	2.99029	9.19E-03	7.66E-07	5.39E-06	8.10E-07	5.89E-06	9.2019E-03
520044.8	4258892.48	52967.57124	4.93667	0.46711	7.16145	0.45128	9.19E-03	1.16E-05	9.58E-07	1.68E-05	8.88E-07	9.2172E-03
520512.2	4258824.31	52963.85553	0.24788	0.15201	0.23761	0.15914	9.19E-03	5.82E-07	3.12E-07	5.58E-07	3.13E-07	9.1881E-03
520432.7	4258233.42	52952.63398	0.19652	0.36798	0.20137	0.39359	9.18E-03	4.61E-07	7.55E-07	4.73E-07	7.75E-07	9.1869E-03
520543.4	4258734.94	52949.99644	0.20826	0.15957	0.19945	0.16646	9.18E-03	4.89E-07	3.27E-07	4.68E-07	3.28E-07	9.1855E-03
520138.67	4258352.5	52933.44512	0.37227	4.84359	0.38911	5.70705	9.18E-03	8.74E-07	9.93E-06	9.14E-07	1.12E-05	9.2040E-03
520109.18	4258392.41	52924.318	0.43063	9.82729	0.4548	11.84313	9.18E-03	1.01E-06	2.02E-05	1.07E-06	2.33E-05	9.2250E-03
520029.81	4258598.97	52884.42774	1.29539	3.21443	1.71407	2.65889	9.17E-03	3.04E-06	6.59E-06	4.02E-06	5.23E-06	9.1915E-03
520266.23	4258252.9	52872.67757	0.26217	1.07409	0.27326	1.18533	9.17E-03	6.15E-07	2.20E-06	6.42E-07	2.33E-06	9.1763E-03
520429.59	4258948.58	52871.41079	0.3767	0.15374	0.35845	0.16188	9.17E-03	8.84E-07	3.15E-07	8.42E-07	3.19E-07	9.1727E-03
520412.34	4258965.73	52866.42353	0.41317	0.1555	0.39347	0.16418	9.17E-03	9.70E-07	3.19E-07	9.24E-07	3.23E-07	9.1720E-03
520499.55	4258849.56	52840.19078	0.26423	0.15082	0.25314	0.15834	9.16E-03	6.20E-07	3.09E-07	5.94E-07	3.12E-07	9.1667E-03
520246.62	4258262.84	52797.09305	0.27367	1.2669	0.28736	1.40697	9.16E-03	6.42E-07	2.60E-06	6.75E-07	2.77E-06	9.1641E-03
520103.61	4258966.72	52765.92673	10.1761	0.39125	8.69025	0.36269	9.15E-03	2.39E-05	8.02E-07	2.04E-05	7.14E-07	9.1978E-03
520383.79	4258223.27	52693.7461	0.21077	0.48693	0.21695	0.52189	9.14E-03	4.95E-07	9.99E-07	5.09E-07	1.03E-06	9.1425E-03
520374	4258223.24	52665.99325	0.21395	0.51624	0.22012	0.55382	9.13E-03	5.02E-07	1.06E-06	5.17E-07	1.09E-06	9.1378E-03
520315.24	4258233.05	52633.38288	0.23669	0.74913	0.24353	0.81401	9.13E-03	5.56E-07	1.54E-06	5.72E-07	1.60E-06	9.1333E-03
520197.39	4259023.1	52630.88976	1.94881	0.27216	1.78884	0.27222	9.13E-03	4.58E-06	5.58E-07	4.20E-06	5.36E-07	9.1385E-03
520514.15	4258314.19	52627.47405	0.17709	0.24417	0.17673	0.25678	9.13E-03	4.16E-07	5.01E-07	4.15E-07	5.05E-07	9.1298E-03
520007.47	4258780.46	52597.54505	1.81517	0.7217	2.19534	0.69373	9.12E-03	4.26E-06	1.48E-06	5.15E-06	1.37E-06	9.1351E-03
520393.58	4258223.3	52568.44161	0.20748	0.45987	0.21361	0.49248	9.12E-03	4.87E-07	9.43E-07	5.01E-07	9.69E-07	9.1207E-03
520364.21	4258223.21	52566.05598	0.21711	0.54783	0.22317	0.58863	9.12E-03	5.10E-07	1.12E-06	5.24E-07	1.16E-06	9.1207E-03
520059.43	4258918.51	52537.50618	8.30808	0.4369	18.78784	0.41671	9.11E-03	1.95E-05	8.96E-07	4.41E-05	8.20E-07	9.1777E-03
520285.84	4258242.96	52495.07635	0.25056	0.92333	0.25955	1.01236	9.11E-03	5.88E-07	1.89E-06	6.09E-07	1.99E-06	9.1101E-03
520187.77	4258302.66	52447.34572	0.31536	2.32254	0.3339	2.63168	9.10E-03	7.40E-07	4.76E-06	7.84E-07	5.18E-06	9.1082E-03
520403.37	4258223.33	52371.39693	0.20418	0.43471	0.2101	0.46538	9.08E-03	4.79E-07	8.92E-07	4.93E-07	9.16E-07	9.0864E-03
520456.29	4258917.51	52369.84253	0.32732	0.15115	0.3118	0.15907	9.08E-03	7.68E-07	3.10E-07	7.32E-07	3.13E-07	9.0854E-03
520049.56	4258540.7	52344.02875	1.03533	7.62916	1.2709	5.3466	9.08E-03	2.43E-06	1.56E-05	2.98E-06	1.05E-05	9.1104E-03
520534.94	4258417.86	52330.15172	0.18154	0.20985	0.17939	0.22144	9.08E-03	4.26E-07	4.30E-07	4.21E-07	4.36E-07	9.0781E-03
520354.42	4258223.18	52305.21392	0.22013	0.58213	0.22611	0.62656	9.07E-03	5.17E-07	1.19E-06	5.31E-07	1.23E-06	9.0756E-03
520316.2	4259022.9	52304.18117	0.72959	0.17776	0.6922	0.19046	9.07E-03	1.71E-06	3.65E-07	1.63E-06	3.75E-07	9.0760E-03
520476.93	4258258.21	52259.10792	0.18393	0.29283	0.1857	0.31146	9.06E-03	4.32E-07	6.01E-07	4.36E-07	6.13E-07	9.0662E-03
520015.13	4258823.02	52252.81191	2.24438	0.59076	2.73789	0.57439	9.06E-03	5.27E-06	1.21E-06	6.43E-06	1.13E-06	9.0771E-03
520049.2	4258904.29	52229.04617	5.72055	0.45004	8.91349	0.43333	9.06E-03	1.34E-05	9.23E-07	2.09E-05	8.53E-07	9.0950E-03
520256.81	4259033	52187.50346	1.12134	0.21323	1.05434	0.2242	9.05E-03	2.63E-06	4.37E-07	2.48E-06	4.41E-07	9.0577E-03
520534.65	4258442.96	52161.93531	0.18452	0.20707	0.18201	0.21849	9.05E-03	4.33E-07	4.25E-07	4.27E-07	4.30E-07	9.0490E-03
520266.71	4259032.98	52161.39039	1.03758	0.20588	0.97815	0.21753	9.05E-03	2.44E-06	4.22E-07	2.30E-06	4.28E-07	9.0527E-03
520531.95	4258371.87	52160.98345	0.17731	0.21829	0.17651	0.23064	9.05E-03	4.16E-07	4.48E-07	4.14E-07	4.54E-07	9.0488E-03
520227.02	4258272.78	52160.46211	0.2845	1.51982	0.30077	1.69736	9.05E-03	6.68E-07	3.12E-06	7.06E-07	3.34E-06	9.0548E-03
520246.91	4259033.02	52158.56943	1.2162	0.22111	1.14031	0.23112	9.05E-03	2.86E-06	4.53E-07	2.68E-06	4.55E-07	9.0531E-03
520395.34	4258982.77	52155.39248	0.45387	0.15639	0.43183	0.16583	9.05E-03	1.07E-06	3.21E-07	1.01E-06	3.26E-07	9.0488E-03
520167.67	4259013.15	52150.79861	2.79852	0.30764	2.51735	0.29757	9.05E-03	6.57E-06	6.31E-07	5.91E-06	5.86E-07	9.0590E-03
520442.49	4258233.45	52104.8772	0.19273	0.34973	0.1971	0.37383	9.04E-03	4.52E-07	7.17E-07	4.63E-07	7.36E-07	9.0397E-03
520345.89	4259012.85	52085.90549	0.60481	0.1668	0.57493	0.17845	9.03E-03	1.42E-06	3.42E-07	1.35E-06	3.51E-07	9.0375E-03
520365.67	4259002.82	52077.93488	0.53737	0.16171	0.51118	0.17242	9.03E-03	1.26E-06	3.32E-07	1.20E-06	3.39E-07	9.0358E-03
520034.75	4258878.34	52059.04821	3.69518	0.48221	4.86576	0.46908	9.03E-03	8.68E-06	9.89E-07	1.14E-05	9.23E-07	9.0514E-03
520546.97	4258726.4	52046.27685	0.20442	0.15946	0.1958	0.16649	9.03E-03	4.80E-07	3.27E-07	4.60E-07	3.28E-07	9.0288E-03
520020.34	4258842.42	52037.74906	2.5567	0.54539	3.15349	0.53178	9.03E-03	6.00E-06	1.12E-06	7.40E-06	1.05E-06	9.0413E-03
520237.01	4259033.03	52027.95404	1.32402	0.22943	1.23738	0.23813	9.02E-03	3.11E-06	4.71E-07	2.90E-06	4.69E-07	9.0310E-03
520128.85	4258362.47	52024.00474	0.38325	5.92358	0.40067	7.02607	9.02E-03	9.00E-07	1.21E-05	9.41E-07	1.38E-05	9.0511E-03
520530.6	4258361.28	51965.60785	0.17651	0.22109	0.17608	0.23341	9.01E-03	4.14E-07	4.53E-07	4.13E-07	4.59E-07	9.0149E-03
520451.47	4258237.29	51960.31983	0.19014	0.33347	0.19395	0.35623	9.01E-03	4.46E-07	6.84E-07	4.55E-07	7.01E-07	9.0146E-03
520276.61	4259032.97	51959.98386	0.96259	0.19884	0.90928	0.21094	9.01E-03	2.26E-06	4.08E-07	2.13E-06	4.15E-07	9.0174E-03
520158.68	4259009.44	51954.89706	3.17876	0.31851	2.83875	0.30509	9.01E-03	7.46E-06	6.53E-07	6.66E-06	6.01E-07	9.0267E-03
520413.16	4258223.36	51938.97954	0.20068	0.41164	0.20641	0.44032	9.01E-03	4.71E-07	8.44E-07	4.85E-07	8.67E-07	9.0112E-03
520503.84	4258289.75	51937.56694	0.17777	0.25747	0.17738	0.27163	9.01E-03	4.17E-07	5.28E-07	4.16E-07	5.35E-07	9.0102E-03
520447.13	4258931.31	51935.67111	0.34331	0.15129	0.32681	0.15918	9.01E-03	8.06E-07	3.10E-07	7.67E-07	3.13E-07	9.0102E-03
520494.59	4258275.78	51930.65186	0.17954	0.26867	0.17968	0.28452	9.01E-03	4.22E-07	5.51E-07	4.22E-07	5.60E-07	9.0091E-03
520094.46	4258962.95	51925.37528	13.68566	0.39444	12.14811	0.36641	9.01E-03	3.21E-05	8.09E-07	2.85E-05	7.21E-07	9.0684E-03
520479.72	4258887.79	51889.70253	0.29201	0.14953	0.27916	0.15731	9.00E-03	6.86E-07	3.07E-07	6.55E-07	3.10E-07	9.0020E-03
520019.93	4258628.11	51863.93831	1.32087	2.24134	1.70421	1.94819	9.00E-03	3.10E-06	4.60E-06	4.00E-06	3.83E-06	9.0111E-03
520344.64	4258223.15	51860.30452	0.22294	0.61948	0.22897	0.66789	8.99E-03	5.23E-07	1.27E-06	5.38E-07	1.31E-06	8.9986E-03
520187.49	4259023.12	51854.65768	2.18105	0.2817	1.99037	0.27846	8.99E-03	5.12E-06	5.78E-07	4.67E-06	5.48E-07	9.0049E-03
520420.85	4258962.2	51829.59005	0.39513	0.15333	0.37623	0.16164	8.99E-03	9.28E-07	3.14E-07	8.83E-07	3.18E-07	8.9920E-03
520113.27	4258980.7	51821.79389	7.89723	0.37383	6.66998	0.34655	8.99E-03	1.85E-05	7.67E-07	1.57E-05	6.82E-07	9.0239E-03
520197.59	4258292.69	51804.50569	0.30468	2.07052	0.32281	2.33741	8.99E-03	7.15E-07	4.25E-06	7.58E-07	4.60E-06	8.9956E-03
520007.12	4258683.15	51795.19095	1.37204	1.32904	1.6948	1.21691	8.98E-03	3.22E-06	2.73E-06	3.98E-06	2.40E-06	8.9960E-03
520525.4	4258801.87	51774.07296	0.23236	0.15207	0.22269	0.15879	8.98E-03	5.46E-07	3.12E-07	5.23E-07	3.13E-07	8.9817E-03
520227.11	4259033.05	51773.26276	1.44734	0.23812	1.3476	0.24511	8.98E-03	3.40E-06	4.88E-07	3.16E-06	4.82E-07	8.9874E-03
520470.69	4258901.54	51771.97826	0.3054	0.14951	0.29135	0.15734	8.98E-03	7.17E-07	3.07E-07	6.84E-07	3.10E-07	8.9816E-03
520305.45	4258233.02	51756.46872	0.23922	0.80275	0.24669	0.8747	8.98E-03	5.62E-07	1.65E-06	5.79E-07	1.72E-06	8.9814E-03
520534.32	4258382.9	51728.63554	0.17759	0.2147	0.17634	0.22687	8.97E-03	4.17E-07	4.40E-07	4.14E-07	4.47E-07	8.9738E-03
520528.93	4258793.43	51719.30066	0.22807	0.15266	0.21857	0.15929	8.97E-03	5.35E-07	3.13E-07	5.13E-07	3.14E-07	8.9722E-03
520149.69	4259005.73	51684.17746	3.65988	0.32897	3.24065	0.31221	8.96E-03	8.59E-06	6.75E-07	7.61E-06	6.15E-07	8.9819E-03
520286.51	4259032.95	51649.89643	0.89537	0.19214	0.84701	0.20452	8.96E-03	2.10E-06	3.94E-07	1.99E-06	4.03E-07	8.9633E-03
520003.14	4258745.9	51643.42803	1.54648	0.86765	1.88355	0.82097	8.96E-03	3.63E-06	1.78E-06	4.42E-06	1.62E-06	8.9688E-03
520488.97	4258873.96	51642.74893	0.27914	0.14893	0.26693	0.15663	8.96E-03	6.55E-07	3.05E-07	6.27E-07	3.08E-07	8.9591E-03
520460.45	4258241.14	51603.4084	0.18738	0.31853	0.19063	0.33991	8.95E-03	4.40E-07	6.53E-07	4.48E-07	6.69E-07	8.9526E-03
520011.5	4258814.28	51587.76101	2.06004	0.61102	2.50103	0.59283	8.95E-03	4.84E-06	1.25E-06	5.87E-06	1.17E-06	8.9608E-03
520532.46	4258785	51585.3233	0.22385	0.1533	0.21455	0.15983	8.95E-03	5.26E-07	3.14E-07	5.04E-07	3.15E-07	8.9489E-03
520326.1	4259022.89	51546.71655	0.68439	0.17253	0.6495	0.18491	8.94E-03	1.61E-06	3.54E-07	1.52E-06	3.64E-07	8.9444E-03
520529.45	4258350.78	51534.27337	0.17559	0.22377	0.1754	0.23595	8.94E-03	4.12E-07	4.59E-07	4.12E-07	4.64E-07	8.9401E-03
520385.46	4258992.79	51522.71008	0.47982	0.15705	0.45662	0.16687	8.94E-03	1.13E-06	3.22E-07	1.07E-06	3.28E-07	8.9392E-03
520551.22	4258692.32	51497.93615	0.19717	0.16419	0.18933	0.17151	8.93E-03	4.63E-07	3.37E-07	4.44E-07	3.38E-07	8.9337E-03
520017.12	4258636.77	51496.34068	1.31954	2.02975	1.68549	1.78629	8.93E-03	3.10E-06	4.16E-06	3.96E-06	3.52E-06	8.9465E-03
520022.72	4258853.39	51493.17727	2.71947	0.5215	3.3783	0.50893	8.93E-03	6.38E-06	1.07E-06	7.93E-06	1.00E-06	8.9476E-03
520511.13	4258834.76	51485.41954	0.2502	0.14979	0.23979	0.15692	8.93E-03	5.87E-07	3.07E-07	5.63E-07	3.09E-07	8.9317E-03
520485.55	4258261.89	51427.13856	0.181	0.28097	0.1821	0.29846	8.92E-03	4.25E-07	5.76E-07	4.28E-07	5.88E-07	8.9218E-03
520217.21	4259033.07	51411.27756	1.58964	0.24714	1.47397	0.252	8.92E-03	3.73E-06	5.07E-07	3.46E-06	4.96E-07	8.9252E-03
520403.79	4258979.27	51410.35652	0.43352	0.15425	0.41242	0.16329	8.92E-03	1.02E-06	3.16E-07	9.68E-07	3.21E-07	8.9195E-03
520256.44	4258252.87	51393.36114	0.26375	1.16754	0.27629	1.29228	8.91E-03	6.19E-07	2.39E-06	6.49E-07	2.54E-06	8.9202E-03
520513.34	4258303.83	51390.38429	0.1758	0.24625	0.17533	0.25902	8.91E-03	4.13E-07	5.05E-07	4.12E-07	5.10E-07	8.9153E-03
520422.94	4258223.39	51389.70531	0.19714	0.39028	0.20259	0.41718	8.91E-03	4.63E-07	8.00E-07	4.76E-07	8.21E-07	8.9159E-03
520140.71	4259002.02	51382.53332	4.29441	0.33894	3.76041	0.31895	8.91E-03	1.01E-05	6.95E-07	8.83E-06	6.28E-07	8.9323E-03
520535.99	4258776.56	51368.47685	0.21971	0.1539	0.21058	0.16032	8.91E-03	5.16E-07	3.16E-07	4.94E-07	3.16E-07	8.9113E-03
520438.16	4258945.03	51356.61052	0.36031	0.15123	0.34285	0.15913	8.91E-03	8.46E-07	3.10E-07	8.05E-07	3.13E-07	8.9098E-03
520334.85	4258223.12	51355.84737	0.22573	0.66005	0.23186	0.71333	8.91E-03	5.30E-07	1.35E-06	5.44E-07	1.40E-06	8.9113E-03
520004.25	4258700.34	51337.42457	1.38572	1.16109	1.69441	1.07433	8.90E-03	3.25E-06	2.38E-06	3.98E-06	2.11E-06	8.9160E-03
520276.05	4258242.93	51285.56373	0.25264	0.99701	0.26282	1.09652	8.90E-03	5.93E-07	2.04E-06	6.17E-07	2.16E-06	8.9007E-03
520296.42	4259032.93	51231.94341	0.83473	0.18577	0.79036	0.19827	8.89E-03	1.96E-06	3.81E-07	1.86E-06	3.90E-07	8.8905E-03
520498.46	4258860.02	51218.71692	0.26657	0.14867	0.25531	0.15615	8.88E-03	6.26E-07	3.05E-07	5.99E-07	3.07E-07	8.8855E-03
520003.81	4258771.61	51181.73719	1.66241	0.7483	2.002	0.71654	8.88E-03	3.90E-06	1.53E-06	4.70E-06	1.41E-06	8.8888E-03
520534.69	4258468.95	51082.91247	0.18702	0.20315	0.18388	0.21469	8.86E-03	4.39E-07	4.17E-07	4.32E-07	4.23E-07	8.8618E-03
520539.52	4258768.13	51058.555	0.21567	0.15432	0.20665	0.16068	8.86E-03	5.06E-07	3.16E-07	4.85E-07	3.16E-07	8.8575E-03
520469.42	4258244.98	51005.71469	0.18445	0.30487	0.18718	0.32481	8.85E-03	4.33E-07	6.25E-07	4.39E-07	6.39E-07	8.8488E-03
520131.72	4258998.31	51000.95362	5.12534	0.34782	4.43578	0.32503	8.85E-03	1.20E-05	7.13E-07	1.04E-05	6.40E-07	8.8697E-03
520236.84	4258262.81	50997.38356	0.2744	1.38833	0.28947	1.54556	8.85E-03	6.44E-07	2.85E-06	6.80E-07	3.04E-06	8.8525E-03
520355.79	4259012.84	50985.97097	0.57001	0.16247	0.54187	0.17358	8.84E-03	1.34E-06	3.33E-07	1.27E-06	3.42E-07	8.8466E-03
520177.59	4259023.13	50985.23408	2.46169	0.29091	2.23212	0.28413	8.84E-03	5.78E-06	5.97E-07	5.24E-06	5.59E-07	8.8553E-03
520550.54	4258717.87	50982.09096	0.20068	0.15932	0.19229	0.16645	8.84E-03	4.71E-07	3.27E-07	4.51E-07	3.28E-07	8.8442E-03
520002.21	4258719.55	50951.11547	1.41943	1.01423	1.72308	0.948	8.84E-03	3.33E-06	2.08E-06	4.05E-06	1.87E-06	8.8486E-03
520207.41	4258282.72	50946.26659	0.29413	1.86056	0.3118	2.09034	8.84E-03	6.91E-07	3.82E-06	7.32E-07	4.11E-06	8.8458E-03
520207.31	4259033.08	50931.01458	1.75525	0.25635	1.62009	0.25868	8.83E-03	4.12E-06	5.26E-07	3.80E-06	5.09E-07	8.8427E-03
520104.2	4258976.96	50879.93197	10.15584	0.37771	8.60388	0.35017	8.82E-03	2.38E-05	7.75E-07	2.02E-05	6.89E-07	8.8704E-03
520060.45	4258928.92	50876.54644	8.68165	0.42011	18.28267	0.40053	8.82E-03	2.04E-05	8.62E-07	4.29E-05	7.88E-07	8.8893E-03
520528.46	4258340.34	50868.85699	0.17451	0.22658	0.17447	0.23851	8.82E-03	4.10E-07	4.65E-07	4.10E-07	4.70E-07	8.8247E-03
520036.03	4258888.86	50812.04349	3.84751	0.46245	5.11585	0.44975	8.81E-03	9.03E-06	9.48E-07	1.20E-05	8.85E-07	8.8360E-03
520295.66	4258232.99	50801.78433	0.24159	0.86207	0.24989	0.94223	8.81E-03	5.67E-07	1.77E-06	5.87E-07	1.85E-06	8.8161E-03
520432.73	4258223.42	50785.78509	0.19363	0.37033	0.19868	0.39572	8.81E-03	4.55E-07	7.60E-07	4.66E-07	7.79E-07	8.8110E-03
520007.88	4258805.54	50772.22612	1.895	0.6321	2.28886	0.61175	8.81E-03	4.45E-06	1.30E-06	5.37E-06	1.20E-06	8.8185E-03
520336	4259022.87	50755.06502	0.64323	0.16772	0.61057	0.1797	8.80E-03	1.51E-06	3.44E-07	1.43E-06	3.54E-07	8.8069E-03
520465.01	4258913.9	50754.70828	0.31438	0.14867	0.29967	0.15641	8.80E-03	7.38E-07	3.05E-07	7.04E-07	3.08E-07	8.8052E-03
520050.41	4258914.79	50732.39467	5.98973	0.43244	9.58671	0.41613	8.80E-03	1.41E-05	8.87E-07	2.25E-05	8.19E-07	8.8376E-03
520375.57	4259002.8	50725.74798	0.50783	0.15768	0.48306	0.16788	8.80E-03	1.19E-06	3.23E-07	1.13E-06	3.30E-07	8.8011E-03
520306.32	4259032.92	50710.03475	0.77997	0.17985	0.73906	0.19234	8.80E-03	1.83E-06	3.69E-07	1.74E-06	3.79E-07	8.7997E-03
520325.06	4258223.08	50708.18529	0.22833	0.70447	0.23479	0.76321	8.80E-03	5.36E-07	1.44E-06	5.51E-07	1.50E-06	8.7991E-03
520429.35	4258958.68	50692.09557	0.37819	0.15091	0.35986	0.15893	8.79E-03	8.88E-07	3.10E-07	8.45E-07	3.13E-07	8.7947E-03
520119.03	4258372.44	50645.79008	0.39385	7.47085	0.41255	8.95863	8.78E-03	9.25E-07	1.53E-05	9.69E-07	1.76E-05	8.8191E-03
520024.39	4258864.07	50634.30232	2.84704	0.49902	3.55801	0.48729	8.78E-03	6.68E-06	1.02E-06	8.35E-06	9.59E-07	8.7993E-03
520538.28	4258426.62	50580.58641	0.18076	0.20621	0.17843	0.21746	8.77E-03	4.24E-07	4.23E-07	4.19E-07	4.28E-07	8.7747E-03
520412.24	4258975.77	50565.47634	0.41437	0.15229	0.39435	0.16092	8.77E-03	9.73E-07	3.12E-07	9.26E-07	3.17E-07	8.7729E-03
520520.56	4258820.85	50519.3658	0.2392	0.14946	0.22932	0.15628	8.76E-03	5.62E-07	3.07E-07	5.38E-07	3.08E-07	8.7641E-03
520508.25	4258845.96	50495.80425	0.25443	0.14816	0.24379	0.15536	8.76E-03	5.97E-07	3.04E-07	5.72E-07	3.06E-07	8.7600E-03
520503.29	4258279.5	50486.8132	0.17635	0.25889	0.17616	0.27348	8.76E-03	4.14E-07	5.31E-07	4.14E-07	5.38E-07	8.7586E-03
520007.12	4258673.87	50432.43184	1.31288	1.4118	1.62182	1.28637	8.75E-03	3.08E-06	2.90E-06	3.81E-06	2.53E-06	8.7596E-03
520122.73	4258994.6	50405.58852	6.23603	0.355	5.33205	0.33013	8.74E-03	1.46E-05	7.28E-07	1.25E-05	6.50E-07	8.7712E-03
520494.17	4258265.58	50317.30013	0.17798	0.2701	0.17854	0.28635	8.73E-03	4.18E-07	5.54E-07	4.19E-07	5.64E-07	8.7293E-03
520383.82	4258213.27	50315.93701	0.2067	0.49024	0.2126	0.52484	8.73E-03	4.85E-07	1.01E-06	4.99E-07	1.03E-06	8.7301E-03
520455.77	4258927.73	50295.1927	0.32896	0.1487	0.31327	0.15641	8.72E-03	7.72E-07	3.05E-07	7.35E-07	3.08E-07	8.7256E-03
520538.77	4258402.04	50278.75524	0.17771	0.2088	0.17581	0.22035	8.72E-03	4.17E-07	4.28E-07	4.13E-07	4.34E-07	8.7223E-03
520478.4	4258248.82	50276.40009	0.18148	0.29202	0.18362	0.31063	8.72E-03	4.26E-07	5.99E-07	4.31E-07	6.11E-07	8.7223E-03
520523.13	4258318.03	50241.17613	0.17363	0.23488	0.17338	0.24676	8.71E-03	4.08E-07	4.82E-07	4.07E-07	4.86E-07	8.7159E-03
520197.41	4259033.1	50232.71609	1.94833	0.26537	1.7888	0.26483	8.71E-03	4.57E-06	5.44E-07	4.20E-06	5.21E-07	8.7225E-03
520393.61	4258213.3	50224.46815	0.20362	0.46308	0.20956	0.49526	8.71E-03	4.78E-07	9.50E-07	4.92E-07	9.75E-07	8.7141E-03
520374.03	4258213.24	50219.84578	0.2096	0.5197	0.21548	0.5569	8.71E-03	4.92E-07	1.07E-06	5.06E-07	1.10E-06	8.7136E-03

520040.1	4258900.54	50186.90411	4.32893	0.44531	5.9603	0.43208	8.70E-03	1.02E-05	9.13E-07	1.40E-05	8.51E-07	8.7306E-03
520546.59	4258751.26	50135.92322	0.20782	0.15494	0.19907	0.16132	8.70E-03	4.88E-07	3.18E-07	4.67E-07	3.18E-07	8.6974E-03
520364.24	4258213.21	50124.80387	0.21259	0.55128	0.21832	0.59191	8.69E-03	4.99E-07	1.13E-06	5.13E-07	1.17E-06	8.6972E-03
520512.62	4258293.51	50087.11755	0.17445	0.24812	0.174	0.26111	8.69E-03	4.10E-07	5.09E-07	4.08E-07	5.14E-07	8.6892E-03
520316.22	4259032.9	50052.05277	0.73016	0.17428	0.69214	0.18663	8.68E-03	1.71E-06	3.57E-07	1.62E-06	3.67E-07	8.6854E-03
520217.23	4258272.75	50047.74357	0.28405	1.68176	0.30095	1.8825	8.68E-03	6.67E-07	3.45E-06	7.07E-07	3.71E-06	8.6891E-03
520442.52	4258223.45	50027.51265	0.19005	0.35187	0.19467	0.37578	8.68E-03	4.46E-07	7.22E-07	4.57E-07	7.40E-07	8.6794E-03
520479.07	4258898.07	50024.81409	0.29389	0.14726	0.28074	0.15488	8.68E-03	6.90E-07	3.02E-07	6.59E-07	3.05E-07	8.6785E-03
520403.4	4258213.33	50020.49217	0.20047	0.43788	0.20636	0.46796	8.68E-03	4.71E-07	8.98E-07	4.84E-07	9.21E-07	8.6786E-03
520167.69	4259023.15	50019.17754	2.80632	0.29947	2.52645	0.2891	8.68E-03	6.59E-06	6.14E-07	5.93E-06	5.69E-07	8.6893E-03
520451.41	4258227.26	49978.86458	0.18772	0.33537	0.19182	0.3581	8.67E-03	4.41E-07	6.88E-07	4.50E-07	7.05E-07	8.6709E-03
520266.26	4258242.9	49978.74312	0.25435	1.07993	0.26585	1.19131	8.67E-03	5.97E-07	2.21E-06	6.24E-07	2.35E-06	8.6744E-03
520315.27	4258223.05	49969.18471	0.23081	0.75318	0.23779	0.81824	8.67E-03	5.42E-07	1.54E-06	5.58E-07	1.61E-06	8.6712E-03
520099.36	4258402.38	49956.11732	0.44004	14.01788	0.46876	15.73276	8.66E-03	1.03E-06	2.87E-05	1.10E-06	3.10E-05	8.7265E-03
520095.14	4258973.22	49932.56186	13.38111	0.37983	11.83297	0.35309	8.66E-03	3.14E-05	7.79E-07	2.78E-05	6.95E-07	8.7212E-03
520488.17	4258884.29	49923.47747	0.28108	0.14693	0.26883	0.15449	8.66E-03	6.60E-07	3.01E-07	6.31E-07	3.04E-07	8.6609E-03
520266.73	4259042.98	49887.79774	1.03819	0.20173	0.97811	0.21279	8.65E-03	2.44E-06	4.14E-07	2.30E-06	4.19E-07	8.6584E-03
520395.36	4258992.77	49884.01248	0.45465	0.15313	0.43236	0.1625	8.65E-03	1.07E-06	3.14E-07	1.02E-06	3.20E-07	8.6549E-03
520554.12	4258709.33	49855.29915	0.19708	0.15927	0.18896	0.16642	8.65E-03	4.63E-07	3.27E-07	4.44E-07	3.28E-07	8.6487E-03
520158.77	4259019.47	49841.20528	3.18862	0.30963	2.84869	0.29611	8.64E-03	7.49E-06	6.35E-07	6.69E-06	5.83E-07	8.6601E-03
520354.46	4258213.18	49835.52557	0.21536	0.5856	0.22107	0.62994	8.64E-03	5.06E-07	1.20E-06	5.19E-07	1.24E-06	8.6472E-03
520246.93	4259043.02	49834.12762	1.21655	0.21646	1.14023	0.22582	8.64E-03	2.86E-06	4.44E-07	2.68E-06	4.45E-07	8.6499E-03
520256.83	4259043	49822.00083	1.12107	0.20875	1.05353	0.21911	8.64E-03	2.63E-06	4.28E-07	2.47E-06	4.31E-07	8.6474E-03
520345.9	4259022.85	49814.4603	0.6054	0.16324	0.57474	0.17474	8.64E-03	1.42E-06	3.35E-07	1.35E-06	3.44E-07	8.6435E-03
520004.25	4258796.8	49803.90937	1.74678	0.65376	2.09638	0.63103	8.64E-03	4.10E-06	1.34E-06	4.92E-06	1.24E-06	8.6499E-03
520365.69	4259012.82	49802.85003	0.53797	0.15836	0.5114	0.16895	8.64E-03	1.26E-06	3.25E-07	1.20E-06	3.33E-07	8.6412E-03
520246.66	4258252.84	49796.45581	0.26476	1.27394	0.27867	1.41373	8.64E-03	6.22E-07	2.61E-06	6.54E-07	2.78E-06	8.6436E-03
520237.03	4259043.03	49778.72409	1.32514	0.22463	1.23836	0.23262	8.63E-03	3.11E-06	4.61E-07	2.91E-06	4.58E-07	8.6408E-03
520446.73	4258941.48	49777.30603	0.34463	0.14864	0.32798	0.15634	8.63E-03	8.09E-07	3.05E-07	7.70E-07	3.08E-07	8.6358E-03
520285.87	4258232.96	49715.23902	0.24365	0.92823	0.25303	1.01746	8.62E-03	5.72E-07	1.90E-06	5.94E-07	2.00E-06	8.6280E-03
520276.63	4259042.97	49700.08087	0.96315	0.1949	0.90916	0.20646	8.62E-03	2.26E-06	4.00E-07	2.13E-06	4.06E-07	8.6255E-03
520460.31	4258231.06	49688.35545	0.18516	0.32037	0.18877	0.3418	8.62E-03	4.35E-07	6.57E-07	4.43E-07	6.73E-07	8.6204E-03
520413.19	4258213.36	49681.83144	0.19724	0.41455	0.203	0.44274	8.62E-03	4.63E-07	8.50E-07	4.77E-07	8.72E-07	8.6197E-03
520025.9	4258874.69	49671.07449	2.97054	0.478	3.73421	0.46695	8.62E-03	6.97E-06	9.80E-07	8.77E-06	9.19E-07	8.6329E-03
520168.16	4258312.6	49669.10503	0.32169	3.01447	0.33777	3.44665	8.61E-03	7.55E-07	6.18E-06	7.93E-07	6.78E-06	8.6294E-03
520420.69	4258972.28	49635.33393	0.39637	0.15032	0.37739	0.15858	8.61E-03	9.31E-07	3.08E-07	8.86E-07	3.12E-07	8.6115E-03
520497.49	4258870.43	49589.53069	0.26876	0.14647	0.25723	0.1539	8.60E-03	6.31E-07	3.00E-07	6.04E-07	3.03E-07	8.6029E-03
520149.85	4259015.79	49578.11913	3.66539	0.31928	3.24685	0.30267	8.60E-03	8.61E-06	6.55E-07	7.62E-06	5.96E-07	8.6166E-03
520158.34	4258322.56	49575.84239	0.33155	3.48488	0.34726	3.99903	8.60E-03	7.78E-07	7.15E-06	8.15E-07	7.87E-06	8.6153E-03
520227.13	4259043.05	49557.11074	1.44862	0.23309	1.34917	0.23934	8.60E-03	3.40E-06	4.78E-07	3.17E-06	4.71E-07	8.6030E-03
520000.14	4258762.77	49512.7052	1.51737	0.77591	1.82693	0.73932	8.59E-03	3.56E-06	1.59E-06	4.29E-06	1.46E-06	8.5987E-03
520550.12	4258742.83	49510.13172	0.20404	0.15508	0.19546	0.16156	8.59E-03	4.79E-07	3.18E-07	4.59E-07	3.18E-07	8.5889E-03
520487.38	4258252.66	49492.95819	0.17858	0.27941	0.18	0.29694	8.58E-03	4.19E-07	5.73E-07	4.23E-07	5.85E-07	8.5863E-03
520187.51	4259033.12	49480.79549	2.17737	0.27429	1.98822	0.2706	8.58E-03	5.11E-06	5.63E-07	4.67E-06	5.33E-07	8.5931E-03
520177.98	4258302.63	49446.00498	0.31167	2.64031	0.32825	3.00201	8.58E-03	7.32E-07	5.42E-06	7.71E-07	5.91E-06	8.5890E-03
519999.42	4258736.93	49444.58686	1.40886	0.89888	1.70178	0.8466	8.58E-03	3.31E-06	1.84E-06	4.00E-06	1.67E-06	8.5868E-03
520344.67	4258213.15	49384.24692	0.21796	0.62301	0.2238	0.67146	8.57E-03	5.12E-07	1.28E-06	5.25E-07	1.32E-06	8.5691E-03
520326.12	4259032.89	49377.9411	0.68499	0.16918	0.64958	0.18128	8.56E-03	1.61E-06	3.47E-07	1.53E-06	3.57E-07	8.5682E-03
520286.53	4259042.95	49323.81678	0.89539	0.18821	0.84601	0.20009	8.55E-03	2.10E-06	3.86E-07	1.99E-06	3.94E-07	8.5599E-03
520437.86	4258955.16	49313.96182	0.36195	0.14858	0.34439	0.15633	8.55E-03	8.50E-07	3.05E-07	8.09E-07	3.08E-07	8.5556E-03
520522.21	4258307.63	49293.71335	0.17249	0.23699	0.17205	0.24895	8.55E-03	4.05E-07	4.86E-07	4.04E-07	4.90E-07	8.5516E-03
520385.47	4259002.79	49285.24123	0.48054	0.1538	0.45705	0.16353	8.55E-03	1.13E-06	3.15E-07	1.07E-06	3.22E-07	8.5511E-03
520140.93	4259012.11	49256.28601	4.2789	0.32828	3.75292	0.30877	8.54E-03	1.00E-05	6.73E-07	8.81E-06	6.08E-07	8.5634E-03
520061.39	4258939.3	49247.53632	9.06667	0.40428	19.47478	0.38534	8.54E-03	2.13E-05	8.29E-07	4.57E-05	7.59E-07	8.6104E-03
520051.52	4258925.24	49241.67015	6.24871	0.41594	10.25635	0.40004	8.54E-03	1.47E-05	8.53E-07	2.41E-05	7.87E-07	8.5811E-03
520422.98	4258213.39	49210.04238	0.19393	0.39295	0.19948	0.41939	8.54E-03	4.55E-07	8.06E-07	4.68E-07	8.26E-07	8.5378E-03
520217.23	4259043.07	49203.63464	1.59085	0.24173	1.47568	0.24586	8.53E-03	3.73E-06	4.96E-07	3.46E-06	4.84E-07	8.5423E-03
520469.2	4258234.87	49177.75301	0.18242	0.30666	0.18557	0.3267	8.53E-03	4.28E-07	6.29E-07	4.36E-07	6.43E-07	8.5318E-03
520473.72	4258910.29	49173.11027	0.30212	0.14624	0.28823	0.1538	8.53E-03	7.09E-07	3.00E-07	6.77E-07	3.03E-07	8.5308E-03
520404.09	4258989.16	49167.46623	0.43367	0.15092	0.41233	0.1599	8.53E-03	1.02E-06	3.10E-07	9.68E-07	3.15E-07	8.5305E-03
520305.48	4258223.02	49150.71808	0.23316	0.80684	0.24084	0.87923	8.52E-03	5.47E-07	1.65E-06	5.65E-07	1.73E-06	8.5295E-03
520227.05	4258262.78	49084.97638	0.27436	1.52854	0.29036	1.70522	8.51E-03	6.44E-07	3.13E-06	6.82E-07	3.36E-06	8.5214E-03
520538.16	4258478.07	49075.74495	0.18586	0.19953	0.18235	0.21084	8.51E-03	4.36E-07	4.09E-07	4.28E-07	4.15E-07	8.5137E-03
520507.07	4258856.46	49051.0903	0.25678	0.14608	0.246	0.15327	8.51E-03	6.03E-07	3.00E-07	5.78E-07	3.02E-07	8.5095E-03
520086.07	4258969.48	49050.76739	14.12102	0.38064	18.36207	0.35556	8.51E-03	3.32E-05	7.81E-07	4.31E-05	7.00E-07	8.5854E-03
520502.79	4258269.27	49046.58877	0.17491	0.26023	0.17504	0.27525	8.51E-03	4.11E-07	5.34E-07	4.11E-07	5.42E-07	8.5088E-03
520029.77	4258589.27	49037.22162	1.17454	3.3659	1.54052	2.76174	8.51E-03	2.76E-06	6.90E-06	3.62E-06	5.44E-06	8.5240E-03
520187.8	4258292.66	49022.26699	0.30174	2.3358	0.31865	2.64153	8.50E-03	7.08E-07	4.79E-06	7.48E-07	5.20E-06	8.5141E-03
520138.7	4258342.5	49006.32667	0.35212	4.86375	0.36653	5.72042	8.50E-03	8.27E-07	9.98E-06	8.60E-07	1.13E-05	8.5228E-03
520132.02	4259008.43	48892.27455	5.09011	0.33638	4.41394	0.31434	8.48E-03	1.19E-05	6.90E-07	1.04E-05	6.19E-07	8.5038E-03
520296.43	4259042.93	48887.23938	0.83443	0.18199	0.78915	0.19404	8.48E-03	1.96E-06	3.73E-07	1.85E-06	3.82E-07	8.4838E-03
520041.4	4258911.07	48878.88804	4.51393	0.42801	6.30897	0.41506	8.48E-03	1.06E-05	8.78E-07	1.48E-05	8.17E-07	8.5049E-03
520334.88	4258213.12	48842.46983	0.22046	0.6637	0.22658	0.71696	8.47E-03	5.18E-07	1.36E-06	5.32E-07	1.41E-06	8.4753E-03
520511.98	4258283.22	48832.89653	0.17314	0.24963	0.17277	0.26301	8.47E-03	4.06E-07	5.12E-07	4.06E-07	5.18E-07	8.4717E-03
520542.05	4258410.67	48829.29932	0.17703	0.20518	0.17489	0.21635	8.47E-03	4.16E-07	4.21E-07	4.11E-07	4.26E-07	8.4709E-03
520019.89	4258618.41	48821.82738	1.21338	2.36728	1.55596	2.04395	8.47E-03	2.85E-06	4.86E-06	3.65E-06	4.02E-06	8.4833E-03
520464.41	4258924.15	48795.56843	0.31602	0.14634	0.30115	0.15388	8.46E-03	7.42E-07	3.00E-07	7.07E-07	3.03E-07	8.4654E-03
520007.12	4258664.6	48794.9619	1.24983	1.49798	1.54488	1.35767	8.46E-03	2.93E-06	3.07E-06	3.63E-06	2.67E-06	8.4756E-03
520355.8	4259022.84	48779.54041	0.5706	0.15898	0.54167	0.16998	8.46E-03	1.34E-06	3.26E-07	1.27E-06	3.35E-07	8.4639E-03
520541.61	4258435.38	48768.84093	0.17992	0.2026	0.17741	0.21358	8.46E-03	4.22E-07	4.16E-07	4.17E-07	4.20E-07	8.4604E-03
520553.65	4258734.39	48768.36828	0.20039	0.15503	0.19195	0.16164	8.46E-03	4.70E-07	3.18E-07	4.51E-07	3.18E-07	8.4602E-03
520207.32	4259043.08	48744.07634	1.75653	0.25049	1.6219	0.25214	8.45E-03	4.12E-06	5.14E-07	3.81E-06	4.96E-07	8.4634E-03
520177.6	4259033.13	48709.51663	2.45858	0.28306	2.23125	0.27598	8.45E-03	5.77E-06	5.81E-07	5.24E-06	5.43E-07	8.4606E-03
520432.76	4258213.42	48673.55608	0.19063	0.37283	0.19587	0.39779	8.44E-03	4.48E-07	7.65E-07	4.60E-07	7.83E-07	8.4447E-03
520000.62	4258788.06	48667.10484	1.61024	0.67614	1.92163	0.65062	8.44E-03	3.78E-06	1.39E-06	4.51E-06	1.28E-06	8.4520E-03
520109.21	4258382.41	48663.60889	0.40343	9.86327	0.42459	11.85859	8.44E-03	9.47E-07	2.02E-05	9.97E-07	2.33E-05	8.4860E-03
520013.67	4258849.66	48637.59529	2.23652	0.51788	2.71056	0.50576	8.44E-03	5.25E-06	1.06E-06	6.36E-06	9.96E-07	8.4496E-03
520027.27	4258885.25	48631.13569	3.08733	0.45838	3.90798	0.44787	8.43E-03	7.25E-06	9.40E-07	9.17E-06	8.82E-07	8.4531E-03
520539.44	4258365.07	48627.52332	0.17282	0.21289	0.17207	0.2247	8.43E-03	4.06E-07	4.37E-07	4.04E-07	4.42E-07	8.4359E-03
520008.1	4258830.19	48601.46538	1.96654	0.55895	2.35671	0.54413	8.43E-03	4.62E-06	1.15E-06	5.53E-06	1.07E-06	8.4421E-03
520557.69	4258700.8	48598.35108	0.1936	0.15932	0.18577	0.16639	8.43E-03	4.55E-07	3.27E-07	4.36E-07	3.28E-07	8.4307E-03
520429.13	4258968.78	48595.17174	0.37956	0.14814	0.36122	0.15607	8.43E-03	8.91E-07	3.04E-07	8.48E-07	3.07E-07	8.4310E-03
520276.08	4258232.93	48581.26838	0.24548	1.00212	0.25603	1.10198	8.43E-03	5.76E-07	2.06E-06	6.01E-07	2.17E-06	8.4316E-03
520336.02	4259032.87	48576.61227	0.64365	0.16444	0.61053	0.17619	8.43E-03	1.51E-06	3.37E-07	1.43E-06	3.47E-07	8.4290E-03
520256.48	4258242.87	48565.65748	0.25559	1.17375	0.26841	1.29839	8.42E-03	6.00E-07	2.41E-06	6.30E-07	2.56E-06	8.4297E-03
520478.09	4258238.67	48558.12968	0.17963	0.2937	0.18223	0.3125	8.42E-03	4.22E-07	6.02E-07	4.28E-07	6.15E-07	8.4243E-03
520375.59	4259012.8	48544.57112	0.50838	0.15446	0.48339	0.16455	8.42E-03	1.19E-06	3.17E-07	1.13E-06	3.24E-07	8.4228E-03
520540.93	4258375.72	48539.10895	0.17346	0.21015	0.1723	0.22189	8.42E-03	4.07E-07	4.31E-07	4.05E-07	4.37E-07	8.4206E-03
520197.62	4258282.69	48516.19038	0.29214	2.08264	0.30899	2.3465	8.41E-03	6.86E-07	4.27E-06	7.25E-07	4.62E-06	8.4252E-03
520538.17	4258354.51	48474.97245	0.17204	0.2154	0.17161	0.22716	8.41E-03	4.04E-07	4.42E-07	4.03E-07	4.47E-07	8.4095E-03
520306.33	4259042.92	48470.92257	0.78014	0.17631	0.73842	0.1884	8.41E-03	1.83E-06	3.62E-07	1.73E-06	3.71E-07	8.4114E-03
520039.65	4258560.14	48467.78435	1.07981	5.00718	1.37521	3.83459	8.41E-03	2.54E-06	1.03E-05	3.23E-06	7.55E-06	8.4301E-03
520496.36	4258256.51	48432.04771	0.17551	0.26842	0.17638	0.28466	8.40E-03	4.12E-07	5.51E-07	4.14E-07	5.60E-07	8.4023E-03
520412.82	4258985.54	48355.64303	0.41396	0.14896	0.39376	0.15754	8.39E-03	9.72E-07	3.06E-07	9.24E-07	3.10E-07	8.3896E-03
520455.3	4258937.93	48323.80362	0.33048	0.14626	0.31466	0.15377	8.38E-03	7.76E-07	3.00E-07	7.39E-07	3.03E-07	8.3837E-03
520123.1	4259004.75	48286.17482	6.14886	0.34272	5.27964	0.31889	8.38E-03	1.44E-05	7.03E-07	1.24E-05	6.28E-07	8.4032E-03
520487.45	4258894.6	48274.65997	0.28282	0.14496	0.27064	0.15233	8.37E-03	6.64E-07	2.97E-07	6.35E-07	3.00E-07	8.3749E-03
520516.95	4258842.36	48255.50498	0.24515	0.14552	0.23493	0.15242	8.37E-03	5.76E-07	2.98E-07	5.52E-07	3.00E-07	8.3714E-03
520325.09	4258213.08	48217.00653	0.22287	0.70815	0.22942	0.76702	8.36E-03	5.23E-07	1.45E-06	5.39E-07	1.51E-06	8.3670E-03
520295.69	4258222.99	48209.34018	0.23524	0.86639	0.24387	0.9469	8.36E-03	5.52E-07	1.78E-06	5.73E-07	1.86E-06	8.3665E-03
520095.76	4258983.47	48207.4656	13.14477	0.36665	11.61083	0.34096	8.36E-03	3.09E-05	7.52E-07	2.73E-05	6.71E-07	8.4209E-03
520532.42	4258809.04	48203.07305	0.2268	0.1474	0.2174	0.15385	8.36E-03	5.32E-07	3.02E-07	5.10E-07	3.03E-07	8.3623E-03
520521.4	4258297.26	48189.59233	0.17123	0.23901	0.17074	0.25108	8.36E-03	4.02E-07	4.90E-07	4.01E-07	4.94E-07	8.3601E-03
520537.07	4258344.03	48129.181	0.17114	0.218	0.17092	0.22959	8.35E-03	4.02E-07	4.47E-07	4.01E-07	4.52E-07	8.3495E-03
520383.85	4258203.27	48123.85701	0.20274	0.49326	0.2083	0.52768	8.35E-03	4.76E-07	1.01E-06	4.89E-07	1.04E-06	8.3499E-03
520197.42	4259043.1	48110.94338	1.95026	0.25912	1.79156	0.25798	8.34E-03	4.58E-06	5.31E-07	4.21E-06	5.08E-07	8.3544E-03
520030.99	4258896.78	48106.04437	3.39741	0.44111	4.38643	0.43048	8.34E-03	7.98E-06	9.05E-07	1.03E-05	8.47E-07	8.3638E-03
520236.87	4258252.81	48093.07945	0.26512	1.39599	0.2801	1.55277	8.34E-03	6.22E-07	2.86E-06	6.58E-07	3.06E-06	8.3487E-03
520128.88	4258352.47	48084.69957	0.36166	5.9459	0.37667	7.0405	8.34E-03	8.49E-07	1.22E-05	8.84E-07	1.39E-05	8.3679E-03
520393.64	4258203.3	48065.48918	0.19986	0.46604	0.20551	0.49793	8.34E-03	4.69E-07	9.56E-07	4.82E-07	9.80E-07	8.3396E-03
520451.37	4258217.22	48061.98886	0.18522	0.33746	0.18958	0.36004	8.34E-03	4.35E-07	6.92E-07	4.45E-07	7.09E-07	8.3384E-03
520539.41	4258792.35	48054.70003	0.21877	0.14863	0.20972	0.1549	8.33E-03	5.14E-07	3.05E-07	4.92E-07	3.05E-07	8.3365E-03
520442.55	4258213.45	48033.77982	0.1873	0.35409	0.19215	0.37771	8.33E-03	4.40E-07	7.26E-07	4.51E-07	7.44E-07	8.3336E-03
520015.45	4258860.38	48019.32612	2.34085	0.49556	2.84744	0.48459	8.33E-03	5.50E-06	1.02E-06	6.68E-06	9.54E-07	8.3429E-03
520496.62	4258880.8	48007.09571	0.27075	0.14436	0.25904	0.15169	8.33E-03	6.36E-07	2.96E-07	6.08E-07	2.99E-07	8.3285E-03
520541.44	4258460.8	47989.63247	0.18249	0.19959	0.17951	0.21061	8.32E-03	4.28E-07	4.09E-07	4.21E-07	4.15E-07	8.3253E-03
520374.06	4258203.24	47985.81695	0.20541	0.52281	0.21096	0.55988	8.32E-03	4.82E-07	1.07E-06	4.95E-07	1.10E-06	8.3261E-03
520004.51	4258821.54	47958.07566	1.81746	0.57709	2.16814	0.56058	8.32E-03	4.27E-06	1.18E-06	5.09E-06	1.10E-06	8.3298E-03
520316.23	4259042.9	47953.00638	0.73062	0.17102	0.69206	0.18301	8.32E-03	1.72E-06	3.51E-07	1.62E-06	3.60E-07	8.3213E-03
519998.44	4258710.45	47935.97572	1.27751	1.04715	1.53823	0.97458	8.31E-03	3.00E-06	2.15E-06	3.61E-06	1.92E-06	8.3250E-03
520486.98	4258242.48	47890.98654	0.17691	0.28068	0.17879	0.29851	8.31E-03	4.15E-07	5.76E-07	4.20E-07	5.88E-07	8.3085E-03
520542.9	4258784	47882.31686	0.21483	0.14931	0.20599	0.15547	8.30E-03	5.04E-07	3.06E-07	4.84E-07	3.06E-07	8.3066E-03
520557.18	4258725.96	47879.43494	0.19681	0.15476	0.18851	0.16151	8.30E-03	4.62E-07	3.17E-07	4.43E-07	3.18E-07	8.3060E-03
520460.18	4258221	47868.81736	0.1829	0.32224	0.1868	0.34364	8.30E-03	4.29E-07	6.61E-07	4.39E-07	6.76E-07	8.3048E-03
520403.43	4258203.33	47864.39259	0.19686	0.44082	0.20257	0.47045	8.30E-03	4.62E-07	9.04E-07	4.76E-07	9.26E-07	8.3046E-03
520364.28	4258203.21	47863.65092	0.20819	0.55436	0.21362	0.59498	8.30E-03	4.89E-07	1.14E-06	5.02E-07	1.17E-06	8.3050E-03
520446.37	4258951.64	47842.2585	0.34629	0.14614	0.32956	0.15367	8.30E-03	8.13E-07	3.00E-07	7.74E-07	3.02E-07	8.3002E-03
520207.44	4258272.72	47829.42337	0.28265	1.8711	0.29931	2.09894	8.30E-03	6.64E-07	3.84E-06	7.03E-07	4.13E-06	8.3051E-03
520000.68	4258691.74	47826.4751	1.24269	1.19268	1.50741	1.09953	8.30E-03	2.92E-06	2.45E-06	3.54E-06	2.16E-06	8.3064E-03
520167.7	4259033.15	47822.2248	2.80102	0.29107	2.52489	0.28061	8.29E-03	6.58E-06	5.97E-07	5.93E-06	5.52E-07	8.3082E-03
520052.54	4258935.65	47765.75931	6.4978	0.40043	10.91474	0.38494	8.28E-03	1.53E-05	8.21E-07	2.56E-05	7.58E-07	8.3272E-03
520395.37	4259002.77	47762.24981	0.45531	0.15005	0.43291	0.15932	8.28E-03	1.07E-06	3.08E-07	1.02E-06	3.14E-07	8.2869E-03
520158.85	4259029.5	47727.57021	3.1827	0.30072	2.84762	0.28726	8.28E-03	7.47E-06	6.17E-07	6.69E-06	5.65E-07	8.2935E-03
520246.94	4259053.02	47696.97813	1.2172	0.21206	1.14053	0.22077	8.27E-03	2.86E-06	4.35E-07	2.68E-06	4.35E-07	8.2792E-03
520345.92	4259032.85	47689.04333	0.60573	0.15996	0.5746	0.17129	8.27E-03	1.42E-06	3.28E-07	1.35E-06	3.37E-07	8.2749E-03
520266.75	4259052.98	47687.18866	1.03825	0.19766	0.97741	0.20817	8.27E-03	2.44E-06	4.05E-07	2.29E-06	4.10E-07	8.2767E-03
520114.18	4259001.06	47673.7991	7.64154	0.34781	6.5048	0.3229	8.27E-03	1.79E-05	7.13E-07	1.53E-05	6.36E-07	8.3034E-03
520256.85	4259053	47665.86643	1.12114	0.20452	1.05313	0.21428	8.27E-03	2.63E-06	4.19E-07	2.47E-06	4.22E-07	8.2734E-03
520365.7	4259022.82	47665.68431	0.53853	0.155	0.5113	0.16548	8.27E-03	1.26E-06	3.18E-07	1.20E-06	3.26E-07	8.2705E-03
520237.04	4259053.03	47660.96786	1.326	0.22	1.23907	0.22731	8.27E-03	3.11E-06	4.51E-07	2.91E-06	4.47E-07	8.2735E-03
519996.47	4258753.92	47645.45905	1.38461	0.80341	1.66394	0.76163	8.26E-03	3.25E-06	1.65E-06	3.91E-06	1.50E-06	8.2742E-03
520413.22	4258203.36	47615.5076	0.19389	0.41727	0.19952	0.44508	8.26E-03	4.55E-07	8.56E-07	4.68E-07	8.76E-07	8.2613E-03
520506.02	4258866.9	47603.57741	0.25893	0.14404	0.24801	0.15119	8.26E-03	6.08E-07	2.95E-07	5.82E-07	2.98E-07	8.2584E-03
520276.65	4259052.97	47582.03571	0.96343	0.19108	0.90865	0.2021	8.25E-03	2.26E-06	3.92E-07	2.13E-06	3.98E-07	8.2581E-03
520511.41	4258272.96	47580.52658	0.17181	0.25097	0.17165	0.26477	8.25E-03	4.03E-07	5.15E-07	4.03E-07	5.21E-07	8.2545E-03
520150	4259025.84	47557.24639	3.65947	0.30987	3.24619	0.2935	8.25E-03	8.59E-06	6.36E-07	7.62E-06	5.78E-07	8.2660E-03
520042.59	4258921.55	47540.13183	4.69109	0.41167	6.65115	0.39901	8.25E-03	1.10E-05	8.44E-07	1.56E-05	7.85E-07	8.2739E-03
520354.49	4258203.18	47530.3932	0.21072	0.58881	0.21623	0.63316	8.24E-03	4.95E-07	1.21E-06	5.08E-07	1.25E-06	8.2474E-03
520315.3	4258213.05	47513.57669	0.22517	0.75691	0.23233	0.82227	8.24E-03	5.29E-07	1.55E-06	5.45E-07	1.62E-06	8.2453E-03
520482.44	4258906.68	47483.40161	0.29026	0.14405	0.27745	0.15138	8.24E-03	6.81E-07	2.95E-07	6.51E-07	2.98E-07	8.2377E-03
520437.58	4258965.28	47477.54981	0.3636	0.146	0.34605	0.15364	8.23E-03	8.54E-07	2.99E-07	8.12E-07	3.02E-07	8.2370E-03
520469	4258224.77	47457.1328	0.18037	0.30839	0.18385	0.32852	8.23E-03	4.23E-07	6.32E-07	4.32E-07	6.47E-07	8.2334E-03
520059.44	4258511.57	47456.8268	0.84276	13.16372	0.97736	7.88119	8.23E-03	1.98E-06	2.70E-05	2.29E-06	1.55E-05	8.2780E-03
520421.55	4258981.93	47456.455	0.39544	0.14711	0.37644	0.15528	8.23E-03	9.28E-07	3.02E-07	8.84E-07	3.06E-07	8.2335E-03
520227.14	4259053.05	47442.03964	1.44947	0.22809	1.34986	0.23367	8.23E-03	3.40E-06	4.68E-07	3.17E-06	4.60E-07	8.2361E-03
519997	4258779.31	47369.16839	1.48461	0.69908	1.76203	0.6704	8.22E-03	3.49E-06	1.43E-06	4.14E-06	1.32E-06	8.2263E-03
520473.05	4258920.57	47353.35896	0.30386	0.14403	0.2898	0.15141	8.21E-03	7.13E-07	2.95E-07	6.80E-07	2.98E-07	8.2152E-03
520266.3	4258232.9	47337.34069	0.24689	1.08527	0.25868	1.19695	8.21E-03	5.80E-07	2.23E-06	6.07E-07	2.36E-06	8.2162E-03
520187.52	4259043.12	47334.91683	2.17347	0.2673	1.98655	0.26319	8.21E-03	5.10E-06	5.48E-07	4.66E-06	5.18E-07	8.2209E-03
520549.89	4258767.31	47302.94385	0.20719	0.15022	0.19862	0.15625	8.20E-03	4.86E-07	3.08E-07	4.66E-07	3.08E-07	8.2060E-03
520545.34	4258419.3	47296.70806	0.17629	0.20181	0.17397	0.21263	8.20E-03	4.14E-07	4.14E-07	4.08E-07	4.19E-07	8.2051E-03
520326.13	4259042.89	47283.17902	0.68528	0.16592	0.64926	0.17773	8.20E-03	1.61E-06	3.40E-07	1.52E-06	3.50E-07	8.2049E-03
520086.77	4258979.76	47282.44965	15.64038	0.36697	17.6955	0.34296	8.20E-03	3.67E-05	7.53E-07	4.15E-05	6.75E-07	8.2806E-03
520141.15	4259022.19	47276.79051	4.26484	0.31821	3.74668	0.29917	8.20E-03	1.00E-05	6.53E-07	8.80E-06	5.89E-07	8.2200E-03
520017.05	4258871.04	47274.11061	2.44107	0.47464	2.97943	0.4646	8.20E-03	5.73E-06	9.73E-07	6.99E-06	9.15E-07	8.2141E-03
520561.26	4258692.26	47247.31771	0.1902	0.15933	0.18261	0.16626	8.19E-03	4.47E-07	3.27E-07	4.29E-07	3.27E-07	8.1964E-03
520286.55	4259052.95	47230.21974	0.89566	0.18461	0.84558	0.196	8.19E-03	2.10E-06	3.79E-07	1.99E-06	3.86E-07	8.1967E-03
520423.01	4258203.39	47207.58221	0.19078	0.39549	0.19631	0.42157	8.19E-03	4.48E-07	8.11E-07	4.61E-07	8.30E-07	8.1905E-03
520505.33	4258260.35	47206.11038	0.17242	0.25814	0.1728	0.27315	8.19E-03	4.05E-07	5.29E-07	4.06E-07	5.38E-07	8.1896E-03
520385.49	4259012.79	47193.54807	0.48109	0.15068	0.45739	0.1603	8.19E-03	1.13E-06	3.09E-07	1.07E-06	3.16E-07	8.1883E-03
520285.9	4258222.96	47179.29656	0.23706	0.93275	0.24678	1.02241	8.18E-03	5.57E-07	1.91E-06	5.79E-07	2.01E-06	8.1881E-03
520000.93	4258812.89	47175.57473	1.68102	0.59594	1.99777	0.57743	8.18E-03	3.95E-06	1.22E-06	4.69E-06	1.14E-06	8.1934E-03
520520.67	4258286.94	47136.20059	0.17001	0.24061	0.16951	0.25298	8.18E-03	3.99E-07	4.93E-07	3.98E-07	4.98E-07	8.1773E-03
520531.08	4258311.42	47116.42507	0.16921	0.22808	0.16884	0.2394	8.17E-03	3.97E-07	4.68E-07	3.96E-07	4.71E-07	8.1739E-03
520217.26	4258262.75	47109.55263	0.27357	1.69083	0.28971	1.89082	8.17E-03	6.42E-07	3.47E-06	6.80E-07	3.72E-06	8.1794E-03
520217.24	4259053.07	47104.65721	1.59171	0.23638	1.47656	0.23986	8.17E-03	3.74E-06	4.85E-07	3.47E-06	4.72E-07	8.1782E-03
520404.04	4258999.18	47100.01645	0.43449	0.14791	0.41307	0.15683	8.17E-03	1.02E-06	3.03E-07	9.70E-07	3.09E-07	8.1719E-03
520105.26	4258997.38	47056.59023	9.84359	0.35157	8.35219	0.32636	8.16E-03	2.31E-05	7.21E-07	1.96E-05	6.42E-07	8.2058E-03
520344.7	4258203.15	47054.8082	0.21308	0.62631	0.21886	0.67477	8.16E-03	5.00E-07	1.28E-06	5.14E-07	1.33E-06	8.1651E-03
520527.7	4258827.9	47052.61473	0.23323	0.14495	0.22367	0.15149	8.16E-03	5.48E-07	2.97E-07	5.25E-07	2.98E-07	8.1627E-03

520246.69	4258242.84	47033.02363	0.25622	1.28084	0.27021	1.42013	8.16E-03	6.02E-07	2.63E-06	6.34E-07	2.80E-06	8.1643E-03
519995.71	4258727.97	47019.30662	1.28073	0.92882	1.53493	0.87093	8.16E-03	3.01E-06	1.90E-06	3.60E-06	1.71E-06	8.1655E-03
520057.87	4258947.84	46991.21862	7.93632	0.38763	16.08399	0.37096	8.15E-03	1.86E-05	7.95E-07	3.78E-05	7.30E-07	8.2083E-03
520463.87	4258934.38	46985.18364	0.3177	0.14407	0.3027	0.15141	8.15E-03	7.46E-07	2.95E-07	7.11E-07	2.98E-07	8.1514E-03
520032.39	4258907.35	46985.10108	3.5356	0.424	4.60874	0.41365	8.15E-03	8.30E-06	8.70E-07	1.08E-05	8.14E-07	8.1702E-03
520545.94	4258395	46980.01792	0.17331	0.20406	0.17146	0.2152	8.15E-03	4.07E-07	4.19E-07	4.03E-07	4.24E-07	8.1501E-03
520515.67	4258852.89	46978.33134	0.2475	0.14356	0.23719	0.15045	8.15E-03	5.81E-07	2.94E-07	5.57E-07	2.96E-07	8.1499E-03
520495.87	4258246.29	46967.39185	0.17398	0.26982	0.17533	0.2864	8.15E-03	4.08E-07	5.53E-07	4.12E-07	5.64E-07	8.1482E-03
520007.12	4258655.32	46921.22565	1.18387	1.58573	1.46321	1.42981	8.14E-03	2.78E-06	3.25E-06	3.44E-06	2.81E-06	8.1506E-03
520477.81	4258228.54	46913.04199	0.17774	0.2954	0.18075	0.31431	8.14E-03	4.17E-07	6.06E-07	4.24E-07	6.19E-07	8.1389E-03
520132.29	4259018.53	46905.24451	5.05659	0.32557	4.39435	0.30425	8.14E-03	1.19E-05	6.68E-07	1.03E-05	5.99E-07	8.1590E-03
520560.71	4258717.52	46900.47111	0.19334	0.15466	0.18528	0.16148	8.13E-03	4.54E-07	3.17E-07	4.35E-07	3.18E-07	8.1362E-03
520553.39	4258758.96	46882.29875	0.2035	0.1505	0.19503	0.15654	8.13E-03	4.78E-07	3.09E-07	4.58E-07	3.08E-07	8.1331E-03
520296.45	4259052.93	46829.93844	0.83473	0.17856	0.78872	0.19016	8.12E-03	1.96E-06	3.66E-07	1.85E-06	3.74E-07	8.1270E-03
520119.06	4258362.44	46794.34148	0.37086	7.49483	0.38709	8.9918	8.12E-03	8.71E-07	1.54E-05	9.09E-07	1.77E-05	8.1511E-03
520432.8	4258203.42	46730.99499	0.18767	0.37518	0.19297	0.39978	8.11E-03	4.41E-07	7.69E-07	4.53E-07	7.87E-07	8.1077E-03
520355.82	4259032.84	46718.38461	0.57091	0.15577	0.54159	0.16664	8.10E-03	1.34E-06	3.19E-07	1.27E-06	3.28E-07	8.1064E-03
520305.51	4258213.02	46704.60593	0.22725	0.81075	0.23524	0.88338	8.10E-03	5.34E-07	1.66E-06	5.52E-07	1.74E-06	8.1052E-03
520207.34	4259053.08	46691.53866	1.75726	0.24489	1.62363	0.2459	8.10E-03	4.13E-06	5.02E-07	3.81E-06	4.84E-07	8.1074E-03
520177.62	4259043.13	46616.80627	2.45314	0.27555	2.22903	0.26823	8.09E-03	5.76E-06	5.65E-07	5.23E-06	5.28E-07	8.0976E-03
520336.04	4259042.87	46529.95037	0.64379	0.16116	0.61003	0.17268	8.07E-03	1.51E-06	3.31E-07	1.43E-06	3.40E-07	8.0740E-03
520454.87	4258948.11	46513.36926	0.33217	0.14391	0.31627	0.15124	8.07E-03	7.80E-07	2.95E-07	7.43E-07	2.98E-07	8.0696E-03
520334.91	4258203.12	46497.69188	0.21535	0.66708	0.22154	0.72034	8.06E-03	5.06E-07	1.37E-06	5.20E-07	1.42E-06	8.0686E-03
520306.35	4259052.92	46489.15909	0.78047	0.17307	0.73813	0.18473	8.06E-03	1.83E-06	3.55E-07	1.73E-06	3.64E-07	8.0676E-03
520375.61	4259022.8	46484.56089	0.50886	0.15129	0.48344	0.16127	8.06E-03	1.19E-06	3.10E-07	1.13E-06	3.17E-07	8.0655E-03
520495.83	4258891.13	46471.2192	0.27256	0.14241	0.2608	0.14961	8.06E-03	6.40E-07	2.92E-07	6.12E-07	2.95E-07	8.0621E-03
520430.28	4258978.31	46458.89721	0.37811	0.1451	0.36	0.15291	8.06E-03	8.88E-07	2.98E-07	8.45E-07	3.01E-07	8.0604E-03
520049.52	4258531.01	46437.26878	0.91467	7.68277	1.09101	5.4396	8.05E-03	2.15E-06	1.58E-05	2.56E-06	1.07E-05	8.0855E-03
520018.5	4258881.63	46432.9775	2.53585	0.45507	3.10831	0.44579	8.05E-03	5.95E-06	9.33E-07	7.30E-06	8.78E-07	8.0686E-03
520096.34	4258993.7	46419.55057	12.92071	0.35371	11.36419	0.32915	8.05E-03	3.03E-05	7.25E-07	2.67E-05	6.48E-07	8.1096E-03
520123.44	4259014.88	46416.66381	6.11391	0.3316	5.25431	0.3086	8.05E-03	1.44E-05	6.80E-07	1.23E-05	6.07E-07	8.0787E-03
520168.19	4258302.6	46400.22745	0.30687	3.02833	0.32086	3.45857	8.05E-03	7.20E-07	6.21E-06	7.53E-07	6.81E-06	8.0624E-03
520412.7	4258995.59	46353.44842	0.41495	0.14598	0.39464	0.15451	8.04E-03	9.74E-07	2.99E-07	9.26E-07	3.04E-07	8.0423E-03
520486.62	4258232.31	46330.01876	0.17514	0.28292	0.17753	0.30083	8.04E-03	4.11E-07	5.80E-07	4.17E-07	5.92E-07	8.0377E-03
520158.37	4258312.56	46301.40595	0.31576	3.49818	0.32913	4.01805	8.03E-03	7.41E-07	7.17E-06	7.73E-07	7.91E-06	8.0474E-03
520227.08	4258252.78	46296.22679	0.26475	1.53659	0.28024	1.71283	8.03E-03	6.22E-07	3.15E-06	6.58E-07	3.37E-06	8.0377E-03
520530.18	4258301.02	46259.81665	0.16808	0.23018	0.16759	0.24153	8.02E-03	3.95E-07	4.72E-07	3.93E-07	4.75E-07	8.0253E-03
520178.01	4258292.63	46258.54603	0.29789	2.6535	0.31258	3.01216	8.02E-03	6.99E-07	5.44E-06	7.34E-07	5.93E-06	8.0361E-03
519997.34	4258804.24	46248.95423	1.55594	0.61529	1.84158	0.59452	8.02E-03	3.65E-06	1.26E-06	4.32E-06	1.17E-06	8.0321E-03
520451.33	4258207.19	46246.10443	0.18268	0.33956	0.18724	0.36193	8.02E-03	4.29E-07	6.96E-07	4.40E-07	7.12E-07	8.0235E-03
520043.69	4258932	46232.53328	4.86554	0.39648	6.98828	0.38408	8.02E-03	1.14E-05	8.13E-07	1.64E-05	7.56E-07	8.0482E-03
520197.44	4259053.1	46172.3601	1.95188	0.25321	1.7946	0.25149	8.01E-03	4.58E-06	5.19E-07	4.21E-06	4.95E-07	8.0182E-03
520505.07	4258877.3	46171.85931	0.26091	0.14205	0.24988	0.14912	8.01E-03	6.13E-07	2.91E-07	5.87E-07	2.94E-07	8.0101E-03
520442.58	4258203.45	46139.91286	0.18451	0.35632	0.18952	0.37956	8.00E-03	4.33E-07	7.31E-07	4.45E-07	7.47E-07	8.0051E-03
520460.07	4258210.94	46113.36375	0.18056	0.32425	0.18473	0.34552	8.00E-03	4.24E-07	6.65E-07	4.34E-07	6.80E-07	8.0004E-03
520525.64	4258838.76	46109.2233	0.23632	0.14307	0.22658	0.14966	8.00E-03	5.55E-07	2.93E-07	5.32E-07	2.95E-07	7.9991E-03
520446.03	4258961.78	46091.00252	0.34817	0.14374	0.3314	0.15113	7.99E-03	8.17E-07	2.95E-07	7.78E-07	2.97E-07	7.9965E-03
520276.12	4258222.93	46071.15663	0.23857	1.00696	0.24946	1.10697	7.99E-03	5.60E-07	2.07E-06	5.86E-07	2.18E-06	7.9962E-03
520099.39	4258392.38	46043.67426	0.41128	14.04458	0.43642	15.98746	7.99E-03	9.66E-07	2.88E-05	1.02E-06	3.15E-05	8.0483E-03
520520.02	4258276.65	46033.74578	0.16876	0.24204	0.16837	0.25476	7.98E-03	3.96E-07	4.96E-07	3.95E-07	5.01E-07	7.9861E-03
520544.84	4258469.73	46028.37022	0.18136	0.19584	0.17804	0.20671	7.98E-03	4.26E-07	4.02E-07	4.18E-07	4.07E-07	7.9851E-03
520383.88	4258193.27	46014.89522	0.19876	0.49617	0.20405	0.53031	7.98E-03	4.67E-07	1.02E-06	4.79E-07	1.04E-06	7.9841E-03
520021.89	4258893.02	46001.96692	2.74625	0.43757	3.40713	0.42861	7.98E-03	6.45E-06	8.97E-07	8.00E-06	8.44E-07	7.9950E-03
520187.83	4258282.66	45999.84514	0.28912	2.3468	0.30424	2.65257	7.98E-03	6.79E-07	4.81E-06	7.14E-07	5.22E-06	7.9899E-03
520256.51	4258232.87	45998.63801	0.24783	1.17948	0.26076	1.30449	7.98E-03	5.82E-07	2.42E-06	6.12E-07	2.57E-06	7.9844E-03
520393.67	4258193.3	45980.03973	0.19606	0.46893	0.20145	0.50042	7.98E-03	4.60E-07	9.62E-07	4.73E-07	9.85E-07	7.9779E-03
520148.55	4258322.53	45949.02218	0.32455	4.10004	0.33752	4.73413	7.97E-03	7.62E-07	8.41E-06	7.92E-07	9.32E-06	7.9889E-03
520316.25	4259052.9	45946.99358	0.7307	0.16783	0.69155	0.17946	7.97E-03	1.72E-06	3.44E-07	1.62E-06	3.53E-07	7.9733E-03
520325.12	4258203.08	45942.89557	0.21767	0.71144	0.22434	0.77072	7.97E-03	5.11E-07	1.46E-06	5.27E-07	1.52E-06	7.9726E-03
520504.77	4258250.09	45891.84475	0.17103	0.25937	0.17184	0.27479	7.96E-03	4.02E-07	5.32E-07	4.03E-07	5.41E-07	7.9616E-03
520564.24	4258709.09	45875.82464	0.19003	0.15471	0.18225	0.16152	7.96E-03	4.46E-07	3.17E-07	4.28E-07	3.18E-07	7.9585E-03
520374.09	4258193.24	45866.47611	0.20127	0.52572	0.20654	0.56264	7.96E-03	4.73E-07	1.08E-06	4.85E-07	1.11E-06	7.9585E-03
519993.37	4258770.57	45865.02237	1.36513	0.7228	1.61716	0.69015	7.96E-03	3.20E-06	1.48E-06	3.80E-06	1.36E-06	7.9649E-03
520114.59	4259011.23	45852.35496	7.57345	0.33622	6.4512	0.31228	7.95E-03	1.78E-05	6.90E-07	1.51E-05	6.15E-07	7.9871E-03
520481.69	4258917	45848.83848	0.29214	0.14193	0.27908	0.1491	7.95E-03	6.86E-07	2.91E-07	6.55E-07	2.94E-07	7.9542E-03
520403.46	4258193.33	45838.79544	0.19328	0.44359	0.19877	0.4728	7.95E-03	4.54E-07	9.10E-07	4.67E-07	9.31E-07	7.9533E-03
520468.81	4258214.68	45829.01081	0.17829	0.31005	0.18203	0.33023	7.95E-03	4.19E-07	6.36E-07	4.27E-07	6.50E-07	7.9510E-03
520514.31	4258264.19	45815.97619	0.16931	0.24849	0.1693	0.26231	7.95E-03	3.97E-07	5.10E-07	3.97E-07	5.16E-07	7.9484E-03
520295.72	4258212.99	45797.56087	0.2291	0.87051	0.23807	0.95125	7.94E-03	5.38E-07	1.79E-06	5.59E-07	1.87E-06	7.9481E-03
520033.66	4258917.87	45793.77192	3.66725	0.40789	4.82587	0.39779	7.94E-03	8.61E-06	8.37E-07	1.13E-05	7.83E-07	7.9643E-03
520395.39	4259012.77	45779.07468	0.45581	0.14707	0.43339	0.15625	7.94E-03	1.07E-06	3.02E-07	1.02E-06	3.08E-07	7.9429E-03
520167.72	4259043.15	45766.30067	2.78795	0.28291	2.51791	0.27243	7.94E-03	6.55E-06	5.80E-07	5.91E-06	5.36E-07	7.9515E-03
520560.37	4258742.27	45757.36632	0.1964	0.1507	0.18818	0.15691	7.94E-03	4.61E-07	3.09E-07	4.42E-07	3.09E-07	7.9379E-03
520491.16	4258903.07	45744.36247	0.27911	0.14155	0.26696	0.14869	7.93E-03	6.55E-07	2.90E-07	6.27E-07	2.93E-07	7.9360E-03
520548.62	4258427.92	45710.73578	0.17547	0.19859	0.17301	0.2091	7.93E-03	4.12E-07	4.07E-07	4.06E-07	4.12E-07	7.9300E-03
520364.31	4258193.21	45708.89872	0.20384	0.55731	0.20908	0.59786	7.93E-03	4.79E-07	1.14E-06	4.91E-07	1.18E-06	7.9313E-03
519992.8	4258745.07	45699.97222	1.27081	0.82979	1.51444	0.78351	7.93E-03	2.98E-06	1.70E-06	3.56E-06	1.54E-06	7.9362E-03
520345.94	4259042.85	45697.00917	0.60588	0.15677	0.57421	0.16792	7.93E-03	1.42E-06	3.22E-07	1.35E-06	3.31E-07	7.9294E-03
520549.18	4258403.52	45696.69264	0.17265	0.20086	0.17057	0.21161	7.93E-03	4.05E-07	4.12E-07	4.00E-07	4.17E-07	7.9275E-03
520158.62	4259039.39	45695.80986	3.18126	0.2923	2.85178	0.27891	7.93E-03	7.47E-06	5.99E-07	6.70E-06	5.49E-07	7.9410E-03
520514.54	4258863.37	45678.13895	0.24964	0.1416	0.23924	0.14848	7.92E-03	5.86E-07	2.90E-07	5.62E-07	2.92E-07	7.9244E-03
520365.72	4259032.82	45674.07409	0.53879	0.15194	0.5114	0.16232	7.92E-03	1.26E-06	3.12E-07	1.20E-06	3.20E-07	7.9251E-03
520019.85	4258608.71	45670.31437	1.11387	2.47692	1.41583	2.13126	7.92E-03	2.62E-06	5.08E-06	3.32E-06	4.20E-06	7.9365E-03
520472.44	4258930.83	45664.24811	0.30555	0.14188	0.29138	0.14907	7.92E-03	7.17E-07	2.91E-07	6.84E-07	2.93E-07	7.9222E-03
520413.25	4258193.36	45629.97083	0.19049	0.41995	0.19598	0.44729	7.91E-03	4.47E-07	8.61E-07	4.60E-07	8.80E-07	7.9170E-03
520149.51	4259035.63	45561.67673	3.68193	0.30123	3.27054	0.285	7.90E-03	8.64E-06	6.18E-07	7.68E-06	5.61E-07	7.9200E-03
520048.72	4258944.07	45560.65093	5.72072	0.38382	8.82508	0.37039	7.90E-03	1.34E-05	7.87E-07	2.07E-05	7.29E-07	7.9380E-03
520495.44	4258236.09	45540.7672	0.1724	0.27141	0.17422	0.28824	7.90E-03	4.05E-07	5.57E-07	4.09E-07	5.67E-07	7.9008E-03
520197.65	4258272.69	45539.25315	0.28033	2.09386	0.29581	2.35472	7.90E-03	6.58E-07	4.29E-06	6.94E-07	4.64E-06	7.9089E-03
520058.88	4258958.25	45528.20491	8.27544	0.37379	17.55504	0.35757	7.90E-03	1.94E-05	7.67E-07	4.12E-05	7.04E-07	7.9588E-03
520421.37	4258992.01	45522.12071	0.39654	0.1442	0.37745	0.15234	7.90E-03	9.31E-07	2.96E-07	8.86E-07	3.00E-07	7.8980E-03
520546.89	4258358.24	45478.4513	0.16852	0.20764	0.1678	0.21894	7.89E-03	3.96E-07	4.26E-07	3.94E-07	4.31E-07	7.8897E-03
520187.54	4259053.12	45448.93292	2.18082	0.26107	1.99417	0.25646	7.88E-03	5.12E-06	5.35E-07	4.68E-06	5.05E-07	7.8938E-03
520236.9	4258242.81	45440.3477	0.25628	1.40316	0.27098	1.55962	7.88E-03	6.02E-07	2.88E-06	6.36E-07	3.07E-06	7.8886E-03
520006.5	4258856.69	45411.40276	1.95821	0.49253	2.33648	0.48151	7.88E-03	4.60E-06	1.01E-06	5.49E-06	9.48E-07	7.8884E-03
520548.28	4258368.85	45400.27747	0.16917	0.20517	0.16807	0.21644	7.87E-03	3.97E-07	4.21E-07	3.95E-07	4.26E-07	7.8761E-03
520439.01	4258974.7	45392.93424	0.36184	0.14299	0.34451	0.15049	7.87E-03	8.49E-07	2.93E-07	8.09E-07	2.96E-07	7.8754E-03
520140.41	4259031.87	45381.68064	4.32278	0.30943	3.80084	0.2906	7.87E-03	1.01E-05	6.35E-07	8.92E-06	5.72E-07	7.8915E-03
520354.52	4258193.18	45368.34963	0.20619	0.59177	0.2116	0.63616	7.87E-03	4.84E-07	1.21E-06	4.97E-07	1.25E-06	7.8724E-03
520545.69	4258347.72	45361.24917	0.16776	0.21004	0.16732	0.22125	7.87E-03	3.94E-07	4.31E-07	3.93E-07	4.36E-07	7.8694E-03
520477.56	4258218.42	45354.10667	0.17583	0.29705	0.17916	0.31604	7.87E-03	4.13E-07	6.09E-07	4.21E-07	6.22E-07	7.8685E-03
520529.37	4258290.66	45335.04669	0.16691	0.232	0.16636	0.24348	7.86E-03	3.92E-07	4.76E-07	3.91E-07	4.79E-07	7.8649E-03
520423.04	4258193.39	45311.48642	0.18763	0.39797	0.19305	0.42365	7.86E-03	4.40E-07	8.16E-07	4.53E-07	8.34E-07	7.8616E-03
520326.15	4259052.89	45291.08203	0.68524	0.16272	0.64852	0.17422	7.86E-03	1.61E-06	3.34E-07	1.52E-06	3.43E-07	7.8593E-03
520000.87	4258836.88	45281.99286	1.73243	0.53087	2.04649	0.51718	7.85E-03	4.07E-06	1.09E-06	4.80E-06	1.02E-06	7.8649E-03
520463.38	4258944.59	45269.0306	0.31931	0.14182	0.30423	0.14897	7.85E-03	7.50E-07	2.91E-07	7.14E-07	2.93E-07	7.8538E-03
520315.33	4258203.05	45245.27783	0.21974	0.76033	0.22713	0.8261	7.85E-03	5.16E-07	1.56E-06	5.33E-07	1.63E-06	7.8518E-03
520385.51	4259022.79	45226.50174	0.48152	0.14764	0.45758	0.15716	7.84E-03	1.13E-06	3.03E-07	1.07E-06	3.09E-07	7.8471E-03
520105.74	4259007.57	45214.51213	9.63853	0.33933	8.21902	0.31528	7.84E-03	2.26E-05	6.96E-07	1.93E-05	6.21E-07	7.8855E-03
520029.73	4258579.58	45184.57512	1.06684	3.50678	1.37951	2.85376	7.84E-03	2.50E-06	7.19E-06	3.24E-06	5.62E-06	7.8556E-03
519993.75	4258795.6	45176.53091	1.44047	0.63512	1.69834	0.61177	7.84E-03	3.38E-06	1.30E-06	3.99E-06	1.20E-06	7.8455E-03
520404	4259009.21	45160.43639	0.43514	0.14507	0.4138	0.15391	7.83E-03	1.02E-06	2.98E-07	9.71E-07	3.03E-07	7.8355E-03
520023.37	4258903.63	45059.07353	2.85401	0.4206	3.56423	0.41203	7.82E-03	6.70E-06	8.63E-07	8.37E-06	8.11E-07	7.8320E-03
520563.87	4258733.92	45041.99074	0.19299	0.15063	0.18493	0.15697	7.81E-03	4.53E-07	3.09E-07	4.34E-07	3.09E-07	7.8138E-03
520207.47	4258262.72	45033.68652	0.27188	1.88042	0.28734	2.10766	7.81E-03	6.38E-07	3.86E-06	6.75E-07	4.15E-06	7.8202E-03
520544.65	4258337.25	45020.58419	0.16681	0.21269	0.16662	0.22365	7.81E-03	3.92E-07	4.36E-07	3.91E-07	4.40E-07	7.8103E-03
520109.24	4258372.41	45004.95271	0.37893	9.90479	0.3978	11.75688	7.81E-03	8.90E-07	2.03E-05	9.34E-07	2.31E-05	7.8512E-03
520131.3	4259028.12	44985.50449	5.15428	0.31622	4.48208	0.29531	7.80E-03	1.21E-05	6.49E-07	1.05E-05	5.81E-07	7.8264E-03
520524.28	4258849.33	44981.84535	0.23865	0.14123	0.22887	0.14782	7.80E-03	5.60E-07	2.90E-07	5.37E-07	2.91E-07	7.8036E-03
520542.9	4258807.93	44962.77372	0.21759	0.14362	0.20868	0.14973	7.80E-03	5.11E-07	2.95E-07	4.90E-07	2.95E-07	7.8002E-03
520432.83	4258193.42	44904.78968	0.18473	0.37747	0.19	0.40172	7.79E-03	4.34E-07	7.74E-07	4.46E-07	7.91E-07	7.7910E-03
520539.96	4258315.22	44883.51872	0.16597	0.2195	0.16564	0.23033	7.78E-03	3.90E-07	4.50E-07	3.89E-07	4.53E-07	7.7865E-03
520008.2	4258867.38	44879.44107	2.04235	0.47184	2.44132	0.46199	7.78E-03	4.79E-06	9.68E-07	5.73E-06	9.09E-07	7.7965E-03
520266.33	4258222.9	44875.75463	0.23967	1.09058	0.2517	1.20223	7.78E-03	5.63E-07	2.24E-06	5.91E-07	2.37E-06	7.7893E-03
520344.73	4258193.15	44861.69872	0.20831	0.62937	0.21413	0.67781	7.78E-03	4.89E-07	1.29E-06	5.03E-07	1.33E-06	7.7847E-03
520007.12	4258646.05	44860.43692	1.11586	1.67301	1.37777	1.50099	7.78E-03	2.62E-06	3.43E-06	3.23E-06	2.95E-06	7.7931E-03
520454.48	4258958.28	44854.61793	0.33401	0.14163	0.31808	0.14881	7.78E-03	7.84E-07	2.90E-07	7.47E-07	2.93E-07	7.7819E-03
520486.3	4258222.16	44823.73124	0.17335	0.2846	0.17616	0.3026	7.77E-03	4.07E-07	5.84E-07	4.14E-07	5.96E-07	7.7765E-03
520285.94	4258212.96	44789.15551	0.23062	0.93715	0.24072	1.02678	7.77E-03	5.41E-07	1.92E-06	5.65E-07	2.02E-06	7.7735E-03
520355.84	4259042.84	44786.3403	0.57106	0.15272	0.54142	0.16344	7.77E-03	1.34E-06	3.13E-07	1.27E-06	3.22E-07	7.7712E-03
520504.21	4258887.66	44753.37941	0.26275	0.14006	0.25159	0.14704	7.76E-03	6.17E-07	2.87E-07	5.91E-07	2.89E-07	7.7641E-03
520549.83	4258791.4	44733.7599	0.21007	0.1449	0.20152	0.15081	7.76E-03	4.93E-07	2.97E-07	4.73E-07	2.97E-07	7.7604E-03
520177.64	4259053.13	44725.51135	2.45632	0.26864	2.23365	0.26103	7.76E-03	5.77E-06	5.51E-07	5.24E-06	5.14E-07	7.7695E-03
520567.77	4258700.65	44719.77513	0.18676	0.15475	0.17924	0.16145	7.76E-03	4.38E-07	3.17E-07	4.21E-07	3.18E-07	7.7579E-03
519994.67	4258701.35	44712.17524	1.14729	1.0749	1.36884	0.99778	7.76E-03	2.69E-06	2.20E-06	3.21E-06	1.96E-06	7.7652E-03
520513.66	4258253.9	44677.15029	0.16806	0.24971	0.1684	0.26397	7.75E-03	3.95E-07	5.12E-07	3.95E-07	5.20E-07	7.7509E-03
520128.91	4258342.47	44675.79317	0.34212	5.96518	0.35503	7.06255	7.75E-03	8.03E-07	1.22E-05	8.33E-07	1.39E-05	7.7766E-03
520034.84	4258928.34	44637.37277	3.79666	0.39291	5.03889	0.38301	7.74E-03	8.91E-06	8.06E-07	1.18E-05	7.54E-07	7.7645E-03
519997.12	4258827.83	44617.50799	1.60372	0.54803	1.88516	0.53273	7.74E-03	3.77E-06	1.12E-06	4.43E-06	1.05E-06	7.7491E-03
520430.03	4258988.42	44615.53326	0.3793	0.14235	0.36121	0.15012	7.74E-03	8.90E-07	2.92E-07	8.48E-07	2.96E-07	7.7407E-03
520504.25	4258239.86	44596.12301	0.1696	0.26082	0.17088	0.27655	7.73E-03	3.98E-07	5.35E-07	4.01E-07	5.44E-07	7.7369E-03
520096.89	4259003.92	44591.30776	12.66601	0.34126	11.11196	0.31783	7.73E-03	2.97E-05	7.00E-07	2.61E-05	6.26E-07	7.7913E-03
520375.62	4259032.8	44573.51379	0.50916	0.1483	0.48363	0.15818	7.73E-03	1.20E-06	3.04E-07	1.14E-06	3.11E-07	7.7340E-03
520122.19	4259024.36	44549.55333	6.29143	0.32188	5.40753	0.29948	7.73E-03	1.48E-05	6.60E-07	1.27E-05	5.90E-07	7.7556E-03
520246.72	4258232.84	44540.07371	0.24813	1.28698	0.26197	1.42652	7.73E-03	5.83E-07	2.64E-06	6.15E-07	2.81E-06	7.7319E-03
520336.05	4259052.87	44539.78821	0.64364	0.15801	0.60925	0.16928	7.73E-03	1.51E-06	3.24E-07	1.43E-06	3.33E-07	7.7288E-03
520451.29	4258197.17	44523.57769	0.18012	0.34165	0.18481	0.36376	7.72E-03	4.23E-07	7.01E-07	4.34E-07	7.16E-07	7.7247E-03
520459.97	4258200.88	44475.11007	0.17823	0.32601	0.18256	0.34716	7.71E-03	4.18E-07	6.69E-07	4.29E-07	6.83E-07	7.7162E-03
520412.6	4259005.64	44468.16657	0.41578	0.1431	0.39542	0.15158	7.71E-03	9.76E-07	2.93E-07	9.28E-07	2.98E-07	7.7153E-03
520528.64	4258280.34	44449.28874	0.16579	0.23342	0.16522	0.24524	7.71E-03	3.89E-07	4.79E-07	3.88E-07	4.83E-07	7.7113E-03
520217.29	4258252.75	44430.81326	0.26363	1.69927	0.27885	1.89865	7.71E-03	6.19E-07	3.49E-06	6.55E-07	3.74E-06	7.7148E-03
520305.54	4258203.02	44430.42562	0.22155	0.81444	0.22986	0.88727	7.71E-03	5.20E-07	1.67E-06	5.40E-07	1.75E-06	7.7107E-03
520442.62	4258193.45	44402.89895	0.18178	0.35837	0.18681	0.38133	7.70E-03	4.27E-07	7.35E-07	4.39E-07	7.51E-07	7.7038E-03
520513.52	4258873.8	44384.03462	0.2516	0.13972	0.24115	0.14654	7.70E-03	5.91E-07	2.87E-07	5.66E-07	2.88E-07	7.6999E-03
519991.99	4258719.01	44377.50479	1.16121	0.95628	1.38185	0.89323	7.70E-03	2.73E-06	1.96E-06	3.24E-06	1.76E-06	7.7068E-03
520334.94	4258193.12	44340.06513	0.21045	0.67013	0.21676	0.72358	7.69E-03	4.94E-07	1.37E-06	5.09E-07	1.42E-06	7.6944E-03
520552.42	4258412.04	44339.58619	0.17193	0.19766	0.16967	0.20805	7.69E-03	4.04E-07	4.05E-07	3.98E-07	4.10E-07	7.6921E-03
520523.29	4258268.03	44304.41758	0.16621	0.23936	0.1659	0.25205	7.68E-03	3.90E-07	4.91E-07	3.89E-07	4.96E-07	7.6862E-03
520548.24	4258478.65	44282.4595	0.1802	0.19263	0.17654	0.20328	7.68E-03	4.23E-07	3.95E-07	4.14E-07	4.00E-07	7.6822E-03
520481.02	4258927.28	44280.72049	0.29383	0.13986	0.28065	0.14686	7.68E-03	6.90E-07	2.87E-07	6.59E-07	2.89E-07	7.6822E-03
520490.33	4258913.42	44267.62411	0.28094	0.13961	0.2687	0.14659	7.68E-03	6.60E-07	2.86E-07	6.31E-07	2.89E-07	7.6799E-03
520538.95	4258304.78	44264.93556	0.16498	0.22165	0.1645	0.23243	7.68E-03	3.87E-07	4.55E-07	3.86E-07	4.58E-07	7.6792E-03
520556.75	4258774.86	44259.04044	0.20282	0.14576	0.19448	0.15153	7.68E-03	4.76E-07	2.99E-07	4.57E-07	2.98E-07	7.6781E-03
520468.65	4258204.59	44242.24202	0.17612	0.3118	0.1801	0.3319	7.67E-03	4.13E-07	6.39E-07	4.23E-07	6.53E-07	7.6757E-03
520447.74	4258971.08	44236.95256	0.34645	0.1409	0.32994	0.14812	7.67E-03	8.13E-07	2.89E-07	7.75E-07	2.92E-07	7.6749E-03
520567.36	4258725.58	44231.02007	0.1897	0.15046	0.1818	0.15691	7.67E-03	4.45E-07	3.09E-07	4.27E-07	3.09E-07	7.6732E-03
520049.81	4258954.51	44230.13967	5.94919	0.37029	9.33885	0.35713	7.67E-03	1.40E-05	7.59E-07	2.19E-05	7.03E-07	7.7089E-03
520009.73	4258878.01	44229.47521	2.12217	0.45234	2.54198	0.44349	7.67E-03	4.98E-06	9.28E-07	5.97E-06	8.73E-07	7.6842E-03
519997.12	4258683.15	44188.18245	1.11183	1.21803	1.34011	1.11973	7.66E-03	2.61E-06	2.50E-06	3.15E-06	2.20E-06	7.6747E-03
519989.75	4258761.83	44169.64682	1.25248	0.74663	1.48273	0.70943	7.66E-03	2.94E-06	1.53E-06	3.48E-06	1.40E-06	7.6704E-03
520495.04	4258225.9	44140.88147	0.17077	0.27303	0.17304	0.29001	7.66E-03	4.01E-07	5.60E-07	4.06E-07	5.71E-07	7.6580E-03
520059.81	4258968.63	44096.89016	8.61049	0.36067	19.14181	0.34492	7.65E-03	2.02E-05	7.40E-07	4.49E-05	6.79E-07	7.7150E-03
520551.91	4258436.55	44073.65597	0.17459	0.19529	0.17198	0.20556	7.64E-03	4.10E-07	4.01E-07	4.04E-07	4.05E-07	7.6460E-03
520024.74	4258914.18	44061.30659	2.95841	0.40469	3.71912	0.39641	7.64E-03	6.95E-06	8.30E-07	8.73E-06	7.80E-07	7.6595E-03
520113.09	4259020.6	44056.06877	7.89529	0.32617	6.72091	0.30301	7.64E-03	1.85E-05	6.69E-07	1.58E-05	5.96E-07	7.6769E-03
520534.34	4258835.16	44048.22714	0.2279	0.14084	0.2187	0.14712	7.64E-03	5.35E-07	2.89E-07	5.13E-07	2.90E-07	7.6416E-03
520039.57	4258940.29	44046.32601	4.3305	0.38008	5.95892	0.36943	7.64E-03	1.02E-05	7.80E-07	1.40E-05	7.27E-07	7.6653E-03
520499.87	4258899.46	44045.80116	0.26859	0.1391	0.25706	0.14604	7.64E-03	6.31E-07	2.85E-07	6.03E-07	2.87E-07	7.6414E-03
520471.89	4258941.07	44031.61613	0.3071	0.13972	0.29285	0.14672	7.64E-03	7.21E-07	2.87E-07	6.88E-07	2.89E-07	7.6391E-03
520393.7	4258183.3	44010.88565	0.19231	0.47162	0.19745	0.50273	7.63E-03	4.51E-07	9.67E-07	4.64E-07	9.90E-07	7.6364E-03
520383.91	4258183.27	43997.50577	0.19481	0.49894	0.19988	0.53273	7.63E-03	4.57E-07	1.02E-06	4.69E-07	1.05E-06	7.6342E-03
519990.16	4258786.95	43966.35222	1.33404	0.65526	1.56582	0.62906	7.63E-03	3.13E-06	1.34E-06	3.68E-06	1.24E-06	7.6352E-03
520088.03	4259000.27	43960.55497	15.19593	0.34186	16.58513	0.31983	7.62E-03	3.57E-05	7.01E-07	3.89E-05	6.30E-07	7.7007E-03
520167.74	4259053.15	43954.44918	2.7955	0.27566	2.52631	0.26502	7.62E-03	6.56E-06	5.65E-07	5.93E-06	5.22E-07	7.6373E-03
520403.49	4258183.33	43933.45482	0.18975	0.44618	0.19498	0.47503	7.62E-03	4.45E-07	9.15E-07	4.58E-07	9.35E-07	7.6228E-03
520395.41	4259022.77	43908.08442	0.45621	0.14416	0.4337	0.15324	7.62E-03	1.07E-06	2.96E-07	1.02E-06	3.02E-07	7.6183E-03
520012.78	4258889.26	43879.60178	2.26967	0.43465	2.73907	0.4265	7.61E-03	5.33E-06	8.91E-07	6.43E-06	8.40E-07	7.6242E-03
520477.33	4258208.31	43861.15241	0.17387	0.29867	0.17747	0.3177	7.61E-03	4.08E-07	6.13E-07	4.17E-07	6.25E-07	7.6096E-03
520158.7	4259049.42	43856.29214	3.17784	0.28423	2.85235	0.27093	7.61E-03	7.46E-06	5.83E-07	6.70E-06	5.33E-07	7.6219E-03
520374.13	4258183.24	43834.65043	0.19715	0.52844	0.20225	0.56512	7.60E-03	4.63E-07	1.08E-06	4.75E-07	1.11E-06	7.6061E-03

520345.95	4259052.85	43829.11067	0.60591	0.15375	0.57379	0.16471	7.60E-03	1.42E-06	3.15E-07	1.35E-06	3.24E-07	7.6054E-03
520523.06	4258859.84	43824.55305	0.2408	0.13931	0.23094	0.1459	7.60E-03	5.65E-07	2.86E-07	5.42E-07	2.87E-07	7.6028E-03
520365.74	4259042.82	43811.23539	0.53892	0.149	0.51142	0.15925	7.60E-03	1.27E-06	3.06E-07	1.20E-06	3.13E-07	7.6019E-03
520039.6	4258550.44	43811.13413	0.96424	5.12003	1.19247	3.93196	7.60E-03	2.26E-06	1.05E-05	2.80E-06	7.74E-06	7.6221E-03
519993.37	4258818.79	43805.35337	1.48408	0.56592	1.73957	0.54863	7.60E-03	3.48E-06	1.16E-06	4.08E-06	1.08E-06	7.6076E-03
520325.15	4258193.08	43769.52347	0.21253	0.71466	0.21945	0.77402	7.59E-03	4.99E-07	1.47E-06	5.15E-07	1.52E-06	7.5956E-03
520413.28	4258183.36	43764.81041	0.18714	0.42247	0.19241	0.44939	7.59E-03	4.39E-07	8.66E-07	4.52E-07	8.85E-07	7.5934E-03
520149.67	4259045.69	43760.08544	3.67367	0.2926	3.2681	0.27664	7.59E-03	8.62E-06	6.00E-07	7.67E-06	5.45E-07	7.6074E-03
520227.11	4258242.78	43729.61364	0.25556	1.54428	0.2704	1.7198	7.58E-03	6.00E-07	3.17E-06	6.35E-07	3.39E-06	7.5925E-03
520553.38	4258388.69	43717.67121	0.16885	0.19823	0.16697	0.20901	7.58E-03	3.96E-07	4.07E-07	3.92E-07	4.11E-07	7.5842E-03
520276.15	4258212.93	43713.40859	0.23183	1.01184	0.24305	1.11154	7.58E-03	5.44E-07	2.08E-06	5.71E-07	2.19E-06	7.5873E-03
520421.21	4259002.08	43701.05373	0.3975	0.14136	0.37836	0.14948	7.58E-03	9.33E-07	2.90E-07	8.88E-07	2.94E-07	7.5822E-03
520462.93	4258954.79	43648.58865	0.32087	0.13958	0.30576	0.14657	7.57E-03	7.53E-07	2.86E-07	7.18E-07	2.89E-07	7.5727E-03
520140.63	4259041.96	43639.77713	4.30205	0.30032	3.79211	0.28193	7.57E-03	1.01E-05	6.16E-07	8.90E-06	5.55E-07	7.5893E-03
520438.7	4258984.83	43633.34527	0.36311	0.1404	0.34583	0.14784	7.57E-03	8.52E-07	2.88E-07	8.12E-07	2.91E-07	7.5702E-03
520364.34	4258183.21	43617.12571	0.19948	0.56021	0.20468	0.60043	7.57E-03	4.68E-07	1.15E-06	4.81E-07	1.18E-06	7.5685E-03
520256.54	4258222.87	43583.90698	0.24027	1.18531	0.25327	1.30989	7.56E-03	5.64E-07	2.43E-06	5.95E-07	2.58E-06	7.5656E-03
520295.75	4258202.99	43559.71203	0.22317	0.8744	0.23249	0.95532	7.56E-03	5.24E-07	1.79E-06	5.46E-07	1.88E-06	7.5600E-03
519989.13	4258736.23	43544.73491	1.16242	0.85495	1.37544	0.80413	7.55E-03	2.73E-06	1.75E-06	3.23E-06	1.58E-06	7.5619E-03
520513.07	4258243.63	43517.16072	0.16675	0.25098	0.16752	0.26562	7.55E-03	3.91E-07	5.15E-07	3.93E-07	5.23E-07	7.5497E-03
520423.07	4258183.39	43504.38046	0.18447	0.40037	0.18974	0.42563	7.55E-03	4.33E-07	8.21E-07	4.45E-07	8.38E-07	7.5482E-03
520563.68	4258758.32	43490.76792	0.19584	0.14633	0.18772	0.15212	7.54E-03	4.60E-07	3.00E-07	4.41E-07	2.99E-07	7.5448E-03
520571.31	4258692.22	43481.18206	0.1836	0.15467	0.17627	0.16124	7.54E-03	4.31E-07	3.17E-07	4.14E-07	3.17E-07	7.5431E-03
520538.06	4258294.38	43469.89892	0.16384	0.22374	0.16333	0.23448	7.54E-03	3.85E-07	4.59E-07	3.83E-07	4.62E-07	7.5413E-03
520119.09	4258352.44	43452.12641	0.35001	7.52194	0.36431	8.97237	7.54E-03	8.22E-07	1.54E-05	8.55E-07	1.77E-05	7.5713E-03
520103.98	4259016.84	43449.68644	10.19813	0.32883	8.70507	0.30578	7.54E-03	2.39E-05	6.74E-07	2.04E-05	6.02E-07	7.5818E-03
520168.22	4258292.6	43443.60929	0.29304	3.04177	0.30519	3.46802	7.54E-03	6.88E-07	6.24E-06	7.16E-07	6.83E-06	7.5496E-03
520178.04	4258282.63	43409.91815	0.28509	2.66505	0.29794	3.02255	7.53E-03	6.69E-07	5.47E-06	6.99E-07	5.95E-06	7.5420E-03
520385.52	4259032.79	43389.79048	0.48183	0.14473	0.4578	0.15416	7.53E-03	1.13E-06	2.97E-07	1.07E-06	3.03E-07	7.5286E-03
520486.01	4258212.02	43365.98544	0.17151	0.2863	0.17468	0.30431	7.52E-03	4.03E-07	5.87E-07	4.10E-07	5.99E-07	7.5236E-03
520403.96	4259019.23	43344.44813	0.43569	0.14225	0.41439	0.151	7.52E-03	1.02E-06	2.92E-07	9.73E-07	2.97E-07	7.5205E-03
520522.55	4258257.7	43325.5833	0.16507	0.2406	0.16503	0.25375	7.51E-03	3.88E-07	4.93E-07	3.87E-07	5.00E-07	7.5164E-03
520158.4	4258302.56	43304.74833	0.30099	3.51223	0.31246	4.0294	7.51E-03	7.07E-07	7.20E-06	7.34E-07	7.93E-06	7.5276E-03
520503.79	4258229.65	43304.1313	0.16811	0.26235	0.16986	0.27829	7.51E-03	3.95E-07	5.38E-07	3.99E-07	5.48E-07	7.5128E-03
520551.62	4258461.66	43289.0779	0.17697	0.19239	0.17382	0.20277	7.51E-03	4.15E-07	3.95E-07	4.08E-07	3.99E-07	7.5099E-03
520354.55	4258183.18	43276.10992	0.20167	0.59467	0.20714	0.63881	7.51E-03	4.73E-07	1.22E-06	4.86E-07	1.26E-06	7.5095E-03
520131.6	4259038.23	43256.93824	5.11861	0.3065	4.46134	0.28625	7.50E-03	1.20E-05	6.29E-07	1.05E-05	5.63E-07	7.5264E-03
520187.86	4258272.66	43191.60023	0.2771	2.35838	0.29065	2.66042	7.49E-03	6.51E-07	4.84E-06	6.82E-07	5.24E-06	7.5028E-03
520432.86	4258183.42	43144.68326	0.18174	0.37977	0.18694	0.40356	7.48E-03	4.27E-07	7.79E-07	4.39E-07	7.94E-07	7.4857E-03
520014.36	4258899.91	43114.96265	2.35795	0.41779	2.8591	0.4102	7.48E-03	5.54E-06	8.57E-07	6.71E-06	8.07E-07	7.4920E-03
520512.6	4258884.19	43102.44892	0.25341	0.13784	0.24291	0.14459	7.48E-03	5.95E-07	2.83E-07	5.70E-07	2.85E-07	7.4777E-03
520315.36	4258193.05	43070.07669	0.21436	0.76376	0.2221	0.82946	7.47E-03	5.03E-07	1.57E-06	5.21E-07	1.63E-06	7.4745E-03
520532.88	4258845.77	43068.62452	0.23023	0.13902	0.22099	0.14531	7.47E-03	5.41E-07	2.85E-07	5.19E-07	2.86E-07	7.4717E-03
520025.98	4258924.69	43026.58045	3.05766	0.38975	3.86782	0.38172	7.46E-03	7.18E-06	7.99E-07	9.08E-06	7.51E-07	7.4806E-03
520236.93	4258232.81	43020.85899	0.24786	1.40969	0.26208	1.56622	7.46E-03	5.82E-07	2.89E-06	6.15E-07	3.08E-06	7.4689E-03
520456.47	4258967.47	42981.15873	0.3319	0.1388	0.31622	0.14579	7.45E-03	7.79E-07	2.85E-07	7.42E-07	2.87E-07	7.4570E-03
520355.85	4259052.84	42973.71176	0.57108	0.14983	0.54124	0.1604	7.45E-03	1.34E-06	3.07E-07	1.27E-06	3.16E-07	7.4568E-03
520148.58	4258312.53	42939.95114	0.30883	4.11485	0.31988	4.74919	7.45E-03	7.25E-07	8.44E-06	7.51E-07	9.35E-06	7.4670E-03
520555.67	4258420.56	42930.4835	0.17117	0.19441	0.16873	0.20451	7.45E-03	4.02E-07	3.99E-07	3.96E-07	4.03E-07	7.4477E-03
520050.82	4258964.92	42918.25962	6.17462	0.35739	9.85291	0.34453	7.44E-03	1.45E-05	7.33E-07	2.31E-05	6.78E-07	7.4830E-03
520451.62	4258187.29	42887.1976	0.17746	0.34303	0.18221	0.3648	7.44E-03	4.17E-07	7.04E-07	4.28E-07	7.18E-07	7.4409E-03
520040.75	4258950.77	42884.96843	4.4938	0.36681	6.24023	0.35632	7.44E-03	1.05E-05	7.52E-07	1.47E-05	7.01E-07	7.4649E-03
520460.6	4258191.14	42880.82189	0.17568	0.32669	0.18011	0.34756	7.44E-03	4.12E-07	6.70E-07	4.23E-07	6.84E-07	7.4397E-03
520197.68	4258262.69	42878.35119	0.26929	2.10351	0.28329	2.3634	7.44E-03	6.32E-07	4.31E-06	6.65E-07	4.65E-06	7.4473E-03
520429.81	4258998.52	42864.16567	0.38036	0.1396	0.36225	0.14735	7.43E-03	8.93E-07	2.86E-07	8.50E-07	2.90E-07	7.4369E-03
519989.62	4258809.75	42855.98699	1.37431	0.58419	1.6053	0.56469	7.43E-03	3.23E-06	1.20E-06	3.77E-06	1.11E-06	7.4425E-03
519997.12	4258673.87	42822.60632	1.06341	1.28263	1.28075	1.17508	7.43E-03	2.50E-06	2.63E-06	3.01E-06	2.31E-06	7.4378E-03
520489.59	4258923.74	42820.33751	0.28263	0.13765	0.2703	0.14447	7.43E-03	6.64E-07	2.82E-07	6.35E-07	2.84E-07	7.4289E-03
520094.88	4259013.08	42814.87941	13.46122	0.33011	12.04709	0.30797	7.43E-03	3.16E-05	6.77E-07	2.83E-05	6.06E-07	7.4872E-03
520344.76	4258183.15	42806.24584	0.20368	0.6322	0.20962	0.6806	7.42E-03	4.78E-07	1.30E-06	4.92E-07	1.34E-06	7.4282E-03
520122.56	4259034.5	42785.73089	6.20198	0.31142	5.35437	0.28993	7.42E-03	1.46E-05	6.39E-07	1.26E-05	5.71E-07	7.4493E-03
520494.68	4258215.74	42778.1914	0.1691	0.27465	0.17178	0.29171	7.42E-03	3.97E-07	5.63E-07	4.03E-07	5.74E-07	7.4216E-03
520375.64	4259042.8	42771.97732	0.50931	0.14539	0.48363	0.15517	7.42E-03	1.20E-06	2.98E-07	1.14E-06	3.05E-07	7.4215E-03
520480.39	4258937.55	42769.17986	0.29543	0.13779	0.28215	0.14462	7.42E-03	6.94E-07	2.83E-07	6.62E-07	2.85E-07	7.4200E-03
520537.26	4258284.03	42731.80778	0.16279	0.22529	0.16218	0.23625	7.41E-03	3.82E-07	4.62E-07	3.81E-07	4.65E-07	7.4133E-03
520532.26	4258271.87	42703.26947	0.16313	0.23068	0.16263	0.24235	7.41E-03	3.83E-07	4.73E-07	3.82E-07	4.77E-07	7.4084E-03
520060.67	4258978.98	42702.92462	8.9141	0.34835	17.06479	0.33305	7.41E-03	2.09E-05	7.14E-07	4.01E-05	6.56E-07	7.4690E-03
520099.42	4258382.38	42695.03816	0.38577	14.08928	0.40806	16.00012	7.41E-03	9.06E-07	2.89E-05	9.58E-07	3.15E-05	7.4675E-03
520009.93	4258628.15	42693.51905	1.04484	1.90931	1.29384	1.69202	7.40E-03	2.45E-06	3.92E-06	3.04E-06	3.33E-06	7.4177E-03
520412.51	4259015.69	42692.72657	0.41648	0.14028	0.39607	0.14871	7.40E-03	9.78E-07	2.88E-07	9.30E-07	2.93E-07	7.4073E-03
520498.98	4258909.84	42685.49962	0.2704	0.13723	0.25879	0.14404	7.40E-03	6.35E-07	2.81E-07	6.08E-07	2.84E-07	7.4054E-03
520469.58	4258194.98	42684.93567	0.17366	0.31191	0.17779	0.33175	7.40E-03	4.08E-07	6.40E-07	4.17E-07	6.53E-07	7.4056E-03
520442.65	4258183.45	42682.331	0.17893	0.36057	0.184	0.38304	7.40E-03	4.20E-07	7.40E-07	4.32E-07	7.54E-07	7.4054E-03
520556.86	4258397.81	42672.93957	0.16836	0.19564	0.16624	0.20599	7.40E-03	3.95E-07	4.01E-07	3.90E-07	4.05E-07	7.4030E-03
520554.31	4258351.4	42656.17471	0.16439	0.2027	0.16371	0.2135	7.40E-03	3.86E-07	4.16E-07	3.84E-07	4.20E-07	7.4001E-03
520007.12	4258636.77	42654.40538	1.04702	1.75721	1.28953	1.56951	7.40E-03	2.46E-06	3.60E-06	3.03E-06	3.09E-06	7.4104E-03
520521.97	4258870.3	42651.57735	0.24278	0.13739	0.23282	0.14396	7.40E-03	5.70E-07	2.82E-07	5.47E-07	2.83E-07	7.3994E-03
519986.58	4258778.3	42608.06108	1.23437	0.67572	1.44379	0.64625	7.39E-03	2.90E-06	1.39E-06	3.39E-06	1.27E-06	7.3991E-03
520447.36	4258981.24	42600.01479	0.34785	0.13846	0.33141	0.14561	7.39E-03	8.17E-07	2.84E-07	7.78E-07	2.87E-07	7.3909E-03
520285.97	4258202.96	42597.55318	0.22447	0.94128	0.23486	1.03107	7.39E-03	5.27E-07	1.93E-06	5.51E-07	2.03E-06	7.3934E-03
520548.83	4258319.02	42587.4077	0.16273	0.21149	0.16246	0.22188	7.39E-03	3.82E-07	4.34E-07	3.81E-07	4.37E-07	7.3882E-03
520555.61	4258361.97	42585.58433	0.16504	0.20039	0.16401	0.2112	7.39E-03	3.87E-07	4.11E-07	3.85E-07	4.16E-07	7.3879E-03
520030.43	4258936.52	42563.13077	3.41153	0.37685	4.41023	0.36838	7.38E-03	8.01E-06	7.73E-07	1.04E-05	7.25E-07	7.4022E-03
520266.36	4258212.9	42559.53769	0.23263	1.09594	0.24486	1.20692	7.38E-03	5.46E-07	2.25E-06	5.75E-07	2.38E-06	7.3875E-03
520471.38	4258951.29	42555.8058	0.30868	0.13763	0.29443	0.14446	7.38E-03	7.25E-07	2.82E-07	6.91E-07	2.84E-07	7.3831E-03
520553.17	4258340.9	42523.12538	0.16359	0.20512	0.16321	0.21576	7.38E-03	3.84E-07	4.21E-07	3.83E-07	4.25E-07	7.3771E-03
519999.34	4258863.73	42491.90552	1.73319	0.46913	2.03908	0.459	7.37E-03	4.07E-06	9.62E-07	4.79E-06	9.04E-07	7.3807E-03
520207.5	4258252.72	42483.30854	0.26168	1.88899	0.27586	2.11581	7.37E-03	6.14E-07	3.87E-06	6.48E-07	4.16E-06	7.3778E-03
520019.81	4258599.01	42460.31741	1.02424	2.57719	1.2939	2.2103	7.36E-03	2.40E-06	5.29E-06	3.04E-06	4.35E-06	7.3796E-03
520138.76	4258322.5	42417.4221	0.31668	4.90542	0.32754	5.71974	7.36E-03	7.43E-07	1.01E-05	7.69E-07	1.13E-05	7.3799E-03
520508.59	4258895.85	42409.62596	0.25861	0.13677	0.24776	0.14351	7.36E-03	6.07E-07	2.81E-07	5.82E-07	2.82E-07	7.3575E-03
520570.6	4258741.78	42391.0287	0.18923	0.14637	0.18133	0.15236	7.35E-03	4.44E-07	3.00E-07	4.26E-07	3.00E-07	7.3540E-03
519986.12	4258753.09	42361.63704	1.1516	0.76942	1.35706	0.72804	7.35E-03	2.70E-06	1.58E-06	3.19E-06	1.43E-06	7.3563E-03
520478.56	4258198.82	42353.21008	0.17149	0.29818	0.17526	0.31701	7.35E-03	4.03E-07	6.12E-07	4.11E-07	6.24E-07	7.3480E-03
520113.52	4259030.77	42344.27309	7.76523	0.31542	6.63683	0.29323	7.34E-03	1.82E-05	6.47E-07	1.56E-05	5.77E-07	7.3795E-03
520574.35	4258708.88	42337.91911	0.18333	0.1504	0.17593	0.15686	7.34E-03	4.30E-07	3.08E-07	4.13E-07	3.09E-07	7.3448E-03
520512.53	4258233.39	42336.45448	0.16538	0.25243	0.16663	0.26733	7.34E-03	3.88E-07	5.18E-07	3.91E-07	5.26E-07	7.3449E-03
520521.88	4258247.4	42314.15139	0.16389	0.2418	0.16421	0.25537	7.34E-03	3.85E-07	4.96E-07	3.86E-07	5.03E-07	7.3410E-03
519993.85	4258844.06	42314.04217	1.54587	0.50425	1.80564	0.49156	7.34E-03	3.63E-06	1.03E-06	4.24E-06	9.68E-07	7.3490E-03
520334.97	4258183.12	42312.66726	0.20569	0.67299	0.21219	0.72656	7.34E-03	4.83E-07	1.38E-06	4.98E-07	1.43E-06	7.3427E-03
520305.57	4258193.02	42297.16935	0.21599	0.818	0.22466	0.89083	7.34E-03	5.07E-07	1.68E-06	5.27E-07	1.75E-06	7.3407E-03
520015.81	4258910.5	42288.20087	2.44266	0.40196	2.9759	0.3948	7.33E-03	5.73E-06	8.24E-07	6.99E-06	7.77E-07	7.3490E-03
520246.75	4258222.84	42204.82442	0.2403	1.29311	0.2539	1.43219	7.32E-03	5.64E-07	2.65E-06	5.96E-07	2.82E-06	7.3269E-03
520547.73	4258308.53	42196.52638	0.16188	0.21354	0.16145	0.22385	7.32E-03	3.80E-07	4.38E-07	3.79E-07	4.41E-07	7.3204E-03
520393.73	4258173.3	42195.00555	0.18869	0.47401	0.19356	0.50494	7.32E-03	4.43E-07	9.72E-07	4.54E-07	9.94E-07	7.3214E-03
520085.77	4259009.33	42173.64889	15.97974	0.33019	18.86667	0.30964	7.31E-03	3.75E-05	6.77E-07	4.43E-05	6.10E-07	7.3979E-03
520403.52	4258173.33	42151.86957	0.18629	0.44855	0.19124	0.47713	7.31E-03	4.37E-07	9.20E-07	4.49E-07	9.39E-07	7.3138E-03
520395.42	4259032.77	42151.31641	0.45651	0.14134	0.43396	0.15033	7.31E-03	1.07E-06	2.90E-07	1.02E-06	2.96E-07	7.3136E-03
520383.95	4258173.27	42129.03275	0.19098	0.50137	0.19585	0.53497	7.31E-03	4.48E-07	1.03E-06	4.60E-07	1.05E-06	7.3101E-03
520546.67	4258822.87	42094.27877	0.21601	0.13909	0.20739	0.14501	7.30E-03	5.07E-07	2.85E-07	4.87E-07	2.85E-07	7.3026E-03
520550.31	4258814.19	42064.0913	0.21215	0.13965	0.20366	0.1455	7.30E-03	4.98E-07	2.86E-07	4.78E-07	2.86E-07	7.2974E-03
520503.36	4258219.45	42063.51431	0.1666	0.26375	0.16877	0.27987	7.30E-03	3.91E-07	5.41E-07	3.96E-07	5.51E-07	7.2976E-03
520365.75	4259052.82	42061.92073	0.53894	0.14615	0.51132	0.15628	7.30E-03	1.27E-06	3.00E-07	1.20E-06	3.08E-07	7.2985E-03
520413.31	4258173.36	42061.45411	0.18391	0.42472	0.18889	0.45142	7.30E-03	4.32E-07	8.71E-07	4.43E-07	8.89E-07	7.2980E-03
520531.58	4258856.31	42043.34571	0.23238	0.13716	0.22308	0.14347	7.29E-03	5.46E-07	2.81E-07	5.24E-07	2.82E-07	7.2939E-03
520000.96	4258874.39	42029.99576	1.80198	0.44992	2.12131	0.44095	7.29E-03	4.23E-06	9.23E-07	4.98E-06	8.68E-07	7.3009E-03
520421.05	4259012.15	41986.19263	0.39834	0.13862	0.3792	0.1467	7.28E-03	9.35E-07	2.84E-07	8.90E-07	2.89E-07	7.2847E-03
520553.94	4258805.51	41984.57825	0.20835	0.14018	0.19998	0.14594	7.28E-03	4.89E-07	2.87E-07	4.69E-07	2.87E-07	7.2836E-03
520217.32	4258242.75	41967.98386	0.25416	1.70725	0.26837	1.90579	7.28E-03	5.97E-07	3.50E-06	6.30E-07	3.75E-06	7.2876E-03
520438.41	4258994.96	41964.44888	0.36424	0.13782	0.34705	0.14522	7.28E-03	8.55E-07	2.83E-07	8.15E-07	2.86E-07	7.2808E-03
520374.16	4258173.24	41940.20992	0.19315	0.53091	0.19815	0.56747	7.27E-03	4.53E-07	1.09E-06	4.65E-07	1.12E-06	7.2775E-03
520487.53	4258202.66	41909.89434	0.16921	0.2853	0.17256	0.30316	7.27E-03	3.97E-07	5.85E-07	4.05E-07	5.97E-07	7.2711E-03
520531.44	4258261.51	41899.47847	0.16212	0.23191	0.16175	0.24404	7.27E-03	3.81E-07	4.76E-07	3.80E-07	4.80E-07	7.2690E-03
520423.1	4258173.39	41885.53884	0.18147	0.40244	0.18644	0.42754	7.26E-03	4.26E-07	8.25E-07	4.38E-07	8.42E-07	7.2674E-03
520104.49	4259027.04	41865.32827	10.02281	0.3181	8.56897	0.29597	7.26E-03	2.35E-05	6.52E-07	2.01E-05	5.83E-07	7.3062E-03
520557.58	4258796.83	41847.9946	0.20461	0.14069	0.19636	0.14637	7.26E-03	4.80E-07	2.89E-07	4.61E-07	2.88E-07	7.2599E-03
520109.27	4258362.41	41827.92221	0.35706	9.93389	0.37374	11.78621	7.25E-03	8.38E-07	2.04E-05	8.77E-07	2.32E-05	7.3002E-03
520465.2	4258963.85	41801.94968	0.31839	0.13677	0.30357	0.14356	7.25E-03	7.47E-07	2.81E-07	7.13E-07	2.83E-07	7.2524E-03
519985.87	4258800.71	41765.02319	1.2726	0.60285	1.48146	0.58082	7.24E-03	2.99E-06	1.24E-06	3.48E-06	1.14E-06	7.2528E-03
520003.68	4258885.5	41754.95011	1.90885	0.4322	2.25712	0.4242	7.24E-03	4.48E-06	8.86E-07	5.30E-06	8.35E-07	7.2537E-03
520325.18	4258183.08	41741.42386	0.20756	0.71765	0.21477	0.77708	7.24E-03	4.87E-07	1.47E-06	5.04E-07	1.53E-06	7.2439E-03
520059.4	4258501.87	41712.54558	0.75297	13.19356	0.85982	7.96512	7.23E-03	1.77E-06	2.71E-05	2.02E-06	1.57E-05	7.2814E-03
520574.06	4258733.51	41710.59665	0.18604	0.14633	0.17833	0.15243	7.23E-03	4.37E-07	3.00E-07	4.19E-07	3.00E-07	7.2360E-03
520364.37	4258173.21	41704.0436	0.19531	0.56271	0.20051	0.60286	7.23E-03	4.59E-07	1.15E-06	4.71E-07	1.19E-06	7.2366E-03
520041.83	4258961.21	41693.11792	4.65112	0.35423	6.51307	0.3439	7.23E-03	1.09E-05	7.26E-07	1.53E-05	6.77E-07	7.2591E-03
519990.14	4258835.12	41675.40822	1.43809	0.51958	1.67193	0.50544	7.23E-03	3.38E-06	1.07E-06	3.93E-06	9.95E-07	7.2378E-03
520385.54	4259042.79	41661.38367	0.48198	0.14192	0.4579	0.15125	7.23E-03	1.13E-06	2.91E-07	1.08E-06	2.98E-07	7.2288E-03
520546.76	4258298.1	41630.84835	0.16089	0.21565	0.16036	0.22589	7.22E-03	3.78E-07	4.42E-07	3.76E-07	4.45E-07	7.2223E-03
520051.75	4258975.3	41630.7529	6.39395	0.34525	10.37462	0.33269	7.22E-03	1.50E-05	7.08E-07	2.44E-05	6.55E-07	7.2614E-03
520403.92	4259029.25	41627.70588	0.43614	0.13949	0.41484	0.14816	7.22E-03	1.02E-06	2.86E-07	9.74E-07	2.92E-07	7.2227E-03
520561.21	4258788.15	41625.82791	0.20089	0.14107	0.19273	0.14668	7.22E-03	4.72E-07	2.89E-07	4.52E-07	2.89E-07	7.2213E-03
520554.95	4258470.43	41620.72111	0.17588	0.18906	0.1724	0.19929	7.22E-03	4.13E-07	3.88E-07	4.05E-07	3.92E-07	7.2205E-03
519988.27	4258710.04	41583.77319	1.05141	0.97989	1.24161	0.91295	7.21E-03	2.47E-06	2.01E-06	2.91E-06	1.80E-06	7.2217E-03
520276.18	4258202.93	41559.35072	0.22541	1.01631	0.23682	1.11599	7.21E-03	5.29E-07	2.08E-06	5.56E-07	2.20E-06	7.2136E-03
520432.89	4258173.42	41556.72296	0.17887	0.38178	0.18386	0.40534	7.21E-03	4.20E-07	7.83E-07	4.32E-07	7.98E-07	7.2103E-03
520456.03	4258977.66	41518.47371	0.33344	0.13653	0.31784	0.14341	7.20E-03	7.83E-07	2.80E-07	7.46E-07	2.82E-07	7.2033E-03
520520.98	4258880.72	41495.82151	0.24456	0.13566	0.23464	0.14217	7.20E-03	5.74E-07	2.78E-07	5.51E-07	2.80E-07	7.1989E-03
520558.91	4258429.07	41491.55093	0.17037	0.19119	0.16776	0.20106	7.20E-03	4.00E-07	3.92E-07	3.94E-07	3.96E-07	7.1981E-03
520031.68	4258947.03	41469.97853	3.53135	0.36359	4.59422	0.35526	7.19E-03	8.29E-06	7.46E-07	1.08E-05	6.99E-07	7.2133E-03
520295.79	4258192.99	41454.71819	0.21739	0.87816	0.22705	0.95894	7.19E-03	5.10E-07	1.80E-06	5.33E-07	1.89E-06	7.1949E-03
520488.9	4258934.03	41425.24325	0.2842	0.13571	0.27183	0.14237	7.19E-03	6.67E-07	2.78E-07	6.38E-07	2.80E-07	7.1869E-03
520227.14	4258232.78	41373.46908	0.2468	1.55145	0.26086	1.72631	7.18E-03	5.79E-07	3.18E-06	6.12E-07	3.40E-06	7.1838E-03
520029.69	4258569.88	41369.99292	0.97141	3.62166	1.22564	2.94412	7.18E-03	2.28E-06	7.43E-06	2.88E-06	5.80E-06	7.1938E-03
520560.33	4258406.94	41357.44159	0.16761	0.19241	0.16528	0.20238	7.17E-03	3.93E-07	3.95E-07	3.88E-07	3.98E-07	7.1748E-03
520460.49	4258181.07	41357.4098	0.17325	0.32875	0.17778	0.34934	7.17E-03	4.07E-07	6.74E-07	4.17E-07	6.88E-07	7.1754E-03
520017.13	4258921.04	41355.50558	2.52212	0.38702	3.0873	0.38021	7.17E-03	5.92E-06	7.94E-07	7.25E-06	7.48E-07	7.1876E-03
520061.48	4258989.3	41350.52192	9.22683	0.33664	17.88657	0.3218	7.17E-03	2.17E-05	6.90E-07	4.20E-05	6.33E-07	7.2370E-03
519990.89	4258692.25	41349.9396	1.02802	1.09862	1.2199	1.01684	7.17E-03	2.41E-06	2.25E-06	2.86E-06	2.00E-06	7.1815E-03
520498.16	4258920.19	41348.28204	0.27211	0.13533	0.26038	0.142	7.17E-03	6.39E-07	2.78E-07	6.11E-07	2.80E-07	7.1735E-03
520354.58	4258173.18	41347.51692	0.19732	0.59722	0.2029	0.6413	7.17E-03	4.63E-07	1.22E-06	4.76E-07	1.26E-06	7.1750E-03
520496.51	4258206.51	41344.70121	0.16683	0.27326	0.16971	0.29018	7.17E-03	3.92E-07	5.60E-07	3.98E-07	5.71E-07	7.1730E-03
520564.85	4258779.46	41334.85846	0.19725	0.14147	0.18918	0.14701	7.17E-03	4.63E-07	2.90E-07	4.44E-07	2.89E-07	7.1708E-03
520095.45	4259023.31	41333.80452	13.2003	0.31939	11.77953	0.29811	7.17E-03	3.10E-05	6.55E-07	2.77E-05	5.87E-07	7.2290E-03
520256.57	4258212.87	41317.9534	0.23293	1.19117	0.24591	1.31466	7.17E-03	5.47E-07	2.44E-06	5.77E-07	2.59E-06	7.1726E-03
520479.82	4258947.79	41315.06533	0.29689	0.13576	0.28359	0.14242	7.17E-03	6.97E-07	2.78E-07	6.66E-07	2.80E-07	7.1678E-03
520521.27	4258237.13	41279.46132	0.16265	0.24305	0.1634	0.25695	7.16E-03	3.82E-07	4.98E-07	3.84E-07	5.06E-07	7.1615E-03
520577.85	4258700.54	41269.70862	0.18029	0.15033	0.17309	0.15669	7.16E-03	4.23E-07	3.08E-07	4.06E-07	3.08E-07	7.1595E-03
520451.58	4258177.26	41268.66687	0.17477	0.34527	0.1796	0.36656	7.16E-03	4.10E-07	7.08E-07	4.22E-07	7.22E-07	7.1601E-03
519997.12	4258664.6	41261.72075	1.01285	1.34793	1.21923	1.23075	7.16E-03	2.38E-06	2.76E-06	2.86E-06	2.42E-06	7.1671E-03
519985.46	4258727.38	41224.95594	1.06131	0.87791	1.24693	0.82313	7.15E-03	2.49E-06	1.80E-06	2.93E-06	1.62E-06	7.1591E-03
520469.39	4258184.89	41223.57698	0.17143	0.31386	0.17571	0.33351	7.15E-03	4.02E-07	6.44E-07	4.13E-07	6.57E-07	7.1522E-03
520541.49	4258842.21	41214.40314	0.22225	0.13675	0.21345	0.14278	7.15E-03	5.22E-07	2.80E-07	5.01E-07	2.81E-07	7.1500E-03
520429.6	4259008.61	41213.02244	0.3813	0.13691	0.3632	0.14464	7.15E-03	8.95E-07	2.81E-07	8.53E-07	2.85E-07	7.1505E-03
520512.04	4258223.17	41209.881	0.16401	0.25369	0.16569	0.26883	7.15E-03	3.85E-07	5.20E-07	3.89E-07	5.29E-07	7.1495E-03
520560.54	4258381.62	41195.92749	0.16492	0.19405	0.16309	0.20449	7.15E-03	3.87E-07	3.98E-07	3.83E-07	4.03E-07	7.1468E-03
520507.62	4258906.26	41159.93115	0.26043	0.13496	0.24948	0.14158	7.14E-03	6.11E-07	2.77E-07	5.86E-07	2.79E-07	7.1408E-03
520005.35	4258896.19	41159.23512	1.9829	0.41542	2.35263	0.40817	7.14E-03	4.66E-06	8.52E-07	5.52E-06	8.03E-07	7.1507E-03
520442.68	4258173.45	41118.2656	0.17619	0.36253	0.18115	0.38468	7.13E-03	4.14E-07	7.44E-07	4.25E-07	7.57E-07	7.1341E-03
520375.66	4259052.8	41076.99781	0.50934	0.14257	0.48352	0.15226	7.12E-03	1.20E-06	2.92E-07	1.14E-06	3.00E-07	7.1275E-03
519982.99	4258769.65	41073.91283	1.13897	0.69631	1.33055	0.66302	7.12E-03	2.67E-06	1.43E-06	3.12E-06	1.31E-06	7.1326E-03
520568.48	4258770.78	41072.51253	0.19379	0.14191	0.18584	0.14741	7.12E-03	4.55E-07	2.91E-07	4.36E-07	2.90E-07	7.1253E-03
520541.24	4258275.72	41066.97321	0.16013	0.22234	0.15949	0.23314	7.12E-03	3.76E-07	4.56E-07	3.74E-07	4.59E-07	7.1245E-03
520315.39	4258183.05	41058.17415	0.20919	0.76692	0.21726	0.83263	7.12E-03	4.91E-07	1.57E-06	5.10E-07	1.64E-06	7.1256E-03
520530.69	4258251.18	41047.57733	0.16105	0.233	0.16095	0.24558	7.12E-03	3.78E-07	4.78E-07	3.78E-07	4.83E-07	7.1212E-03
520412.42	4259025.73	41022.34123	0.41706	0.13754	0.39662	0.1459	7.12E-03	9.79E-07	2.82E-07	9.31E-07	2.87E-07	7.1176E-03
520447.02	4258991.39	41012.09173	0.34904	0.13603	0.33272	0.14312	7.11E-03	8.19E-07	2.79E-07	7.81E-07	2.82E-07	7.1155E-03
520530.41	4258866.8	40986.25642	0.23438	0.13523	0.22495	0.14154	7.11E-03	5.50E-07	2.77E-07	5.28E-07	2.79E-07	7.1105E-03
520545.88	4258287.72	40985.07222	0.15985	0.21745	0.15925	0.2277	7.11E-03	3.75E-07	4.46E-07	3.74E-07	4.48E-07	7.1103E-03
520478.3	4258188.7	40981.84086	0.16947	0.29984	0.17342	0.3186	7.11E-03	3.98E-07	6.15E-07	4.07E-07	6.27E-07	7.1102E-03
520021.28	4258932.74	40968.10955	2.76688	0.37392	3.43647	0.36701	7.11E-03	6.50E-06	7.67E-07	8.07E-06	7.22E-07	7.1218E-03

520049.48	4258521.31	40959.43353	0.81503	7.72475	0.95063	5.52178	7.10E-03	1.91E-06	1.58E-05	2.23E-06	1.09E-05	7.1351E-03
519986.43	4258826.18	40911.2484	1.33766	0.53542	1.54972	0.51958	7.10E-03	3.14E-06	1.10E-06	3.64E-06	1.02E-06	7.1048E-03
520344.79	4258173.15	40898.93969	0.19921	0.63476	0.20533	0.68323	7.09E-03	4.68E-07	1.30E-06	4.82E-07	1.34E-06	7.0973E-03
520517.31	4258892.25	40821.45872	0.24915	0.13452	0.23895	0.14103	7.08E-03	5.85E-07	2.76E-07	5.61E-07	2.78E-07	7.0820E-03
520178.07	4258272.63	40807.29882	0.27305	2.67629	0.28428	3.03088	7.08E-03	6.41E-07	5.49E-06	6.67E-07	5.97E-06	7.0906E-03
520168.25	4258282.6	40803.04554	0.28023	3.05343	0.29067	3.47826	7.08E-03	6.58E-07	6.26E-06	6.82E-07	6.85E-06	7.0916E-03
520236.96	4258222.81	40745.51455	0.23971	1.41635	0.2534	1.5719	7.07E-03	5.63E-07	2.90E-06	5.95E-07	3.09E-06	7.0743E-03
520086.42	4259019.59	40713.91338	15.69544	0.31936	18.13915	0.29961	7.06E-03	3.68E-05	6.55E-07	4.26E-05	5.90E-07	7.1423E-03
520187.89	4258262.66	40680.51168	0.26592	2.36821	0.27788	2.66899	7.06E-03	6.24E-07	4.86E-06	6.52E-07	5.25E-06	7.0672E-03
520572.12	4258762.1	40668.39376	0.19034	0.14216	0.18249	0.14769	7.05E-03	4.47E-07	2.92E-07	4.28E-07	2.91E-07	7.0552E-03
520158.43	4258292.56	40618.27312	0.28732	3.52511	0.29711	4.04013	7.05E-03	6.75E-07	7.23E-06	6.98E-07	7.95E-06	7.0616E-03
520505.49	4258210.35	40612.49689	0.1643	0.26225	0.16675	0.27815	7.04E-03	3.86E-07	5.38E-07	3.91E-07	5.48E-07	7.0459E-03
520487.21	4258192.51	40605.42822	0.16736	0.2869	0.17095	0.30475	7.04E-03	3.93E-07	5.88E-07	4.01E-07	6.00E-07	7.0448E-03
519982.12	4258791.66	40535.44661	1.17812	0.62175	1.36659	0.59687	7.03E-03	2.77E-06	1.28E-06	3.21E-06	1.17E-06	7.0391E-03
520286	4258192.96	40528.44019	0.21845	0.94539	0.22912	1.03491	7.03E-03	5.13E-07	1.94E-06	5.38E-07	2.04E-06	7.0345E-03
520042.84	4258971.62	40515.78958	4.8046	0.34232	6.78364	0.33217	7.03E-03	1.13E-05	7.02E-07	1.59E-05	6.54E-07	7.0558E-03
520119.12	4258342.44	40515.68692	0.33119	7.54537	0.34375	8.98191	7.03E-03	7.78E-07	1.55E-05	8.07E-07	1.77E-05	7.0620E-03
520395.44	4259042.77	40497.34957	0.45666	0.13861	0.43412	0.14751	7.02E-03	1.07E-06	2.84E-07	1.02E-06	2.90E-07	7.0267E-03
520006.88	4258906.81	40488.3594	2.05375	0.39969	2.44511	0.39302	7.02E-03	4.82E-06	8.20E-07	5.74E-06	7.74E-07	7.0347E-03
520393.77	4258163.3	40471.11143	0.18512	0.47618	0.18978	0.50694	7.02E-03	4.35E-07	9.77E-07	4.46E-07	9.98E-07	7.0224E-03
520197.71	4258252.69	40470.22217	0.25894	2.11199	0.27143	2.37202	7.02E-03	6.08E-07	4.33E-06	6.37E-07	4.67E-06	7.0296E-03
520403.55	4258163.33	40469.4465	0.1829	0.45072	0.18758	0.47908	7.02E-03	4.29E-07	9.24E-07	4.40E-07	9.43E-07	7.0220E-03
519982.5	4258744.34	40457.30199	1.06046	0.79075	1.24024	0.74582	7.02E-03	2.49E-06	1.62E-06	2.91E-06	1.47E-06	7.0256E-03
520335	4258173.12	40453.8013	0.20114	0.67553	0.20784	0.72945	7.02E-03	4.72E-07	1.39E-06	4.88E-07	1.44E-06	7.0203E-03
520413.34	4258163.36	40423.03986	0.18068	0.42683	0.18538	0.45328	7.01E-03	4.24E-07	8.75E-07	4.35E-07	8.92E-07	7.0138E-03
520266.39	4258202.9	40416.59914	0.22586	1.10102	0.23816	1.21128	7.01E-03	5.30E-07	2.26E-06	5.59E-07	2.38E-06	7.0158E-03
520464.69	4258974.07	40409.25496	0.31994	0.13464	0.30519	0.1413	7.01E-03	7.51E-07	2.76E-07	7.16E-07	2.78E-07	7.0108E-03
520032.84	4258957.5	40396.98045	3.64843	0.35112	4.77189	0.34291	7.01E-03	8.57E-06	7.20E-07	1.12E-05	6.75E-07	7.0278E-03
520540.33	4258265.31	40391.1348	0.15918	0.22367	0.1586	0.23486	7.01E-03	3.74E-07	4.59E-07	3.72E-07	4.62E-07	7.0073E-03
520438.15	4259005.07	40382.73363	0.36524	0.13524	0.34813	0.14263	7.00E-03	8.57E-07	2.77E-07	8.17E-07	2.81E-07	7.0064E-03
520383.98	4258163.27	40380.2316	0.18726	0.50357	0.19199	0.53707	7.00E-03	4.40E-07	1.03E-06	4.51E-07	1.06E-06	7.0067E-03
520052.62	4258985.65	40373.96967	6.60144	0.33383	10.91077	0.32156	7.00E-03	1.55E-05	6.85E-07	2.56E-05	6.33E-07	7.0451E-03
520420.91	4259022.22	40366.31466	0.39905	0.13594	0.37991	0.14397	7.00E-03	9.37E-07	2.79E-07	8.92E-07	2.83E-07	7.0037E-03
520540.11	4258852.78	40320.53528	0.22438	0.13501	0.21557	0.14105	6.99E-03	5.27E-07	2.77E-07	5.06E-07	2.78E-07	6.9950E-03
520423.13	4258163.39	40302.79239	0.17842	0.40444	0.18312	0.42931	6.99E-03	4.19E-07	8.29E-07	4.30E-07	8.45E-07	6.9929E-03
520305.61	4258183.02	40300.06263	0.2106	0.82135	0.21962	0.89401	6.99E-03	4.94E-07	1.68E-06	5.16E-07	1.76E-06	6.9943E-03
520148.61	4258302.53	40233.25463	0.29429	4.12913	0.30374	4.76045	6.98E-03	6.91E-07	8.47E-06	7.13E-07	9.37E-06	6.9975E-03
520520.72	4258226.88	40228.473	0.16136	0.24435	0.16258	0.25847	6.98E-03	3.79E-07	5.01E-07	3.82E-07	5.09E-07	6.9792E-03
520575.75	4258753.42	40182.79666	0.18696	0.1422	0.1792	0.14782	6.97E-03	4.39E-07	2.92E-07	4.21E-07	2.91E-07	6.9710E-03
520374.19	4258163.24	40172.16088	0.18928	0.53312	0.19422	0.56965	6.97E-03	4.44E-07	1.09E-06	4.56E-07	1.12E-06	6.9708E-03
520530.02	4258240.87	40138.93303	0.15992	0.23418	0.1602	0.24713	6.96E-03	3.75E-07	4.80E-07	3.76E-07	4.86E-07	6.9636E-03
520581.34	4258692.19	40137.92405	0.17736	0.15018	0.17028	0.15641	6.96E-03	4.16E-07	3.08E-07	4.00E-07	3.08E-07	6.9632E-03
520207.53	4258242.72	40137.49448	0.252	1.89707	0.2649	2.12313	6.96E-03	5.92E-07	3.89E-06	6.22E-07	4.18E-06	6.9709E-03
520496.11	4258196.32	40128.75426	0.16516	0.27467	0.16832	0.29165	6.96E-03	3.88E-07	5.63E-07	3.95E-07	5.74E-07	6.9621E-03
520558.29	4258479.19	40114.26465	0.17474	0.18577	0.17088	0.19583	6.96E-03	4.10E-07	3.81E-07	4.01E-07	3.85E-07	6.9592E-03
520556.51	4258312.29	40107.92628	0.1588	0.20577	0.1584	0.21571	6.96E-03	3.73E-07	4.22E-07	3.72E-07	4.25E-07	6.9581E-03
520580.99	4258716.98	40096.97801	0.17992	0.14623	0.17265	0.15242	6.95E-03	4.22E-07	3.00E-07	4.05E-07	3.00E-07	6.9561E-03
520561.7	4258344.55	40095.31178	0.16042	0.19789	0.15977	0.20821	6.95E-03	3.77E-07	4.06E-07	3.75E-07	4.10E-07	6.9559E-03
520488.27	4258944.29	40070.2866	0.28567	0.13377	0.27326	0.14026	6.95E-03	6.71E-07	2.74E-07	6.42E-07	2.76E-07	6.9519E-03
520009.89	4258618.45	40065.43	0.96947	1.99029	1.19408	1.75881	6.95E-03	2.28E-06	4.08E-06	2.80E-06	3.46E-06	6.9618E-03
520497.41	4258930.5	40048.47901	0.27368	0.13345	0.26187	0.13997	6.95E-03	6.43E-07	2.74E-07	6.15E-07	2.76E-07	6.9480E-03
520562.93	4258355.09	40045.88354	0.16108	0.19566	0.16009	0.20604	6.95E-03	3.78E-07	4.01E-07	3.76E-07	4.06E-07	6.9473E-03
520385.56	4259052.79	40034.11417	0.482	0.13919	0.4579	0.14843	6.94E-03	1.13E-06	2.85E-07	1.08E-06	2.92E-07	6.9465E-03
520432.92	4258163.42	40030.06677	0.176	0.38369	0.18074	0.40699	6.94E-03	4.13E-07	7.87E-07	4.24E-07	8.01E-07	6.9455E-03
520562.15	4258437.59	40027.61481	0.16951	0.18802	0.16671	0.19771	6.94E-03	3.98E-07	3.86E-07	3.91E-07	3.89E-07	6.9442E-03
519982.73	4258817.24	40019.02391	1.24365	0.55181	1.43772	0.5339	6.94E-03	2.92E-06	1.13E-06	3.38E-06	1.05E-06	6.9496E-03
520455.62	4258987.83	40017.41284	0.33474	0.13423	0.31925	0.14104	6.94E-03	7.86E-07	2.75E-07	7.49E-07	2.78E-07	6.9429E-03
520022.62	4258943.29	40010.20203	2.86096	0.36076	3.57112	0.35402	6.94E-03	6.72E-06	7.40E-07	8.38E-06	6.97E-07	6.9561E-03
520094.69	4259031.31	40005.31464	13.47248	0.31077	12.13057	0.29039	6.94E-03	3.16E-05	6.37E-07	2.85E-05	5.72E-07	7.0001E-03
520246.78	4258212.84	40005.07615	0.23268	1.29938	0.24599	1.43706	6.94E-03	5.46E-07	2.66E-06	5.78E-07	2.83E-06	6.9453E-03
520563.96	4258390.6	39995.01208	0.16419	0.19055	0.16206	0.20063	6.94E-03	3.85E-07	3.91E-07	3.80E-07	3.95E-07	6.9385E-03
520404.18	4259039.15	39992.08767	0.43578	0.13676	0.41455	0.14533	6.94E-03	1.02E-06	2.80E-07	9.73E-07	2.86E-07	6.9390E-03
520563.81	4258416.06	39989.08215	0.16681	0.18914	0.16429	0.1988	6.94E-03	3.92E-07	3.88E-07	3.86E-07	3.91E-07	6.9375E-03
520506.73	4258916.64	39926.20279	0.26213	0.13313	0.25107	0.13963	6.93E-03	6.15E-07	2.73E-07	5.89E-07	2.75E-07	6.9268E-03
520364.4	4258163.21	39918.15973	0.19128	0.56495	0.19653	0.60511	6.92E-03	4.49E-07	1.16E-06	4.61E-07	1.19E-06	6.9269E-03
520325.21	4258173.08	39892.23918	0.20284	0.72029	0.21029	0.78008	6.92E-03	4.76E-07	1.48E-06	4.94E-07	1.54E-06	6.9231E-03
519992.19	4258870.77	39842.27542	1.54782	0.44745	1.7981	0.43809	6.91E-03	3.63E-06	9.18E-07	4.22E-06	8.62E-07	6.9201E-03
520099.45	4258372.38	39788.57443	0.36281	14.14659	0.3829	15.72817	6.90E-03	8.52E-07	2.90E-05	8.99E-07	3.10E-05	6.9629E-03
520460.39	4258171.02	39781.43764	0.17063	0.33126	0.17534	0.35121	6.90E-03	4.01E-07	6.79E-07	4.12E-07	6.91E-07	6.9021E-03
520469.23	4258174.8	39771.6649	0.1691	0.31603	0.17353	0.33532	6.90E-03	3.97E-07	6.48E-07	4.07E-07	6.60E-07	6.9003E-03
520514.47	4258214.19	39769.54111	0.1617	0.2519	0.16369	0.26681	6.90E-03	3.80E-07	5.17E-07	3.84E-07	5.25E-07	6.8997E-03
520555.45	4258301.82	39757.91779	0.15795	0.2078	0.15743	0.21764	6.90E-03	3.71E-07	4.26E-07	3.70E-07	4.28E-07	6.8974E-03
520008.28	4258917.38	39746.54742	2.12129	0.38488	2.53432	0.3787	6.89E-03	4.98E-06	7.89E-07	5.95E-06	7.45E-07	6.9063E-03
520451.55	4258167.23	39727.10776	0.17207	0.34737	0.1769	0.36814	6.89E-03	4.04E-07	7.12E-07	4.15E-07	7.25E-07	6.8927E-03
520217.35	4258232.75	39701.44388	0.24514	1.71473	0.25829	1.91231	6.89E-03	5.76E-07	3.52E-06	6.06E-07	3.76E-06	6.8945E-03
520539.51	4258254.95	39686.08037	0.15821	0.22475	0.15779	0.23638	6.88E-03	3.71E-07	4.61E-07	3.70E-07	4.65E-07	6.8850E-03
520516.26	4258902.69	39673.68854	0.25098	0.13273	0.24065	0.13916	6.88E-03	5.89E-07	2.72E-07	5.65E-07	2.74E-07	6.8829E-03
520138.79	4258312.5	39672.38932	0.30117	4.92349	0.31061	5.72023	6.88E-03	7.07E-07	1.01E-05	7.29E-07	1.13E-05	6.9038E-03
520058.46	4258998.05	39661.11851	8.23962	0.32434	16.70518	0.31104	6.88E-03	1.93E-05	6.65E-07	3.92E-05	6.12E-07	6.9389E-03
520429.41	4259018.7	39650.47072	0.3821	0.13428	0.36403	0.14199	6.88E-03	8.97E-07	2.75E-07	8.55E-07	2.80E-07	6.8795E-03
520442.71	4258163.45	39637.77768	0.17346	0.36438	0.17824	0.38623	6.87E-03	4.07E-07	7.47E-07	4.18E-07	7.60E-07	6.8773E-03
519994.57	4258881.74	39632.31051	1.62697	0.42991	1.89366	0.42166	6.87E-03	3.82E-06	8.82E-07	4.45E-06	8.30E-07	6.8840E-03
519986.82	4258851.23	39619.41226	1.38887	0.47977	1.60753	0.46792	6.87E-03	3.26E-06	9.84E-07	3.77E-06	9.21E-07	6.8807E-03
520478.07	4258178.58	39619.0082	0.16736	0.30181	0.17149	0.32036	6.87E-03	3.93E-07	6.19E-07	4.03E-07	6.31E-07	6.8738E-03
520579.39	4258744.73	39558.10242	0.18365	0.14214	0.17601	0.14789	6.86E-03	4.31E-07	2.92E-07	4.13E-07	2.91E-07	6.8626E-03
520354.61	4258163.18	39546.88841	0.19312	0.59954	0.19885	0.6436	6.86E-03	4.53E-07	1.23E-06	4.67E-07	1.27E-06	6.8626E-03
519997.12	4258655.32	39527.39305	0.96057	1.41316	1.15572	1.28576	6.86E-03	2.26E-06	2.90E-06	2.71E-06	2.53E-06	6.8662E-03
520276.21	4258192.93	39522.89179	0.21913	1.0208	0.2307	1.11991	6.86E-03	5.14E-07	2.09E-06	5.42E-07	2.20E-06	6.8604E-03
520446.7	4259001.53	39503.00478	0.35011	0.13359	0.33392	0.14064	6.85E-03	8.22E-07	2.74E-07	7.84E-07	2.77E-07	6.8538E-03
520295.82	4258182.99	39484.00621	0.21177	0.88184	0.22176	0.9623	6.85E-03	4.97E-07	1.81E-06	5.21E-07	1.89E-06	6.8530E-03
520505.02	4258200.13	39474.69351	0.16277	0.26372	0.16556	0.27971	6.85E-03	3.82E-07	5.41E-07	3.89E-07	5.51E-07	6.8486E-03
520553.69	4258830.05	39463.8569	0.21096	0.13509	0.20269	0.14078	6.84E-03	4.95E-07	2.77E-07	4.76E-07	2.77E-07	6.8464E-03
520557.29	4258821.46	39442.21759	0.20729	0.13566	0.19917	0.14128	6.84E-03	4.87E-07	2.78E-07	4.68E-07	2.78E-07	6.8426E-03
519979.4	4258761	39407.78779	1.05021	0.71611	1.22391	0.67903	6.84E-03	2.47E-06	1.47E-06	2.87E-06	1.34E-06	6.8432E-03
520412.92	4259035.53	39406.5527	0.41625	0.13481	0.39595	0.14308	6.83E-03	9.77E-07	2.76E-07	9.30E-07	2.82E-07	6.8374E-03
520012.13	4258928.96	39404.40082	2.29563	0.37155	2.77029	0.36559	6.83E-03	5.39E-06	7.62E-07	6.50E-06	7.20E-07	6.8479E-03
520039.56	4258540.74	39386.33469	0.86413	5.20603	1.04037	4.01639	6.83E-03	2.03E-06	1.07E-05	2.44E-06	7.91E-06	6.8544E-03
520560.88	4258812.87	39379.08865	0.2037	0.13618	0.19569	0.14172	6.83E-03	4.78E-07	2.79E-07	4.59E-07	2.79E-07	6.8316E-03
520538.86	4258863.31	39373.81139	0.22637	0.13317	0.21747	0.13923	6.83E-03	5.31E-07	2.73E-07	5.11E-07	2.74E-07	6.8308E-03
520550.22	4258279.56	39368.76248	0.15714	0.21437	0.15647	0.22442	6.83E-03	3.69E-07	4.40E-07	3.67E-07	4.42E-07	6.8300E-03
520033.92	4258967.94	39357.84353	3.76285	0.33945	4.94539	0.33135	6.83E-03	8.83E-06	6.96E-07	1.16E-05	6.52E-07	6.8482E-03
520043.77	4258982	39355.30591	4.95041	0.33103	7.04842	0.32106	6.83E-03	1.16E-05	6.79E-07	1.65E-05	6.32E-07	6.8555E-03
520486.91	4258182.37	39327.97055	0.16545	0.28864	0.16924	0.30638	6.82E-03	3.88E-07	5.92E-07	3.97E-07	6.03E-07	6.8232E-03
520526.02	4258888.64	39287.5519	0.24019	0.13233	0.2306	0.13862	6.81E-03	5.64E-07	2.71E-07	5.41E-07	2.73E-07	6.8159E-03
520473.36	4258970.48	39279.21853	0.30718	0.1328	0.29333	0.13927	6.81E-03	7.21E-07	2.72E-07	6.89E-07	2.74E-07	6.8148E-03
520564.48	4258804.28	39267.95341	0.20015	0.13666	0.19224	0.14212	6.81E-03	4.70E-07	2.80E-07	4.51E-07	2.80E-07	6.8123E-03
520554.5	4258291.4	39258.62397	0.15699	0.20981	0.15639	0.21956	6.81E-03	3.69E-07	4.30E-07	3.67E-07	4.32E-07	6.8108E-03
520561.76	4258462.44	39257.58313	0.17169	0.18544	0.16835	0.19527	6.81E-03	4.03E-07	3.80E-07	3.95E-07	3.84E-07	6.8106E-03
520019.77	4258589.32	39250.58963	0.94386	2.67571	1.1862	2.28182	6.81E-03	2.22E-06	5.49E-06	2.78E-06	4.49E-06	6.8228E-03
520256.6	4258202.87	39223.083	0.22587	1.19669	0.23871	1.31906	6.80E-03	5.30E-07	2.45E-06	5.60E-07	2.60E-06	6.8092E-03
520315.43	4258173.05	39216.48298	0.20427	0.76972	0.21261	0.83566	6.80E-03	4.80E-07	1.58E-06	4.99E-07	1.64E-06	6.8061E-03
520529.4	4258230.59	39215.30576	0.15875	0.23538	0.15946	0.24862	6.80E-03	3.73E-07	4.83E-07	3.74E-07	4.89E-07	6.8034E-03
520227.17	4258222.78	39210.01456	0.23846	1.55801	0.25163	1.73243	6.80E-03	5.60E-07	3.20E-06	5.91E-07	3.41E-06	6.8086E-03
519996.34	4258892.47	39200.63374	1.69092	0.41327	1.97271	0.40592	6.80E-03	3.97E-06	8.48E-07	4.63E-06	7.99E-07	6.8094E-03
519978.37	4258782.62	39168.54224	1.08995	0.64058	1.25975	0.61261	6.79E-03	2.56E-06	1.31E-06	2.96E-06	1.21E-06	6.8016E-03
520344.82	4258163.15	39121.76994	0.1949	0.6371	0.20123	0.68569	6.79E-03	4.58E-07	1.31E-06	4.72E-07	1.35E-06	6.7891E-03
520568.08	4258795.69	39108.07238	0.19664	0.13709	0.18882	0.14248	6.78E-03	4.62E-07	2.81E-07	4.43E-07	2.80E-07	6.7846E-03
520023.85	4258953.79	39054.76647	2.95164	0.34837	3.70021	0.34178	6.77E-03	6.93E-06	7.14E-07	8.69E-06	6.73E-07	6.7909E-03
520109.3	4258352.41	39047.02963	0.33731	9.96295	0.35215	11.79272	6.77E-03	7.92E-07	2.04E-05	8.27E-07	2.32E-05	6.8178E-03
519983.15	4258842.38	39006.83023	1.29729	0.49359	1.49569	0.48042	6.77E-03	3.05E-06	1.01E-06	3.51E-06	9.46E-07	6.7741E-03
519979.02	4258808.3	39001.70129	1.15614	0.56839	1.33299	0.54817	6.76E-03	2.71E-06	1.17E-06	3.13E-06	1.08E-06	6.7728E-03
520464.23	4258984.27	38989.70893	0.32122	0.13241	0.30654	0.13898	6.76E-03	7.54E-07	2.72E-07	7.20E-07	2.74E-07	6.7646E-03
520567.38	4258399.59	38984.95814	0.16363	0.18816	0.1613	0.19783	6.76E-03	3.84E-07	3.86E-07	3.79E-07	3.89E-07	6.7633E-03
520583.02	4258736.05	38955.92287	0.18052	0.14219	0.17308	0.14804	6.76E-03	4.24E-07	2.92E-07	4.06E-07	2.91E-07	6.7581E-03
520395.46	4259052.77	38937.56038	0.4567	0.13596	0.43418	0.14478	6.75E-03	1.07E-06	2.79E-07	1.02E-06	2.85E-07	6.7562E-03
520495.74	4258186.15	38921.34536	0.1634	0.27639	0.16683	0.29331	6.75E-03	3.84E-07	5.67E-07	3.92E-07	5.77E-07	6.7526E-03
520538.76	4258244.61	38914.50589	0.15718	0.22586	0.15705	0.23788	6.75E-03	3.69E-07	4.63E-07	3.69E-07	4.68E-07	6.7512E-03
520393.8	4258153.3	38895.63801	0.18172	0.47801	0.18617	0.50886	6.75E-03	4.27E-07	9.80E-07	4.37E-07	1.00E-06	6.7491E-03
520437.91	4259015.18	38881.90904	0.36611	0.1327	0.34908	0.14007	6.74E-03	8.60E-07	2.72E-07	8.20E-07	2.76E-07	6.7461E-03
520403.59	4258153.33	38877.29144	0.17956	0.45265	0.18402	0.48084	6.74E-03	4.22E-07	9.28E-07	4.32E-07	9.47E-07	6.7458E-03
520567.71	4258374.57	38870.99606	0.16103	0.1903	0.15933	0.20032	6.74E-03	3.78E-07	3.90E-07	3.74E-07	3.94E-07	6.7435E-03
520523.44	4258218.03	38853.0012	0.15908	0.24217	0.16058	0.25614	6.74E-03	3.73E-07	4.97E-07	3.77E-07	5.04E-07	6.7406E-03
520413.37	4258153.36	38851.35997	0.17747	0.42881	0.18193	0.45498	6.74E-03	4.17E-07	8.79E-07	4.27E-07	8.96E-07	6.7412E-03
520549.22	4258269.12	38842.36126	0.15628	0.21578	0.15557	0.22615	6.74E-03	3.67E-07	4.43E-07	3.65E-07	4.45E-07	6.7387E-03
520128.97	4258322.47	38834.1716	0.30762	6.01225	0.31778	7.01049	6.74E-03	7.22E-07	1.23E-05	7.46E-07	1.38E-05	6.7632E-03
520084.79	4259031.32	38824.14846	14.49393	0.30653	19.95932	0.28818	6.73E-03	3.40E-05	6.29E-07	4.69E-05	5.67E-07	6.8160E-03
520571.67	4258787.1	38809.70012	0.19312	0.13741	0.18537	0.14273	6.73E-03	4.53E-07	2.82E-07	4.35E-07	2.81E-07	6.7328E-03
520496.72	4258940.8	38787.28299	0.27515	0.13158	0.26328	0.13794	6.73E-03	6.46E-07	2.70E-07	6.18E-07	2.72E-07	6.7293E-03
520384.01	4258153.27	38775.36665	0.18372	0.50542	0.18832	0.53908	6.73E-03	4.31E-07	1.04E-06	4.42E-07	1.06E-06	6.7284E-03
520421.66	4259031.91	38771.46908	0.39782	0.13317	0.37884	0.14112	6.72E-03	9.34E-07	2.73E-07	8.89E-07	2.78E-07	6.7271E-03
519981.79	4258718.53	38762.96747	0.96707	0.89782	1.12901	0.83992	6.72E-03	2.27E-06	1.84E-06	2.65E-06	1.65E-06	6.7317E-03
520423.16	4258153.39	38752.83883	0.17533	0.40644	0.1798	0.43092	6.72E-03	4.12E-07	8.34E-07	4.22E-07	8.48E-07	6.7240E-03
520505.92	4258926.98	38725.1791	0.26369	0.1313	0.25254	0.13767	6.72E-03	6.19E-07	2.69E-07	5.93E-07	2.71E-07	6.7185E-03
520049.35	4258994.29	38720.80873	5.92973	0.32156	9.0923	0.31069	6.72E-03	1.39E-05	6.59E-07	2.13E-05	6.12E-07	6.7525E-03
520513.92	4258203.94	38708.3466	0.16029	0.25334	0.16268	0.26835	6.71E-03	3.76E-07	5.20E-07	3.82E-07	5.28E-07	6.7156E-03
520335.03	4258163.12	38691.55196	0.1967	0.67793	0.20364	0.73204	6.71E-03	4.62E-07	1.39E-06	4.78E-07	1.44E-06	6.7146E-03
519997.95	4258903.12	38679.6867	1.75158	0.39768	2.04868	0.39106	6.71E-03	4.11E-06	8.16E-07	4.81E-06	7.70E-07	6.7193E-03
519984.55	4258701.08	38664.77567	0.94998	0.99898	1.11479	0.92922	6.71E-03	2.23E-06	2.05E-06	2.62E-06	1.83E-06	6.7150E-03
520548.63	4258849.26	38657.48888	0.21677	0.13289	0.2084	0.13867	6.70E-03	5.09E-07	2.73E-07	4.89E-07	2.73E-07	6.7065E-03
520236.99	4258212.81	38622.10907	0.23185	1.42292	0.24494	1.57686	6.70E-03	5.44E-07	2.92E-06	5.75E-07	3.10E-06	6.7060E-03
520286.03	4258182.96	38597.92616	0.21263	0.94933	0.22351	1.03844	6.69E-03	4.99E-07	1.95E-06	5.25E-07	2.04E-06	6.6996E-03
520567.28	4258425.19	38587.70937	0.16596	0.18587	0.16327	0.1953	6.69E-03	3.90E-07	3.81E-07	3.83E-07	3.84E-07	6.6944E-03
520455.25	4258997.99	38583.23564	0.33584	0.13192	0.32051	0.13867	6.69E-03	7.88E-07	2.71E-07	7.52E-07	2.73E-07	6.6942E-03
520575.27	4258778.51	38551.0871	0.18977	0.13779	0.1821	0.14306	6.69E-03	4.46E-07	2.83E-07	4.28E-07	2.82E-07	6.6879E-03
520013.55	4258939.54	38544.58323	2.36994	0.3584	2.87202	0.35269	6.69E-03	5.56E-06	7.35E-07	6.74E-06	6.94E-07	6.6991E-03
520515.3	4258913.09	38543.62035	0.25268	0.13095	0.24223	0.13727	6.69E-03	5.93E-07	2.69E-07	5.69E-07	2.70E-07	6.6869E-03
520432.95	4258153.42	38527.62402	0.17306	0.38562	0.1776	0.40853	6.68E-03	4.06E-07	7.91E-07	4.17E-07	8.04E-07	6.6849E-03
520374.22	4258153.24	38515.61572	0.18553	0.53509	0.19048	0.57166	6.68E-03	4.36E-07	1.10E-06	4.47E-07	1.13E-06	6.6835E-03
520178.1	4258262.63	38461.91739	0.26183	2.68611	0.27154	3.03946	6.67E-03	6.15E-07	5.51E-06	6.37E-07	5.98E-06	6.6838E-03
520404.14	4259049.17	38458.0622	0.43602	0.13412	0.41471	0.14262	6.67E-03	1.02E-06	2.75E-07	9.74E-07	2.81E-07	6.6729E-03
520305.64	4258173.02	38455.52033	0.20542	0.82451	0.21474	0.89711	6.67E-03	4.82E-07	1.69E-06	5.04E-07	1.77E-06	6.6744E-03
520266.42	4258192.9	38428.27237	0.21933	1.10585	0.2316	1.21529	6.67E-03	5.15E-07	2.27E-06	5.44E-07	2.39E-06	6.6709E-03
520187.92	4258252.66	38422.52915	0.25549	2.37638	0.2659	2.67823	6.66E-03	6.00E-07	4.87E-06	6.24E-07	5.27E-06	6.6756E-03
520537.74	4258873.78	38417.24379	0.22818	0.1314	0.21923	0.13745	6.66E-03	5.36E-07	2.69E-07	5.15E-07	2.71E-07	6.6649E-03
520059.31	4259008.4	38414.70477	8.54876	0.31385	18.05581	0.30092	6.66E-03	2.01E-05	6.44E-07	4.24E-05	5.92E-07	6.7266E-03
520168.28	4258272.6	38404.64816	0.26826	3.06444	0.27722	3.48699	6.66E-03	6.30E-07	6.28E-06	6.51E-07	6.86E-06	6.6755E-03
519978.87	4258735.6	38396.94986	0.97385	0.8101	1.13132	0.76206	6.66E-03	2.29E-06	1.66E-06	2.66E-06	1.50E-06	6.6679E-03
520504.58	4258189.93	38381.97786	0.16122	0.26512	0.16427	0.28118	6.66E-03	3.78E-07	5.44E-07	3.86E-07	5.53E-07	6.6590E-03
520460.3	4258160.97	38365.82975	0.16812	0.33322	0.17282	0.35275	6.65E-03	3.95E-07	6.83E-07	4.06E-07	6.94E-07	6.6566E-03
520469.07	4258164.72	38364.35308	0.1667	0.3181	0.17125	0.33693	6.65E-03	3.91E-07	6.52E-07	4.02E-07	6.63E-07	6.6562E-03
520059.36	4258492.17	38352.48537	0.68007	13.29831	0.76721	7.9772	6.65E-03	1.60E-06	2.73E-05	1.80E-06	1.57E-05	6.6984E-03
520451.52	4258157.21	38317.81348	0.16946	0.34924	0.17417	0.36965	6.65E-03	3.98E-07	7.16E-07	4.09E-07	7.28E-07	6.6483E-03
520034.92	4258978.34	38298.14453	3.87087	0.32835	5.11374	0.32035	6.64E-03	9.09E-06	6.73E-07	1.20E-05	6.31E-07	6.6650E-03
520578.87	4258769.92	38294.82086	0.18655	0.13818	0.179	0.14344	6.64E-03	4.38E-07	2.83E-07	4.20E-07	2.82E-07	6.6435E-03
519979.49	4258833.54	38287.31753	1.2118	0.50778	1.39257	0.49306	6.64E-03	2.84E-06	1.04E-06	3.27E-06	9.71E-07	6.6489E-03
520477.85	4258168.48	38286.36297	0.16517	0.30382	0.16946	0.32204	6.64E-03	3.88E-07	6.23E-07	3.98E-07	6.34E-07	6.6426E-03
520197.74	4258242.69	38260.61335	0.24915	2.11977	0.26021	2.37981	6.64E-03	5.85E-07	4.35E-06	6.11E-07	4.68E-06	6.6464E-03
520548.32	4258258.72	38259.37628	0.15539	0.21696	0.15474	0.22771	6.64E-03	3.65E-07	4.45E-07	3.63E-07	4.48E-07	6.6375E-03
520364.43	4258153.21	38246.86859	0.18738	0.56697	0.19273	0.60719	6.63E-03	4.40E-07	1.16E-06	4.52E-07	1.20E-06	6.6370E-03
520524.9	4258899.11	38238.74772	0.24202	0.13059	0.2323	0.13682	6.63E-03	5.68E-07	2.68E-07	5.45E-07	2.69E-07	6.6340E-03
520491.39	4258953.01	38224.45048	0.28232	0.13088	0.27011	0.13716	6.63E-03	6.63E-07	2.68E-07	6.34E-07	2.70E-07	6.6317E-03
520586.66	4258727.37	38215.58559	0.17742	0.14223	0.17023	0.14814	6.63E-03	4.17E-07	2.92E-07	4.00E-07	2.92E-07	6.6297E-03
520158.46	4258282.56	38209.31285	0.27467	3.53645	0.28297	4.05165	6.63E-03	6.45E-07	7.25E-06	6.64E-07	7.98E-06	6.6438E-03
520587.91	4258700.44	38193.33045	0.17418	0.14605	0.16727	0.15209	6.62E-03	4.09E-07	3.00E-07	3.93E-07	2.99E-07	6.6259E-03
520442.74	4258153.45	38180.00012	0.17067	0.36625	0.17529	0.38767	6.62E-03	4.01E-07	7.51E-07	4.12E-07	7.63E-07	6.6245E-03
520482.02	4258966.89	38164.61451	0.29509	0.13101	0.28223	0.13728	6.62E-03	6.93E-07	2.69E-07	6.63E-07	2.70E-07	6.6214E-03
520025	4258964.26	38136.96407	3.04125	0.33675	3.82451	0.33026	6.61E-03	7.14E-06	6.91E-07	8.98E-06	6.50E-07	6.6321E-03
520325.25	4258163.08	38135.06581	0.19821	0.7228	0.20595	0.78269	6.61E-03	4.65E-07	1.48E-06	4.84E-07	1.54E-06	6.6183E-03
520538.08	4258234.31	38113.90831	0.15611	0.22696	0.15636	0.23932	6.61E-03	3.66E-07	4.65E-07	3.67E-07	4.71E-07	6.6124E-03
520093.33	4259043.57	38113.57179	13.97094	0.2983	12.81594	0.27922	6.61E-03	3.28E-05	6.12E-07	3.01E-05	5.50E-07	6.6747E-03

520486.63	4258172.24	38092.19219	0.16348	0.2904	0.16744	0.30798	6.61E-03	3.84E-07	5.96E-07	3.93E-07	6.06E-07	6.6089E-03
519999.43	4258913.73	38084.07074	1.80954	0.38295	2.12193	0.37694	6.61E-03	4.25E-06	7.85E-07	4.98E-06	7.42E-07	6.6163E-03
520430.4	4259028.3	38076.54978	0.38052	0.13152	0.36266	0.13915	6.60E-03	8.93E-07	2.70E-07	8.51E-07	2.74E-07	6.6065E-03
520446.41	4259011.66	38067.20209	0.35106	0.1311	0.33493	0.13814	6.60E-03	8.24E-07	2.69E-07	7.86E-07	2.72E-07	6.6047E-03
520568.02	4258337.24	38037.34622	0.15697	0.19406	0.15638	0.20395	6.60E-03	3.69E-07	3.98E-07	3.67E-07	4.01E-07	6.5989E-03
520565.29	4258316.05	38001.62798	0.15572	0.19855	0.15534	0.20814	6.59E-03	3.66E-07	4.07E-07	3.65E-07	4.10E-07	6.5928E-03
520207.56	4258232.72	37984.84869	0.24283	1.90446	0.25445	2.12989	6.59E-03	5.70E-07	3.91E-06	5.97E-07	4.19E-06	6.5976E-03
520246.81	4258202.84	37970.36235	0.22538	1.30526	0.23826	1.4415	6.59E-03	5.29E-07	2.68E-06	5.59E-07	2.84E-06	6.5924E-03
520472.83	4258980.71	37944.49661	0.30849	0.13064	0.29465	0.137	6.58E-03	7.24E-07	2.68E-07	6.92E-07	2.70E-07	6.5833E-03
520412.82	4259045.58	37923.47428	0.41662	0.13229	0.39641	0.14048	6.58E-03	9.78E-07	2.71E-07	9.31E-07	2.77E-07	6.5801E-03
519987.12	4258683.15	37918.47876	0.91914	1.11524	1.08577	1.03049	6.58E-03	2.16E-06	2.29E-06	2.55E-06	2.03E-06	6.5858E-03
520522.83	4258207.76	37891.40378	0.15781	0.2435	0.15973	0.25763	6.57E-03	3.70E-07	4.99E-07	3.75E-07	5.07E-07	6.5738E-03
520532.42	4258221.88	37881.07897	0.15648	0.23297	0.15744	0.24608	6.57E-03	3.67E-07	4.78E-07	3.70E-07	4.84E-07	6.5720E-03
520582.47	4258761.33	37880.50228	0.18331	0.13828	0.17583	0.1436	6.57E-03	4.30E-07	2.84E-07	4.13E-07	2.83E-07	6.5716E-03
519975.31	4258799.36	37875.21781	1.07534	0.58491	1.23465	0.56226	6.57E-03	2.52E-06	1.20E-06	2.90E-06	1.11E-06	6.5770E-03
520354.64	4258153.18	37859.45642	0.18905	0.60164	0.19498	0.6457	6.57E-03	4.44E-07	1.23E-06	4.58E-07	1.27E-06	6.5700E-03
520148.64	4258292.53	37832.61276	0.28094	4.14101	0.28892	4.77688	6.56E-03	6.60E-07	8.49E-06	6.78E-07	9.40E-06	6.5811E-03
520547.31	4258859.81	37825.09363	0.21874	0.13116	0.21033	0.13696	6.56E-03	5.14E-07	2.69E-07	4.94E-07	2.70E-07	6.5621E-03
520564.14	4258305.55	37819.12907	0.15499	0.20053	0.15452	0.20999	6.56E-03	3.64E-07	4.11E-07	3.63E-07	4.13E-07	6.5611E-03
520565.05	4258471.07	37812.9771	0.17061	0.18233	0.16694	0.19202	6.56E-03	4.01E-07	3.74E-07	3.92E-07	3.78E-07	6.5600E-03
520534.74	4258885.03	37800.94639	0.23168	0.13022	0.22266	0.13627	6.56E-03	5.44E-07	2.67E-07	5.23E-07	2.68E-07	6.5580E-03
520002.98	4258925.19	37789.73882	1.93743	0.36951	2.28789	0.36397	6.55E-03	4.55E-06	7.58E-07	5.37E-06	7.16E-07	6.5659E-03
520570.81	4258408.58	37767.65948	0.16286	0.18512	0.16035	0.19447	6.55E-03	3.82E-07	3.80E-07	3.76E-07	3.83E-07	6.5521E-03
520495.41	4258175.99	37747.65884	0.16159	0.27806	0.16524	0.29487	6.55E-03	3.79E-07	5.70E-07	3.88E-07	5.80E-07	6.5491E-03
520040.25	4258990.54	37737.96897	4.489	0.31886	6.1445	0.31012	6.55E-03	1.05E-05	6.54E-07	1.44E-05	6.10E-07	6.5717E-03
520014.87	4258950.08	37716.69445	2.44483	0.34608	2.97336	0.34058	6.54E-03	5.74E-06	7.10E-07	6.98E-06	6.70E-07	6.5559E-03
520513.42	4258193.72	37691.30541	0.15887	0.25472	0.16159	0.26982	6.54E-03	3.73E-07	5.22E-07	3.79E-07	5.31E-07	6.5392E-03
519975.82	4258752.35	37674.07665	0.97052	0.73448	1.12468	0.6943	6.53E-03	2.28E-06	1.51E-06	2.64E-06	1.37E-06	6.5422E-03
519997.12	4258646.05	37670.77618	0.90804	1.47593	1.0903	1.33901	6.53E-03	2.13E-06	3.03E-06	2.56E-06	2.64E-06	6.5442E-03
520029.65	4258560.18	37664.87291	0.88365	3.71682	1.08974	3.02367	6.53E-03	2.07E-06	7.62E-06	2.56E-06	5.95E-06	6.5510E-03
520295.85	4258172.99	37653.6389	0.20636	0.8853	0.21659	0.96544	6.53E-03	4.84E-07	1.82E-06	5.08E-07	1.90E-06	6.5356E-03
519974.62	4258773.58	37646.11176	1.00602	0.65922	1.16047	0.62782	6.53E-03	2.36E-06	1.35E-06	2.72E-06	1.24E-06	6.5372E-03
520559.2	4258283.4	37639.78333	0.15419	0.20672	0.15354	0.21615	6.53E-03	3.62E-07	4.24E-07	3.60E-07	4.25E-07	6.5300E-03
520463.8	4258994.45	37633.35988	0.32238	0.13023	0.30785	0.13671	6.53E-03	7.57E-07	2.67E-07	7.23E-07	2.69E-07	6.5294E-03
520217.38	4258222.75	37629.37098	0.23661	1.72136	0.24862	1.91857	6.53E-03	5.55E-07	3.53E-06	5.84E-07	3.78E-06	6.5351E-03
520276.24	4258182.93	37624.43587	0.21305	1.0251	0.22469	1.12349	6.53E-03	5.00E-07	2.10E-06	5.27E-07	2.21E-06	6.5311E-03
520547.5	4258248.36	37619.84578	0.15445	0.21804	0.154	0.22916	6.52E-03	3.63E-07	4.47E-07	3.62E-07	4.51E-07	6.5266E-03
520505.17	4258937.3	37554.66005	0.26515	0.12949	0.25393	0.13572	6.51E-03	6.22E-07	2.66E-07	5.96E-07	2.67E-07	6.5154E-03
520050.28	4259004.67	37552.07346	6.13684	0.31126	9.53998	0.30062	6.51E-03	1.44E-05	6.38E-07	2.24E-05	5.92E-07	6.5513E-03
520062.25	4258475.37	37545.72844	0.59768	16.78882	0.66597	8.8469	6.51E-03	1.40E-06	3.44E-05	1.56E-06	1.74E-05	6.5669E-03
519985.47	4258877.99	37525.38714	1.40187	0.42743	1.61166	0.41878	6.51E-03	3.29E-06	8.77E-07	3.78E-06	8.24E-07	6.5174E-03
520563.12	4258295.09	37497.81958	0.15415	0.20247	0.15358	0.21181	6.50E-03	3.62E-07	4.15E-07	3.61E-07	4.17E-07	6.5054E-03
520315.46	4258163.05	37492.93392	0.1995	0.77236	0.2081	0.83851	6.50E-03	4.68E-07	1.58E-06	4.89E-07	1.65E-06	6.5072E-03
519975.82	4258824.69	37453.49251	1.13136	0.52231	1.29654	0.50577	6.50E-03	2.66E-06	1.07E-06	3.04E-06	9.96E-07	6.5039E-03
520344.85	4258153.15	37440.5907	0.19069	0.63929	0.19727	0.68788	6.49E-03	4.48E-07	1.31E-06	4.63E-07	1.35E-06	6.4975E-03
520514.42	4258923.46	37436.22402	0.25424	0.12918	0.2437	0.13539	6.49E-03	5.97E-07	2.65E-07	5.72E-07	2.67E-07	6.4948E-03
520590.3	4258718.69	37394.10021	0.17441	0.14214	0.16744	0.14807	6.49E-03	4.09E-07	2.92E-07	3.93E-07	2.91E-07	6.4872E-03
520009.85	4258608.75	37378.97896	0.90013	2.06276	1.10405	1.81954	6.48E-03	2.11E-06	4.23E-06	2.59E-06	3.58E-06	6.4957E-03
520413.41	4258143.36	37346.16876	0.17429	0.4306	0.17855	0.45649	6.48E-03	4.09E-07	8.83E-07	4.19E-07	8.99E-07	6.4801E-03
520393.83	4258143.3	37343.84389	0.17829	0.47981	0.18267	0.51053	6.48E-03	4.19E-07	9.84E-07	4.29E-07	1.00E-06	6.4800E-03
520403.62	4258143.33	37335.16456	0.17623	0.45448	0.18056	0.48241	6.48E-03	4.14E-07	9.32E-07	4.24E-07	9.50E-07	6.4783E-03
520421.51	4259041.98	37332.24407	0.39834	0.13062	0.37933	0.13851	6.48E-03	9.35E-07	2.68E-07	8.91E-07	2.73E-07	6.4775E-03
520439.14	4259024.68	37331.61377	0.36423	0.12993	0.34743	0.13723	6.47E-03	8.55E-07	2.66E-07	8.16E-07	2.70E-07	6.4772E-03
520586.06	4258752.74	37318.74602	0.1801	0.13824	0.17271	0.14367	6.47E-03	4.23E-07	2.84E-07	4.05E-07	2.83E-07	6.4742E-03
520504.19	4258179.75	37296.05973	0.15958	0.26658	0.16288	0.28262	6.47E-03	3.75E-07	5.47E-07	3.82E-07	5.56E-07	6.4707E-03
520256.63	4258192.87	37280.95946	0.21909	1.20189	0.23164	1.32307	6.47E-03	5.14E-07	2.46E-06	5.44E-07	2.60E-06	6.4723E-03
520138.82	4258302.5	37258.42225	0.287	4.9384	0.29512	5.73274	6.46E-03	6.74E-07	1.01E-05	6.93E-07	1.13E-05	6.4851E-03
520558.12	4258272.93	37248.62788	0.15341	0.20823	0.15264	0.21788	6.46E-03	3.60E-07	4.27E-07	3.58E-07	4.29E-07	6.4622E-03
519987.32	4258888.75	37245.49185	1.45789	0.41106	1.67806	0.40342	6.46E-03	3.42E-06	8.43E-07	3.94E-06	7.94E-07	6.4691E-03
520423.19	4258143.39	37244.51713	0.17222	0.40836	0.17652	0.43237	6.46E-03	4.04E-07	8.38E-07	4.14E-07	8.51E-07	6.4624E-03
520384.04	4258143.27	37236.77884	0.18022	0.50711	0.18479	0.54085	6.46E-03	4.23E-07	1.04E-06	4.34E-07	1.06E-06	6.4615E-03
520099.48	4258362.38	37230.91037	0.34229	14.18533	0.36026	15.79597	6.46E-03	8.04E-07	2.91E-05	8.46E-07	3.11E-05	6.5194E-03
520454.9	4259008.14	37216.5438	0.33685	0.12954	0.3216	0.13627	6.46E-03	7.91E-07	2.66E-07	7.55E-07	2.68E-07	6.4571E-03
520026.07	4258974.69	37204.43612	3.12707	0.32583	3.94511	0.31942	6.45E-03	7.34E-06	6.68E-07	9.26E-06	6.29E-07	6.4708E-03
520523.87	4258909.54	37202.07261	0.24371	0.12883	0.23386	0.13497	6.45E-03	5.72E-07	2.64E-07	5.49E-07	2.66E-07	6.4542E-03
519979.79	4258858.39	37177.70756	1.25695	0.45699	1.44149	0.44599	6.45E-03	2.95E-06	9.37E-07	3.38E-06	8.78E-07	6.4565E-03
520570.76	4258434.32	37160.63871	0.16504	0.18264	0.16217	0.19188	6.45E-03	3.87E-07	3.75E-07	3.81E-07	3.78E-07	6.4469E-03
520227.2	4258212.78	37152.37825	0.23035	1.56504	0.24268	1.73711	6.44E-03	5.41E-07	3.21E-06	5.70E-07	3.42E-06	6.4517E-03
520591.37	4258692.17	37151.56989	0.17143	0.14589	0.16463	0.1518	6.44E-03	4.02E-07	2.99E-07	3.86E-07	2.99E-07	6.4452E-03
520568.64	4258454.63	37129.91221	0.16763	0.18181	0.16438	0.19125	6.44E-03	3.94E-07	3.73E-07	3.86E-07	3.76E-07	6.4415E-03
520004.49	4258935.8	37107.55027	2.00189	0.35649	2.37177	0.35133	6.44E-03	4.70E-06	7.31E-07	5.57E-06	6.92E-07	6.4478E-03
520560.71	4258837.22	37072.11137	0.20604	0.13118	0.1981	0.13667	6.43E-03	4.84E-07	2.69E-07	4.65E-07	2.69E-07	6.4315E-03
520374.25	4258143.24	37072.04989	0.18211	0.53643	0.18697	0.57369	6.43E-03	4.28E-07	1.10E-06	4.39E-07	1.13E-06	6.4331E-03
520432.98	4258143.42	37066.70948	0.1701	0.38749	0.17446	0.40992	6.43E-03	3.99E-07	7.95E-07	4.10E-07	8.07E-07	6.4315E-03
520468.93	4258154.65	37066.04003	0.16436	0.31993	0.1689	0.3384	6.43E-03	3.86E-07	6.56E-07	3.97E-07	6.66E-07	6.4310E-03
520460.21	4258150.92	37058.83867	0.16567	0.33501	0.17026	0.35422	6.43E-03	3.89E-07	6.87E-07	4.00E-07	6.97E-07	6.4299E-03
520564.28	4258828.71	37056.2589	0.20257	0.13181	0.19479	0.13721	6.43E-03	4.76E-07	2.70E-07	4.57E-07	2.70E-07	6.4287E-03
520083.42	4259043.59	37018.32714	14.37839	0.2941	21.73969	0.27703	6.42E-03	3.38E-05	6.03E-07	5.10E-05	5.45E-07	6.5066E-03
520490.69	4258963.31	37013.9385	0.28375	0.129	0.27154	0.13514	6.42E-03	6.66E-07	2.65E-07	6.37E-07	2.66E-07	6.4217E-03
520335.07	4258153.12	37011.50578	0.19232	0.68021	0.19957	0.73427	6.42E-03	4.52E-07	1.40E-06	4.69E-07	1.45E-06	6.4232E-03
520500.12	4258949.4	37009.24783	0.27162	0.12874	0.26004	0.13489	6.42E-03	6.38E-07	2.64E-07	6.10E-07	2.66E-07	6.4209E-03
520567.84	4258820.2	37004.67434	0.19915	0.13231	0.19148	0.13764	6.42E-03	4.68E-07	2.71E-07	4.50E-07	2.71E-07	6.4198E-03
520477.66	4258158.38	37003.09354	0.16294	0.3057	0.16732	0.32354	6.42E-03	3.83E-07	6.27E-07	3.93E-07	6.37E-07	6.4201E-03
520531.73	4258211.57	36966.38478	0.15526	0.23434	0.15672	0.24756	6.41E-03	3.65E-07	4.81E-07	3.68E-07	4.87E-07	6.4134E-03
520522.26	4258197.5	36960.95306	0.15652	0.24479	0.1588	0.25905	6.41E-03	3.67E-07	5.02E-07	3.73E-07	5.10E-07	6.4125E-03
520546.12	4258870.31	36960.54334	0.22056	0.12935	0.21206	0.13516	6.41E-03	5.18E-07	2.65E-07	4.98E-07	2.66E-07	6.4122E-03
520053.78	4259013.71	36960.15181	6.95352	0.3046	11.70104	0.29347	6.41E-03	1.63E-05	6.25E-07	2.75E-05	5.78E-07	6.4556E-03
520451.49	4258147.18	36946.50794	0.16681	0.35106	0.17138	0.37105	6.41E-03	3.92E-07	7.20E-07	4.02E-07	7.30E-07	6.4104E-03
520546.75	4258238.02	36931.83013	0.15347	0.21912	0.15333	0.23059	6.41E-03	3.60E-07	4.49E-07	3.60E-07	4.54E-07	6.4073E-03
520571.4	4258811.69	36914.58753	0.19578	0.13276	0.1882	0.13803	6.40E-03	4.60E-07	2.72E-07	4.42E-07	2.72E-07	6.4041E-03
520481.44	4258977.14	36905.35144	0.29641	0.12898	0.28355	0.13514	6.40E-03	6.96E-07	2.65E-07	6.66E-07	2.66E-07	6.4030E-03
520486.38	4258162.11	36901.42144	0.16147	0.29209	0.16554	0.30946	6.40E-03	3.79E-07	5.99E-07	3.89E-07	6.09E-07	6.4024E-03
520016.08	4258960.58	36896.12842	2.5177	0.33449	3.07033	0.32915	6.40E-03	5.91E-06	6.86E-07	7.21E-06	6.48E-07	6.4139E-03
519989.02	4258899.44	36869.66475	1.51106	0.39573	1.74263	0.38891	6.39E-03	3.55E-06	8.12E-07	4.09E-06	7.66E-07	6.4041E-03
520533.54	4258895.53	36853.69395	0.2335	0.12854	0.22438	0.13455	6.39E-03	5.48E-07	2.64E-07	5.27E-07	2.65E-07	6.3937E-03
520541.4	4258225.72	36830.06956	0.15387	0.22428	0.1543	0.23656	6.39E-03	3.61E-07	4.60E-07	3.62E-07	4.66E-07	6.3897E-03
520286.06	4258172.96	36798.92487	0.20699	0.95308	0.21801	1.04168	6.38E-03	4.86E-07	1.95E-06	5.12E-07	2.05E-06	6.3876E-03
520093.34	4259053.57	36798.13068	13.89992	0.28916	12.78968	0.27086	6.38E-03	3.26E-05	5.93E-07	3.00E-05	5.33E-07	6.4463E-03
520557.14	4258262.49	36794.70173	0.1526	0.20949	0.1518	0.21945	6.38E-03	3.58E-07	4.30E-07	3.56E-07	4.32E-07	6.3834E-03
520574.96	4258803.19	36783.59665	0.19245	0.13322	0.18496	0.1384	6.38E-03	4.52E-07	2.73E-07	4.34E-07	2.72E-07	6.3814E-03
520442.77	4258143.45	36768.9607	0.16786	0.36803	0.17231	0.38897	6.38E-03	3.94E-07	7.55E-07	4.05E-07	7.66E-07	6.3797E-03
520589.66	4258744.15	36763.15981	0.17705	0.1382	0.1698	0.14375	6.38E-03	4.16E-07	2.83E-07	3.99E-07	2.83E-07	6.3778E-03
520305.67	4258163.02	36733.65246	0.20041	0.82749	0.20998	0.89998	6.37E-03	4.70E-07	1.70E-06	4.93E-07	1.77E-06	6.3757E-03
520512.96	4258183.51	36719.95302	0.15743	0.25601	0.16039	0.2712	6.37E-03	3.70E-07	5.25E-07	3.77E-07	5.34E-07	6.3707E-03
520031.14	4258986.78	36715.96918	3.53573	0.31636	4.55676	0.30938	6.37E-03	8.30E-06	6.49E-07	1.07E-05	6.09E-07	6.3885E-03
520430.19	4259038.39	36687.67501	0.38115	0.12906	0.36335	0.13665	6.36E-03	8.95E-07	2.65E-07	8.53E-07	2.69E-07	6.3656E-03
520364.46	4258143.21	36666.25703	0.18357	0.56881	0.18909	0.60904	6.36E-03	4.31E-07	1.17E-06	4.44E-07	1.20E-06	6.3628E-03
520472.35	4258990.91	36663.35954	0.30966	0.12853	0.29592	0.13479	6.36E-03	7.27E-07	2.64E-07	6.95E-07	2.65E-07	6.3610E-03
520041.24	4259000.94	36662.78451	4.63228	0.30871	6.37893	0.30011	6.36E-03	1.09E-05	6.33E-07	1.50E-05	5.91E-07	6.3861E-03
520237.02	4258202.81	36654.70058	0.22432	1.4291	0.23672	1.58129	6.36E-03	5.27E-07	2.93E-06	5.56E-07	3.11E-06	6.3647E-03
520495.1	4258165.85	36627.48183	0.15976	0.2796	0.16355	0.29628	6.35E-03	3.75E-07	5.73E-07	3.84E-07	5.83E-07	6.3548E-03
519987.12	4258673.87	36621.50038	0.88026	1.16534	1.03724	1.07484	6.35E-03	2.07E-06	2.39E-06	2.44E-06	2.12E-06	6.3608E-03
519971.61	4258790.42	36619.50343	0.99867	0.60154	1.14354	0.57611	6.35E-03	2.34E-06	1.23E-06	2.68E-06	1.13E-06	6.3589E-03
520578.53	4258794.68	36607.76583	0.18918	0.13367	0.18179	0.13878	6.35E-03	4.44E-07	2.74E-07	4.27E-07	2.73E-07	6.3509E-03
520109.33	4258342.41	36590.57424	0.31945	9.98845	0.33266	11.84693	6.35E-03	7.50E-07	2.05E-05	7.81E-07	2.33E-05	6.3918E-03
519976.16	4258849.63	36589.43558	1.17784	0.46952	1.34702	0.45727	6.35E-03	2.77E-06	9.63E-07	3.16E-06	9.00E-07	6.3541E-03
520266.45	4258182.9	36580.33458	0.21304	1.11042	0.22515	1.21897	6.34E-03	5.00E-07	2.28E-06	5.29E-07	2.40E-06	6.3504E-03
520447.88	4259021.06	36542.18831	0.3489	0.12835	0.33302	0.13532	6.34E-03	8.19E-07	2.63E-07	7.82E-07	2.66E-07	6.3402E-03
520129.01	4258312.47	36520.58074	0.29287	6.02615	0.3016	7.05287	6.33E-03	6.88E-07	1.24E-05	7.08E-07	1.39E-05	6.3620E-03
520568.33	4258479.69	36517.38266	0.16948	0.17925	0.16543	0.18876	6.33E-03	3.98E-07	3.68E-07	3.88E-07	3.72E-07	6.3353E-03
519972.15	4258815.84	36512.44585	1.05607	0.53702	1.20671	0.51844	6.33E-03	2.48E-06	1.10E-06	2.83E-06	1.02E-06	6.3404E-03
520593.93	4258710	36501.77592	0.17151	0.142	0.16471	0.14788	6.33E-03	4.03E-07	2.91E-07	3.87E-07	2.91E-07	6.3324E-03
520325.28	4258153.08	36469.21349	0.19368	0.72527	0.20172	0.78507	6.33E-03	4.55E-07	1.49E-06	4.74E-07	1.55E-06	6.3294E-03
519990.57	4258910.07	36410.27648	1.56148	0.38113	1.80398	0.37502	6.32E-03	3.67E-06	7.82E-07	4.24E-06	7.38E-07	6.3246E-03
520582.09	4258786.17	36386.11647	0.18597	0.13409	0.17868	0.13913	6.31E-03	4.37E-07	2.75E-07	4.19E-07	2.74E-07	6.3124E-03
520005.88	4258946.37	36385.09125	2.06374	0.3442	2.45218	0.33934	6.31E-03	4.84E-06	7.06E-07	5.76E-06	6.68E-07	6.3228E-03
520049.44	4258511.61	36364.17505	0.73225	7.76912	0.83922	5.59261	6.31E-03	1.72E-06	1.59E-05	1.97E-06	1.10E-05	6.3378E-03
520543.46	4258881.42	36360.81749	0.2236	0.12816	0.2151	0.13398	6.31E-03	5.25E-07	2.63E-07	5.05E-07	2.64E-07	6.3082E-03
520513.62	4258933.8	36349.13744	0.25566	0.12742	0.24504	0.1335	6.30E-03	6.00E-07	2.61E-07	5.75E-07	2.63E-07	6.3063E-03
520178.14	4258252.63	36339.57069	0.25137	2.69428	0.25967	3.04777	6.30E-03	5.90E-07	5.53E-06	6.10E-07	6.00E-06	6.3157E-03
520187.96	4258242.66	36335.29894	0.24562	2.38407	0.25465	2.68541	6.30E-03	5.77E-07	4.89E-06	5.98E-07	5.29E-06	6.3135E-03
520463.4	4259004.63	36334.20089	0.32342	0.128	0.30902	0.13444	6.30E-03	7.59E-07	2.63E-07	7.25E-07	2.65E-07	6.3040E-03
520555.76	4258856.31	36317.91984	0.21148	0.12912	0.20348	0.13468	6.30E-03	4.96E-07	2.65E-07	4.78E-07	2.65E-07	6.3007E-03
520556.25	4258252.1	36273.72237	0.15173	0.21061	0.15104	0.2209	6.29E-03	3.56E-07	4.32E-07	3.55E-07	4.35E-07	6.2931E-03
520354.67	4258143.18	36263.23952	0.18507	0.60358	0.19125	0.64755	6.29E-03	4.34E-07	1.24E-06	4.49E-07	1.27E-06	6.2931E-03
520503.82	4258169.58	36239.96143	0.1579	0.26805	0.16139	0.28401	6.29E-03	3.71E-07	5.50E-07	3.79E-07	5.59E-07	6.2875E-03
520168.32	4258262.6	36237.90039	0.25713	3.07377	0.26475	3.49526	6.29E-03	6.04E-07	6.30E-06	6.22E-07	6.88E-06	6.2997E-03
520593.26	4258735.56	36235.28018	0.17418	0.13829	0.16713	0.14392	6.28E-03	4.09E-07	2.84E-07	3.92E-07	2.83E-07	6.2862E-03
519975.25	4258726.86	36224.10129	0.89293	0.82688	1.03096	0.77652	6.28E-03	2.10E-06	1.70E-06	2.42E-06	1.53E-06	6.2906E-03
520197.78	4258232.69	36217.72564	0.23987	2.12702	0.24961	2.38616	6.28E-03	5.63E-07	4.36E-06	5.86E-07	4.70E-06	6.2920E-03
519978.13	4258709.69	36209.52903	0.88018	0.91397	1.02157	0.85402	6.28E-03	2.07E-06	1.87E-06	2.40E-06	1.68E-06	6.2884E-03
520522.93	4258919.94	36180.3681	0.24525	0.12712	0.23532	0.13316	6.28E-03	5.76E-07	2.61E-07	5.52E-07	2.62E-07	6.2770E-03
519993.84	4258921.41	36178.52297	1.65809	0.36773	1.92496	0.36223	6.27E-03	3.89E-06	7.54E-07	4.52E-06	7.13E-07	6.2849E-03
520531.1	4258201.28	36158.26239	0.15414	0.23546	0.15594	0.24894	6.27E-03	3.62E-07	4.83E-07	3.66E-07	4.90E-07	6.2732E-03
520585.65	4258777.66	36110.91993	0.18283	0.13444	0.17562	0.13945	6.26E-03	4.29E-07	2.76E-07	4.12E-07	2.75E-07	6.2647E-03
520019.73	4258579.62	36088.65605	0.87023	2.76919	1.08263	2.34707	6.26E-03	2.04E-06	5.68E-06	2.54E-06	4.62E-06	6.2743E-03
520246.84	4258192.84	36080.60981	0.21835	1.3108	0.23071	1.44547	6.26E-03	5.13E-07	2.69E-06	5.42E-07	2.85E-06	6.2646E-03
520017.21	4258971.04	36078.09097	2.58713	0.32358	3.16187	0.31836	6.26E-03	6.07E-06	6.64E-07	7.42E-06	6.27E-07	6.2724E-03
520521.74	4258187.26	36037.80293	0.15518	0.24608	0.15778	0.26042	6.25E-03	3.64E-07	5.05E-07	3.70E-07	5.13E-07	6.2523E-03
520540.64	4258215.38	36028.84644	0.15277	0.22562	0.15369	0.23807	6.25E-03	3.59E-07	4.63E-07	3.61E-07	4.69E-07	6.2507E-03
520158.5	4258272.56	36021.86501	0.26289	3.5467	0.26993	4.06069	6.25E-03	6.17E-07	7.27E-06	6.34E-07	7.99E-06	6.2643E-03
520207.59	4258222.72	36016.76785	0.23417	1.91088	0.24452	2.13639	6.25E-03	5.50E-07	3.92E-06	5.74E-07	4.21E-06	6.2562E-03
519970.87	4258764.54	35996.95028	0.92738	0.67682	1.06702	0.64213	6.24E-03	2.18E-06	1.39E-06	2.51E-06	1.26E-06	6.2508E-03
520438.87	4259034.79	35996.71584	0.36497	0.12754	0.34826	0.13481	6.24E-03	8.57E-07	2.62E-07	8.18E-07	2.65E-07	6.2457E-03
520574.07	4258319.81	35947.66848	0.1527	0.19153	0.15223	0.20084	6.23E-03	3.58E-07	3.93E-07	3.57E-07	3.95E-07	6.2365E-03
520295.88	4258162.99	35940.34052	0.2011	0.88861	0.21152	0.96829	6.23E-03	4.72E-07	1.82E-06	4.97E-07	1.91E-06	6.2384E-03
520568.17	4258287.24	35932.09354	0.15132	0.19932	0.15069	0.20829	6.23E-03	3.55E-07	4.09E-07	3.54E-07	4.10E-07	6.2338E-03
520413.44	4258133.36	35905.90353	0.17114	0.43224	0.17527	0.45783	6.23E-03	4.02E-07	8.86E-07	4.11E-07	9.01E-07	6.2303E-03
520532.44	4258905.99	35900.91635	0.23519	0.12684	0.22594	0.13279	6.23E-03	5.52E-07	2.60E-07	5.30E-07	2.61E-07	6.2285E-03
519972.52	4258840.87	35900.84839	1.10336	0.48234	1.25879	0.46862	6.23E-03	2.59E-06	9.89E-07	2.96E-06	9.22E-07	6.2343E-03
520499.35	4258959.72	35883.43833	0.27305	0.12697	0.26146	0.13297	6.22E-03	6.41E-07	2.60E-07	6.14E-07	2.62E-07	6.2256E-03
520572.84	4258309.27	35870.64313	0.15202	0.19362	0.15159	0.20273	6.22E-03	3.57E-07	3.97E-07	3.56E-07	3.99E-07	6.2231E-03
520403.65	4258133.33	35869.20453	0.17295	0.4561	0.17722	0.48378	6.22E-03	4.06E-07	9.35E-07	4.16E-07	9.52E-07	6.2241E-03
520344.89	4258143.15	35856.22009	0.18659	0.64128	0.19344	0.68979	6.22E-03	4.38E-07	1.32E-06	4.54E-07	1.36E-06	6.2227E-03
520276.27	4258172.93	35854.43384	0.20718	1.02919	0.21879	1.12673	6.22E-03	4.86E-07	2.11E-06	5.14E-07	2.22E-06	6.2241E-03
520469.73	4258144.98	35851.26256	0.16191	0.32005	0.16635	0.33817	6.22E-03	3.80E-07	6.56E-07	3.91E-07	6.66E-07	6.2203E-03
520490.04	4258973.58	35845.70358	0.28507	0.12712	0.2729	0.13313	6.22E-03	6.69E-07	2.61E-07	6.41E-07	2.62E-07	6.2191E-03
520315.49	4258153.05	35843.23007	0.19479	0.77503	0.20368	0.84097	6.22E-03	4.57E-07	1.59E-06	4.78E-07	1.66E-06	6.2210E-03
520423.23	4258133.39	35843.05081	0.16921	0.40996	0.17333	0.43366	6.22E-03	3.97E-07	8.41E-07	4.07E-07	8.54E-07	6.2193E-03
519972.23	4258743.7	35840.91702	0.89634	0.75093	1.03173	0.70835	6.22E-03	2.10E-06	1.54E-06	2.42E-06	1.39E-06	6.2239E-03
520508.85	4258945.78	35825.41495	0.26147	0.12664	0.25053	0.13266	6.21E-03	6.14E-07	2.60E-07	5.88E-07	2.61E-07	6.2155E-03
520393.86	4258133.3	35816.48946	0.17482	0.48156	0.17926	0.5119	6.21E-03	4.10E-07	9.88E-07	4.21E-07	1.01E-06	6.2150E-03
520460.76	4258141.14	35806.60332	0.16312	0.33559	0.16756	0.35441	6.21E-03	3.83E-07	6.88E-07	3.93E-07	6.98E-07	6.2127E-03
520478.71	4258148.82	35783.79551	0.16053	0.30549	0.1649	0.32291	6.21E-03	3.77E-07	6.27E-07	3.87E-07	6.36E-07	6.2086E-03
520589.21	4258769.15	35776.66224	0.17975	0.13468	0.17262	0.13971	6.21E-03	4.22E-07	2.76E-07	4.05E-07	2.75E-07	6.2067E-03
520053.8	4259023.71	35775.96672	6.98724	0.29497	11.74093	0.28429	6.21E-03	1.64E-05	6.05E-07	2.76E-05	5.60E-07	6.2503E-03
520571.88	4258463.14	35771.13416	0.16662	0.17887	0.16308	0.18818	6.20E-03	3.91E-07	3.67E-07	3.83E-07	3.70E-07	6.2059E-03
520083.44	4259053.59	35757.00821	16.44289	0.28508	21.61832	0.26872	6.20E-03	3.86E-05	5.85E-07	5.08E-05	5.29E-07	6.2924E-03
520512.54	4258173.31	35749.88844	0.15592	0.25731	0.15909	0.27251	6.20E-03	3.66E-07	5.28E-07	3.73E-07	5.36E-07	6.2025E-03
520384.07	4258133.27	35743.76439	0.17673	0.50876	0.18139	0.54238	6.20E-03	4.15E-07	1.04E-06	4.26E-07	1.07E-06	6.2025E-03
520032.21	4258997.21	35736.95246	3.64312	0.3063	4.70944	0.29942	6.20E-03	8.55E-06	6.28E-07	1.11E-05	5.89E-07	6.2192E-03
519980.84	4258692.11	35727.78477	0.85862	1.01263	0.99991	0.94177	6.20E-03	2.02E-06	2.08E-06	2.35E-06	1.85E-06	6.2051E-03
520487.69	4258152.66	35722.18044	0.15916	0.29145	0.16325	0.30847	6.20E-03	3.74E-07	5.98E-07	3.83E-07	6.07E-07	6.1978E-03
519997.12	4258636.77	35720.88891	0.8561	1.53462	1.02438	1.38951	6.20E-03	2.01E-06	3.15E-06	2.40E-06	2.74E-06	6.2059E-03
520456.62	4259017.44	35716.506	0.33443	0.1268	0.31945	0.13345	6.19E-03	7.85E-07	2.60E-07	7.50E-07	2.63E-07	6.1969E-03
520433.01	4258133.42	35714.30056	0.16725	0.38907	0.17138	0.41119	6.19E-03	3.93E-07	7.98E-07	4.02E-07	8.09E-07	6.1969E-03
520571.73	4258298.78	35701.66813	0.15129	0.19553	0.15078	0.20449	6.19E-03	3.55E-07	4.01E-07	3.54E-07	4.03E-07	6.1938E-03
520480.9	4258987.37	35691.4056	0.29762	0.12694	0.28478	0.13299	6.19E-03	6.99E-07	2.60E-07	6.69E-07	2.62E-07	6.1924E-03
520555.43	4258241.74	35690.4536	0.15082	0.21172	0.15037	0.22233	6.19E-03	3.54E-07	4.34E-07	3.53E-07	4.38E-07	6.1919E-03
520550.38	4258229.56	35671.9277	0.15119	0.2163	0.15121	0.22768	6.19E-03	3.55E-07	4.44E-07	3.55E-07	4.48E-07	6.1887E-03

520217.41	4258212.75	35661.03782	0.22834	1.72856	0.23934	1.92314	6.19E-03	5.36E-07	3.55E-06	5.62E-07	3.79E-06	6.1937E-03
520022.04	4258983.02	35660.93825	2.8712	0.31413	3.56282	0.30853	6.19E-03	6.74E-06	6.44E-07	8.36E-06	6.07E-07	6.2016E-03
520451.78	4258137.29	35656.2261	0.16416	0.35213	0.16855	0.37171	6.18E-03	3.85E-07	7.22E-07	3.96E-07	7.32E-07	6.1866E-03
520007.17	4258956.89	35655.82157	2.12382	0.33263	2.53022	0.328	6.18E-03	4.99E-06	6.82E-07	5.94E-06	6.46E-07	6.1966E-03
520148.68	4258282.53	35650.21635	0.26854	4.15199	0.27531	4.7883	6.18E-03	6.30E-07	8.52E-06	6.46E-07	9.43E-06	6.2026E-03
520567.01	4258276.73	35628.2362	0.15056	0.20101	0.14981	0.21004	6.18E-03	3.53E-07	4.12E-07	3.52E-07	4.13E-07	6.1811E-03
519995.42	4258932.06	35614.21961	1.71291	0.35478	1.99369	0.34977	6.18E-03	4.02E-06	7.28E-07	4.68E-06	6.89E-07	6.1872E-03
520043.88	4259013.73	35588.45923	5.02612	0.29792	7.08623	0.28918	6.17E-03	1.18E-05	6.11E-07	1.66E-05	5.69E-07	6.2023E-03
520119.19	4258322.44	35581.80445	0.29834	7.59149	0.30829	8.959	6.17E-03	7.00E-07	1.56E-05	7.24E-07	1.76E-05	6.2061E-03
519999.93	4258628.19	35572.95385	0.85311	1.64747	1.02443	1.48419	6.17E-03	2.00E-06	3.38E-06	2.41E-06	2.92E-06	6.1807E-03
520554.5	4258866.84	35552.52068	0.21329	0.12741	0.20524	0.13299	6.17E-03	5.01E-07	2.61E-07	4.82E-07	2.62E-07	6.1679E-03
520597.57	4258701.32	35542.86902	0.16868	0.14192	0.16205	0.14768	6.16E-03	3.96E-07	2.91E-07	3.80E-07	2.91E-07	6.1661E-03
520596.85	4258726.96	35537.25388	0.1713	0.13824	0.16446	0.14392	6.16E-03	4.02E-07	2.84E-07	3.86E-07	2.83E-07	6.1651E-03
520542.18	4258891.95	35516.12541	0.22539	0.12657	0.21686	0.13236	6.16E-03	5.29E-07	2.60E-07	5.09E-07	2.61E-07	6.1617E-03
520374.28	4258133.24	35501.76525	0.17836	0.53839	0.18349	0.57518	6.16E-03	4.19E-07	1.10E-06	4.31E-07	1.13E-06	6.1607E-03
520093.77	4259064.4	35489.46738	13.63833	0.27993	12.53511	0.26236	6.16E-03	3.20E-05	5.74E-07	2.94E-05	5.16E-07	6.2180E-03
520496.67	4258156.51	35486.91654	0.15753	0.27845	0.16136	0.29484	6.16E-03	3.70E-07	5.71E-07	3.79E-07	5.80E-07	6.1569E-03
519968.48	4258807	35486.2011	0.98676	0.55136	1.1211	0.53081	6.15E-03	2.32E-06	1.13E-06	2.63E-06	1.04E-06	6.1620E-03
520256.66	4258182.87	35479.25287	0.21257	1.20675	0.22473	1.32675	6.15E-03	4.99E-07	2.47E-06	5.28E-07	2.61E-06	6.1598E-03
520442.8	4258133.45	35471.57332	0.16515	0.36955	0.16938	0.39018	6.15E-03	3.88E-07	7.58E-07	3.98E-07	7.68E-07	6.1547E-03
520471.9	4259001.11	35433.15533	0.31073	0.12643	0.29712	0.13261	6.15E-03	7.29E-07	2.59E-07	6.98E-07	2.61E-07	6.1477E-03
520335.1	4258143.12	35426.79034	0.18805	0.6824	0.19561	0.73629	6.14E-03	4.41E-07	1.40E-06	4.59E-07	1.45E-06	6.1484E-03
520592.77	4258760.64	35377.72191	0.17675	0.13471	0.16968	0.13982	6.14E-03	4.15E-07	2.76E-07	3.98E-07	2.75E-07	6.1375E-03
520039.52	4258531.05	35349.10545	0.7784	5.2708	0.91542	4.08555	6.13E-03	1.83E-06	1.08E-05	2.15E-06	8.04E-06	6.1540E-03
519978.31	4258885.03	35307.23942	1.26855	0.40862	1.44431	0.40061	6.12E-03	2.98E-06	8.38E-07	3.39E-06	7.89E-07	6.1319E-03
520530.52	4258191.02	35288.73782	0.15287	0.23673	0.15507	0.25026	6.12E-03	3.59E-07	4.86E-07	3.64E-07	4.93E-07	6.1224E-03
520227.23	4258202.78	35275.71592	0.22268	1.57116	0.23408	1.74173	6.12E-03	5.23E-07	3.22E-06	5.50E-07	3.43E-06	6.1261E-03
520565.95	4258266.27	35273.31495	0.1498	0.20243	0.14898	0.21165	6.12E-03	3.52E-07	4.15E-07	3.50E-07	4.17E-07	6.1195E-03
520447.56	4259031.2	35261.50799	0.3497	0.12602	0.33396	0.13298	6.12E-03	8.21E-07	2.58E-07	7.84E-07	2.62E-07	6.1181E-03
520539.94	4258205.07	35245.61877	0.15166	0.22681	0.15303	0.23942	6.11E-03	3.56E-07	4.65E-07	3.59E-07	4.71E-07	6.1148E-03
519967.9	4258781.48	35226.05062	0.9253	0.61784	1.05795	0.5894	6.11E-03	2.17E-06	1.27E-06	2.48E-06	1.16E-06	6.1169E-03
520522.07	4258930.3	35174.58071	0.24664	0.12543	0.23664	0.13136	6.10E-03	5.79E-07	2.57E-07	5.56E-07	2.59E-07	6.1025E-03
520364.49	4258133.21	35170.36814	0.17986	0.57049	0.18558	0.61067	6.10E-03	4.22E-07	1.17E-06	4.36E-07	1.20E-06	6.1034E-03
520521.26	4258177.04	35168.43631	0.15384	0.24725	0.15666	0.2617	6.10E-03	3.61E-07	5.07E-07	3.68E-07	5.15E-07	6.1016E-03
519987.12	4258664.6	35154.70199	0.83913	1.21556	0.98833	1.11838	6.10E-03	1.97E-06	2.49E-06	2.32E-06	2.20E-06	6.1064E-03
520505.64	4258160.35	35125.64432	0.15573	0.26663	0.1593	0.28231	6.09E-03	3.66E-07	5.47E-07	3.74E-07	5.56E-07	6.0942E-03
519968.89	4258832.1	35119.68409	1.03361	0.4954	1.1763	0.48	6.09E-03	2.43E-06	1.02E-06	2.76E-06	9.45E-07	6.0985E-03
520286.09	4258162.96	35111.56714	0.20152	0.95668	0.21259	1.04457	6.09E-03	4.73E-07	1.96E-06	4.99E-07	2.06E-06	6.0949E-03
520305.7	4258153.02	35109.72263	0.19553	0.83037	0.20531	0.90253	6.09E-03	4.59E-07	1.70E-06	4.82E-07	1.78E-06	6.0940E-03
520138.86	4258292.5	35106.08594	0.27398	4.95029	0.28093	5.74981	6.09E-03	6.43E-07	1.02E-05	6.60E-07	1.13E-05	6.1118E-03
519980.09	4258895.75	35066.73686	1.31575	0.39356	1.49988	0.38645	6.08E-03	3.09E-06	8.07E-07	3.52E-06	7.61E-07	6.0903E-03
520549.55	4258219.19	35030.8955	0.15026	0.21735	0.15067	0.22906	6.08E-03	3.53E-07	4.46E-07	3.54E-07	4.51E-07	6.0776E-03
519996.89	4258942.66	35027.68928	1.76652	0.34258	2.06134	0.33797	6.08E-03	4.15E-06	7.03E-07	4.84E-06	6.65E-07	6.0857E-03
520099.51	4258352.38	34964.48815	0.32378	14.21948	0.33988	15.96441	6.06E-03	7.60E-07	2.92E-05	7.98E-07	3.14E-05	6.1266E-03
520552.17	4258877.81	34964.33822	0.21592	0.12614	0.20788	0.13174	6.06E-03	5.07E-07	2.59E-07	4.88E-07	2.59E-07	6.0659E-03
520531.44	4258916.42	34960.78408	0.23672	0.12515	0.22738	0.13102	6.06E-03	5.56E-07	2.57E-07	5.34E-07	2.58E-07	6.0654E-03
519972.59	4258865.13	34939.73014	1.14218	0.43619	1.29637	0.42605	6.06E-03	2.68E-06	8.95E-07	3.04E-06	8.39E-07	6.0676E-03
520008.36	4258967.38	34928.5309	2.18133	0.32173	2.60394	0.31729	6.06E-03	5.12E-06	6.60E-07	6.11E-06	6.25E-07	6.0707E-03
520596.34	4258752.14	34910.48656	0.17382	0.1347	0.16686	0.13992	6.06E-03	4.08E-07	2.76E-07	3.92E-07	2.75E-07	6.0564E-03
520325.31	4258143.08	34893.68678	0.18925	0.72766	0.1976	0.78717	6.05E-03	4.44E-07	1.49E-06	4.64E-07	1.55E-06	6.0561E-03
520567.74	4258844.38	34890.65845	0.20123	0.12752	0.19366	0.1328	6.05E-03	4.72E-07	2.62E-07	4.55E-07	2.61E-07	6.0531E-03
520571.27	4258835.94	34880.5251	0.19795	0.12807	0.19051	0.13328	6.05E-03	4.65E-07	2.63E-07	4.47E-07	2.62E-07	6.0513E-03
520564.99	4258255.84	34864.43396	0.149	0.20364	0.1482	0.21312	6.05E-03	3.50E-07	4.18E-07	3.48E-07	4.20E-07	6.0486E-03
520465.36	4259013.82	34864.05565	0.32079	0.12533	0.3067	0.13167	6.05E-03	7.53E-07	2.57E-07	7.20E-07	2.59E-07	6.0490E-03
520266.48	4258172.9	34858.05149	0.20697	1.11473	0.21882	1.2223	6.05E-03	4.86E-07	2.29E-06	5.14E-07	2.41E-06	6.0517E-03
520574.8	4258827.51	34839.02641	0.1947	0.12866	0.18741	0.13379	6.04E-03	4.57E-07	2.64E-07	4.40E-07	2.63E-07	6.0441E-03
520237.05	4258192.81	34826.56462	0.2171	1.43488	0.22874	1.58516	6.04E-03	5.10E-07	2.94E-06	5.37E-07	3.12E-06	6.0476E-03
520354.71	4258133.18	34820.99095	0.18134	0.60518	0.18771	0.64941	6.04E-03	4.26E-07	1.24E-06	4.41E-07	1.28E-06	6.0429E-03
520498.65	4258970.02	34786.56512	0.27435	0.12516	0.26277	0.13103	6.03E-03	6.44E-07	2.57E-07	6.17E-07	2.58E-07	6.0353E-03
520023.17	4258993.48	34778.22622	2.9549	0.30414	3.67183	0.29863	6.03E-03	6.94E-06	6.24E-07	8.62E-06	5.88E-07	6.0489E-03
520508.02	4258956.13	34777.05519	0.26288	0.12493	0.2519	0.13081	6.03E-03	6.17E-07	2.56E-07	5.91E-07	2.57E-07	6.0336E-03
520578.33	4258819.08	34763.4806	0.19149	0.12904	0.18426	0.13412	6.03E-03	4.50E-07	2.65E-07	4.33E-07	2.64E-07	6.0310E-03
519981.72	4258906.42	34735.82745	1.36061	0.37925	1.55312	0.37291	6.02E-03	3.19E-06	7.78E-07	3.65E-06	7.34E-07	6.0331E-03
520054.23	4259033.71	34715.59983	7.13321	0.28614	12.12279	0.27579	6.02E-03	1.67E-05	5.87E-07	2.85E-05	5.43E-07	6.0676E-03
520489.45	4258983.84	34708.16886	0.28627	0.12521	0.27415	0.13109	6.02E-03	6.72E-07	2.57E-07	6.44E-07	2.58E-07	6.0218E-03
520600.45	4258718.37	34686.27353	0.16841	0.13798	0.16173	0.14368	6.02E-03	3.95E-07	2.83E-07	3.80E-07	2.83E-07	6.0175E-03
520009.81	4258599.06	34680.56553	0.83797	2.13145	1.02482	1.87578	6.02E-03	1.97E-06	4.37E-06	2.41E-06	3.69E-06	6.0276E-03
520469.58	4258134.9	34671.47207	0.15959	0.32175	0.16391	0.33952	6.01E-03	3.75E-07	6.60E-07	3.85E-07	6.68E-07	6.0157E-03
520514.62	4258164.19	34671.36908	0.15382	0.25555	0.15707	0.27053	6.01E-03	3.61E-07	5.24E-07	3.69E-07	5.33E-07	6.0154E-03
520478.5	4258138.72	34642.18421	0.15834	0.3072	0.16266	0.32429	6.01E-03	3.72E-07	6.30E-07	3.82E-07	6.38E-07	6.0106E-03
520541.01	4258902.44	34640.47266	0.22708	0.12491	0.21841	0.13066	6.01E-03	5.33E-07	2.56E-07	5.13E-07	2.57E-07	6.0098E-03
520487.41	4258142.53	34606.63606	0.1571	0.29326	0.16122	0.30995	6.00E-03	3.69E-07	6.01E-07	3.78E-07	6.10E-07	6.0043E-03
520581.86	4258810.64	34592.64048	0.18826	0.12942	0.1811	0.13443	6.00E-03	4.42E-07	2.65E-07	4.25E-07	2.65E-07	6.0013E-03
519984.69	4258917.64	34589.21604	1.43502	0.36598	1.64352	0.36034	6.00E-03	3.37E-06	7.51E-07	3.86E-06	7.09E-07	6.0080E-03
520460.66	4258131.08	34582.06525	0.16064	0.33727	0.16492	0.3557	6.00E-03	3.77E-07	6.92E-07	3.87E-07	7.00E-07	6.0003E-03
520012.93	4258979.26	34573.43177	2.38653	0.31215	2.88087	0.30755	6.00E-03	5.60E-06	6.40E-07	6.76E-06	6.05E-07	6.0102E-03
520423.26	4258123.39	34552.6581	0.16634	0.41128	0.17026	0.43487	5.99E-03	3.91E-07	8.44E-07	4.00E-07	8.56E-07	5.9955E-03
520413.47	4258123.36	34549.10452	0.16807	0.43365	0.17212	0.45902	5.99E-03	3.95E-07	8.89E-07	4.04E-07	9.04E-07	5.9950E-03
520601.2	4258692.64	34531.60767	0.16595	0.14184	0.15943	0.14744	5.99E-03	3.90E-07	2.91E-07	3.74E-07	2.90E-07	5.9907E-03
520480.39	4258997.59	34529.93402	0.29872	0.12491	0.28596	0.13088	5.99E-03	7.01E-07	2.56E-07	6.71E-07	2.58E-07	5.9909E-03
520575.13	4258471.66	34515.14608	0.16556	0.17597	0.16169	0.18515	5.99E-03	3.89E-07	3.61E-07	3.80E-07	3.64E-07	5.9880E-03
520529.98	4258180.78	34513.32992	0.15169	0.23779	0.15413	0.2515	5.99E-03	3.56E-07	4.88E-07	3.62E-07	4.95E-07	5.9879E-03
520403.68	4258123.33	34508.28209	0.16981	0.45747	0.17405	0.48505	5.99E-03	3.99E-07	9.38E-07	4.09E-07	9.55E-07	5.9880E-03
520083.87	4259064.41	34497.15997	14.75429	0.27595	20.90457	0.26026	5.98E-03	3.46E-05	5.66E-07	4.91E-05	5.12E-07	6.0682E-03
520456.24	4259027.6	34494.96511	0.33532	0.12455	0.32047	0.13119	5.98E-03	7.87E-07	2.55E-07	7.52E-07	2.58E-07	5.9850E-03
520043.9	4259023.73	34493.42178	5.04856	0.28863	7.10193	0.28022	5.98E-03	1.19E-05	5.92E-07	1.67E-05	5.52E-07	6.0124E-03
520539.3	4258194.78	34492.67649	0.15056	0.22791	0.15231	0.24069	5.98E-03	3.53E-07	4.67E-07	3.58E-07	4.74E-07	5.9842E-03
520433.05	4258123.42	34455.35009	0.16449	0.39037	0.16839	0.41232	5.98E-03	3.86E-07	8.01E-07	3.95E-07	8.12E-07	5.9785E-03
520496.33	4258146.35	34441.52645	0.15565	0.28005	0.15955	0.29623	5.97E-03	3.65E-07	5.74E-07	3.75E-07	5.83E-07	5.9756E-03
520451.75	4258127.27	34437.32017	0.1616	0.35364	0.16577	0.37291	5.97E-03	3.79E-07	7.25E-07	3.89E-07	7.34E-07	5.9752E-03
520187.99	4258232.66	34415.9991	0.23632	2.3914	0.2441	2.69216	5.97E-03	5.55E-07	4.90E-06	5.73E-07	5.30E-06	5.9806E-03
520564.11	4258245.45	34406.75445	0.14819	0.20469	0.1475	0.21449	5.97E-03	3.48E-07	4.20E-07	3.46E-07	4.22E-07	5.9692E-03
520393.89	4258123.3	34401.60782	0.17149	0.483	0.17602	0.5131	5.97E-03	4.03E-07	9.91E-07	4.13E-07	1.01E-06	5.9696E-03
520344.92	4258133.15	34397.77248	0.18268	0.64306	0.18978	0.69169	5.97E-03	4.29E-07	1.32E-06	4.46E-07	1.36E-06	5.9697E-03
520178.17	4258242.63	34397.09198	0.24155	2.70194	0.2486	3.05586	5.97E-03	5.67E-07	5.54E-06	5.84E-07	6.02E-06	5.9787E-03
519998.25	4258953.21	34388.83808	1.81754	0.33103	2.12565	0.32675	5.96E-03	4.27E-06	6.79E-07	4.99E-06	6.43E-07	5.9752E-03
520129.04	4258302.47	34388.44548	0.27916	6.04277	0.28681	7.06575	5.96E-03	6.55E-07	1.24E-05	6.73E-07	1.39E-05	5.9922E-03
520599.9	4258743.63	34379.97448	0.17097	0.13472	0.16417	0.14003	5.96E-03	4.01E-07	2.76E-07	3.85E-07	2.76E-07	5.9644E-03
520197.81	4258222.69	34342.25139	0.23111	2.13369	0.23962	2.39238	5.96E-03	5.43E-07	4.38E-06	5.63E-07	4.71E-06	5.9667E-03
519968.81	4258856.03	34337.45934	1.06956	0.44823	1.21251	0.43679	5.96E-03	2.51E-06	9.19E-07	2.85E-06	8.60E-07	5.9628E-03
519964.81	4258798.15	34335.24087	0.91996	0.56598	1.04223	0.54303	5.96E-03	2.16E-06	1.16E-06	2.45E-06	1.07E-06	5.9621E-03
520295.91	4258152.99	34328.11068	0.19599	0.89179	0.20653	0.9708	5.95E-03	4.60E-07	1.83E-06	4.85E-07	1.91E-06	5.9587E-03
520246.87	4258182.84	34326.72262	0.21162	1.31594	0.22336	1.44902	5.95E-03	4.97E-07	2.70E-06	5.24E-07	2.85E-06	5.9604E-03
520588.93	4258793.77	34324.52412	0.18215	0.13036	0.17518	0.13521	5.95E-03	4.28E-07	2.67E-07	4.11E-07	2.66E-07	5.9548E-03
520548.78	4258208.85	34301.10759	0.1492	0.21862	0.1501	0.23045	5.95E-03	3.50E-07	4.48E-07	3.52E-07	4.54E-07	5.9510E-03
520093.79	4259074.4	34277.5253	13.54486	0.27165	12.4973	0.25478	5.95E-03	3.18E-05	5.57E-07	2.93E-05	5.02E-07	6.0075E-03
520384.1	4258123.27	34273.71355	0.1732	0.51037	0.17808	0.54355	5.94E-03	4.07E-07	1.05E-06	4.18E-07	1.07E-06	5.9476E-03
520168.35	4258252.6	34272.57464	0.24676	3.08215	0.25317	3.50454	5.94E-03	5.79E-07	6.32E-06	5.94E-07	6.90E-06	5.9588E-03
520315.52	4258143.05	34270.54781	0.19015	0.77769	0.19933	0.84307	5.94E-03	4.46E-07	1.59E-06	4.68E-07	1.66E-06	5.9482E-03
519967.12	4258755.49	34268.68906	0.85556	0.69275	0.9797	0.65548	5.94E-03	2.01E-06	1.42E-06	2.30E-06	1.29E-06	5.9508E-03
519965.26	4258823.34	34261.05871	0.96936	0.50834	1.09827	0.49125	5.94E-03	2.28E-06	1.04E-06	2.58E-06	9.67E-07	5.9493E-03
520442.83	4258123.45	34257.20785	0.16252	0.37085	0.16649	0.39129	5.94E-03	3.82E-07	7.61E-07	3.91E-07	7.70E-07	5.9441E-03
520577.15	4258291.09	34208.79956	0.14846	0.19222	0.14786	0.20082	5.93E-03	3.49E-07	3.94E-07	3.47E-07	3.95E-07	5.9348E-03
520276.3	4258162.93	34205.82558	0.20152	1.03303	0.21299	1.12969	5.93E-03	4.73E-07	2.12E-06	5.00E-07	2.22E-06	5.9382E-03
520550.82	4258888.38	34200.62453	0.21771	0.12457	0.20963	0.13016	5.93E-03	5.11E-07	2.55E-07	4.92E-07	2.56E-07	5.9335E-03
520562.88	4258863.37	34192.35613	0.20635	0.12547	0.1987	0.13083	5.93E-03	4.84E-07	2.57E-07	4.66E-07	2.58E-07	5.9320E-03
520029.6	4258550.48	34145.60819	0.80449	3.79827	0.97158	3.09311	5.92E-03	1.89E-06	7.79E-06	2.28E-06	6.09E-06	5.9404E-03
520207.63	4258212.72	34143.93513	0.22581	1.91803	0.23509	2.14055	5.92E-03	5.30E-07	3.93E-06	5.52E-07	4.21E-06	5.9313E-03
520505.24	4258150.16	34137.76433	0.154	0.26818	0.15769	0.2837	5.92E-03	3.62E-07	5.50E-07	3.70E-07	5.58E-07	5.9229E-03
519986.36	4258928.32	34133.56662	1.48307	0.35318	1.70185	0.3481	5.92E-03	3.48E-06	7.24E-07	4.00E-06	6.85E-07	5.9292E-03
520523.6	4258168.03	34110.39649	0.15178	0.24532	0.1547	0.25956	5.92E-03	3.56E-07	5.03E-07	3.63E-07	5.11E-07	5.9180E-03
520592.46	4258785.34	34095.4183	0.17915	0.13079	0.17229	0.13559	5.91E-03	4.21E-07	2.68E-07	4.04E-07	2.67E-07	5.9151E-03
520374.31	4258123.24	34035.77436	0.17474	0.53999	0.18013	0.57638	5.90E-03	4.10E-07	1.11E-06	4.23E-07	1.13E-06	5.9064E-03
520530.51	4258926.8	34034.01388	0.23811	0.12352	0.22871	0.12929	5.90E-03	5.59E-07	2.53E-07	5.37E-07	2.55E-07	5.9046E-03
520158.53	4258262.56	34028.75283	0.25192	3.5568	0.25786	4.06928	5.90E-03	5.91E-07	7.29E-06	6.05E-07	8.01E-06	5.9186E-03
520575.9	4258280.54	34025.79737	0.14778	0.194	0.14706	0.20257	5.90E-03	3.47E-07	3.98E-07	3.45E-07	3.99E-07	5.9031E-03
520581.53	4258312.99	33996.86927	0.14914	0.18688	0.14863	0.19575	5.90E-03	3.50E-07	3.83E-07	3.49E-07	3.85E-07	5.8981E-03
520474.1	4259010.2	33992.77608	0.30789	0.12386	0.29467	0.12992	5.90E-03	7.23E-07	2.54E-07	6.92E-07	2.56E-07	5.8978E-03
519971.62	4258718.12	33955.11386	0.81729	0.8406	0.93885	0.78869	5.89E-03	1.92E-06	1.72E-06	2.20E-06	1.55E-06	5.8968E-03
520558.45	4258223	33946.72451	0.14772	0.20965	0.14767	0.22055	5.89E-03	3.47E-07	4.30E-07	3.47E-07	4.34E-07	5.8895E-03
520335.13	4258133.12	33942.76126	0.18392	0.68442	0.19177	0.73812	5.89E-03	4.32E-07	1.40E-06	4.50E-07	1.45E-06	5.8910E-03
520580.35	4258302.47	33935.39188	0.14848	0.18882	0.14798	0.19749	5.89E-03	3.49E-07	3.87E-07	3.47E-07	3.89E-07	5.8874E-03
520604.05	4258709.78	33925.00415	0.16575	0.13801	0.15927	0.14361	5.88E-03	3.89E-07	2.83E-07	3.74E-07	2.83E-07	5.8855E-03
519968.64	4258735.05	33906.92706	0.82638	0.76513	0.94532	0.72085	5.88E-03	1.94E-06	1.57E-06	2.22E-06	1.42E-06	5.8881E-03
520585.36	4258369.19	33869.98038	0.15308	0.17871	0.15111	0.18786	5.87E-03	3.59E-07	3.67E-07	3.55E-07	3.70E-07	5.8760E-03
520217.45	4258202.75	33867.98077	0.22054	1.73453	0.23049	1.92751	5.87E-03	5.18E-07	3.56E-06	5.41E-07	3.79E-06	5.8827E-03
520595.99	4258776.9	33816.15415	0.17621	0.13107	0.16941	0.13586	5.87E-03	4.14E-07	2.69E-07	3.98E-07	2.67E-07	5.8666E-03
520256.69	4258172.87	33805.59689	0.2063	1.21128	0.21798	1.3301	5.86E-03	4.84E-07	2.48E-06	5.12E-07	2.62E-06	5.8695E-03
520364.52	4258123.21	33802.63428	0.17634	0.57188	0.18225	0.61226	5.86E-03	4.14E-07	1.17E-06	4.28E-07	1.21E-06	5.8661E-03
520603.46	4258735.12	33782.45153	0.16819	0.13467	0.16157	0.14006	5.86E-03	3.95E-07	2.76E-07	3.79E-07	2.76E-07	5.8607E-03
520538.7	4258184.51	33781.18872	0.14947	0.22893	0.15152	0.24191	5.86E-03	3.51E-07	4.70E-07	3.56E-07	4.76E-07	5.8608E-03
520539.94	4258912.89	33779.60874	0.22862	0.12326	0.21985	0.12896	5.86E-03	5.37E-07	2.53E-07	5.16E-07	2.54E-07	5.8605E-03
520014.13	4258989.75	33778.83036	2.4537	0.30224	2.96556	0.29775	5.86E-03	5.76E-06	6.20E-07	6.96E-06	5.86E-07	5.8727E-03
519964.19	4258772.54	33769.01993	0.8588	0.63287	0.97715	0.60201	5.86E-03	2.02E-06	1.30E-06	2.29E-06	1.19E-06	5.8639E-03
520062.83	4258443.35	33768.29501	0.46183	18.04345	0.50472	9.2422	5.86E-03	1.08E-06	3.70E-05	1.18E-06	1.82E-05	5.9144E-03
520574.77	4258270.04	33763.46233	0.14706	0.19556	0.14624	0.20418	5.86E-03	3.45E-07	4.01E-07	3.43E-07	4.02E-07	5.8576E-03
520514.16	4258153.98	33754.57384	0.15226	0.2568	0.15566	0.27171	5.85E-03	3.57E-07	5.27E-07	3.65E-07	5.35E-07	5.8564E-03
520507.25	4258966.46	33749.66877	0.26417	0.12322	0.25319	0.12896	5.85E-03	6.20E-07	2.53E-07	5.94E-07	2.54E-07	5.8554E-03
519999.51	4258963.73	33736.79197	1.86669	0.32011	2.18727	0.3161	5.85E-03	4.38E-06	6.57E-07	5.14E-06	6.22E-07	5.8623E-03
520497.99	4258980.3	33724.03205	0.27557	0.12333	0.26399	0.12908	5.85E-03	6.47E-07	2.53E-07	6.20E-07	2.54E-07	5.8511E-03
520464.92	4259024.01	33701.21413	0.32173	0.12313	0.30775	0.12946	5.85E-03	7.55E-07	2.53E-07	7.22E-07	2.55E-07	5.8473E-03
520148.71	4258272.53	33667.94546	0.25702	4.16281	0.26275	4.79977	5.84E-03	6.03E-07	8.54E-06	6.17E-07	9.45E-06	5.8588E-03
519965.04	4258846.93	33652.99072	1.00254	0.46035	1.13344	0.4475	5.84E-03	2.35E-06	9.44E-07	2.66E-06	8.81E-07	5.8438E-03
519987.9	4258938.95	33644.75699	1.52939	0.34107	1.75855	0.33647	5.84E-03	3.59E-06	7.00E-07	4.13E-06	6.62E-07	5.8446E-03
520516.68	4258952.54	33626.90036	0.25317	0.12295	0.24282	0.1287	5.83E-03	5.94E-07	2.52E-07	5.70E-07	2.53E-07	5.8341E-03
520548.08	4258198.54	33624.22733	0.14819	0.21966	0.14949	0.23168	5.83E-03	3.48E-07	4.51E-07	3.51E-07	4.56E-07	5.8336E-03
520488.89	4258994.07	33617.10341	0.28737	0.12331	0.27533	0.12908	5.83E-03	6.75E-07	2.53E-07	6.46E-07	2.54E-07	5.8326E-03
519974.46	4258700.84	33614.18833	0.80075	0.92585	0.92365	0.86503	5.83E-03	1.88E-06	1.90E-06	2.17E-06	1.70E-06	5.8379E-03
520560.89	4258874.2	33606.16564	0.20862	0.12414	0.20097	0.12952	5.83E-03	4.90E-07	2.55E-07	4.72E-07	2.55E-07	5.8303E-03
520053.72	4259043.64	33584.97671	7.04303	0.27724	11.77757	0.2674	5.83E-03	1.65E-05	5.69E-07	2.76E-05	5.26E-07	5.8704E-03
519987.12	4258655.32	33580.84032	0.79771	1.26428	0.93826	1.16076	5.82E-03	1.87E-06	2.59E-06	2.20E-06	2.28E-06	5.8334E-03
520305.73	4258143.02	33568.90827	0.19073	0.83318	0.2007	0.90469	5.82E-03	4.48E-07	1.71E-06	4.71E-07	1.78E-06	5.8268E-03
520286.12	4258152.96	33544.96678	0.19626	0.96002	0.20727	1.04728	5.82E-03	4.61E-07	1.97E-06	4.87E-07	2.06E-06	5.8232E-03
520227.27	4258192.78	33541.89303	0.21537	1.57659	0.22581	1.74577	5.82E-03	5.06E-07	3.23E-06	5.30E-07	3.44E-06	5.8254E-03
520478.3	4258128.62	33522.23634	0.15611	0.30888	0.16035	0.32557	5.81E-03	3.66E-07	6.33E-07	3.76E-07	6.41E-07	5.8163E-03
520044.33	4259033.73	33521.37011	5.13695	0.28013	7.24645	0.27194	5.81E-03	1.21E-05	5.75E-07	1.70E-05	5.35E-07	5.8443E-03
520487.15	4258132.41	33516.91597	0.15499	0.29503	0.15912	0.31133	5.81E-03	3.64E-07	6.05E-07	3.74E-07	6.13E-07	5.8153E-03
520469.44	4258124.83	33515.78755	0.15722	0.32339	0.16141	0.34074	5.81E-03	3.69E-07	6.63E-07	3.79E-07	6.71E-07	5.8152E-03
520526.31	4258938.55	33491.47279	0.2427	0.12263	0.23302	0.12836	5.81E-03	5.70E-07	2.52E-07	5.47E-07	2.53E-07	5.8106E-03
520599.52	4258768.47	33481.84563	0.17333	0.13123	0.1666	0.13606	5.81E-03	4.07E-07	2.69E-07	3.91E-07	2.68E-07	5.8086E-03
520532.58	4258171.88	33477.2947	0.14966	0.23567	0.15222	0.24918	5.81E-03	3.51E-07	4.83E-07	3.57E-07	4.91E-07	5.8082E-03
520354.74	4258123.18	33474.55223	0.17775	0.60656	0.1843	0.65115	5.81E-03	4.17E-07	1.24E-06	4.33E-07	1.28E-06	5.8094E-03
520119.22	4258312.44	33474.37609	0.2839	7.6162	0.2929	8.91623	5.81E-03	6.67E-07	1.56E-05	6.88E-07	1.76E-05	5.8405E-03
520003.83	4258975.5	33460.70894	2.02051	0.31038	2.3865	0.30644	5.80E-03	4.74E-06	6.37E-07	5.60E-06	6.03E-07	5.8152E-03
520573.73	4258259.58	33446.04991	0.14631	0.19689	0.14545	0.20568	5.80E-03	3.43E-07	4.04E-07	3.41E-07	4.05E-07	5.8026E-03
520549.58	4258898.9	33419.30885	0.21937	0.12301	0.21123	0.12857	5.80E-03	5.15E-07	2.52E-07	4.96E-07	2.53E-07	5.7979E-03
520460.58	4258121.03	33414.82387	0.15817	0.33879	0.16227	0.35685	5.80E-03	3.71E-07	6.95E-07	3.81E-07	7.02E-07	5.7978E-03
520578.37	4258480.18	33392.73087	0.16446	0.17322	0.16025	0.18221	5.79E-03	3.86E-07	3.55E-07	3.76E-07	3.59E-07	5.7933E-03
520325.34	4258133.09	33386.27435	0.18487	0.73	0.19354	0.78886	5.79E-03	4.34E-07	1.50E-06	4.54E-07	1.55E-06	5.7946E-03
520496.01	4258136.2	33382.44785	0.15367	0.28207	0.15766	0.29786	5.79E-03	3.61E-07	5.79E-07	3.70E-07	5.86E-07	5.7919E-03
520083.89	4259074.41	33348.62491	14.6463	0.26779	20.78701	0.25275	5.78E-03	3.44E-05	5.49E-07	4.88E-05	4.98E-07	5.8684E-03
519999.89	4258618.49	33312.79328	0.79882	1.70222	0.95529	1.53287	5.78E-03	1.88E-06	3.49E-06	2.24E-06	3.02E-06	5.7886E-03
519961.62	4258814.58	33309.64697	0.90858	0.52094	1.0236	0.50215	5.78E-03	2.13E-06	1.07E-06	2.40E-06	9.88E-07	5.7840E-03
520557.62	4258212.63	33304.31557	0.14674	0.21093	0.14717	0.22199	5.78E-03	3.44E-07	4.33E-07	3.46E-07	4.37E-07	5.7780E-03
520423.29	4258113.39	33294.74458	0.16346	0.41249	0.16728	0.43589	5.77E-03	3.84E-07	8.46E-07	3.93E-07	8.58E-07	5.7773E-03
520413.5	4258113.36	33283.10683	0.16512	0.43481	0.16911	0.46009	5.77E-03	3.88E-07	8.92E-07	3.97E-07	9.06E-07	5.7754E-03
520523.07	4258157.79	33278.81333	0.15037	0.2465	0.15348	0.26073	5.77E-03	3.53E-07	5.06E-07	3.60E-07	5.13E-07	5.7738E-03
519971.16	4258892.07	33277.73752	1.15451	0.3911	1.30356	0.38369	5.77E-03	2.71E-06	8.02E-07	3.06E-06	7.55E-07	5.7792E-03
520451.72	4258117.24	33269.03735	0.15906	0.355	0.163	0.374	5.77E-03	3.73E-07	7.28E-07	3.83E-07	7.36E-07	5.7726E-03
520266.51	4258162.9	33252.5359	0.20112	1.11878	0.21262	1.22532	5.77E-03	4.72E-07	2.29E-06	4.99E-07	2.41E-06	5.7732E-03

520403.71	4258113.33	33238.16089	0.16678	0.45861	0.17102	0.48619	5.77E-03	3.92E-07	9.41E-07	4.02E-07	9.57E-07	5.7677E-03
520433.08	4258113.42	33225.68413	0.16172	0.39159	0.16546	0.41331	5.76E-03	3.80E-07	8.03E-07	3.88E-07	8.14E-07	5.7652E-03
520568.33	4258237.24	33196.56255	0.14584	0.20172	0.14524	0.21137	5.76E-03	3.42E-07	4.14E-07	3.41E-07	4.16E-07	5.7593E-03
520138.89	4258282.5	33154.37817	0.26193	4.96207	0.26787	5.76707	5.75E-03	6.15E-07	1.02E-05	6.29E-07	1.14E-05	5.7732E-03
520504.87	4258139.99	33148.70165	0.15219	0.26995	0.156	0.28519	5.75E-03	3.57E-07	5.54E-07	3.66E-07	5.61E-07	5.7513E-03
520237.09	4258182.81	33142.34965	0.21022	1.43995	0.22105	1.58863	5.75E-03	4.94E-07	2.95E-06	5.19E-07	3.13E-06	5.7555E-03
519989.33	4258949.53	33135.8498	1.57406	0.32965	1.81347	0.32545	5.75E-03	3.70E-06	6.76E-07	4.26E-06	6.41E-07	5.7565E-03
520482.84	4259006.58	33127.4013	0.2957	0.1224	0.28336	0.12822	5.75E-03	6.94E-07	2.51E-07	6.65E-07	2.52E-07	5.7477E-03
520607.02	4258726.61	33120.50022	0.1655	0.13456	0.15905	0.13999	5.74E-03	3.89E-07	2.76E-07	3.73E-07	2.76E-07	5.7459E-03
520393.92	4258113.3	33098.82539	0.16832	0.48419	0.17294	0.51423	5.74E-03	3.95E-07	9.93E-07	4.06E-07	1.01E-06	5.7436E-03
520603.05	4258760.03	33090.22545	0.17053	0.13126	0.16387	0.13618	5.74E-03	4.00E-07	2.69E-07	3.85E-07	2.68E-07	5.7407E-03
520572.79	4258249.17	33083.33663	0.14555	0.19801	0.14473	0.20704	5.74E-03	3.42E-07	4.06E-07	3.40E-07	4.08E-07	5.7396E-03
519961.14	4258789.3	33078.23198	0.85658	0.58024	0.96832	0.5548	5.74E-03	2.01E-06	1.19E-06	2.27E-06	1.09E-06	5.7438E-03
519972.87	4258902.77	33068.49957	1.19487	0.37707	1.35028	0.3705	5.74E-03	2.81E-06	7.73E-07	3.17E-06	7.29E-07	5.7431E-03
520442.86	4258113.45	33067.26202	0.15987	0.37206	0.16365	0.39225	5.74E-03	3.75E-07	7.63E-07	3.84E-07	7.72E-07	5.7377E-03
520607.64	4258701.19	33051.19666	0.16313	0.13811	0.15684	0.14356	5.73E-03	3.83E-07	2.83E-07	3.68E-07	2.83E-07	5.7339E-03
520344.95	4258123.15	33034.57235	0.1789	0.64464	0.18623	0.69343	5.73E-03	4.20E-07	1.32E-06	4.37E-07	1.37E-06	5.7332E-03
520019.69	4258569.92	33028.88897	0.80331	2.84712	0.98169	2.41052	5.73E-03	1.89E-06	5.84E-06	2.30E-06	4.75E-06	5.7435E-03
520581.18	4258461.69	33026.14329	0.162	0.17331	0.15835	0.18218	5.73E-03	3.80E-07	3.55E-07	3.72E-07	3.59E-07	5.7297E-03
520588.66	4258377.86	33009.68514	0.15248	0.17592	0.1502	0.18479	5.73E-03	3.58E-07	3.61E-07	3.53E-07	3.64E-07	5.7268E-03
520063.93	4258432.91	33001.85004	0.43209	19.86185	0.47051	9.65784	5.72E-03	1.01E-06	4.07E-05	1.10E-06	1.90E-05	5.7859E-03
520049.4	4258501.91	32999.41635	0.66306	7.82166	0.74933	5.64922	5.72E-03	1.56E-06	1.60E-05	1.76E-06	1.11E-05	5.7541E-03
520547.42	4258188.24	32982.101	0.1472	0.22062	0.14883	0.23287	5.72E-03	3.46E-07	4.52E-07	3.49E-07	4.58E-07	5.7222E-03
520099.55	4258342.38	32945.5858	0.30696	14.25294	0.32149	15.95838	5.71E-03	7.21E-07	2.92E-05	7.55E-07	3.14E-05	5.7764E-03
519975.54	4258913.86	32943.15602	1.25224	0.36398	1.41802	0.35814	5.71E-03	2.94E-06	7.46E-07	3.33E-06	7.05E-07	5.7216E-03
520559.46	4258884.8	32936.57666	0.21038	0.12268	0.20277	0.12805	5.71E-03	4.94E-07	2.52E-07	4.76E-07	2.52E-07	5.7142E-03
520538.96	4258923.31	32922.6255	0.23	0.12165	0.22115	0.12727	5.71E-03	5.40E-07	2.49E-07	5.19E-07	2.51E-07	5.7118E-03
519965.56	4258872.3	32913.50494	1.04575	0.41632	1.17678	0.40699	5.71E-03	2.46E-06	8.54E-07	2.76E-06	8.01E-07	5.7156E-03
520384.13	4258113.27	32901.62792	0.16979	0.51169	0.1749	0.54451	5.71E-03	3.99E-07	1.05E-06	4.11E-07	1.07E-06	5.7096E-03
520574.77	4258851.53	32896.689	0.19655	0.12405	0.18936	0.12913	5.71E-03	4.61E-07	2.54E-07	4.45E-07	2.54E-07	5.7072E-03
520473.6	4259020.41	32890.61152	0.30888	0.12178	0.29578	0.12782	5.70E-03	7.25E-07	2.50E-07	6.94E-07	2.52E-07	5.7066E-03
519961.27	4258837.83	32881.34844	0.93991	0.47254	1.05885	0.45815	5.70E-03	2.21E-06	9.69E-07	2.49E-06	9.02E-07	5.7097E-03
520092.5	4259085.69	32860.31542	13.99496	0.2623	13.16474	0.2464	5.70E-03	3.29E-05	5.38E-07	3.09E-05	4.85E-07	5.7643E-03
520581.78	4258834.8	32854.27931	0.19034	0.12517	0.18343	0.13011	5.70E-03	4.47E-07	2.57E-07	4.31E-07	2.56E-07	5.6998E-03
520588.23	4258402.59	32851.08815	0.15465	0.17444	0.15194	0.18296	5.70E-03	3.63E-07	3.58E-07	3.57E-07	3.60E-07	5.6993E-03
520513.73	4258143.78	32844.6106	0.15061	0.25844	0.15415	0.27316	5.70E-03	3.54E-07	5.30E-07	3.62E-07	5.38E-07	5.6985E-03
520589.45	4258354.05	32826.55231	0.1501	0.17728	0.14849	0.18639	5.69E-03	3.52E-07	3.64E-07	3.49E-07	3.67E-07	5.6950E-03
520295.94	4258142.99	32823.42032	0.19104	0.89476	0.20163	0.97308	5.69E-03	4.49E-07	1.84E-06	4.73E-07	1.92E-06	5.6977E-03
520585.28	4258826.43	32793.13729	0.1873	0.12562	0.18047	0.1305	5.69E-03	4.40E-07	2.58E-07	4.24E-07	2.57E-07	5.6892E-03
520541.55	4258175.72	32778.14398	0.14748	0.22659	0.14964	0.23941	5.69E-03	3.46E-07	4.65E-07	3.51E-07	4.71E-07	5.6869E-03
520315.55	4258133.05	32774.58458	0.18559	0.78025	0.19503	0.84475	5.68E-03	4.36E-07	1.60E-06	4.58E-07	1.66E-06	5.6888E-03
520005.1	4258986.02	32754.29659	2.07543	0.30062	2.45611	0.29681	5.68E-03	4.87E-06	6.17E-07	5.77E-06	5.84E-07	5.6929E-03
520567.36	4258226.81	32754.21223	0.14508	0.20272	0.14474	0.21271	5.68E-03	3.41E-07	4.16E-07	3.40E-07	4.19E-07	5.6826E-03
520374.34	4258113.24	32741.87632	0.17141	0.54119	0.17698	0.5777	5.68E-03	4.02E-07	1.11E-06	4.15E-07	1.14E-06	5.6820E-03
519977.12	4258683.15	32741.09058	0.77385	1.02154	0.89796	0.94941	5.68E-03	1.82E-06	2.10E-06	2.11E-06	1.87E-06	5.6867E-03
520058.1	4258461.19	32738.39523	0.50816	12.63619	0.55853	7.66387	5.68E-03	1.19E-06	2.59E-05	1.31E-06	1.51E-05	5.7218E-03
520506.54	4258976.76	32731.79435	0.26534	0.1215	0.25437	0.12711	5.68E-03	6.23E-07	2.49E-07	5.97E-07	2.50E-07	5.6789E-03
520531.99	4258161.61	32713.23906	0.14839	0.23682	0.15117	0.25038	5.67E-03	3.48E-07	4.86E-07	3.55E-07	4.93E-07	5.6756E-03
520246.91	4258172.84	32709.68868	0.20519	1.32046	0.21624	1.45226	5.67E-03	4.82E-07	2.71E-06	5.08E-07	2.86E-06	5.6799E-03
520556.85	4258202.29	32695.71133	0.1458	0.21194	0.14665	0.2232	5.67E-03	3.42E-07	4.35E-07	3.44E-07	4.39E-07	5.6725E-03
520497.39	4258990.55	32694.07824	0.27665	0.12152	0.26513	0.12715	5.67E-03	6.49E-07	2.49E-07	6.22E-07	2.50E-07	5.6724E-03
520276.33	4258152.93	32687.27995	0.19611	1.03649	0.20731	1.1326	5.67E-03	4.60E-07	2.13E-06	4.87E-07	2.23E-06	5.6748E-03
520188.02	4258222.66	32663.1605	0.22759	2.39755	0.23421	2.69893	5.67E-03	5.34E-07	4.92E-06	5.50E-07	5.31E-06	5.6766E-03
520515.86	4258962.89	32653.16147	0.25442	0.12132	0.24405	0.12693	5.66E-03	5.97E-07	2.49E-07	5.73E-07	2.50E-07	5.6652E-03
520588.78	4258818.06	32643.84059	0.18422	0.12587	0.17741	0.13071	5.66E-03	4.32E-07	2.58E-07	4.17E-07	2.57E-07	5.6633E-03
520606.58	4258751.6	32638.75295	0.16779	0.13125	0.16124	0.13627	5.66E-03	3.94E-07	2.69E-07	3.79E-07	2.68E-07	5.6624E-03
520548.45	4258909.37	32629.56327	0.22089	0.12142	0.21266	0.12694	5.66E-03	5.19E-07	2.49E-07	4.99E-07	2.50E-07	5.6610E-03
520178.2	4258232.63	32626.78859	0.23236	2.70823	0.23826	3.06413	5.66E-03	5.46E-07	5.55E-06	5.59E-07	6.03E-06	5.6717E-03
519977.29	4258924.58	32609.04867	1.2946	0.35141	1.46809	0.34617	5.66E-03	3.04E-06	7.21E-07	3.45E-06	6.81E-07	5.6638E-03
520197.84	4258212.69	32589.05939	0.22276	2.14049	0.23019	2.39715	5.65E-03	5.23E-07	4.39E-06	5.40E-07	4.72E-06	5.6626E-03
520525.35	4258948.96	32559.66817	0.24404	0.12106	0.23432	0.12667	5.65E-03	5.73E-07	2.48E-07	5.50E-07	2.49E-07	5.6489E-03
519990.66	4258960.07	32552.76768	1.61672	0.31875	1.86574	0.3149	5.65E-03	3.80E-06	6.54E-07	4.38E-06	6.20E-07	5.6556E-03
520335.16	4258123.12	32545.83285	0.1799	0.68629	0.18802	0.73972	5.64E-03	4.22E-07	1.41E-06	4.41E-07	1.46E-06	5.6487E-03
520053.74	4259053.64	32542.44544	7.08229	0.26904	11.85116	0.25957	5.64E-03	1.66E-05	5.52E-07	2.78E-05	5.11E-07	5.6899E-03
520586.13	4258294.93	32511.30218	0.14565	0.18537	0.14504	0.19371	5.64E-03	3.42E-07	3.80E-07	3.41E-07	3.81E-07	5.6404E-03
520364.56	4258113.21	32494.73252	0.17287	0.57311	0.179	0.61356	5.64E-03	4.06E-07	1.18E-06	4.20E-07	1.21E-06	5.6393E-03
519963.37	4258746.45	32481.24864	0.79004	0.70647	0.89865	0.66762	5.63E-03	1.85E-06	1.45E-06	2.11E-06	1.31E-06	5.6405E-03
520168.38	4258242.6	32471.40524	0.23705	3.08983	0.2424	3.51282	5.63E-03	5.57E-07	6.34E-06	5.69E-07	6.91E-06	5.6464E-03
520129.07	4258292.47	32470.72519	0.26654	6.05791	0.27323	7.08338	5.63E-03	6.26E-07	1.24E-05	6.41E-07	1.39E-05	5.6595E-03
520043.82	4259043.65	32454.85322	5.08094	0.27154	7.11513	0.26374	5.63E-03	1.19E-05	5.57E-07	1.67E-05	5.19E-07	5.6589E-03
520109.4	4258322.41	32446.66255	0.28827	10.04247	0.29897	11.82327	5.63E-03	6.77E-07	2.06E-05	7.02E-07	2.33E-05	5.6730E-03
520522.58	4258147.57	32437.09263	0.14889	0.24786	0.15216	0.262	5.63E-03	3.50E-07	5.08E-07	3.57E-07	5.16E-07	5.6278E-03
520207.66	4258202.72	32433.04942	0.21793	1.92423	0.22614	2.14493	5.63E-03	5.12E-07	3.95E-06	5.31E-07	4.22E-06	5.6346E-03
520584.79	4258284.34	32428.20931	0.14504	0.18726	0.14434	0.19547	5.62E-03	3.41E-07	3.84E-07	3.39E-07	3.85E-07	5.6260E-03
520535.04	4258934.94	32397.85056	0.23408	0.12072	0.22499	0.1263	5.62E-03	5.50E-07	2.48E-07	5.28E-07	2.49E-07	5.6208E-03
520610.59	4258718.1	32371.18091	0.16285	0.13434	0.15654	0.13976	5.61E-03	3.82E-07	2.76E-07	3.68E-07	2.75E-07	5.6159E-03
520595.79	4258801.33	32356.25933	0.17832	0.12669	0.17166	0.13138	5.61E-03	4.19E-07	2.60E-07	4.03E-07	2.59E-07	5.6134E-03
519961.82	4258863.29	32351.42892	0.98312	0.42712	1.10382	0.41666	5.61E-03	2.31E-06	8.76E-07	2.59E-06	8.20E-07	5.6178E-03
519994.72	4258971.74	32324.60661	1.73404	0.30891	2.01348	0.3053	5.61E-03	4.07E-06	6.34E-07	4.73E-06	6.01E-07	5.6166E-03
520569.61	4258870.59	32305.87407	0.20164	0.12218	0.19439	0.12735	5.60E-03	4.73E-07	2.51E-07	4.56E-07	2.51E-07	5.6047E-03
520566.46	4258216.42	32265.69377	0.14427	0.20369	0.14428	0.21398	5.60E-03	3.39E-07	4.18E-07	3.39E-07	4.21E-07	5.5979E-03
519978.91	4258935.24	32264.74106	1.33665	0.33956	1.51855	0.33484	5.60E-03	3.14E-06	6.96E-07	3.57E-06	6.59E-07	5.6042E-03
520583.58	4258273.81	32264.55492	0.14438	0.18892	0.14357	0.19708	5.60E-03	3.39E-07	3.87E-07	3.37E-07	3.88E-07	5.5976E-03
519957.99	4258805.82	32255.06124	0.85013	0.53373	0.95462	0.51293	5.59E-03	2.00E-06	1.09E-06	2.24E-06	1.01E-06	5.6008E-03
520588.97	4258306.16	32252.37029	0.14577	0.18224	0.14515	0.19076	5.59E-03	3.42E-07	3.74E-07	3.41E-07	3.76E-07	5.5955E-03
520256.73	4258162.87	32241.22881	0.20026	1.21542	0.21139	1.33291	5.59E-03	4.70E-07	2.49E-06	4.96E-07	2.62E-06	5.5982E-03
520558.15	4258895.35	32231.56585	0.21202	0.12116	0.20436	0.12652	5.59E-03	4.98E-07	2.48E-07	4.80E-07	2.49E-07	5.5919E-03
520491.58	4259002.97	32226.13509	0.28424	0.12072	0.27244	0.12635	5.59E-03	6.67E-07	2.48E-07	6.40E-07	2.49E-07	5.5913E-03
520590.23	4258316.71	32224.54009	0.14636	0.18024	0.14563	0.18897	5.59E-03	3.44E-07	3.70E-07	3.42E-07	3.72E-07	5.5906E-03
520158.56	4258252.57	32223.71944	0.24172	3.56535	0.24668	4.07895	5.59E-03	5.67E-07	7.31E-06	5.79E-07	8.03E-06	5.6055E-03
520599.29	4258792.96	32221.33439	0.17552	0.12712	0.16893	0.13174	5.59E-03	4.12E-07	2.61E-07	3.97E-07	2.59E-07	5.5900E-03
520217.48	4258192.75	32215.15415	0.21315	1.73998	0.22205	1.93184	5.59E-03	5.00E-07	3.57E-06	5.21E-07	3.80E-06	5.5960E-03
519960.48	4258763.6	32194.06734	0.79502	0.64671	0.90144	0.61361	5.58E-03	1.87E-06	1.33E-06	2.12E-06	1.21E-06	5.5904E-03
520354.77	4258113.18	32140.77593	0.1741	0.60803	0.18093	0.65245	5.57E-03	4.09E-07	1.25E-06	4.25E-07	1.28E-06	5.5780E-03
520305.76	4258133.02	32128.48256	0.1861	0.83579	0.19617	0.90664	5.57E-03	4.37E-07	1.71E-06	4.61E-07	1.78E-06	5.5769E-03
520556.14	4258191.98	32126.732	0.1449	0.21283	0.1461	0.22434	5.57E-03	3.40E-07	4.36E-07	3.43E-07	4.42E-07	5.5738E-03
520591.96	4258386.53	32126.37063	0.15183	0.17333	0.14932	0.18188	5.57E-03	3.56E-07	3.55E-07	3.51E-07	3.58E-07	5.5736E-03
520610.12	4258743.17	32125.26936	0.16512	0.13119	0.15872	0.1363	5.57E-03	3.88E-07	2.69E-07	3.73E-07	2.68E-07	5.5733E-03
520611.24	4258692.6	32117.66086	0.16054	0.13808	0.15438	0.14336	5.57E-03	3.77E-07	2.83E-07	3.62E-07	2.82E-07	5.5720E-03
520540.9	4258165.43	32081.95113	0.14633	0.22769	0.14876	0.2406	5.56E-03	3.44E-07	4.67E-07	3.49E-07	4.74E-07	5.5661E-03
520482.29	4259016.82	32081.43552	0.29671	0.12041	0.28447	0.12618	5.56E-03	6.97E-07	2.47E-07	6.68E-07	2.48E-07	5.5662E-03
520286.15	4258142.96	32067.56982	0.19113	0.96322	0.20202	1.04961	5.56E-03	4.49E-07	1.98E-06	4.74E-07	2.07E-06	5.5669E-03
520582.48	4258263.33	32050.59516	0.1437	0.19032	0.1428	0.19856	5.56E-03	3.37E-07	3.90E-07	3.35E-07	3.91E-07	5.5605E-03
520592.92	4258363.18	32019.37044	0.14953	0.17438	0.14755	0.18324	5.55E-03	3.51E-07	3.58E-07	3.46E-07	3.61E-07	5.5550E-03
520009.77	4258589.36	32014.54136	0.78119	2.20028	0.95204	1.92767	5.55E-03	1.83E-06	4.51E-06	2.24E-06	3.79E-06	5.5652E-03
519957.49	4258828.73	32009.46943	0.88024	0.48485	0.98874	0.46868	5.55E-03	2.07E-06	9.94E-07	2.32E-06	9.23E-07	5.5582E-03
520550.53	4258179.56	32008.92671	0.14523	0.2181	0.14699	0.23022	5.55E-03	3.41E-07	4.47E-07	3.45E-07	4.53E-07	5.5534E-03
520082.6	4259085.7	31994.17233	14.69285	0.25847	22.56179	0.24438	5.55E-03	3.45E-05	5.30E-07	5.30E-05	4.81E-07	5.6377E-03
520602.8	4258784.59	31989.46305	0.17271	0.1274	0.16617	0.132	5.55E-03	4.05E-07	2.61E-07	3.90E-07	2.60E-07	5.5497E-03
520325.37	4258123.09	31972.43202	0.18062	0.73213	0.18956	0.79031	5.55E-03	4.24E-07	1.50E-06	4.45E-07	1.56E-06	5.5494E-03
520531.44	4258151.36	31937.51567	0.14704	0.23809	0.15003	0.2516	5.54E-03	3.45E-07	4.88E-07	3.52E-07	4.95E-07	5.5411E-03
520064.67	4258422.61	31935.28788	0.40487	21.21994	0.43947	9.91515	5.54E-03	9.51E-07	4.35E-05	1.03E-06	1.95E-05	5.6041E-03
519987.12	4258646.05	31929.97772	0.75698	1.30981	0.88771	1.20129	5.54E-03	1.78E-06	2.69E-06	2.08E-06	2.36E-06	5.5470E-03
520227.3	4258182.78	31928.9116	0.20839	1.58174	0.21789	1.74948	5.54E-03	4.89E-07	3.24E-06	5.12E-07	3.44E-06	5.5456E-03
520577.31	4258241.09	31915.76491	0.14319	0.19495	0.1424	0.20382	5.54E-03	3.36E-07	4.00E-07	3.34E-07	4.01E-07	5.5371E-03
519965.06	4258726.4	31899.80057	0.76094	0.77682	0.86586	0.73155	5.53E-03	1.79E-06	1.59E-06	2.03E-06	1.44E-06	5.5397E-03
520148.74	4258262.53	31855.61639	0.24629	4.17347	0.25114	4.80852	5.53E-03	5.78E-07	8.56E-06	5.90E-07	9.47E-06	5.5444E-03
520039.48	4258521.35	31854.61498	0.70501	5.32347	0.8131	4.14493	5.53E-03	1.66E-06	1.09E-05	1.91E-06	8.16E-06	5.5477E-03
520547.41	4258919.81	31843.13576	0.22228	0.11985	0.21397	0.12531	5.52E-03	5.22E-07	2.46E-07	5.02E-07	2.47E-07	5.5246E-03
519980.41	4258945.85	31838.57757	1.37607	0.32825	1.56584	0.32399	5.52E-03	3.23E-06	6.73E-07	3.68E-06	6.38E-07	5.5305E-03
520591.56	4258411.35	31829.52838	0.15389	0.17172	0.15101	0.18003	5.52E-03	3.61E-07	3.52E-07	3.55E-07	3.54E-07	5.5221E-03
520584.66	4258470.82	31814.54817	0.16088	0.17043	0.1569	0.17915	5.52E-03	3.78E-07	3.50E-07	3.68E-07	3.53E-07	5.5195E-03
520581.47	4258252.88	31767.8999	0.14297	0.19155	0.14207	0.19993	5.51E-03	3.36E-07	3.93E-07	3.34E-07	3.94E-07	5.5115E-03
520092.52	4259095.69	31764.86042	13.92233	0.25481	13.11874	0.23955	5.51E-03	3.27E-05	5.23E-07	3.08E-05	4.72E-07	5.5739E-03
520266.55	4258152.9	31762.23995	0.1955	1.1224	0.20655	1.22803	5.51E-03	4.59E-07	2.30E-06	4.85E-07	2.42E-06	5.5147E-03
519957.47	4258780.46	31747.74165	0.7977	0.59335	0.89795	0.56586	5.51E-03	1.87E-06	1.22E-06	2.11E-06	1.11E-06	5.5128E-03
520565.63	4258206.05	31740.88508	0.14341	0.20464	0.14382	0.21517	5.51E-03	3.37E-07	4.20E-07	3.38E-07	4.24E-07	5.5068E-03
520505.88	4258987.04	31739.74378	0.26639	0.11976	0.25545	0.12525	5.51E-03	6.25E-07	2.46E-07	6.00E-07	2.47E-07	5.5068E-03
520344.98	4258113.15	31715.66721	0.17514	0.64619	0.18273	0.69481	5.50E-03	4.11E-07	1.33E-06	4.29E-07	1.37E-06	5.5045E-03
520568.1	4258881.22	31712.53887	0.20338	0.12084	0.19621	0.126	5.50E-03	4.77E-07	2.48E-07	4.61E-07	2.48E-07	5.5018E-03
519958.09	4258854.28	31706.7313	0.92404	0.43815	1.03555	0.42636	5.50E-03	2.17E-06	8.99E-07	2.43E-06	8.39E-07	5.5057E-03
519996.06	4258982.29	31705.13852	1.78063	0.29923	2.07202	0.29581	5.50E-03	4.18E-06	6.14E-07	4.86E-06	5.82E-07	5.5094E-03
520515.09	4258973.22	31704.2651	0.25556	0.11968	0.2452	0.12516	5.50E-03	6.00E-07	2.45E-07	5.76E-07	2.46E-07	5.5006E-03
519968	4258709.38	31650.04219	0.74783	0.851	0.8549	0.79838	5.49E-03	1.76E-06	1.75E-06	2.01E-06	1.57E-06	5.4966E-03
520524.46	4258959.33	31646.80486	0.24526	0.1195	0.23551	0.12498	5.49E-03	5.76E-07	2.45E-07	5.53E-07	2.46E-07	5.4906E-03
520614.15	4258709.59	31621.31942	0.16033	0.13433	0.15419	0.13965	5.48E-03	3.76E-07	2.76E-07	3.62E-07	2.75E-07	5.4859E-03
520119.25	4258302.44	31619.70295	0.27075	7.6361	0.27879	8.93373	5.48E-03	6.36E-07	1.57E-05	6.55E-07	1.76E-05	5.5188E-03
520237.12	4258172.81	31583.94638	0.20366	1.44462	0.21364	1.59203	5.48E-03	4.78E-07	2.96E-06	5.02E-07	3.13E-06	5.4852E-03
520054.17	4259063.64	31582.28473	7.21075	0.26145	12.25302	0.25224	5.48E-03	1.69E-05	5.36E-07	2.88E-05	4.97E-07	5.5245E-03
520576.26	4258230.63	31562.40375	0.1425	0.19598	0.1419	0.20517	5.47E-03	3.35E-07	4.02E-07	3.33E-07	4.04E-07	5.4758E-03
520534.01	4258945.37	31515.63945	0.23537	0.1192	0.22623	0.12467	5.47E-03	5.53E-07	2.44E-07	5.31E-07	2.45E-07	5.4678E-03
520556.96	4258905.85	31512.34601	0.21353	0.11963	0.2058	0.12497	5.47E-03	5.01E-07	2.45E-07	4.83E-07	2.46E-07	5.4671E-03
519977.12	4258673.87	31495.96201	0.74121	1.06119	0.85902	0.98478	5.46E-03	1.74E-06	2.18E-06	2.02E-06	1.94E-06	5.4707E-03
520043.84	4259053.65	31481.61187	5.10533	0.26359	7.14471	0.25607	5.46E-03	1.20E-05	5.41E-07	1.68E-05	5.04E-07	5.4901E-03
520295.97	4258132.99	31427.93502	0.18629	0.89749	0.19681	0.97525	5.45E-03	4.37E-07	1.84E-06	4.62E-07	1.92E-06	5.4557E-03
520315.58	4258123.05	31419.84279	0.1813	0.78243	0.19087	0.84655	5.45E-03	4.26E-07	1.60E-06	4.48E-07	1.67E-06	5.4538E-03
519964.02	4258899.11	31416.81936	1.05613	0.37474	1.18381	0.36788	5.45E-03	2.48E-06	7.69E-07	2.78E-06	7.24E-07	5.4559E-03
520609.8	4258767.86	31387.2034	0.16728	0.1278	0.16089	0.13246	5.44E-03	3.93E-07	2.62E-07	3.78E-07	2.61E-07	5.4453E-03
520540.3	4258155.15	31381.80987	0.14513	0.22878	0.14778	0.2417	5.44E-03	3.41E-07	4.69E-07	3.47E-07	4.76E-07	5.4447E-03
520138.92	4258272.5	31377.7961	0.25076	4.97316	0.25583	5.78257	5.44E-03	5.89E-07	1.02E-05	6.01E-07	1.14E-05	5.4651E-03
520549.82	4258169.24	31374.51428	0.14419	0.21918	0.14625	0.23141	5.44E-03	3.39E-07	4.50E-07	3.43E-07	4.56E-07	5.4434E-03
519981.81	4258956.42	31362.51426	1.41395	0.3175	1.61138	0.31363	5.44E-03	3.32E-06	6.51E-07	3.78E-06	6.17E-07	5.4481E-03
520500.32	4258999.35	31333.05873	0.27333	0.11898	0.26209	0.12445	5.43E-03	6.42E-07	2.44E-07	6.15E-07	2.45E-07	5.4363E-03
520543.77	4258931.32	31327.55692	0.22589	0.11885	0.21735	0.12428	5.43E-03	5.30E-07	2.44E-07	5.10E-07	2.45E-07	5.4352E-03
519966.39	4258910.09	31318.00888	1.10074	0.36172	1.23486	0.35568	5.43E-03	2.58E-06	7.42E-07	2.90E-06	7.00E-07	5.4389E-03
520490.97	4259013.22	31241.41052	0.28527	0.11885	0.27357	0.12442	5.42E-03	6.70E-07	2.44E-07	6.42E-07	2.45E-07	5.4205E-03
520564.86	4258195.71	31228.59453	0.14257	0.20549	0.14335	0.21628	5.42E-03	3.35E-07	4.21E-07	3.37E-07	4.26E-07	5.4180E-03
520276.36	4258142.93	31228.06758	0.19077	1.03997	0.20168	1.13476	5.42E-03	4.48E-07	2.13E-06	4.73E-07	2.23E-06	5.4217E-03
520335.19	4258113.12	31220.79746	0.17596	0.68804	0.18434	0.74106	5.42E-03	4.13E-07	1.41E-06	4.33E-07	1.46E-06	5.4188E-03
520595.27	4258395.2	31220.12456	0.15113	0.17072	0.14842	0.179	5.41E-03	3.55E-07	3.50E-07	3.48E-07	3.52E-07	5.4164E-03
520246.94	4258162.84	31206.53256	0.19904	1.3247	0.20934	1.45537	5.41E-03	4.67E-07	2.72E-06	4.91E-07	2.86E-06	5.4192E-03
520596.4	4258372.31	31182.00059	0.1489	0.17158	0.14661	0.18014	5.41E-03	3.50E-07	3.52E-07	3.44E-07	3.55E-07	5.4098E-03
520559.51	4258183.4	31176.31814	0.14294	0.21017	0.14427	0.22159	5.41E-03	3.36E-07	4.31E-07	3.39E-07	4.36E-07	5.4089E-03
520575.3	4258220.2	31174.40693	0.14178	0.19689	0.14144	0.20641	5.41E-03	3.33E-07	4.04E-07	3.32E-07	4.06E-07	5.4085E-03
519985.62	4258967.99	31171.96545	1.50532	0.30762	1.72374	0.30409	5.41E-03	3.53E-06	6.31E-07	4.05E-06	5.99E-07	5.4154E-03
520591.34	4258436.63	31167.89581	0.15573	0.16968	0.1525	0.17799	5.41E-03	3.66E-07	3.48E-07	3.58E-07	3.50E-07	5.4074E-03
520596.62	4258347.02	31156.0985	0.14672	0.17329	0.14515	0.1821	5.40E-03	3.44E-07	3.55E-07	3.41E-07	3.58E-07	5.4053E-03
519968.23	4258920.84	31154.28214	1.14045	0.34959	1.28131	0.34418	5.40E-03	2.68E-06	7.17E-07	3.01E-06	6.78E-07	5.4106E-03
519954.36	4258797.06	31113.23476	0.79465	0.54636	0.89	0.52341	5.40E-03	1.87E-06	1.12E-06	2.09E-06	1.03E-06	5.4026E-03
520566.72	4258891.8	31080.32205	0.20502	0.11936	0.19781	0.12453	5.39E-03	4.81E-07	2.45E-07	4.64E-07	2.45E-07	5.3922E-03
520581.97	4258858.28	31069.59369	0.19184	0.12088	0.1851	0.12576	5.39E-03	4.50E-07	2.48E-07	4.35E-07	2.48E-07	5.3903E-03
519953.72	4258819.63	31062.04939	0.82459	0.49675	0.92182	0.47888	5.39E-03	1.94E-06	1.02E-06	2.16E-06	9.43E-07	5.3936E-03
520585.61	4258849.58	31061.21186	0.18875	0.12129	0.18207	0.12612	5.39E-03	4.43E-07	2.49E-07	4.27E-07	2.48E-07	5.3888E-03
519958.53	4258879.46	31054.88308	0.96144	0.39792	1.07441	0.38929	5.39E-03	2.26E-06	8.16E-07	2.52E-06	7.66E-07	5.3927E-03
519999.85	4258608.79	31034.71824	0.74881	1.75384	0.89451	1.57714	5.38E-03	1.76E-06	3.60E-06	2.10E-06	3.10E-06	5.3934E-03
520589.25	4258840.88	31029.38857	0.18567	0.12187	0.17913	0.12662	5.38E-03	4.36E-07	2.50E-07	4.21E-07	2.49E-07	5.3833E-03
519970.79	4258692	31025.01047	0.72853	0.93336	0.83507	0.87257	5.38E-03	1.71E-06	1.91E-06	1.96E-06	1.72E-06	5.3884E-03
520188.05	4258212.66	31022.83081	0.2193	2.40407	0.22493	2.70385	5.38E-03	5.15E-07	4.93E-06	5.28E-07	5.32E-06	5.3921E-03
520613.31	4258759.49	31002.55702	0.16464	0.12786	0.15835	0.13259	5.38E-03	3.87E-07	2.62E-07	3.72E-07	2.61E-07	5.3785E-03
520049.36	4258492.22	30988.29517	0.60538	7.88068	0.6765	5.67725	5.37E-03	1.42E-06	1.62E-05	1.59E-06	1.12E-05	5.4051E-03
520178.23	4258222.63	30981.3012	0.22368	2.71463	0.2286	3.07054	5.37E-03	5.25E-07	5.57E-06	5.37E-07	6.04E-06	5.3862E-03
519954.35	4258845.28	30975.28595	0.86806	0.44927	0.97096	0.43596	5.37E-03	2.04E-06	9.21E-07	2.28E-06	8.58E-07	5.3786E-03
520197.87	4258202.69	30975.20199	0.21488	2.14652	0.22131	2.40153	5.37E-03	5.04E-07	4.40E-06	5.20E-07	4.73E-06	5.3827E-03
520592.9	4258832.17	30970.54652	0.18263	0.12236	0.17619	0.12705	5.37E-03	4.29E-07	2.51E-07	4.14E-07	2.50E-07	5.3730E-03
520082.62	4259095.7	30954.8127	14.59472	0.25113	22.42507	0.2376	5.37E-03	3.43E-05	5.15E-07	5.26E-05	4.68E-07	5.4569E-03
520617.18	4258726.3	30930.02034	0.16	0.13102	0.15393	0.1362	5.36E-03	3.76E-07	2.69E-07	3.61E-07	2.68E-07	5.3659E-03
520029.56	4258540.79	30924.54814	0.73396	3.8691	0.86901	3.15498	5.36E-03	1.72E-06	7.94E-06	2.04E-06	6.21E-06	5.3816E-03
520593.68	4258288.15	30888.30243	0.14239	0.18063	0.14164	0.18864	5.36E-03	3.34E-07	3.70E-07	3.33E-07	3.71E-07	5.3588E-03
520596.54	4258823.47	30885.67939	0.17966	0.12274	0.17326	0.12737	5.36E-03	4.22E-07	2.52E-07	4.07E-07	2.51E-07	5.3583E-03
520595.11	4258298.77	30875.8885	0.14291	0.17865	0.1422	0.18684	5.36E-03	3.36E-07	3.66E-07	3.34E-07	3.68E-07	5.3567E-03

519969.92	4258931.53	30860.23905	1.17707	0.33783	1.32387	0.33298	5.35E-03	2.76E-06	6.93E-07	3.11E-06	6.55E-07	5.3598E-03
520207.69	4258192.72	30856.11684	0.21047	1.92969	0.21768	2.14903	5.35E-03	4.94E-07	3.96E-06	5.11E-07	4.23E-06	5.3610E-03
520168.41	4258232.6	30832.86998	0.22799	3.09585	0.23237	3.52199	5.35E-03	5.35E-07	6.35E-06	5.46E-07	6.93E-06	5.3622E-03
520592.39	4258277.58	30824.58883	0.1418	0.18238	0.14096	0.19027	5.35E-03	3.33E-07	3.74E-07	3.31E-07	3.75E-07	5.3478E-03
520305.79	4258123.02	30811.33793	0.18169	0.83807	0.19175	0.90866	5.34E-03	4.27E-07	1.72E-06	4.50E-07	1.79E-06	5.3485E-03
520617.71	4258701.09	30801.21817	0.15785	0.13437	0.15188	0.13954	5.34E-03	3.71E-07	2.76E-07	3.57E-07	2.75E-07	5.3436E-03
520256.76	4258152.87	30797.56408	0.1945	1.21921	0.20499	1.33579	5.34E-03	4.57E-07	2.50E-06	4.81E-07	2.63E-06	5.3478E-03
520555.86	4258916.31	30793.62712	0.21491	0.1181	0.20711	0.12339	5.34E-03	5.05E-07	2.42E-07	4.86E-07	2.43E-07	5.3425E-03
520594.9	4258420.11	30788.66838	0.15308	0.16901	0.15004	0.17715	5.34E-03	3.59E-07	3.47E-07	3.52E-07	3.49E-07	5.3416E-03
520514.38	4258983.52	30776.1757	0.25658	0.11803	0.24623	0.12339	5.34E-03	6.02E-07	2.42E-07	5.78E-07	2.43E-07	5.3397E-03
520523.64	4258969.68	30760.06364	0.24638	0.11793	0.23663	0.12329	5.34E-03	5.78E-07	2.42E-07	5.56E-07	2.43E-07	5.3368E-03
520549.16	4258158.95	30749.78604	0.14312	0.22016	0.14543	0.23248	5.33E-03	3.36E-07	4.52E-07	3.41E-07	4.58E-07	5.3350E-03
520574.41	4258209.81	30748.08572	0.14102	0.19775	0.14102	0.20757	5.33E-03	3.31E-07	4.06E-07	3.31E-07	4.09E-07	5.3346E-03
520129.1	4258282.47	30738.19044	0.2549	6.07117	0.26074	7.10685	5.33E-03	5.98E-07	1.25E-05	6.12E-07	1.40E-05	5.3591E-03
520588.13	4258479.95	30737.68809	0.15972	0.16765	0.15539	0.17618	5.33E-03	3.75E-07	3.44E-07	3.65E-07	3.47E-07	5.3327E-03
520600.18	4258814.77	30732.76992	0.17666	0.12304	0.17029	0.12761	5.33E-03	4.15E-07	2.52E-07	4.00E-07	2.51E-07	5.3318E-03
520286.18	4258132.96	30695.77106	0.18621	0.96613	0.19687	1.0518	5.32E-03	4.37E-07	1.98E-06	4.62E-07	2.07E-06	5.3290E-03
520591.22	4258267.07	30693.47424	0.14117	0.1839	0.14023	0.19177	5.32E-03	3.31E-07	3.77E-07	3.29E-07	3.77E-07	5.3251E-03
520217.51	4258182.75	30679.15479	0.20611	1.74496	0.21402	1.93564	5.32E-03	4.84E-07	3.58E-06	5.02E-07	3.81E-06	5.3295E-03
520533.07	4258955.77	30673.40377	0.23659	0.1177	0.22742	0.12306	5.32E-03	5.55E-07	2.41E-07	5.34E-07	2.42E-07	5.3217E-03
520092.95	4259106.51	30670.84015	13.6661	0.24724	12.84313	0.23256	5.32E-03	3.21E-05	5.07E-07	3.02E-05	4.58E-07	5.3829E-03
520325.4	4258113.09	30666.78816	0.17655	0.73403	0.18567	0.7917	5.32E-03	4.14E-07	1.51E-06	4.36E-07	1.56E-06	5.3229E-03
520586.29	4258244.93	30654.73088	0.14063	0.1884	0.13968	0.19664	5.32E-03	3.30E-07	3.86E-07	3.28E-07	3.87E-07	5.3184E-03
519987.03	4258978.56	30637.52506	1.54638	0.29786	1.77303	0.29461	5.31E-03	3.63E-06	6.11E-07	4.16E-06	5.80E-07	5.3229E-03
520558.74	4258173.06	30619.89608	0.14201	0.21114	0.14367	0.22272	5.31E-03	3.33E-07	4.33E-07	3.37E-07	4.38E-07	5.3124E-03
520054.19	4259073.64	30617.15219	7.26964	0.25393	12.32973	0.24508	5.31E-03	1.71E-05	5.21E-07	2.89E-05	4.82E-07	5.3574E-03
519959.62	4258737.41	30612.00119	0.7284	0.71781	0.82353	0.67811	5.31E-03	1.71E-06	1.47E-06	1.93E-06	1.33E-06	5.3160E-03
520109.43	4258312.41	30608.24031	0.27444	10.07957	0.28436	11.60779	5.31E-03	6.44E-07	2.07E-05	6.68E-07	2.28E-05	5.3537E-03
520597.59	4258309.85	30596.69156	0.14309	0.17586	0.14229	0.18423	5.31E-03	3.36E-07	3.61E-07	3.34E-07	3.63E-07	5.3083E-03
520044.27	4259063.65	30585.63122	5.19516	0.25622	7.29918	0.24889	5.30E-03	1.22E-05	5.25E-07	1.71E-05	4.90E-07	5.3353E-03
520158.59	4258242.57	30565.13552	0.23218	3.57342	0.2363	4.08724	5.30E-03	5.45E-07	7.33E-06	5.55E-07	8.05E-06	5.3179E-03
520603.83	4258806.07	30552.04285	0.17371	0.1234	0.1674	0.1279	5.30E-03	4.08E-07	2.53E-07	3.93E-07	2.52E-07	5.3004E-03
519971.49	4258942.17	30535.43802	1.21249	0.32673	1.36552	0.32236	5.30E-03	2.85E-06	6.70E-07	3.21E-06	6.35E-07	5.3036E-03
519956.78	4258754.66	30535.33731	0.73503	0.65879	0.83063	0.62401	5.30E-03	1.73E-06	1.35E-06	1.95E-06	1.23E-06	5.3025E-03
519954.83	4258870.54	30524.50358	0.90651	0.40769	1.01069	0.39803	5.29E-03	2.13E-06	8.36E-07	2.37E-06	7.84E-07	5.3005E-03
520576.74	4258877.65	30523.4699	0.19672	0.11902	0.18992	0.12398	5.29E-03	4.62E-07	2.44E-07	4.46E-07	2.44E-07	5.2956E-03
520052.25	4258475.41	30515.15909	0.53939	9.10304	0.5953	6.26001	5.29E-03	1.27E-06	1.87E-05	1.40E-06	1.23E-05	5.3264E-03
520542.68	4258941.78	30503.6001	0.22714	0.11737	0.21855	0.1227	5.29E-03	5.33E-07	2.41E-07	5.13E-07	2.42E-07	5.2922E-03
520590.14	4258256.59	30502.96004	0.14051	0.18522	0.13951	0.19315	5.29E-03	3.30E-07	3.80E-07	3.28E-07	3.80E-07	5.2920E-03
520598.92	4258320.43	30472.73617	0.14355	0.17409	0.14261	0.18261	5.29E-03	3.37E-07	3.57E-07	3.35E-07	3.59E-07	5.2867E-03
520227.33	4258172.78	30442.84493	0.20176	1.58622	0.21031	1.75311	5.28E-03	4.74E-07	3.25E-06	4.94E-07	3.45E-06	5.2878E-03
520565.46	4258902.33	30430.93096	0.20651	0.11789	0.19926	0.12305	5.28E-03	4.85E-07	2.42E-07	4.68E-07	2.42E-07	5.2795E-03
520600.05	4258356.04	30418.15247	0.14617	0.17048	0.14424	0.17908	5.28E-03	3.43E-07	3.50E-07	3.39E-07	3.53E-07	5.2773E-03
520499.65	4259009.63	30417.18262	0.27439	0.11722	0.26322	0.12261	5.28E-03	6.44E-07	2.40E-07	6.18E-07	2.41E-07	5.2775E-03
520607.47	4258797.37	30415.33493	0.17092	0.12383	0.16468	0.12826	5.28E-03	4.01E-07	2.54E-07	3.87E-07	2.52E-07	5.2767E-03
520585.17	4258234.44	30382.81778	0.13998	0.18948	0.13915	0.19798	5.27E-03	3.29E-07	3.89E-07	3.27E-07	3.90E-07	5.2712E-03
520509.06	4258995.73	30360.36059	0.26283	0.11726	0.2522	0.12258	5.27E-03	6.17E-07	2.40E-07	5.92E-07	2.41E-07	5.2676E-03
519953.81	4258771.61	30337.46751	0.74219	0.60534	0.83205	0.57615	5.26E-03	1.74E-06	1.24E-06	1.95E-06	1.13E-06	5.2680E-03
520266.58	4258142.9	30326.54785	0.18996	1.12609	0.20056	1.22988	5.26E-03	4.46E-07	2.31E-06	4.71E-07	2.42E-06	5.2656E-03
520599.87	4258381.43	30326.09101	0.14824	0.16891	0.14568	0.17717	5.26E-03	3.48E-07	3.46E-07	3.42E-07	3.49E-07	5.2613E-03
520552.5	4258927.71	30318.18825	0.21814	0.11706	0.21013	0.12233	5.26E-03	5.12E-07	2.40E-07	4.93E-07	2.41E-07	5.2600E-03
520591.33	4258462.49	30315.10218	0.15729	0.16733	0.15347	0.17575	5.26E-03	3.69E-07	3.43E-07	3.60E-07	3.46E-07	5.2594E-03
520598.57	4258403.87	30297.38456	0.15041	0.16815	0.14753	0.1762	5.25E-03	3.53E-07	3.45E-07	3.46E-07	3.47E-07	5.2563E-03
520573.59	4258199.44	30296.99871	0.14024	0.19857	0.14061	0.20865	5.25E-03	3.29E-07	4.07E-07	3.30E-07	4.11E-07	5.2564E-03
520568.49	4258187.24	30283.54534	0.14058	0.20276	0.14151	0.21345	5.25E-03	3.30E-07	4.16E-07	3.32E-07	4.20E-07	5.2540E-03
520620.71	4258717.86	30251.49003	0.15754	0.13083	0.1516	0.13598	5.25E-03	3.70E-07	2.68E-07	3.56E-07	2.68E-07	5.2482E-03
520148.77	4258252.53	30222.6557	0.23636	4.18129	0.24039	4.82252	5.24E-03	5.55E-07	8.58E-06	5.64E-07	9.49E-06	5.2612E-03
519987.12	4258636.77	30218.75801	0.71727	1.35169	0.83822	1.23935	5.24E-03	1.68E-06	2.77E-06	1.97E-06	2.44E-06	5.2502E-03
519950.62	4258836.27	30170.00035	0.81552	0.46031	0.90954	0.44539	5.23E-03	1.91E-06	9.44E-07	2.14E-06	8.77E-07	5.2387E-03
519977.12	4258664.6	30164.16001	0.70839	1.09964	0.81929	1.01926	5.23E-03	1.66E-06	2.26E-06	1.92E-06	2.01E-06	5.2397E-03
520315.61	4258113.05	30155.39261	0.17715	0.78441	0.18677	0.84821	5.23E-03	4.16E-07	1.61E-06	4.38E-07	1.67E-06	5.2344E-03
520237.15	4258162.81	30148.99683	0.19744	1.44869	0.20653	1.59543	5.23E-03	4.64E-07	2.97E-06	4.85E-07	3.14E-06	5.2363E-03
519972.95	4258952.77	30148.38168	1.24635	0.31613	1.40542	0.31218	5.23E-03	2.93E-06	6.48E-07	3.30E-06	6.15E-07	5.2366E-03
520296	4258122.99	30137.57729	0.18174	0.89991	0.19209	0.97737	5.23E-03	4.27E-07	1.85E-06	4.51E-07	1.92E-06	5.2319E-03
520019.65	4258560.22	30132.39171	0.74116	2.91354	0.89039	2.46801	5.23E-03	1.74E-06	5.98E-06	2.09E-06	4.86E-06	5.2410E-03
520611.11	4258788.66	30106.58231	0.168	0.12399	0.16179	0.1284	5.22E-03	3.94E-07	2.54E-07	3.80E-07	2.53E-07	5.2231E-03
520620.31	4258742.75	30075.77263	0.15958	0.12775	0.15355	0.13267	5.22E-03	3.75E-07	2.62E-07	3.60E-07	2.61E-07	5.2178E-03
520584.14	4258223.98	30062.73988	0.13931	0.19044	0.13868	0.19922	5.21E-03	3.27E-07	3.91E-07	3.26E-07	3.92E-07	5.2157E-03
520558.02	4258162.74	30062.37317	0.14105	0.21205	0.14299	0.22377	5.21E-03	3.31E-07	4.35E-07	3.36E-07	4.40E-07	5.2157E-03
519949.95	4258810.54	30018.36199	0.77142	0.50845	0.85933	0.48876	5.21E-03	1.81E-06	1.04E-06	2.02E-06	9.62E-07	5.2124E-03
519976.51	4258964.23	30005.55781	1.31869	0.30637	1.49266	0.30281	5.20E-03	3.10E-06	6.28E-07	3.50E-06	5.96E-07	5.2122E-03
519989.93	4258628.23	29971.5234	0.71459	1.43795	0.83758	1.31416	5.20E-03	1.68E-06	2.95E-06	1.97E-06	2.59E-06	5.2076E-03
520575.29	4258888.25	29966.06145	0.19833	0.11762	0.19154	0.12259	5.20E-03	4.66E-07	2.41E-07	4.50E-07	2.41E-07	5.1989E-03
520119.28	4258292.44	29950.23357	0.25867	7.65376	0.26582	8.97114	5.19E-03	6.07E-07	1.57E-05	6.24E-07	1.77E-05	5.2293E-03
520621.27	4258692.58	29940.50118	0.15543	0.13437	0.14957	0.13937	5.19E-03	3.65E-07	2.76E-07	3.51E-07	2.74E-07	5.1943E-03
519951.13	4258861.61	29918.10723	0.85428	0.41773	0.95082	0.40681	5.19E-03	2.01E-06	8.57E-07	2.23E-06	8.01E-07	5.1951E-03
520083.05	4259106.53	29908.15166	16.4484	0.24371	21.66329	0.23068	5.19E-03	3.86E-05	5.00E-07	5.09E-05	4.54E-07	5.2779E-03
520522.88	4258980	29890.10105	0.24738	0.11636	0.23763	0.1216	5.18E-03	5.81E-07	2.39E-07	5.58E-07	2.39E-07	5.1859E-03
519950.72	4258788.29	29885.57995	0.742	0.55807	0.82879	0.53323	5.18E-03	1.74E-06	1.14E-06	1.95E-06	1.05E-06	5.1894E-03
520276.4	4258132.93	29885.52907	0.18568	1.04297	0.19619	1.13684	5.18E-03	4.36E-07	2.14E-06	4.61E-07	2.24E-06	5.1888E-03
520614.76	4258779.96	29877.46678	0.16532	0.12425	0.15916	0.12867	5.18E-03	3.88E-07	2.55E-07	3.74E-07	2.53E-07	5.1834E-03
520532.19	4258966.14	29850.63075	0.2377	0.11621	0.22852	0.12146	5.18E-03	5.58E-07	2.38E-07	5.36E-07	2.39E-07	5.1790E-03
519961.47	4258717.75	29841.8968	0.69994	0.78579	0.79296	0.7401	5.18E-03	1.64E-06	1.61E-06	1.86E-06	1.46E-06	5.1825E-03
520246.97	4258152.84	29818.0898	0.19318	1.32843	0.20268	1.45842	5.17E-03	4.54E-07	2.72E-06	4.76E-07	2.87E-06	5.1783E-03
520567.65	4258176.87	29799.73794	0.13976	0.20367	0.14104	0.21457	5.17E-03	3.28E-07	4.18E-07	3.31E-07	4.22E-07	5.1701E-03
520564.31	4258912.81	29772.73555	0.20788	0.11641	0.20056	0.12153	5.16E-03	4.88E-07	2.39E-07	4.71E-07	2.39E-07	5.1654E-03
519957.25	4258906.31	29764.15638	0.97511	0.35929	1.08573	0.35302	5.16E-03	2.29E-06	7.37E-07	2.55E-06	6.95E-07	5.1687E-03
520138.95	4258262.5	29751.17817	0.24035	4.98416	0.2447	5.7949	5.16E-03	5.64E-07	1.02E-05	5.74E-07	1.14E-05	5.1830E-03
520598.23	4258428.87	29743.27097	0.15223	0.16637	0.14903	0.17438	5.16E-03	3.57E-07	3.41E-07	3.50E-07	3.43E-07	5.1602E-03
520583.19	4258213.56	29716.0298	0.13862	0.19127	0.13827	0.20036	5.15E-03	3.25E-07	3.92E-07	3.25E-07	3.94E-07	5.1555E-03
520541.67	4258952.2	29694.63264	0.22826	0.1159	0.21964	0.12113	5.15E-03	5.36E-07	2.38E-07	5.16E-07	2.38E-07	5.1519E-03
520044.28	4259073.65	29679.73824	5.23124	0.24893	7.32551	0.24186	5.15E-03	1.23E-05	5.11E-07	1.72E-05	4.76E-07	5.1783E-03
520092.96	4259116.51	29678.54192	13.58657	0.24045	12.80452	0.22633	5.15E-03	3.19E-05	4.93E-07	3.01E-05	4.46E-07	5.2105E-03
519959.16	4258917.1	29659.89015	1.01005	0.34735	1.12566	0.34178	5.14E-03	2.37E-06	7.12E-07	2.64E-06	6.73E-07	5.1508E-03
520603.49	4258365.06	29653.60479	0.14558	0.16758	0.1433	0.17595	5.14E-03	3.42E-07	3.44E-07	3.36E-07	3.46E-07	5.1447E-03
520603.8	4258340	29614.43984	0.14345	0.16943	0.14192	0.17794	5.14E-03	3.37E-07	3.47E-07	3.33E-07	3.50E-07	5.1379E-03
520618.4	4258771.26	29596.68579	0.16269	0.12441	0.1566	0.12888	5.13E-03	3.82E-07	2.55E-07	3.68E-07	2.54E-07	5.1347E-03
520305.82	4258113.02	29563.1387	0.17739	0.84021	0.18738	0.91035	5.13E-03	4.16E-07	1.72E-06	4.40E-07	1.79E-06	5.1320E-03
519977.99	4258974.83	29555.105	1.35489	0.29677	1.53587	0.29352	5.13E-03	3.18E-06	6.09E-07	3.61E-06	5.78E-07	5.1342E-03
520551.34	4258938.19	29543.76146	0.21937	0.11561	0.21131	0.12081	5.12E-03	5.15E-07	2.37E-07	4.96E-07	2.38E-07	5.1257E-03
520623.82	4258734.39	29531.60268	0.15715	0.12764	0.15127	0.13261	5.12E-03	3.69E-07	2.62E-07	3.55E-07	2.61E-07	5.1234E-03
520065.62	4258402.25	29530.95626	0.35818	23.24203	0.38646	10.34739	5.12E-03	8.41E-07	4.77E-05	9.07E-07	2.04E-05	5.1918E-03
520624.24	4258709.43	29502.75622	0.15513	0.1307	0.14932	0.13577	5.12E-03	3.64E-07	2.68E-07	3.51E-07	2.67E-07	5.1184E-03
520508.34	4259006.03	29497.6433	0.2639	0.1156	0.2533	0.12083	5.12E-03	6.20E-07	2.37E-07	5.95E-07	2.38E-07	5.1179E-03
520188.08	4258202.66	29492.04914	0.21142	2.41065	0.21623	2.7072	5.12E-03	4.96E-07	4.94E-06	5.08E-07	5.33E-06	5.1265E-03
520099.61	4258322.38	29483.01474	0.27754	14.34204	0.2896	15.74337	5.11E-03	6.52E-07	2.94E-05	6.80E-07	3.10E-05	5.1754E-03
520197.9	4258192.69	29481.31525	0.20742	2.15197	0.21294	2.40538	5.11E-03	4.87E-07	4.41E-06	5.00E-07	4.73E-06	5.1235E-03
519960.94	4258927.82	29479.74552	1.04359	0.33595	1.16411	0.33097	5.11E-03	2.45E-06	6.89E-07	2.73E-06	6.52E-07	5.1197E-03
520517.8	4258992.11	29460.68813	0.25295	0.11558	0.24291	0.12077	5.11E-03	5.94E-07	2.37E-07	5.70E-07	2.38E-07	5.1115E-03
520603.35	4258390.56	29449.06011	0.14752	0.16631	0.14476	0.17428	5.11E-03	3.46E-07	3.41E-07	3.40E-07	3.43E-07	5.1092E-03
520178.26	4258212.63	29448.61668	0.21547	2.72122	0.21958	3.07519	5.11E-03	5.06E-07	5.58E-06	5.16E-07	6.05E-06	5.1204E-03
520009.73	4258579.66	29423.37035	0.72809	2.26632	0.88089	1.97516	5.10E-03	1.71E-06	4.65E-06	2.07E-06	3.89E-06	5.1157E-03
520256.79	4258142.87	29420.22081	0.18888	1.22288	0.19873	1.33782	5.10E-03	4.43E-07	2.51E-06	4.67E-07	2.63E-06	5.1089E-03
520595.26	4258248.77	29419.45348	0.13814	0.18202	0.13705	0.18978	5.10E-03	3.24E-07	3.73E-07	3.22E-07	3.74E-07	5.1041E-03
520286.22	4258122.96	29417.13699	0.18147	0.96868	0.19181	1.05373	5.10E-03	4.26E-07	1.99E-06	4.50E-07	2.07E-06	5.1072E-03
520207.72	4258182.72	29401.4435	0.20342	1.93439	0.20968	2.15295	5.10E-03	4.78E-07	3.97E-06	4.92E-07	4.24E-06	5.1087E-03
520588.99	4258865.44	29397.64856	0.18737	0.11776	0.18105	0.12246	5.10E-03	4.40E-07	2.42E-07	4.25E-07	2.41E-07	5.1002E-03
520052.9	4259085.75	29383.67035	6.97461	0.24471	11.40432	0.23647	5.10E-03	1.64E-05	5.02E-07	2.68E-05	4.65E-07	5.1406E-03
520592.6	4258856.82	29383.4287	0.18445	0.11816	0.17817	0.1228	5.10E-03	4.33E-07	2.42E-07	4.18E-07	2.42E-07	5.0978E-03
520573.97	4258898.8	29378.97059	0.19981	0.11619	0.19298	0.12116	5.10E-03	4.69E-07	2.38E-07	4.53E-07	2.39E-07	5.0970E-03
520601.21	4258281.36	29370.46162	0.13921	0.17611	0.13836	0.18376	5.09E-03	3.27E-07	3.61E-07	3.25E-07	3.62E-07	5.0955E-03
520601.87	4258412.54	29358.62034	0.14964	0.16561	0.1466	0.17348	5.09E-03	3.51E-07	3.40E-07	3.44E-07	3.41E-07	5.0935E-03
520577.46	4258191.09	29357.795	0.13822	0.1958	0.13875	0.20575	5.09E-03	3.24E-07	4.02E-07	3.26E-07	4.05E-07	5.0934E-03
520596.21	4258848.19	29355.35933	0.18155	0.11851	0.17529	0.12311	5.09E-03	4.26E-07	2.43E-07	4.12E-07	2.42E-07	5.0929E-03
520602.58	4258291.96	29350.57298	0.13973	0.17427	0.13892	0.18209	5.09E-03	3.28E-07	3.57E-07	3.26E-07	3.58E-07	5.0921E-03
519951.5	4258886.61	29347.9946	0.88734	0.38086	0.98587	0.37282	5.09E-03	2.08E-06	7.81E-07	2.31E-06	7.34E-07	5.0962E-03
519964.37	4258700.63	29347.31749	0.68451	0.85785	0.77825	0.80535	5.09E-03	1.61E-06	1.76E-06	1.83E-06	1.59E-06	5.0969E-03
520582.31	4258203.17	29340.82602	0.13791	0.19205	0.13789	0.20143	5.09E-03	3.24E-07	3.94E-07	3.24E-07	3.97E-07	5.0905E-03
520561.23	4258924.1	29339.01898	0.21076	0.11532	0.20325	0.12043	5.09E-03	4.95E-07	2.37E-07	4.77E-07	2.37E-07	5.0902E-03
520599.96	4258270.81	29329.30853	0.13866	0.1777	0.1377	0.18526	5.09E-03	3.26E-07	3.64E-07	3.23E-07	3.65E-07	5.0884E-03
520599.83	4258839.56	29306.02753	0.17867	0.11904	0.17253	0.12357	5.08E-03	4.19E-07	2.44E-07	4.05E-07	2.43E-07	5.0843E-03
520566.87	4258166.53	29300.67302	0.13889	0.20458	0.14049	0.21563	5.08E-03	3.26E-07	4.20E-07	3.30E-07	4.24E-07	5.0836E-03
520168.44	4258222.6	29294.07765	0.2194	3.10316	0.22303	3.52711	5.08E-03	5.15E-07	6.36E-06	5.24E-07	6.94E-06	5.0953E-03
519946.88	4258827.26	29284.18096	0.76567	0.47115	0.85116	0.45457	5.08E-03	1.80E-06	9.66E-07	2.00E-06	8.95E-07	5.0849E-03
520594.75	4258471.48	29260.49266	0.1562	0.1647	0.15207	0.17297	5.08E-03	3.67E-07	3.38E-07	3.57E-07	3.40E-07	5.0765E-03
520217.54	4258172.75	29252.7208	0.19941	1.74942	0.20639	1.93903	5.07E-03	4.68E-07	3.59E-06	4.85E-07	3.82E-06	5.0821E-03
520604.08	4258302.61	29246.65554	0.14019	0.17215	0.13933	0.18019	5.07E-03	3.29E-07	3.53E-07	3.27E-07	3.55E-07	5.0741E-03
520622.04	4258762.56	29242.38329	0.1601	0.12445	0.15409	0.129	5.07E-03	3.76E-07	2.55E-07	3.62E-07	2.54E-07	5.0732E-03
520603.44	4258830.94	29234.93289	0.17581	0.11954	0.16979	0.12401	5.07E-03	4.13E-07	2.45E-07	3.99E-07	2.44E-07	5.0720E-03
519947.43	4258852.69	29234.07246	0.8046	0.42785	0.89429	0.41549	5.07E-03	1.89E-06	8.77E-07	2.10E-06	8.18E-07	5.0762E-03
519962.58	4258938.49	29233.36053	1.07559	0.32504	1.20094	0.32057	5.07E-03	2.53E-06	6.67E-07	2.82E-06	6.31E-07	5.0770E-03
520598.82	4258260.31	29228.69255	0.13807	0.17907	0.13701	0.18663	5.07E-03	3.24E-07	3.67E-07	3.22E-07	3.67E-07	5.0710E-03
520594.07	4258238.25	29223.46303	0.13755	0.18318	0.1365	0.19113	5.07E-03	3.23E-07	3.76E-07	3.20E-07	3.76E-07	5.0701E-03
520129.13	4258272.47	29153.08279	0.2441	6.08444	0.24922	7.12524	5.06E-03	5.73E-07	1.25E-05	5.85E-07	1.40E-05	5.0841E-03
520607.05	4258822.31	29139.53497	0.17302	0.11993	0.16704	0.12433	5.05E-03	4.06E-07	2.46E-07	3.92E-07	2.45E-07	5.0554E-03
520158.62	4258232.57	29058.60602	0.2233	3.57944	0.22663	4.09779	5.04E-03	5.24E-07	7.34E-06	5.32E-07	8.07E-06	5.0565E-03
520227.36	4258162.78	29057.64762	0.19544	1.59025	0.20308	1.7563	5.04E-03	4.59E-07	3.26E-06	4.77E-07	3.46E-06	5.0476E-03
520531.37	4258976.48	29048.00529	0.23873	0.11473	0.22955	0.11985	5.04E-03	5.60E-07	2.35E-07	5.39E-07	2.36E-07	5.0398E-03
520039.44	4258511.65	29019.39447	0.64214	5.37061	0.72914	4.19689	5.03E-03	1.51E-06	1.10E-05	1.71E-06	8.26E-06	5.0558E-03
520610.66	4258813.69	29016.18715	0.17026	0.12027	0.16431	0.1246	5.03E-03	4.00E-07	2.47E-07	3.86E-07	2.45E-07	5.0340E-03
520109.46	4258302.41	29009.13892	0.26191	10.10691	0.27092	11.62608	5.03E-03	6.15E-07	2.07E-05	6.36E-07	2.29E-05	5.0764E-03
520266.61	4258132.9	29002.78723	0.18468	1.12933	0.19474	1.23172	5.03E-03	4.34E-07	2.32E-06	4.57E-07	2.42E-06	5.0360E-03
520592.98	4258227.77	28986.01123	0.13694	0.18416	0.13602	0.19236	5.03E-03	3.21E-07	3.78E-07	3.19E-07	3.79E-07	5.0289E-03
520606.21	4258313.54	28977.89824	0.1404	0.1698	0.13939	0.178	5.03E-03	3.30E-07	3.48E-07	3.27E-07	3.50E-07	5.0274E-03
520083.06	4259116.53	28967.40832	16.33531	0.23706	21.55386	0.22453	5.02E-03	3.84E-05	4.86E-07	5.06E-05	4.42E-07	5.1141E-03
520627.32	4258726.02	28940.04019	0.15478	0.12748	0.14903	0.13245	5.02E-03	3.63E-07	2.61E-07	3.50E-07	2.61E-07	5.0208E-03
520607.19	4258348.92	28935.58028	0.14292	0.16679	0.14104	0.17512	5.02E-03	3.36E-07	3.42E-07	3.31E-07	3.45E-07	5.0201E-03
519964.1	4258949.11	28932.39317	1.10618	0.31462	1.23628	0.31059	5.02E-03	2.60E-06	6.45E-07	2.90E-06	6.11E-07	5.0249E-03
520576.57	4258180.69	28922.74549	0.13745	0.19667	0.13836	0.20684	5.02E-03	3.23E-07	4.03E-07	3.25E-07	4.07E-07	5.0180E-03
520540.74	4258962.6	28921.49215	0.22932	0.11445	0.22067	0.11958	5.02E-03	5.38E-07	2.35E-07	5.18E-07	2.35E-07	5.0178E-03
520296.04	4258112.99	28897.20856	0.17725	0.90222	0.1874	0.97889	5.01E-03	4.16E-07	1.85E-06	4.40E-07	1.93E-06	5.0167E-03
519946.17	4258801.44	28893.55938	0.72093	0.51974	0.80046	0.49826	5.01E-03	1.69E-06	1.07E-06	1.88E-06	9.81E-07	5.0171E-03
520583.87	4258884.7	28885.58714	0.19192	0.11593	0.18553	0.1207	5.01E-03	4.51E-07	2.38E-07	4.36E-07	2.38E-07	5.0114E-03
520606.92	4258374.08	28877.14645	0.14495	0.16519	0.1424	0.17325	5.01E-03	3.40E-07	3.39E-07	3.34E-07	3.41E-07	5.0100E-03
519953.07	4258745.73	28864.5328	0.68119	0.6686	0.76523	0.63326	5.01E-03	1.60E-06	1.37E-06	1.80E-06	1.25E-06	5.0124E-03
519947.83	4258877.77	28845.80534	0.83886	0.38967	0.92957	0.3807	5.00E-03	1.97E-06	7.99E-07	2.18E-06	7.49E-07	5.0089E-03
520614.27	4258805.06	28841.99709	0.16751	0.12056	0.16159	0.12483	5.00E-03	3.93E-07	2.47E-07	3.79E-07	2.46E-07	5.0038E-03
520625.69	4258753.86	28840.64258	0.15758	0.12448	0.1517	0.12913	5.00E-03	3.70E-07	2.55E-07	3.56E-07	2.54E-07	5.0035E-03
519950.14	4258762.77	28837.07037	0.6891	0.61595	0.77055	0.58537	5.00E-03	1.62E-06	1.26E-06	1.81E-06	1.15E-06	5.0075E-03
519967.41	4258960.47	28831.85946	1.1643	0.30501	1.30499	0.30138	5.00E-03	2.73E-06	6.26E-07	3.06E-06	5.93E-07	5.0078E-03
520237.18	4258152.81	28809.71837	0.19148	1.45231	0.1997	1.59845	5.00E-03	4.50E-07	2.98E-06	4.69E-07	3.15E-06	5.0040E-03
520094.86	4259127.17	28787.90651	12.75847	0.23408	11.81464	0.22027	4.99E-03	3.00E-05	4.80E-07	2.77E-05	4.34E-07	5.0517E-03
520550.28	4258948.64	28781.49519	0.22044	0.11417	0.21234	0.11928	4.99E-03	5.18E-07	2.34E-07	4.99E-07	2.35E-07	4.9935E-03
520572.76	4258909.31	28779.2717	0.20117	0.11475	0.19428	0.1197	4.99E-03	4.72E-07	2.35E-07	4.56E-07	2.36E-07	4.9930E-03
519999.81	4258599.1	28774.77115	0.70345	1.80416	0.83963	1.61848	4.99E-03	1.65E-06	3.70E-06	1.97E-06	3.19E-06	5.0014E-03
520627.77	4258700.99	28765.41899	0.15284	0.13073	0.14715	0.13564	4.99E-03	3.59E-07	2.68E-07	3.45E-07	2.67E-07	4.9905E-03
519977.12	4258655.32	28756.28996	0.67561	1.13623	0.7794	1.05236	4.99E-03	1.59E-06	2.33E-06	1.83E-06	2.07E-06	4.9955E-03
520055.4	4258436.43	28750.06725	0.41385	10.83102	0.44849	7.09331	4.99E-03	9.72E-07	2.22E-05	1.05E-06	1.40E-05	5.0248E-03
520148.8	4258242.53	28718.59763	0.22708	4.1891	0.2304	4.83399	4.98E-03	5.33E-07	8.59E-06	5.41E-07	9.52E-06	5.0003E-03
520591.97	4258217.32	28717.18287	0.13632	0.18498	0.1356	0.19349	4.98E-03	3.20E-07	3.79E-07	3.18E-07	3.81E-07	4.9823E-03
520601.57	4258437.63	28702.60098	0.15134	0.16376	0.14795	0.17166	4.98E-03	3.55E-07	3.36E-07	3.47E-07	3.38E-07	4.9797E-03
519955.87	4258728.36	28688.81598	0.67091	0.72668	0.75449	0.68678	4.98E-03	1.58E-06	1.49E-06	1.77E-06	1.35E-06	4.9821E-03
520517.02	4259002.44	28683.16101	0.25412	0.11406	0.24412	0.11914	4.97E-03	5.97E-07	2.34E-07	5.73E-07	2.35E-07	4.9766E-03
520617.88	4258796.43	28634.69433	0.16481	0.12085	0.15893	0.12508	4.97E-03	3.87E-07	2.48E-07	3.73E-07	2.46E-07	4.9678E-03
520276.43	4258122.93	28628.7912	0.18077	1.04576	0.19081	1.13877	4.97E-03	4.24E-07	2.14E-06	4.48E-07	2.24E-06	4.9708E-03
520526.54	4258988.49	28624.73371	0.24372	0.11396	0.23427	0.11902	4.96E-03	5.72E-07	2.34E-07	5.50E-07	2.34E-07	4.9664E-03
520560.01	4258934.61	28617.53577	0.21199	0.1139	0.20442	0.11896	4.96E-03	4.98E-07	2.34E-07	4.80E-07	2.34E-07	4.9650E-03
519947.09	4258779.53	28605.11767	0.69296	0.56842	0.77061	0.54228	4.96E-03	1.63E-06	1.17E-06	1.81E-06	1.07E-06	4.9671E-03
520606.82	4258399.69	28556.56477	0.14677	0.16376	0.14383	0.17149	4.95E-03	3.45E-07	3.36E-07	3.38E-07	3.38E-07	4.9544E-03
520043	4259085.77	28514.32982	5.0542	0.24002	6.9801	0.23343	4.95E-03	1.19E-05	4.92E-07	1.64E-05	4.60E-07	4.9749E-03

520052.91	4259095.75	28506.06325	7.03898	0.23793	11.46657	0.23001	4.94E-03	1.65E-05	4.88E-07	2.69E-05	4.53E-07	4.9886E-03
520247	4258142.84	28499.1456	0.18749	1.33201	0.19623	1.46067	4.94E-03	4.40E-07	2.73E-06	4.61E-07	2.88E-06	4.9496E-03
519943.73	4258843.77	28481.80603	0.75773	0.43783	0.84016	0.42397	4.94E-03	1.78E-06	8.98E-07	1.97E-06	8.35E-07	4.9455E-03
520575.73	4258170.32	28481.16013	0.13666	0.19752	0.13792	0.20788	4.94E-03	3.21E-07	4.05E-07	3.24E-07	4.09E-07	4.9414E-03
519968.96	4258971.1	28462.60928	1.19671	0.29556	1.34319	0.29226	4.94E-03	2.81E-06	6.06E-07	3.15E-06	5.75E-07	4.9439E-03
520621.5	4258787.81	28444.66187	0.16222	0.12114	0.15639	0.12534	4.93E-03	3.81E-07	2.48E-07	3.67E-07	2.47E-07	4.9348E-03
520586.44	4258194.93	28432.6273	0.1359	0.18918	0.136	0.19847	4.93E-03	3.19E-07	3.88E-07	3.19E-07	3.91E-07	4.9329E-03
519967.12	4258683.15	28430.92084	0.66159	0.93715	0.75594	0.87606	4.93E-03	1.55E-06	1.92E-06	1.77E-06	1.72E-06	4.9382E-03
520119.31	4258282.44	28417.51476	0.24746	7.67211	0.25389	8.99117	4.93E-03	5.81E-07	1.57E-05	5.96E-07	1.77E-05	4.9635E-03
520605.17	4258421.21	28408.84953	0.14884	0.16306	0.14564	0.17079	4.93E-03	3.49E-07	3.34E-07	3.42E-07	3.36E-07	4.9287E-03
520591.03	4258206.91	28403.96514	0.13565	0.18577	0.13523	0.19457	4.93E-03	3.18E-07	3.81E-07	3.17E-07	3.83E-07	4.9279E-03
520582.48	4258895.28	28362.25321	0.1934	0.11455	0.18699	0.11933	4.92E-03	4.54E-07	2.35E-07	4.39E-07	2.35E-07	4.9207E-03
520569.96	4258920.48	28360.18034	0.20372	0.11362	0.19668	0.11858	4.92E-03	4.78E-07	2.33E-07	4.62E-07	2.33E-07	4.9204E-03
519943.15	4258818.26	28329.46027	0.71866	0.48146	0.79565	0.46335	4.91E-03	1.69E-06	9.87E-07	1.87E-06	9.12E-07	4.9191E-03
520629.33	4258745.15	28322.19506	0.15505	0.1243	0.14929	0.12904	4.91E-03	3.64E-07	2.55E-07	3.50E-07	2.54E-07	4.9136E-03
520598.18	4258480.46	28318.75977	0.15507	0.16216	0.15061	0.17023	4.91E-03	3.64E-07	3.33E-07	3.54E-07	3.35E-07	4.9131E-03
519944.16	4258868.92	28276.81311	0.79249	0.39879	0.87663	0.38865	4.90E-03	1.86E-06	8.18E-07	2.06E-06	7.65E-07	4.9100E-03
520138.98	4258252.5	28242.72671	0.23061	4.9968	0.2344	5.7973	4.90E-03	5.41E-07	1.02E-05	5.50E-07	1.14E-05	4.9213E-03
520610.59	4258357.85	28242.26534	0.14235	0.16418	0.14014	0.17229	4.90E-03	3.34E-07	3.37E-07	3.29E-07	3.39E-07	4.8998E-03
519950.1	4258913.35	28183.23467	0.89965	0.34498	0.99588	0.33918	4.89E-03	2.11E-06	7.08E-07	2.34E-06	6.68E-07	4.8941E-03
520539.87	4258972.96	28183.00633	0.23036	0.11305	0.2217	0.11806	4.89E-03	5.41E-07	2.32E-07	5.20E-07	2.32E-07	4.8897E-03
520625.11	4258779.18	28180.6478	0.15968	0.12133	0.1539	0.12556	4.89E-03	3.75E-07	2.49E-07	3.61E-07	2.47E-07	4.8890E-03
520286.25	4258112.96	28168.93268	0.17673	0.97142	0.18677	1.05492	4.89E-03	4.15E-07	1.99E-06	4.38E-07	2.08E-06	4.8907E-03
520604.24	4258252.61	28162.2107	0.13566	0.17589	0.13451	0.18321	4.88E-03	3.18E-07	3.61E-07	3.16E-07	3.61E-07	4.8860E-03
520256.82	4258132.87	28150.53498	0.18353	1.22607	0.19269	1.33991	4.88E-03	4.31E-07	2.51E-06	4.52E-07	2.64E-06	4.8886E-03
520084.96	4259127.18	28140.38529	15.52793	0.23098	19.02608	0.21864	4.88E-03	3.65E-05	4.74E-07	4.47E-05	4.30E-07	4.9628E-03
520197.93	4258182.69	28100.50236	0.20038	2.1567	0.20506	2.40895	4.87E-03	4.70E-07	4.42E-06	4.81E-07	4.74E-06	4.8840E-03
520188.11	4258192.66	28099.73112	0.20406	2.41554	0.20806	2.71161	4.87E-03	4.79E-07	4.95E-06	4.88E-07	5.34E-06	4.8850E-03
519951.95	4258924.11	28093.21584	0.93018	0.33381	1.03038	0.32868	4.87E-03	2.18E-06	6.85E-07	2.42E-06	6.47E-07	4.8786E-03
520029.52	4258531.09	28085.34454	0.67132	3.92845	0.78019	3.20825	4.87E-03	1.58E-06	8.06E-06	1.83E-06	6.32E-06	4.8891E-03
520610.36	4258383.1	28082.16998	0.14426	0.16275	0.1415	0.17052	4.87E-03	3.39E-07	3.34E-07	3.32E-07	3.36E-07	4.8721E-03
520585.48	4258184.51	28064.15133	0.13521	0.18999	0.13569	0.19954	4.87E-03	3.17E-07	3.90E-07	3.19E-07	3.93E-07	4.8690E-03
520549.29	4258959.06	28050.02133	0.22144	0.11276	0.2133	0.11777	4.87E-03	5.20E-07	2.31E-07	5.01E-07	2.32E-07	4.8666E-03
520602.98	4258242.06	28048.07024	0.13513	0.1771	0.13395	0.18456	4.86E-03	3.17E-07	3.63E-07	3.14E-07	3.63E-07	4.8662E-03
520207.75	4258172.72	28045.99523	0.19672	1.93869	0.2021	2.15627	4.86E-03	4.62E-07	3.98E-06	4.74E-07	4.24E-06	4.8736E-03
519989.89	4258618.53	28036.40424	0.67422	1.47729	0.78852	1.35068	4.86E-03	1.58E-06	3.03E-06	1.85E-06	2.66E-06	4.8719E-03
520178.29	4258202.63	28015.28992	0.20768	2.72821	0.21112	3.07762	4.86E-03	4.88E-07	5.60E-06	4.96E-07	6.06E-06	4.8718E-03
520608.71	4258274.55	27971.33122	0.13616	0.17174	0.1352	0.17904	4.85E-03	3.20E-07	3.52E-07	3.17E-07	3.52E-07	4.8528E-03
520631.3	4258692.56	27969.62689	0.15058	0.13073	0.14498	0.13547	4.85E-03	3.54E-07	2.68E-07	3.40E-07	2.67E-07	4.8524E-03
520607.5	4258264.02	27944.95626	0.13563	0.17318	0.13456	0.1804	4.85E-03	3.18E-07	3.55E-07	3.16E-07	3.55E-07	4.8483E-03
520610.02	4258285.13	27936.61329	0.13665	0.17014	0.13576	0.17759	4.85E-03	3.21E-07	3.49E-07	3.19E-07	3.50E-07	4.8468E-03
519953.66	4258934.81	27933.87065	0.95938	0.32313	1.06346	0.31856	4.85E-03	2.25E-06	6.63E-07	2.50E-06	6.27E-07	4.8510E-03
520601.46	4258463.23	27932.8972	0.15277	0.1617	0.1488	0.1697	4.84E-03	3.59E-07	3.32E-07	3.49E-07	3.34E-07	4.8462E-03
520099.64	4258312.38	27931.524	0.2645	14.38467	0.27573	15.31853	4.84E-03	6.21E-07	2.95E-05	6.47E-07	3.02E-05	4.9055E-03
520217.57	4258162.75	27928.62509	0.19304	1.75331	0.19915	1.94212	4.84E-03	4.53E-07	3.60E-06	4.68E-07	3.82E-06	4.8524E-03
520558.88	4258945.08	27924.11751	0.21311	0.11253	0.20549	0.11751	4.84E-03	5.00E-07	2.31E-07	4.82E-07	2.31E-07	4.8448E-03
520094.88	4259137.17	27891.188	12.66773	0.22792	11.77934	0.21461	4.84E-03	2.97E-05	4.67E-07	2.77E-05	4.22E-07	4.8959E-03
520168.47	4258212.6	27876.75029	0.21133	3.1097	0.21431	3.53184	4.84E-03	4.96E-07	6.38E-06	5.03E-07	6.95E-06	4.8494E-03
520601.82	4258231.55	27876.01049	0.13455	0.17819	0.13344	0.18583	4.83E-03	3.16E-07	3.65E-07	3.13E-07	3.66E-07	4.8363E-03
520628.72	4258770.56	27867.10616	0.15717	0.12141	0.15146	0.1257	4.83E-03	3.69E-07	2.49E-07	3.56E-07	2.47E-07	4.8346E-03
520525.7	4258998.84	27861.99259	0.24477	0.11247	0.23532	0.11743	4.83E-03	5.75E-07	2.31E-07	5.52E-07	2.31E-07	4.8341E-03
520596.02	4258872.6	27853.51096	0.183	0.11472	0.17706	0.11925	4.83E-03	4.30E-07	2.35E-07	4.16E-07	2.35E-07	4.8324E-03
520611.47	4258295.76	27841.53692	0.13709	0.16826	0.13618	0.17591	4.83E-03	3.22E-07	3.45E-07	3.20E-07	3.46E-07	4.8303E-03
520599.6	4258864.04	27839.56553	0.18024	0.11513	0.17432	0.1196	4.83E-03	4.23E-07	2.36E-07	4.09E-07	2.35E-07	4.8299E-03
520535.28	4258984.87	27815.13624	0.235	0.11235	0.2261	0.1173	4.82E-03	5.52E-07	2.30E-07	5.31E-07	2.31E-07	4.8260E-03
520581.2	4258905.82	27813.78359	0.19476	0.11312	0.18827	0.11791	4.82E-03	4.57E-07	2.32E-07	4.42E-07	2.32E-07	4.8255E-03
520603.18	4258855.48	27813.06286	0.1775	0.11547	0.1716	0.1199	4.82E-03	4.17E-07	2.37E-07	4.03E-07	2.36E-07	4.8253E-03
520632.97	4258736.45	27781.71358	0.15262	0.12419	0.14701	0.12897	4.82E-03	3.58E-07	2.55E-07	3.45E-07	2.54E-07	4.8198E-03
519957.88	4258709.1	27781.67634	0.644	0.79196	0.72629	0.74641	4.82E-03	1.51E-06	1.62E-06	1.71E-06	1.47E-06	4.8249E-03
520050.29	4258455.9	27771.76966	0.45467	8.40345	0.49504	5.95118	4.82E-03	1.07E-06	1.72E-05	1.16E-06	1.17E-05	4.8481E-03
520266.64	4258122.9	27769.36693	0.17961	1.13225	0.18908	1.23339	4.82E-03	4.22E-07	2.32E-06	4.44E-07	2.43E-06	4.8221E-03
520606.77	4258846.93	27769.32782	0.17475	0.11584	0.16891	0.12022	4.82E-03	4.10E-07	2.38E-07	3.97E-07	2.37E-07	4.8177E-03
519944.31	4258893.39	27758.40357	0.82017	0.3652	0.90607	0.35769	4.81E-03	1.93E-06	7.49E-07	2.13E-06	7.04E-07	4.8201E-03
520227.39	4258152.78	27737.51884	0.18931	1.59437	0.19614	1.75823	4.81E-03	4.44E-07	3.27E-06	4.60E-07	3.46E-06	4.8186E-03
520568.67	4258931.02	27733.69225	0.20499	0.11226	0.19788	0.11717	4.81E-03	4.81E-07	2.30E-07	4.65E-07	2.31E-07	4.8117E-03
519955.25	4258945.46	27716.32044	0.98738	0.31291	1.09527	0.30882	4.81E-03	2.32E-06	6.42E-07	2.57E-06	6.08E-07	4.8134E-03
520610.35	4258838.37	27710.39394	0.17205	0.11639	0.16634	0.12071	4.81E-03	4.04E-07	2.39E-07	3.91E-07	2.38E-07	4.8075E-03
520129.16	4258262.47	27697.99358	0.23404	6.09769	0.23856	7.13881	4.80E-03	5.49E-07	1.25E-05	5.60E-07	1.41E-05	4.8318E-03
519942.4	4258792.34	27696.22017	0.67329	0.53008	0.74507	0.50712	4.80E-03	1.58E-06	1.09E-06	1.75E-06	9.98E-07	4.8092E-03
520053.34	4259105.75	27694.86895	7.23313	0.23162	11.83937	0.22392	4.80E-03	1.70E-05	4.75E-07	2.78E-05	4.41E-07	4.8492E-03
520043.01	4259095.77	27688.06454	5.09162	0.23346	7.00506	0.2271	4.80E-03	1.20E-05	4.79E-07	1.64E-05	4.47E-07	4.8317E-03
520600.74	4258221.08	27682.22474	0.13399	0.17902	0.13301	0.18695	4.80E-03	3.15E-07	3.67E-07	3.12E-07	3.68E-07	4.8027E-03
520584.59	4258174.11	27676.41057	0.13448	0.19078	0.13533	0.20055	4.80E-03	3.16E-07	3.91E-07	3.18E-07	3.95E-07	4.8018E-03
520613.06	4258306.46	27673.04476	0.13747	0.16623	0.13644	0.17408	4.80E-03	3.23E-07	3.41E-07	3.20E-07	3.43E-07	4.8011E-03
519940.03	4258834.84	27663.95346	0.71342	0.44753	0.78843	0.4322	4.80E-03	1.67E-06	9.18E-07	1.85E-06	8.51E-07	4.8035E-03
519958.3	4258956.71	27652.91168	1.03445	0.30348	1.14996	0.29979	4.80E-03	2.43E-06	6.22E-07	2.70E-06	5.90E-07	4.8026E-03
520610.3	4258408.81	27646.01308	0.14598	0.16118	0.14288	0.16873	4.80E-03	3.43E-07	3.31E-07	3.35E-07	3.32E-07	4.7964E-03
520158.65	4258222.57	27636.98135	0.21487	3.58758	0.21764	4.10158	4.79E-03	5.04E-07	7.36E-06	5.11E-07	8.07E-06	4.8100E-03
519940.49	4258860.07	27635.17538	0.74811	0.40804	0.82671	0.39653	4.79E-03	1.76E-06	8.37E-07	1.94E-06	7.81E-07	4.7985E-03
520613.93	4258829.81	27630.67172	0.16938	0.11684	0.16374	0.12108	4.79E-03	3.98E-07	2.40E-07	3.84E-07	2.38E-07	4.7937E-03
520614.34	4258341.83	27566.58129	0.13979	0.16307	0.13795	0.17115	4.78E-03	3.28E-07	3.34E-07	3.24E-07	3.37E-07	4.7826E-03
520634.33	4258709.28	27564.87933	0.15016	0.12722	0.14467	0.13203	4.78E-03	3.53E-07	2.61E-07	3.40E-07	2.60E-07	4.7822E-03
520109.49	4258292.41	27563.92643	0.25039	10.13268	0.25855	11.69529	4.78E-03	5.88E-07	2.08E-05	6.07E-07	2.30E-05	4.8258E-03
520237.21	4258142.81	27537.48385	0.18571	1.45586	0.19313	1.60058	4.78E-03	4.36E-07	2.99E-06	4.53E-07	3.15E-06	4.7833E-03
520613.99	4258366.77	27530.23864	0.14176	0.16155	0.13923	0.16942	4.77E-03	3.33E-07	3.31E-07	3.27E-07	3.34E-07	4.7763E-03
520617.51	4258821.26	27526.94163	0.16675	0.11722	0.16117	0.12139	4.77E-03	3.91E-07	2.40E-07	3.78E-07	2.39E-07	4.7757E-03
520595.42	4258198.77	27516.13011	0.13363	0.18284	0.13331	0.19155	4.77E-03	3.14E-07	3.75E-07	3.13E-07	3.77E-07	4.7739E-03
520632.33	4258761.93	27506.56169	0.15473	0.12139	0.14909	0.12578	4.77E-03	3.63E-07	2.49E-07	3.50E-07	2.48E-07	4.7721E-03
520019.6	4258550.53	27459.82534	0.68419	2.97292	0.80953	2.51846	4.76E-03	1.61E-06	6.10E-06	1.90E-06	4.96E-06	4.7773E-03
520608.47	4258429.88	27458.23525	0.148	0.16054	0.14464	0.16817	4.76E-03	3.47E-07	3.29E-07	3.40E-07	3.31E-07	4.7639E-03
520057.08	4258415.76	27448.96678	0.36667	11.88426	0.39541	7.52444	4.76E-03	8.61E-07	2.44E-05	9.28E-07	1.48E-05	4.8019E-03
520599.75	4258210.64	27437.19612	0.13339	0.17981	0.13263	0.18802	4.76E-03	3.13E-07	3.69E-07	3.11E-07	3.70E-07	4.7602E-03
520578.69	4258916.87	27406.65312	0.19699	0.11197	0.19038	0.11677	4.75E-03	4.62E-07	2.30E-07	4.47E-07	2.30E-07	4.7549E-03
520276.46	4258112.93	27402.68904	0.17588	1.04859	0.18549	1.13968	4.75E-03	4.13E-07	2.15E-06	4.35E-07	2.24E-06	4.7581E-03
520621.1	4258812.7	27396.93169	0.16416	0.11755	0.1586	0.12166	4.75E-03	3.85E-07	2.41E-07	3.72E-07	2.39E-07	4.7531E-03
520590.99	4258891.76	27365.80788	0.18728	0.1129	0.18121	0.11751	4.75E-03	4.40E-07	2.32E-07	4.25E-07	2.31E-07	4.7478E-03
519959.92	4258967.37	27361.92278	1.06385	0.29419	1.18396	0.29085	4.75E-03	2.50E-06	6.03E-07	2.78E-06	5.73E-07	4.7523E-03
520548.37	4258969.45	27354.25117	0.22244	0.1114	0.21427	0.11631	4.74E-03	5.22E-07	2.28E-07	5.03E-07	2.29E-07	4.7460E-03
520148.83	4258232.53	27319.36723	0.21835	4.1977	0.22112	4.84025	4.74E-03	5.13E-07	8.61E-06	5.19E-07	9.53E-06	4.7576E-03
519939.41	4258809.25	27297.74038	0.6738	0.49127	0.7433	0.47172	4.73E-03	1.58E-06	1.01E-06	1.75E-06	9.29E-07	4.7399E-03
519977.12	4258646.05	27291.23633	0.64282	1.16867	0.7375	1.08375	4.73E-03	1.51E-06	2.40E-06	1.73E-06	2.13E-06	4.7413E-03
519967.12	4258673.87	27285.32447	0.63489	0.96834	0.72391	0.9046	4.73E-03	1.49E-06	1.99E-06	1.70E-06	1.78E-06	4.7395E-03
520613.79	4258392.11	27274.69901	0.14355	0.16034	0.1406	0.16787	4.73E-03	3.37E-07	3.29E-07	3.30E-07	3.30E-07	4.7320E-03
520084.98	4259137.18	27268.55673	15.37999	0.22491	18.93128	0.21303	4.73E-03	3.61E-05	4.61E-07	4.44E-05	4.19E-07	4.8110E-03
519943.46	4258770.77	27265.29979	0.64668	0.57743	0.71605	0.55047	4.73E-03	1.52E-06	1.18E-06	1.68E-06	1.08E-06	4.7345E-03
520247.03	4258132.84	27261.20776	0.18202	1.33526	0.19002	1.46246	4.73E-03	4.27E-07	2.74E-06	4.46E-07	2.88E-06	4.7348E-03
519940.52	4258884.25	27259.08204	0.77518	0.37372	0.8546	0.36522	4.73E-03	1.82E-06	7.66E-07	2.01E-06	7.19E-07	4.7333E-03
520636.62	4258727.75	27252.83194	0.15032	0.12418	0.14488	0.12894	4.73E-03	3.53E-07	2.55E-07	3.40E-07	2.54E-07	4.7281E-03
519946.47	4258753.92	27243.4916	0.6377	0.62485	0.71251	0.59313	4.73E-03	1.50E-06	1.28E-06	1.67E-06	1.17E-06	4.7309E-03
520624.68	4258804.14	27239.18476	0.16161	0.11785	0.15608	0.1219	4.72E-03	3.79E-07	2.42E-07	3.66E-07	2.40E-07	4.7257E-03
520557.84	4258955.52	27224.22289	0.21404	0.11114	0.20637	0.11603	4.72E-03	5.02E-07	2.28E-07	4.84E-07	2.28E-07	4.7234E-03
520594.4	4258188.32	27208.81692	0.133	0.18362	0.13304	0.19261	4.72E-03	3.12E-07	3.77E-07	3.12E-07	3.79E-07	4.7206E-03
519949.36	4258736.79	27142.21194	0.63057	0.67632	0.70474	0.64095	4.71E-03	1.48E-06	1.39E-06	1.65E-06	1.26E-06	4.7135E-03
520635.94	4258753.3	27098.16987	0.15234	0.12131	0.14681	0.12579	4.70E-03	3.58E-07	2.49E-07	3.45E-07	2.48E-07	4.7013E-03
520534.39	4258995.25	27088.61155	0.23599	0.11092	0.22707	0.11577	4.70E-03	5.54E-07	2.27E-07	5.33E-07	2.28E-07	4.6999E-03
520567.49	4258941.52	27082.24116	0.20609	0.11091	0.19892	0.11576	4.70E-03	4.84E-07	2.27E-07	4.67E-07	2.28E-07	4.6987E-03
519960.75	4258691.89	27068.38764	0.62655	0.86139	0.70889	0.8093	4.69E-03	1.47E-06	1.77E-06	1.66E-06	1.59E-06	4.7014E-03
520628.26	4258795.59	27048.53939	0.15911	0.11812	0.15361	0.12214	4.69E-03	3.74E-07	2.42E-07	3.61E-07	2.40E-07	4.6927E-03
520119.34	4258272.44	27031.18079	0.23713	7.68679	0.24286	9.04061	4.69E-03	5.57E-07	1.58E-05	5.70E-07	1.78E-05	4.7231E-03
520604.84	4258472.09	27006.86845	0.1517	0.15928	0.14744	0.16713	4.68E-03	3.56E-07	3.27E-07	3.46E-07	3.29E-07	4.6856E-03
520544.02	4258981.26	26991.85409	0.22659	0.1107	0.21819	0.11554	4.68E-03	5.32E-07	2.27E-07	5.12E-07	2.27E-07	4.6831E-03
520009.69	4258569.96	26980.96469	0.67937	2.32234	0.81052	2.02174	4.68E-03	1.59E-06	4.76E-06	1.90E-06	3.98E-06	4.6920E-03
520095.31	4259147.99	26975.83372	12.42387	0.22163	11.55381	0.20878	4.68E-03	2.92E-05	4.55E-07	2.71E-05	4.11E-07	4.7360E-03
520256.85	4258122.87	26962.40632	0.17839	1.22892	0.18685	1.34172	4.68E-03	4.19E-07	2.52E-06	4.39E-07	2.64E-06	4.6825E-03
519936.82	4258851.23	26933.1338	0.70616	0.41706	0.77868	0.40417	4.67E-03	1.66E-06	8.55E-07	1.83E-06	7.96E-07	4.6766E-03
520043.44	4259105.77	26924.54648	5.20521	0.22732	7.14831	0.22113	4.67E-03	1.22E-05	4.66E-07	1.68E-05	4.35E-07	4.6998E-03
520617.71	4258350.66	26924.30707	0.13923	0.16064	0.13707	0.16852	4.67E-03	3.27E-07	3.29E-07	3.22E-07	3.32E-07	4.6712E-03
520637.83	4258700.92	26918.43397	0.14806	0.12728	0.14267	0.13193	4.67E-03	3.48E-07	2.61E-07	3.35E-07	2.60E-07	4.6701E-03
520613.22	4258256.46	26898.23935	0.13318	0.17007	0.13203	0.17702	4.67E-03	3.13E-07	3.49E-07	3.10E-07	3.48E-07	4.6667E-03
520593.45	4258177.9	26882.95095	0.13236	0.18435	0.13276	0.19361	4.66E-03	3.11E-07	3.78E-07	3.12E-07	3.81E-07	4.6641E-03
520139.01	4258242.5	26877.61037	0.22159	5.00612	0.22482	5.80904	4.66E-03	5.20E-07	1.03E-05	5.28E-07	1.14E-05	4.6845E-03
520589.65	4258902.32	26874.58234	0.18862	0.11154	0.1825	0.11616	4.66E-03	4.43E-07	2.29E-07	4.28E-07	2.29E-07	4.6626E-03
520053.36	4259115.75	26867.38762	7.31064	0.22539	11.90904	0.21798	4.66E-03	1.72E-05	4.62E-07	2.80E-05	4.29E-07	4.7060E-03
520611.88	4258245.87	26863.19484	0.13272	0.17131	0.13148	0.17833	4.66E-03	3.12E-07	3.51E-07	3.09E-07	3.51E-07	4.6606E-03
520577.34	4258927.43	26855.53143	0.19827	0.11064	0.19158	0.1154	4.66E-03	4.65E-07	2.27E-07	4.50E-07	2.27E-07	4.6593E-03
520039.4	4258501.95	26844.93713	0.58784	5.41337	0.65921	4.24396	4.66E-03	1.38E-06	1.11E-05	1.55E-06	8.35E-06	4.6785E-03
520631.84	4258787.03	26822.2246	0.15665	0.11834	0.15119	0.12236	4.65E-03	3.68E-07	2.43E-07	3.55E-07	2.41E-07	4.6534E-03
520197.96	4258172.69	26815.868	0.1937	2.16097	0.19763	2.41194	4.65E-03	4.55E-07	4.43E-06	4.64E-07	4.75E-06	4.6612E-03
520188.14	4258182.66	26807.67916	0.1971	2.41987	0.20038	2.71551	4.65E-03	4.63E-07	4.96E-06	4.70E-07	5.35E-06	4.6609E-03
520617.39	4258375.69	26806.6119	0.14112	0.15912	0.13834	0.16673	4.65E-03	3.31E-07	3.26E-07	3.25E-07	3.28E-07	4.6508E-03
520207.78	4258162.72	26783.87106	0.19035	1.9425	0.19495	2.15911	4.65E-03	4.47E-07	3.98E-06	4.58E-07	4.25E-06	4.6547E-03
519936.33	4258825.92	26778.66908	0.67124	0.45685	0.73933	0.44009	4.64E-03	1.58E-06	9.37E-07	1.74E-06	8.66E-07	4.6498E-03
520610.66	4258235.33	26759.58735	0.13219	0.17247	0.13096	0.17962	4.64E-03	3.10E-07	3.54E-07	3.07E-07	3.54E-07	4.6427E-03
519952.12	4258719.32	26734.78615	0.61744	0.7331	0.69152	0.69332	4.64E-03	1.45E-06	1.50E-06	1.62E-06	1.36E-06	4.6430E-03
520613.77	4258417.94	26726.20483	0.14516	0.15857	0.1419	0.16599	4.64E-03	3.41E-07	3.25E-07	3.33E-07	3.27E-07	4.6369E-03
520608.24	4258455.15	26724.92555	0.14944	0.1587	0.14559	0.16643	4.64E-03	3.51E-07	3.25E-07	3.42E-07	3.28E-07	4.6367E-03
519942.96	4258920.4	26720.8677	0.83299	0.33143	0.91714	0.32608	4.63E-03	1.96E-06	6.80E-07	2.15E-06	6.42E-07	4.6400E-03
520178.32	4258192.63	26704.01499	0.20038	2.73362	0.2032	3.08093	4.63E-03	4.70E-07	5.61E-06	4.77E-07	6.06E-06	4.6443E-03
519936.73	4258875.11	26693.74822	0.7323	0.38237	0.80588	0.37271	4.63E-03	1.72E-06	7.84E-07	1.89E-06	7.34E-07	4.6350E-03
520217.6	4258152.75	26664.75217	0.18689	1.75744	0.19224	1.94364	4.62E-03	4.39E-07	3.60E-06	4.51E-07	3.83E-06	4.6332E-03
520616.18	4258267.74	26659.45235	0.13319	0.16765	0.13215	0.17459	4.62E-03	3.13E-07	3.44E-07	3.10E-07	3.44E-07	4.6253E-03
519944.74	4258931.13	26643.82248	0.85984	0.32103	0.94728	0.31632	4.62E-03	2.02E-06	6.58E-07	2.22E-06	6.23E-07	4.6268E-03
520640.26	4258719.05	26636.25577	0.14804	0.12411	0.14275	0.1288	4.62E-03	3.48E-07	2.55E-07	3.35E-07	2.54E-07	4.6211E-03
520617.45	4258278.29	26625.82391	0.13367	0.16614	0.1327	0.17322	4.62E-03	3.14E-07	3.41E-07	3.12E-07	3.41E-07	4.6194E-03
520609.52	4258224.83	26624.10938	0.13167	0.17339	0.1305	0.18075	4.62E-03	3.09E-07	3.56E-07	3.06E-07	3.56E-07	4.6192E-03
520639.55	4258744.68	26614.86961	0.14999	0.12117	0.14459	0.12572	4.62E-03	3.52E-07	2.49E-07	3.39E-07	2.47E-07	4.6174E-03
520266.67	4258112.9	26612.30041	0.17473	1.13486	0.18359	1.23477	4.62E-03	4.10E-07	2.33E-06	4.31E-07	2.43E-06	4.6214E-03
520046.63	4258464.79	26585.29349	0.4697	7.19013	0.51282	5.29979	4.61E-03	1.10E-06	1.47E-05	1.20E-06	1.04E-05	4.6386E-03
520168.5	4258202.6	26574.48811	0.20378	3.11499	0.20615	3.53715	4.61E-03	4.78E-07	6.39E-06	4.84E-07	6.96E-06	4.6235E-03
520099.67	4258302.38	26570.75636	0.25267	14.43189	0.26294	15.36141	4.61E-03	5.93E-07	2.96E-05	6.17E-07	3.02E-05	4.6696E-03
520604.4	4258202.61	26569.47034	0.13135	0.17683	0.13066	0.18496	4.61E-03	3.08E-07	3.63E-07	3.07E-07	3.64E-07	4.6097E-03
519999.77	4258589.4	26569.0798	0.6616	1.85436	0.78751	1.65747	4.61E-03	1.55E-06	3.80E-06	1.85E-06	3.26E-06	4.6188E-03
520556.87	4258965.93	26563.78057	0.21497	0.10981	0.20726	0.11461	4.61E-03	5.05E-07	2.25E-07	4.87E-07	2.26E-07	4.6088E-03
520635.43	4258778.47	26550.13762	0.15423	0.11833	0.14877	0.1224	4.61E-03	3.62E-07	2.43E-07	3.49E-07	2.41E-07	4.6062E-03
520618.84	4258288.9	26533.64836	0.1341	0.16448	0.13314	0.17174	4.60E-03	3.15E-07	3.37E-07	3.13E-07	3.38E-07	4.6034E-03
520227.42	4258142.78	26525.06327	0.18352	1.59768	0.18956	1.76041	4.60E-03	4.31E-07	3.28E-06	4.45E-07	3.47E-06	4.6083E-03
520611.77	4258438.55	26520.66105	0.14712	0.15806	0.14358	0.16562	4.60E-03	3.45E-07	3.24E-07	3.37E-07	3.26E-07	4.6012E-03
519946.4	4258941.81	26505.50513	0.88562	0.31106	0.97629	0.30687	4.60E-03	2.08E-06	6.38E-07	2.29E-06	6.04E-07	4.6029E-03
520587.42	4258913.25	26479.51258	0.19056	0.11035	0.18434	0.11499	4.59E-03	4.47E-07	2.26E-07	4.33E-07	2.26E-07	4.5941E-03
519949.19	4258952.95	26474.50172	0.92413	0.30174	1.02017	0.29801	4.59E-03	2.17E-06	6.19E-07	2.40E-06	5.87E-07	4.5977E-03
520617.22	4258401.13	26452.33033	0.1428	0.15793	0.1397	0.16526	4.59E-03	3.35E-07	3.24E-07	3.28E-07	3.25E-07	4.5893E-03
520608.47	4258214.37	26449.35374	0.13112	0.17416	0.1301	0.18179	4.59E-03	3.08E-07	3.57E-07	3.05E-07	3.58E-07	4.5888E-03
520566.39	4258951.98	26440.08956	0.20706	0.10959	0.19984	0.11436	4.59E-03	4.86E-07	2.25E-07	4.69E-07	2.25E-07	4.5873E-03
519938.63	4258783.24	26437.40809	0.62836	0.53918	0.69293	0.51521	4.59E-03	1.48E-06	1.11E-06	1.63E-06	1.01E-06	4.5907E-03
520606.6	4258871.25	26419.03051	0.1761	0.11222	0.17056	0.11653	4.58E-03	4.13E-07	2.30E-07	4.00E-07	2.29E-07	4.5835E-03
520085.41	4259148.01	26390.22001	16.47279	0.21875	18.38497	0.20727	4.58E-03	3.87E-05	4.49E-07	4.32E-05	4.08E-07	4.6600E-03
520610.16	4258862.76	26389.34695	0.1735	0.1126	0.16798	0.11686	4.58E-03	4.07E-07	2.31E-07	3.94E-07	2.30E-07	4.5784E-03
520620.36	4258299.57	26387.38926	0.13447	0.16266	0.13343	0.17013	4.58E-03	3.16E-07	3.34E-07	3.13E-07	3.35E-07	4.5781E-03
520063.61	4258383.1	26380.1825	0.31685	18.89278	0.3399	9.72538	4.58E-03	7.44E-07	3.87E-05	7.98E-07	1.91E-05	4.6350E-03
520129.19	4258252.47	26357.99834	0.22468	6.11096	0.22868	7.1475	4.57E-03	5.27E-07	1.25E-05	5.37E-07	1.41E-05	4.5993E-03
520613.72	4258854.27	26350.3729	0.17092	0.11295	0.16543	0.11717	4.57E-03	4.01E-07	2.32E-07	3.88E-07	2.31E-07	4.5716E-03
520543.07	4258991.65	26342.1278	0.22769	0.10939	0.21926	0.11413	4.57E-03	5.35E-07	2.24E-07	5.15E-07	2.25E-07	4.5704E-03
520158.68	4258212.57	26339.75288	0.20702	3.59369	0.20923	4.10779	4.57E-03	4.86E-07	7.37E-06	4.91E-07	8.09E-06	4.5849E-03
520237.24	4258132.81	26326.77289	0.18012	1.45929	0.18681	1.60169	4.57E-03	4.23E-07	2.99E-06	4.39E-07	3.15E-06	4.5733E-03
520603.31	4258192.14	26324.66473	0.13079	0.17761	0.13042	0.18603	4.57E-03	3.07E-07	3.64E-07	3.06E-07	3.66E-07	4.5672E-03
519937.28	4258900.55	26312.35916	0.76255	0.35017	0.83794	0.34318	4.56E-03	1.79E-06	7.18E-07	1.97E-06	6.76E-07	4.5689E-03
520617.27	4258845.77	26299.65714	0.16836	0.11335	0.16292	0.11752	4.56E-03	3.95E-07	2.32E-07	3.82E-07	2.31E-07	4.5628E-03
520621.07	4258359.5	26276.0081	0.13865	0.1583	0.1362	0.16593	4.56E-03	3.26E-07	3.25E-07	3.20E-07	3.27E-07	4.5588E-03
519950.89	4258963.64	26260.22523	0.95105	0.29267	1.051	0.2893	4.55E-03	2.23E-06	6.00E-07	2.47E-06	5.69E-07	4.5606E-03
520576.09	4258937.95	26252.0077	0.19937	0.10933	0.19262	0.11404	4.55E-03	4.68E-07	2.24E-07	4.52E-07	2.24E-07	4.5547E-03

520109.52	4258282.41	26236.21276	0.23973	10.15774	0.24714	11.75557	4.55E-03	5.63E-07	2.08E-05	5.80E-07	2.31E-05	4.5957E-03
520620.83	4258837.28	26230.64942	0.1658	0.11381	0.16047	0.11791	4.55E-03	3.89E-07	2.33E-07	3.77E-07	2.32E-07	4.5508E-03
520552.76	4258977.64	26216.3725	0.21871	0.10911	0.21079	0.11385	4.55E-03	5.13E-07	2.24E-07	4.95E-07	2.24E-07	4.5486E-03
519935.68	4258800.24	26206.34413	0.63136	0.50032	0.69399	0.47959	4.55E-03	1.48E-06	1.03E-06	1.63E-06	9.44E-07	4.5505E-03
520639.01	4258769.92	26190.85145	0.15182	0.11828	0.14642	0.12243	4.54E-03	3.56E-07	2.43E-07	3.44E-07	2.41E-07	4.5439E-03
520641.33	4258692.55	26181.68131	0.14593	0.12729	0.14062	0.13177	4.54E-03	3.43E-07	2.61E-07	3.30E-07	2.59E-07	4.5423E-03
520608.22	4258480.96	26180.95342	0.15061	0.15697	0.14606	0.16462	4.54E-03	3.54E-07	3.22E-07	3.43E-07	3.24E-07	4.5423E-03
519933.15	4258842.38	26173.25517	0.66643	0.4258	0.73265	0.41156	4.54E-03	1.56E-06	8.73E-07	1.72E-06	8.10E-07	4.5446E-03
520095.33	4259157.99	26143.8389	12.33657	0.21597	11.51765	0.20358	4.53E-03	2.90E-05	4.43E-07	2.70E-05	4.01E-07	4.5914E-03
520624.38	4258828.79	26143.57436	0.16331	0.11414	0.158	0.11819	4.53E-03	3.83E-07	2.34E-07	3.71E-07	2.33E-07	4.5357E-03
520643.17	4258736.05	26142.53598	0.14776	0.12124	0.14255	0.12579	4.53E-03	3.47E-07	2.49E-07	3.35E-07	2.48E-07	4.5355E-03
520043.46	4259115.77	26127.53376	5.24457	0.22125	7.17551	0.21528	4.53E-03	1.23E-05	4.54E-07	1.68E-05	4.24E-07	4.5617E-03
520247.06	4258122.84	26119.54325	0.17683	1.33794	0.18406	1.46439	4.53E-03	4.15E-07	2.74E-06	4.32E-07	2.88E-06	4.5368E-03
519989.85	4258608.84	26111.20312	0.6371	1.51554	0.74521	1.38437	4.53E-03	1.50E-06	3.11E-06	1.75E-06	2.73E-06	4.5379E-03
520055.26	4259127.23	26076.2879	7.91443	0.21933	13.65884	0.21194	4.52E-03	1.86E-05	4.50E-07	3.21E-05	4.17E-07	4.5743E-03
520620.78	4258384.62	26074.73393	0.14043	0.15699	0.13749	0.16433	4.52E-03	3.30E-07	3.22E-07	3.23E-07	3.23E-07	4.5238E-03
519967.12	4258664.6	26069.13946	0.60798	0.99823	0.69188	0.93199	4.52E-03	1.43E-06	2.05E-06	1.62E-06	1.83E-06	4.5285E-03
519932.94	4258865.97	26061.02349	0.6913	0.39106	0.75969	0.38009	4.52E-03	1.62E-06	8.02E-07	1.78E-06	7.48E-07	4.5251E-03
520602.3	4258181.69	26056.68456	0.13021	0.1783	0.13018	0.18702	4.52E-03	3.06E-07	3.66E-07	3.06E-07	3.68E-07	4.5208E-03
520627.94	4258820.29	26034.20002	0.16083	0.11451	0.15557	0.11848	4.52E-03	3.78E-07	2.35E-07	3.65E-07	2.33E-07	4.5167E-03
520148.86	4258222.53	26029.34724	0.21018	4.20561	0.21247	4.84596	4.51E-03	4.93E-07	8.63E-06	4.99E-07	9.54E-06	4.5338E-03
520586	4258923.84	25993.60261	0.19186	0.10907	0.18557	0.11368	4.51E-03	4.50E-07	2.24E-07	4.36E-07	2.24E-07	4.5098E-03
520643.91	4258710.34	25992.23429	0.14584	0.12409	0.14067	0.12866	4.51E-03	3.42E-07	2.54E-07	3.30E-07	2.53E-07	4.5094E-03
520598.1	4258898.82	25963.70019	0.18275	0.11	0.17697	0.11445	4.50E-03	4.29E-07	2.26E-07	4.15E-07	2.25E-07	4.5046E-03
520631.5	4258811.8	25900.16578	0.15839	0.11485	0.15317	0.11876	4.49E-03	3.72E-07	2.36E-07	3.60E-07	2.34E-07	4.4935E-03
520642.59	4258761.36	25894.41089	0.1496	0.11836	0.14431	0.1226	4.49E-03	3.51E-07	2.43E-07	3.39E-07	2.41E-07	4.4924E-03
519939.82	4258762.01	25854.67519	0.60233	0.58525	0.66561	0.55764	4.48E-03	1.41E-06	1.20E-06	1.56E-06	1.10E-06	4.4897E-03
520256.88	4258112.87	25843.47367	0.17344	1.23147	0.1812	1.34313	4.48E-03	4.07E-07	2.53E-06	4.25E-07	2.64E-06	4.4884E-03
519933.52	4258891.5	25837.87121	0.72212	0.35804	0.7924	0.35007	4.48E-03	1.70E-06	7.34E-07	1.86E-06	6.89E-07	4.4864E-03
519932.63	4258817	25834.67934	0.6313	0.46541	0.69247	0.44751	4.48E-03	1.48E-06	9.55E-07	1.63E-06	8.81E-07	4.4859E-03
520611.58	4258463.91	25826.45038	0.14843	0.15633	0.14432	0.16394	4.48E-03	3.48E-07	3.21E-07	3.39E-07	3.23E-07	4.4808E-03
520565.36	4258962.41	25805.72147	0.20791	0.10827	0.20063	0.11296	4.48E-03	4.88E-07	2.22E-07	4.71E-07	2.22E-07	4.4773E-03
520617.25	4258427.06	25803.36852	0.1443	0.15597	0.14086	0.16331	4.48E-03	3.39E-07	3.20E-07	3.31E-07	3.21E-07	4.4768E-03
519977.12	4258636.77	25776.8955	0.61172	1.1995	0.7	1.11302	4.47E-03	1.44E-06	2.46E-06	1.64E-06	2.19E-06	4.4786E-03
519954.29	4258700.45	25758.59544	0.59322	0.79508	0.66501	0.7504	4.47E-03	1.39E-06	1.63E-06	1.56E-06	1.48E-06	4.4738E-03
520635.05	4258803.31	25739.6893	0.15599	0.11517	0.15082	0.11902	4.46E-03	3.66E-07	2.36E-07	3.54E-07	2.34E-07	4.4656E-03
520119.37	4258262.44	25732.71182	0.22745	7.70584	0.23266	9.04117	4.46E-03	5.34E-07	1.58E-05	5.46E-07	1.78E-05	4.4979E-03
520029.48	4258521.39	25713.45453	0.61609	3.97682	0.70406	3.25444	4.46E-03	1.45E-06	8.16E-06	1.65E-06	6.41E-06	4.4775E-03
519942.8	4258745.07	25702.12254	0.59329	0.63163	0.65944	0.60008	4.46E-03	1.39E-06	1.30E-06	1.55E-06	1.18E-06	4.4633E-03
520624.83	4258343.51	25700.07873	0.13623	0.15716	0.13411	0.16481	4.46E-03	3.20E-07	3.22E-07	3.15E-07	3.24E-07	4.4588E-03
520620.79	4258249.68	25660.77268	0.13029	0.1659	0.12908	0.17251	4.45E-03	3.06E-07	3.40E-07	3.03E-07	3.40E-07	4.4520E-03
520574.94	4258948.44	25645.84751	0.2003	0.10802	0.19349	0.11267	4.45E-03	4.70E-07	2.22E-07	4.54E-07	2.22E-07	4.4495E-03
520619.5	4258239.12	25637.30293	0.12984	0.16703	0.12856	0.17373	4.45E-03	3.05E-07	3.43E-07	3.02E-07	3.42E-07	4.4480E-03
520622.2	4258260.3	25628.31896	0.13069	0.16458	0.1296	0.17118	4.45E-03	3.07E-07	3.38E-07	3.04E-07	3.37E-07	4.4464E-03
520139.04	4258232.5	25627.03687	0.21318	5.01367	0.2159	5.82424	4.44E-03	5.00E-07	1.03E-05	5.07E-07	1.15E-05	4.4676E-03
520625.51	4258319.42	25625.67419	0.13431	0.15816	0.13281	0.16579	4.44E-03	3.15E-07	3.24E-07	3.12E-07	3.26E-07	4.4459E-03
520197.99	4258162.69	25621.2753	0.18737	2.16468	0.19063	2.41454	4.44E-03	4.40E-07	4.44E-06	4.48E-07	4.75E-06	4.4540E-03
520624.44	4258368.34	25616.98366	0.13804	0.15602	0.13533	0.1634	4.44E-03	3.24E-07	3.20E-07	3.18E-07	3.22E-07	4.4444E-03
520620.66	4258410.15	25615.82311	0.14202	0.15547	0.13877	0.16266	4.44E-03	3.33E-07	3.19E-07	3.26E-07	3.20E-07	4.4442E-03
520551.75	4258988.06	25609.92361	0.2198	0.10786	0.21183	0.1125	4.44E-03	5.16E-07	2.21E-07	4.97E-07	2.21E-07	4.4434E-03
520188.17	4258172.66	25605.20002	0.19051	2.42372	0.19317	2.71882	4.44E-03	4.47E-07	4.97E-06	4.54E-07	5.35E-06	4.4523E-03
520646.78	4258727.42	25602.55578	0.14553	0.12127	0.14051	0.12577	4.44E-03	3.42E-07	2.49E-07	3.30E-07	2.48E-07	4.4418E-03
520613.37	4258206.46	25600.10261	0.12906	0.17121	0.12809	0.17875	4.44E-03	3.03E-07	3.51E-07	3.01E-07	3.52E-07	4.4415E-03
520085.43	4259158.01	25591.79397	16.40962	0.21316	18.29117	0.2021	4.44E-03	3.85E-05	4.37E-07	4.29E-05	3.98E-07	4.5211E-03
520596.15	4258909.64	25577.70311	0.18441	0.1088	0.17856	0.11327	4.44E-03	4.33E-07	2.23E-07	4.19E-07	2.23E-07	4.4376E-03
520207.81	4258152.72	25575.853	0.18419	1.94677	0.18815	2.15986	4.44E-03	4.32E-07	3.99E-06	4.42E-07	4.25E-06	4.4451E-03
520618.3	4258228.59	25560.0225	0.12936	0.16803	0.12808	0.17488	4.43E-03	3.04E-07	3.45E-07	3.01E-07	3.44E-07	4.4346E-03
520638.61	4258794.82	25546.36443	0.15364	0.11539	0.14849	0.11922	4.43E-03	3.61E-07	2.37E-07	3.49E-07	2.35E-07	4.4321E-03
520039.36	4258492.26	25512.17175	0.5417	5.45468	0.60135	4.27519	4.42E-03	1.27E-06	1.12E-05	1.41E-06	8.42E-06	4.4473E-03
520217.63	4258142.75	25511.03479	0.18111	1.76051	0.18572	1.94583	4.42E-03	4.25E-07	3.61E-06	4.36E-07	3.83E-06	4.4331E-03
520042.98	4258473.67	25501.90201	0.48518	6.2486	0.53192	4.74921	4.42E-03	1.14E-06	1.28E-05	1.25E-06	9.35E-06	4.4477E-03
520646.17	4258752.8	25501.63933	0.14736	0.1184	0.14222	0.1227	4.42E-03	3.46E-07	2.43E-07	3.34E-07	2.42E-07	4.4243E-03
520178.35	4258182.63	25495.533	0.19353	2.73799	0.19577	3.08464	4.42E-03	4.54E-07	5.62E-06	4.60E-07	6.07E-06	4.4347E-03
520561.49	4258974.02	25467.23512	0.21125	0.10755	0.20378	0.11218	4.42E-03	4.96E-07	2.21E-07	4.78E-07	2.21E-07	4.4186E-03
520617.19	4258218.1	25448.23359	0.12887	0.16882	0.12766	0.17591	4.41E-03	3.03E-07	3.46E-07	3.00E-07	3.46E-07	4.4152E-03
520584.7	4258934.39	25441.95837	0.19295	0.10778	0.18659	0.11236	4.41E-03	4.53E-07	2.21E-07	4.38E-07	2.21E-07	4.4141E-03
520064.11	4258372.91	25425.2137	0.30089	19.68454	0.32213	9.93187	4.41E-03	7.06E-07	4.04E-05	7.56E-07	1.96E-05	4.4713E-03
520612.23	4258195.95	25417.13734	0.12856	0.17194	0.12784	0.17979	4.41E-03	3.02E-07	3.53E-07	3.00E-07	3.54E-07	4.4098E-03
520624.86	4258271.45	25409.95069	0.1308	0.16225	0.12975	0.16898	4.41E-03	3.07E-07	3.33E-07	3.05E-07	3.33E-07	4.4085E-03
519945.66	4258727.85	25399.92897	0.58354	0.682	0.64922	0.64699	4.41E-03	1.37E-06	1.40E-06	1.52E-06	1.27E-06	4.4111E-03
520045.36	4259127.25	25386.86661	5.60187	0.21537	7.80977	0.20939	4.40E-03	1.32E-05	4.42E-07	1.83E-05	4.12E-07	4.4356E-03
520227.45	4258132.78	25383.72452	0.17798	1.6007	0.18327	1.76192	4.40E-03	4.18E-07	3.28E-06	4.30E-07	3.47E-06	4.4103E-03
519929.15	4258856.83	25370.04645	0.6525	0.39951	0.71532	0.38725	4.40E-03	1.53E-06	8.19E-07	1.68E-06	7.62E-07	4.4051E-03
519935.82	4258927.45	25367.50145	0.77384	0.31869	0.84786	0.31375	4.40E-03	1.82E-06	6.54E-07	1.99E-06	6.18E-07	4.4050E-03
520168.53	4258192.6	25360.03364	0.19663	3.12028	0.19851	3.54089	4.40E-03	4.62E-07	6.40E-06	4.66E-07	6.97E-06	4.4129E-03
519929.49	4258833.54	25356.69185	0.62867	0.43413	0.68887	0.41865	4.40E-03	1.48E-06	8.90E-07	1.62E-06	8.24E-07	4.4028E-03
520055.28	4259137.23	25356.10449	7.98042	0.21378	13.76745	0.20664	4.40E-03	1.87E-05	4.38E-07	3.23E-05	4.07E-07	4.4498E-03
520095.34	4259167.99	25347.08696	12.22931	0.21055	11.4864	0.19859	4.40E-03	2.87E-05	4.32E-07	2.70E-05	3.91E-07	4.4528E-03
520624.18	4258393.54	25327.03218	0.13971	0.15473	0.13662	0.16186	4.39E-03	3.28E-07	3.17E-07	3.21E-07	3.19E-07	4.3941E-03
520099.7	4258292.38	25322.1174	0.24174	14.47958	0.25116	15.42029	4.39E-03	5.68E-07	2.97E-05	5.90E-07	3.04E-05	4.4532E-03
520626.19	4258282.04	25320.25051	0.13122	0.16073	0.1302	0.16763	4.39E-03	3.08E-07	3.30E-07	3.06E-07	3.30E-07	4.3930E-03
520642.16	4258786.32	25320.02337	0.15134	0.1155	0.1462	0.11935	4.39E-03	3.55E-07	2.37E-07	3.43E-07	2.35E-07	4.3928E-03
519929.76	4258882.44	25306.97459	0.68369	0.36591	0.74878	0.35686	4.39E-03	1.61E-06	7.50E-07	1.76E-06	7.02E-07	4.3942E-03
520647.55	4258701.64	25304.4457	0.14369	0.12409	0.13861	0.12849	4.39E-03	3.37E-07	2.54E-07	3.25E-07	2.53E-07	4.3901E-03
519937.54	4258938.15	25302.75208	0.79763	0.30901	0.87448	0.30467	4.39E-03	1.87E-06	6.34E-07	2.05E-06	6.00E-07	4.3938E-03
519940.09	4258949.2	25302.73606	0.82951	0.29987	0.91045	0.29605	4.39E-03	1.95E-06	6.15E-07	2.14E-06	5.83E-07	4.3939E-03
520237.27	4258122.81	25228.63696	0.17489	1.46182	0.18082	1.60356	4.38E-03	4.11E-07	3.00E-06	4.25E-07	3.16E-06	4.3828E-03
520611.16	4258185.48	25204.28491	0.12803	0.17262	0.12763	0.18077	4.37E-03	3.01E-07	3.54E-07	3.00E-07	3.56E-07	4.3729E-03
520627.65	4258292.67	25187.60335	0.1316	0.15903	0.13051	0.16615	4.37E-03	3.09E-07	3.26E-07	3.06E-07	3.27E-07	4.3699E-03
519941.85	4258959.92	25158.33892	0.8542	0.29095	0.9383	0.28755	4.36E-03	2.01E-06	5.97E-07	2.20E-06	5.66E-07	4.3690E-03
520594.67	4258920.26	25139.08736	0.18571	0.10755	0.17979	0.11202	4.36E-03	4.36E-07	2.21E-07	4.22E-07	2.21E-07	4.3616E-03
520158.71	4258202.57	25136.49035	0.19962	3.5994	0.20137	4.113	4.36E-03	4.69E-07	7.38E-06	4.73E-07	8.10E-06	4.3762E-03
519934.85	4258774.14	25130.72929	0.58619	0.54676	0.6438	0.52235	4.36E-03	1.38E-06	1.12E-06	1.51E-06	1.03E-06	4.3638E-03
520129.22	4258242.47	25129.41088	0.21596	6.12265	0.2195	7.16076	4.36E-03	5.07E-07	1.26E-05	5.15E-07	1.41E-05	4.3863E-03
520628.17	4258352.27	25110.41188	0.13569	0.15482	0.13325	0.16227	4.36E-03	3.19E-07	3.18E-07	3.13E-07	3.19E-07	4.3566E-03
520613.61	4258878.45	25095.14855	0.17207	0.10938	0.16681	0.11354	4.35E-03	4.04E-07	2.24E-07	3.92E-07	2.24E-07	4.3539E-03
520610.08	4258886.89	25093.87732	0.17459	0.10893	0.16922	0.11316	4.35E-03	4.10E-07	2.23E-07	3.97E-07	2.23E-07	4.3537E-03
520019.56	4258540.83	25079.88416	0.63263	3.02761	0.73768	2.56388	4.35E-03	1.49E-06	6.21E-06	1.73E-06	5.05E-06	4.3645E-03
520617.14	4258870.02	25079.15045	0.16958	0.1098	0.1644	0.11391	4.35E-03	3.98E-07	2.25E-07	3.86E-07	2.24E-07	4.3511E-03
520649.76	4258744.25	25065.4676	0.14517	0.11837	0.14019	0.1227	4.35E-03	3.41E-07	2.43E-07	3.29E-07	2.42E-07	4.3486E-03
520573.86	4258958.89	25060.86971	0.20115	0.10674	0.19428	0.11132	4.35E-03	4.72E-07	2.19E-07	4.56E-07	2.19E-07	4.3481E-03
519931.94	4258791.23	25053.74825	0.59102	0.50842	0.64768	0.48681	4.35E-03	1.39E-06	1.04E-06	1.52E-06	9.58E-07	4.3504E-03
520247.09	4258112.84	25044.22778	0.17184	1.34028	0.17834	1.46587	4.34E-03	4.03E-07	2.75E-06	4.19E-07	2.89E-06	4.3503E-03
520620.68	4258861.59	25036.79454	0.16713	0.11014	0.16196	0.11421	4.34E-03	3.92E-07	2.26E-07	3.80E-07	2.25E-07	4.3437E-03
520650.39	4258718.8	25022.01253	0.1434	0.12117	0.13849	0.12559	4.34E-03	3.37E-07	2.49E-07	3.25E-07	2.47E-07	4.3411E-03
520109.55	4258272.41	25015.16374	0.22984	10.18168	0.23659	11.81758	4.34E-03	5.40E-07	2.09E-05	5.55E-07	2.33E-05	4.3840E-03
520614.91	4258472.67	25010.46701	0.1474	0.15404	0.14302	0.16151	4.34E-03	3.46E-07	3.16E-07	3.36E-07	3.18E-07	4.3393E-03
520624.21	4258853.15	24990.60063	0.16471	0.11047	0.15956	0.1145	4.33E-03	3.87E-07	2.27E-07	3.75E-07	2.25E-07	4.3357E-03
519930.24	4258907.71	24973.60378	0.71111	0.33597	0.7774	0.32949	4.33E-03	1.67E-06	6.89E-07	1.83E-06	6.49E-07	4.3364E-03
520645.72	4258777.83	24959.52114	0.14894	0.11531	0.14379	0.11925	4.33E-03	3.50E-07	2.36E-07	3.38E-07	2.35E-07	4.3303E-03
520627.8	4258377.18	24948.3264	0.1374	0.15381	0.13448	0.16094	4.33E-03	3.23E-07	3.15E-07	3.16E-07	3.17E-07	4.3284E-03
520048.09	4258429.46	24926.58895	0.3737	7.68649	0.402	5.63349	4.32E-03	8.77E-07	1.58E-05	9.44E-07	1.11E-05	4.3521E-03
520620.72	4258436.19	24895.70684	0.14339	0.15353	0.13978	0.16078	4.32E-03	3.37E-07	3.15E-07	3.28E-07	3.16E-07	4.3193E-03
520583.48	4258944.9	24894.1607	0.19393	0.10653	0.1875	0.11106	4.32E-03	4.55E-07	2.18E-07	4.40E-07	2.19E-07	4.3191E-03
520560.44	4258984.46	24880.70023	0.21222	0.10632	0.20468	0.11086	4.32E-03	4.98E-07	2.18E-07	4.81E-07	2.18E-07	4.3169E-03
520631.27	4258836.28	24857.624	0.1599	0.11124	0.15488	0.11515	4.31E-03	3.75E-07	2.28E-07	3.64E-07	2.27E-07	4.3126E-03
520148.89	4258212.53	24834.37366	0.2025	4.21308	0.2044	4.85041	4.31E-03	4.75E-07	8.64E-06	4.80E-07	9.55E-06	4.3266E-03
519957.12	4258683.15	24832.72823	0.57349	0.86143	0.64606	0.80998	4.31E-03	1.35E-06	1.77E-06	1.52E-06	1.59E-06	4.3133E-03
519928.93	4258808.07	24831.65265	0.59318	0.47342	0.64844	0.45453	4.31E-03	1.39E-06	9.71E-07	1.52E-06	8.95E-07	4.3117E-03
519967.12	4258655.32	24827.07198	0.58213	1.02509	0.6592	0.9583	4.31E-03	1.37E-06	2.10E-06	1.55E-06	1.89E-06	4.3130E-03
520085.44	4259168.01	24826.1237	16.35577	0.20779	18.20768	0.19713	4.31E-03	3.84E-05	4.26E-07	4.27E-05	3.88E-07	4.3879E-03
519948.37	4258710.28	24785.83095	0.56826	0.73706	0.63402	0.69765	4.30E-03	1.33E-06	1.51E-06	1.49E-06	1.37E-06	4.3047E-03
520624.09	4258419.17	24775.38042	0.1412	0.15307	0.1378	0.16015	4.30E-03	3.31E-07	3.14E-07	3.24E-07	3.15E-07	4.2985E-03
520618.37	4258455.89	24753.761	0.14525	0.15334	0.14127	0.16073	4.29E-03	3.41E-07	3.14E-07	3.32E-07	3.16E-07	4.2947E-03
520570.23	4258970.4	24725.99414	0.2041	0.10599	0.19705	0.11052	4.29E-03	4.79E-07	2.17E-07	4.63E-07	2.18E-07	4.2900E-03
520634.8	4258827.85	24724.33141	0.15748	0.11145	0.15246	0.11531	4.29E-03	3.70E-07	2.29E-07	3.58E-07	2.27E-07	4.2895E-03
519926.01	4258873.38	24720.75305	0.64709	0.37373	0.70722	0.36353	4.29E-03	1.52E-06	7.66E-07	1.66E-06	7.16E-07	4.2924E-03
520045.38	4259137.25	24713.72123	5.64302	0.21001	7.85107	0.2042	4.29E-03	1.32E-05	4.31E-07	1.84E-05	4.02E-07	4.3190E-03
520009.65	4258560.27	24709.80679	0.63378	2.3707	0.74578	2.06469	4.29E-03	1.49E-06	4.86E-06	1.75E-06	4.06E-06	4.2980E-03
520604.88	4258906.02	24702.69683	0.17853	0.10728	0.17301	0.11159	4.28E-03	4.19E-07	2.20E-07	4.06E-07	2.20E-07	4.2858E-03
520593.3	4258930.83	24684.22782	0.18686	0.10631	0.18087	0.11075	4.28E-03	4.39E-07	2.18E-07	4.25E-07	2.18E-07	4.2827E-03
520055.71	4259147.23	24661.89529	8.13276	0.2086	14.31301	0.20162	4.28E-03	1.91E-05	4.28E-07	3.36E-05	3.97E-07	4.3310E-03
520649.28	4258769.34	24655.61212	0.14673	0.1153	0.14164	0.11931	4.28E-03	3.44E-07	2.36E-07	3.33E-07	2.35E-07	4.2776E-03
520638.33	4258819.41	24640.16403	0.15519	0.11183	0.15022	0.11562	4.27E-03	3.64E-07	2.29E-07	3.53E-07	2.28E-07	4.2749E-03
520622.35	4258210.3	24627.19276	0.1268	0.16582	0.1256	0.17282	4.27E-03	2.98E-07	3.40E-07	2.95E-07	3.40E-07	4.2727E-03
519925.35	4258847.69	24619.03331	0.61555	0.40764	0.67284	0.39412	4.27E-03	1.45E-06	8.36E-07	1.58E-06	7.76E-07	4.2747E-03
520653.34	4258735.69	24591.55001	0.14304	0.11831	0.13822	0.12265	4.27E-03	3.36E-07	2.43E-07	3.24E-07	2.41E-07	4.2664E-03
520651.19	4258692.94	24588.43318	0.1416	0.12394	0.13654	0.1282	4.26E-03	3.32E-07	2.54E-07	3.21E-07	2.52E-07	4.2659E-03
520095.36	4259177.99	24577.28283	12.18774	0.20529	11.44472	0.19376	4.26E-03	2.86E-05	4.21E-07	2.69E-05	3.81E-07	4.3191E-03
520119.4	4258252.44	24576.50676	0.21855	7.71638	0.22316	9.11469	4.26E-03	5.13E-07	1.58E-05	5.24E-07	1.79E-05	4.2975E-03
520627.58	4258402.46	24567.64966	0.13897	0.15243	0.13573	0.1594	4.26E-03	3.26E-07	3.13E-07	3.19E-07	3.14E-07	4.2624E-03
520039.32	4258482.56	24550.56962	0.50121	5.49239	0.55201	4.28891	4.26E-03	1.18E-06	1.13E-05	1.30E-06	8.44E-06	4.2804E-03
519926.52	4258898.73	24528.45038	0.67477	0.34333	0.73685	0.33587	4.25E-03	1.58E-06	7.04E-07	1.73E-06	6.61E-07	4.2590E-03
520054.1	4258397.01	24527.51633	0.32208	10.06846	0.34506	6.87415	4.25E-03	7.56E-07	2.06E-05	8.10E-07	1.35E-05	4.2899E-03
520628.33	4258242.9	24516.09981	0.12751	0.16182	0.12624	0.16813	4.25E-03	2.99E-07	3.32E-07	2.96E-07	3.31E-07	4.2535E-03
520641.86	4258810.98	24515.61659	0.15293	0.11224	0.14802	0.11596	4.25E-03	3.59E-07	2.30E-07	3.48E-07	2.28E-07	4.2533E-03
520631.5	4258361.03	24506.0456	0.1351	0.15263	0.1324	0.15984	4.25E-03	3.17E-07	3.13E-07	3.11E-07	3.15E-07	4.2517E-03
520627.08	4258232.35	24495.32882	0.12707	0.16287	0.12575	0.16927	4.25E-03	2.98E-07	3.34E-07	2.95E-07	3.33E-07	4.2499E-03
520629.7	4258253.5	24491.86012	0.12792	0.16056	0.12673	0.16688	4.25E-03	3.00E-07	3.29E-07	2.98E-07	3.29E-07	4.2493E-03
520064.53	4258362.75	24490.46865	0.28621	20.35148	0.30587	10.05851	4.25E-03	6.72E-07	4.17E-05	7.18E-07	1.98E-05	4.3107E-03
520632.69	4258312.41	24490.39673	0.13147	0.15461	0.12997	0.16196	4.25E-03	3.09E-07	3.17E-07	3.05E-07	3.19E-07	4.2490E-03
520621.14	4258199.77	24490.1549	0.12632	0.16663	0.12534	0.1739	4.25E-03	2.97E-07	3.42E-07	2.94E-07	3.42E-07	4.2490E-03
520198.02	4258152.69	24485.54687	0.18128	2.1687	0.18401	2.41506	4.25E-03	4.26E-07	4.45E-06	4.32E-07	4.75E-06	4.2570E-03
519925.82	4258824.69	24483.28352	0.59261	0.44191	0.64715	0.42536	4.25E-03	1.39E-06	9.06E-07	1.52E-06	8.37E-07	4.2512E-03
520207.84	4258142.72	24482.09181	0.17845	1.94957	0.18175	2.16205	4.25E-03	4.19E-07	4.00E-06	4.27E-07	4.26E-06	4.2554E-03
520632.46	4258337.68	24480.25348	0.13324	0.15341	0.13113	0.1608	4.25E-03	3.13E-07	3.15E-07	3.08E-07	3.17E-07	4.2472E-03
520188.2	4258162.66	24474.44245	0.18424	2.42769	0.18637	2.72072	4.24E-03	4.33E-07	4.98E-06	4.38E-07	5.36E-06	4.2562E-03
519999.73	4258579.7	24461.43823	0.62241	1.90211	0.73561	1.69457	4.24E-03	1.46E-06	3.90E-06	1.73E-06	3.34E-06	4.2532E-03
520139.07	4258222.5	24457.3604	0.20526	5.02259	0.20759	5.83078	4.24E-03	4.82E-07	1.03E-05	4.87E-07	1.15E-05	4.2648E-03
520625.91	4258221.84	24444.63378	0.12663	0.16371	0.12531	0.17031	4.24E-03	2.97E-07	3.36E-07	2.94E-07	3.35E-07	4.2411E-03
520217.66	4258132.75	24437.7424	0.17562	1.76298	0.17954	1.9479	4.24E-03	4.12E-07	3.62E-06	4.22E-07	3.83E-06	4.2469E-03
520652.83	4258760.84	24412.07286	0.14473	0.11546	0.13977	0.11954	4.23E-03	3.40E-07	2.37E-07	3.28E-07	2.35E-07	4.2353E-03
520654	4258710.17	24409.35378	0.14132	0.12112	0.13651	0.12541	4.23E-03	3.32E-07	2.48E-07	3.20E-07	2.47E-07	4.2348E-03
520631.17	4258264.14	24406.40295	0.12828	0.15917	0.12719	0.16555	4.23E-03	3.01E-07	3.26E-07	2.99E-07	3.26E-07	4.2344E-03
519936.19	4258753.25	24375.86386	0.55938	0.59161	0.61827	0.56342	4.23E-03	1.31E-06	1.21E-06	1.45E-06	1.11E-06	4.2330E-03
520178.39	4258172.63	24366.56221	0.18703	2.74183	0.18879	3.08667	4.23E-03	4.39E-07	5.62E-06	4.43E-07	6.08E-06	4.2389E-03
520645.4	4258802.55	24350.97148	0.15066	0.11253	0.1458	0.1162	4.22E-03	3.54E-07	2.31E-07	3.42E-07	2.29E-07	4.2247E-03
520582.36	4258955.37	24346.01731	0.19476	0.10528	0.18826	0.10975	4.22E-03	4.57E-07	2.16E-07	4.42E-07	2.16E-07	4.2240E-03
520620.02	4258189.27	24337.4922	0.12586	0.16726	0.12513	0.17484	4.22E-03	2.95E-07	3.43E-07	2.94E-07	3.44E-07	4.2225E-03
520227.48	4258122.78	24330.08958	0.17273	1.60303	0.17731	1.76366	4.22E-03	4.06E-07	3.29E-06	4.16E-07	3.47E-06	4.2275E-03
520603.33	4258916.67	24309.04856	0.17982	0.10609	0.17425	0.1104	4.22E-03	4.22E-07	2.18E-07	4.09E-07	2.17E-07	4.2176E-03
520618.25	4258481.43	24278.904	0.14633	0.15181	0.14168	0.15909	4.21E-03	3.44E-07	3.11E-07	3.33E-07	3.13E-07	4.2124E-03
520631.17	4258386.02	24266.86702	0.13672	0.15161	0.13363	0.15854	4.21E-03	3.21E-07	3.11E-07	3.14E-07	3.12E-07	4.2102E-03
520168.57	4258182.6	24233.64043	0.1899	3.12452	0.19134	3.54364	4.20E-03	4.46E-07	6.41E-06	4.49E-07	6.98E-06	4.2175E-03
519989.81	4258599.14	24220.22366	0.60273	1.55402	0.70523	1.41582	4.20E-03	1.42E-06	3.19E-06	1.66E-06	2.79E-06	4.2099E-03
520633.54	4258275.17	24204.50464	0.12845	0.157	0.12735	0.16359	4.20E-03	3.02E-07	3.22E-07	2.99E-07	3.22E-07	4.1994E-03
520237.3	4258112.81	24202.22634	0.1699	1.46386	0.1751	1.6052	4.20E-03	3.99E-07	3.00E-06	4.11E-07	3.16E-06	4.2047E-03
520569.12	4258980.87	24186.63084	0.20508	0.10482	0.19795	0.10927	4.20E-03	4.81E-07	2.15E-07	4.65E-07	2.15E-07	4.1964E-03
520043.36	4258448.48	24185.20678	0.40703	6.40089	0.43972	4.88744	4.19E-03	9.56E-07	1.31E-05	1.03E-06	9.62E-06	4.2196E-03
520099.73	4258282.38	24182.80639	0.23165	14.52717	0.24028	15.60521	4.19E-03	5.44E-07	2.98E-05	5.64E-07	3.07E-05	4.2560E-03
520592.03	4258941.36	24171.1186	0.18785	0.10508	0.18177	0.10949	4.19E-03	4.41E-07	2.16E-07	4.27E-07	2.16E-07	4.1937E-03
520648.93	4258794.11	24157.83601	0.14846	0.1127	0.1436	0.11637	4.19E-03	3.49E-07	2.31E-07	3.37E-07	2.29E-07	4.1912E-03
519939.13	4258736.23	24150.29045	0.55213	0.63652	0.61026	0.60564	4.19E-03	1.30E-06	1.31E-06	1.43E-06	1.19E-06	4.1940E-03
519930.98	4258945.44	24139.45444	0.74757	0.29781	0.81629	0.29382	4.19E-03	1.76E-06	6.11E-07	1.92E-06	5.78E-07	4.1917E-03
519928.69	4258934.5	24114.86169	0.72116	0.30679	0.78675	0.30219	4.18E-03	1.69E-06	6.29E-07	1.85E-06	5.95E-07	4.1874E-03
520085.46	4259178.01	24088.43505	16.27538	0.20264	18.11618	0.19236	4.18E-03	3.82E-05	4.16E-07	4.25E-05	3.79E-07	4.2596E-03
520656.92	4258727.13	24079.82293	0.14098	0.11824	0.13628	0.12253	4.18E-03	3.31E-07	2.43E-07	3.20E-07	2.41E-07	4.1777E-03
519922.25	4258864.32	24078.12065	0.61215	0.38136	0.66732	0.36999	4.18E-03	1.44E-06	7.82E-07	1.57E-06	7.28E-07	4.1808E-03
520634.94	4258285.78	24071.76332	0.12881	0.15548	0.12769	0.16226	4.18E-03	3.02E-07	3.19E-07	3.00E-07	3.19E-07	4.1764E-03
519932.82	4258956.19	24063.93367	0.7705	0.28909	0.84191	0.2856	4.17E-03	1.81E-06	5.93E-07	1.98E-06	5.62E-07	4.1787E-03

520045.81	4259147.25	24058.55565	5.72878	0.20501	8.04072	0.19931	4.17E-03	1.34E-05	4.20E-07	1.89E-05	3.92E-07	4.2060E-03
520656.39	4258752.35	24032.84248	0.14262	0.11551	0.13782	0.11964	4.17E-03	3.35E-07	2.37E-07	3.24E-07	2.36E-07	4.1695E-03
519922.79	4258889.74	24028.62931	0.64009	0.35055	0.69779	0.34207	4.17E-03	1.50E-06	7.19E-07	1.64E-06	6.73E-07	4.1722E-03
520158.75	4258192.57	24016.95309	0.19265	3.60439	0.19402	4.11604	4.17E-03	4.52E-07	7.39E-06	4.55E-07	8.10E-06	4.1820E-03
520578.97	4258966.78	24007.33836	0.19732	0.10448	0.19064	0.1089	4.16E-03	4.63E-07	2.14E-07	4.48E-07	2.14E-07	4.1653E-03
520129.25	4258232.47	24002.65574	0.20783	6.13214	0.21093	7.18204	4.16E-03	4.88E-07	1.26E-05	4.95E-07	1.41E-05	4.1908E-03
520049.63	4258408.85	23979.504	0.33415	8.19372	0.35782	5.94987	4.16E-03	7.84E-07	1.68E-05	8.40E-07	1.17E-05	4.1893E-03
520055.72	4259157.23	23962.05873	8.186	0.20341	14.40907	0.19667	4.16E-03	1.92E-05	4.17E-07	3.38E-05	3.87E-07	4.2100E-03
520621.67	4258464.56	23956.65913	0.14427	0.15115	0.14005	0.15842	4.16E-03	3.39E-07	3.10E-07	3.29E-07	3.12E-07	4.1565E-03
520627.53	4258428.19	23937.11718	0.14035	0.15067	0.13679	0.15767	4.15E-03	3.29E-07	3.09E-07	3.21E-07	3.10E-07	4.1531E-03
520652.46	4258785.68	23931.79361	0.1463	0.11275	0.14145	0.11646	4.15E-03	3.43E-07	2.31E-07	3.32E-07	2.29E-07	4.1520E-03
520635.94	4258346.8	23908.87399	0.1327	0.15104	0.13024	0.15825	4.15E-03	3.12E-07	3.10E-07	3.06E-07	3.12E-07	4.1481E-03
520601.91	4258927.27	23899.05878	0.18099	0.10489	0.17534	0.10919	4.15E-03	4.25E-07	2.15E-07	4.12E-07	2.15E-07	4.1464E-03
520634.84	4258369.79	23890.23928	0.13447	0.15059	0.13157	0.15754	4.14E-03	3.16E-07	3.09E-07	3.09E-07	3.10E-07	4.1449E-03
520054.92	4258386.69	23886.61801	0.30613	10.47884	0.32744	7.09565	4.14E-03	7.19E-07	2.15E-05	7.69E-07	1.40E-05	4.1800E-03
520109.58	4258262.41	23874.45137	0.22059	10.20896	0.22682	11.8116	4.14E-03	5.18E-07	2.09E-05	5.33E-07	2.33E-05	4.1862E-03
520617.26	4258893.69	23866.47322	0.1704	0.10624	0.16529	0.11032	4.14E-03	4.00E-07	2.18E-07	3.88E-07	2.17E-07	4.1408E-03
519979.89	4258618.58	23865.46296	0.57997	1.298	0.66666	1.20137	4.14E-03	1.36E-06	2.66E-06	1.57E-06	2.36E-06	4.1473E-03
520620.91	4258884.98	23863.0545	0.16792	0.10666	0.16291	0.11069	4.14E-03	3.94E-07	2.19E-07	3.82E-07	2.18E-07	4.1402E-03
519928.21	4258782.23	23861.37885	0.55314	0.51518	0.60415	0.49321	4.14E-03	1.30E-06	1.06E-06	1.42E-06	9.71E-07	4.1434E-03
520095.38	4259187.99	23848.69627	12.09062	0.20029	11.40588	0.18916	4.14E-03	2.84E-05	4.11E-07	2.68E-05	3.72E-07	4.1924E-03
520624.55	4258876.26	23848.48276	0.16547	0.10709	0.16054	0.11106	4.14E-03	3.88E-07	2.20E-07	3.77E-07	2.19E-07	4.1376E-03
520029.44	4258511.69	23831.3498	0.56745	4.01668	0.63926	3.29541	4.13E-03	1.33E-06	8.24E-06	1.50E-06	6.49E-06	4.1510E-03
520628.2	4258867.55	23817.37588	0.16304	0.10749	0.15818	0.11141	4.13E-03	3.83E-07	2.20E-07	3.71E-07	2.19E-07	4.1322E-03
519921.56	4258838.55	23813.31155	0.5804	0.41533	0.6325	0.40068	4.13E-03	1.36E-06	8.52E-07	1.48E-06	7.89E-07	4.1348E-03
520630.98	4258411.39	23799.74963	0.1382	0.15013	0.13482	0.15698	4.13E-03	3.24E-07	3.08E-07	3.17E-07	3.09E-07	4.1292E-03
519931.08	4258765.04	23781.9357	0.54647	0.55303	0.59837	0.52853	4.12E-03	1.28E-06	1.13E-06	1.40E-06	1.04E-06	4.1297E-03
519925.23	4258799.15	23776.26634	0.55693	0.48058	0.60712	0.46098	4.12E-03	1.31E-06	9.86E-07	1.43E-06	9.07E-07	4.1285E-03
519957.12	4258673.87	23774.04112	0.55108	0.88625	0.61977	0.83301	4.12E-03	1.29E-06	1.82E-06	1.46E-06	1.64E-06	4.1297E-03
519950.71	4258691.8	23771.34985	0.54647	0.79541	0.60925	0.75182	4.12E-03	1.28E-06	1.63E-06	1.43E-06	1.48E-06	4.1289E-03
520657.61	4258701.55	23767.39848	0.1393	0.12099	0.13453	0.12514	4.12E-03	3.27E-07	2.48E-07	3.16E-07	2.46E-07	4.1235E-03
520631.85	4258858.83	23766.97207	0.16065	0.10781	0.1558	0.11169	4.12E-03	3.77E-07	2.21E-07	3.66E-07	2.20E-07	4.1235E-03
519923.21	4258914.86	23736.79121	0.66493	0.32283	0.72381	0.31675	4.12E-03	1.56E-06	6.62E-07	1.70E-06	6.24E-07	4.1216E-03
520148.93	4258202.53	23730.70544	0.19531	4.21888	0.19684	4.85442	4.12E-03	4.59E-07	8.65E-06	4.62E-07	9.56E-06	4.1351E-03
520635.5	4258850.12	23711.04891	0.15827	0.10816	0.15346	0.11199	4.11E-03	3.72E-07	2.22E-07	3.60E-07	2.20E-07	4.1137E-03
520590.85	4258951.86	23659.68137	0.1887	0.10387	0.18254	0.10822	4.10E-03	4.43E-07	2.13E-07	4.29E-07	2.13E-07	4.1050E-03
520639.15	4258841.4	23640.93291	0.15591	0.10856	0.15117	0.11233	4.10E-03	3.66E-07	2.23E-07	3.55E-07	2.21E-07	4.1016E-03
520631.33	4258214.14	23638.11284	0.12453	0.16075	0.1232	0.16723	4.10E-03	2.92E-07	3.30E-07	2.89E-07	3.29E-07	4.1012E-03
519941.95	4258718.91	23634.55212	0.53931	0.68578	0.5983	0.65103	4.10E-03	1.27E-06	1.41E-06	1.40E-06	1.28E-06	4.1047E-03
520659.94	4258743.86	23618.66812	0.14057	0.11546	0.13592	0.11962	4.10E-03	3.30E-07	2.37E-07	3.19E-07	2.35E-07	4.0977E-03
520064.89	4258352.61	23582.61859	0.27271	20.91151	0.29095	10.16797	4.09E-03	6.40E-07	4.29E-05	6.83E-07	2.00E-05	4.1545E-03
520634.53	4258394.85	23577.00431	0.13601	0.14943	0.13279	0.15619	4.09E-03	3.19E-07	3.06E-07	3.12E-07	3.07E-07	4.0906E-03
520630.06	4258203.59	23569.0063	0.12413	0.16152	0.12292	0.16826	4.09E-03	2.91E-07	3.31E-07	2.89E-07	3.31E-07	4.0892E-03
519922.15	4258815.84	23560.72294	0.55832	0.44895	0.60757	0.43161	4.09E-03	1.31E-06	9.21E-07	1.43E-06	8.50E-07	4.0910E-03
520642.8	4258832.68	23553.50163	0.15358	0.10889	0.14887	0.11259	4.09E-03	3.61E-07	2.23E-07	3.49E-07	2.22E-07	4.0864E-03
520660.51	4258718.58	23533.67206	0.13897	0.11817	0.13438	0.12236	4.08E-03	3.26E-07	2.42E-07	3.15E-07	2.41E-07	4.0829E-03
520577.8	4258977.27	23506.04596	0.19828	0.10335	0.19151	0.1077	4.08E-03	4.65E-07	2.12E-07	4.50E-07	2.12E-07	4.0784E-03
520612	4258913.08	23501.46164	0.17417	0.10466	0.16891	0.10881	4.08E-03	4.09E-07	2.15E-07	3.97E-07	2.14E-07	4.0775E-03
519919.07	4258880.76	23479.78503	0.60704	0.35768	0.66041	0.34812	4.07E-03	1.43E-06	7.34E-07	1.55E-06	6.85E-07	4.0769E-03
520600.58	4258937.82	23479.40125	0.18204	0.10371	0.1763	0.10799	4.07E-03	4.27E-07	2.13E-07	4.14E-07	2.13E-07	4.0737E-03
520207.88	4258132.72	23466.83534	0.17301	1.9515	0.17571	2.16402	4.07E-03	4.06E-07	4.00E-06	4.13E-07	4.26E-06	4.0793E-03
520628.88	4258193.07	23464.91045	0.12371	0.16217	0.12269	0.16921	4.07E-03	2.90E-07	3.33E-07	2.88E-07	3.33E-07	4.0711E-03
520635.85	4258236.11	23458.98373	0.12485	0.15781	0.12349	0.16389	4.07E-03	2.93E-07	3.24E-07	2.90E-07	3.23E-07	4.0701E-03
520198.06	4258142.69	23454.57795	0.17561	2.17096	0.17779	2.41705	4.07E-03	4.12E-07	4.45E-06	4.17E-07	4.76E-06	4.0781E-03
520119.43	4258242.44	23454.04248	0.21009	7.73703	0.21436	9.08695	4.07E-03	4.93E-07	1.59E-05	5.03E-07	1.79E-05	4.1027E-03
519967.12	4258646.05	23448.27507	0.55411	1.04994	0.62504	0.98265	4.07E-03	1.30E-06	2.15E-06	1.47E-06	1.93E-06	4.0739E-03
520646.45	4258823.97	23446.13559	0.15128	0.1092	0.1466	0.11284	4.07E-03	3.55E-07	2.24E-07	3.44E-07	2.22E-07	4.0678E-03
520634.63	4258225.57	23445.70361	0.12442	0.15877	0.12304	0.16494	4.07E-03	2.92E-07	3.26E-07	2.89E-07	3.25E-07	4.0678E-03
520639.88	4258305.41	23431.57207	0.12871	0.15131	0.12722	0.15835	4.06E-03	3.02E-07	3.10E-07	2.99E-07	3.12E-07	4.0653E-03
520637.17	4258246.68	23428.78758	0.12524	0.15669	0.12396	0.16274	4.06E-03	2.94E-07	3.21E-07	2.91E-07	3.20E-07	4.0648E-03
520217.7	4258122.75	23417.25371	0.17034	1.76529	0.17365	1.94858	4.06E-03	4.00E-07	3.62E-06	4.08E-07	3.84E-06	4.0699E-03
520188.24	4258152.66	23415.15872	0.17828	2.43115	0.17996	2.72115	4.06E-03	4.19E-07	4.99E-06	4.22E-07	5.36E-06	4.0724E-03
520045.82	4259157.25	23392.01788	5.78934	0.1999	8.0689	0.1944	4.06E-03	1.36E-05	4.10E-07	1.89E-05	3.83E-07	4.0906E-03
519918.5	4258855.26	23383.66091	0.57885	0.38871	0.62932	0.37622	4.06E-03	1.36E-06	7.97E-07	1.48E-06	7.41E-07	4.0602E-03
520085.48	4259188.01	23378.47815	16.19473	0.1977	18.02497	0.18778	4.05E-03	3.80E-05	4.05E-07	4.23E-05	3.70E-07	4.1360E-03
520139.11	4258212.5	23375.36212	0.19784	5.02977	0.19983	5.83576	4.05E-03	4.64E-07	1.03E-05	4.69E-07	1.15E-05	4.0771E-03
520227.52	4258112.78	23347.50697	0.16773	1.60466	0.17165	1.76506	4.05E-03	3.94E-07	3.29E-06	4.03E-07	3.47E-06	4.0571E-03
520638.6	4258257.31	23344.28834	0.12558	0.15541	0.1244	0.1615	4.05E-03	2.95E-07	3.19E-07	2.92E-07	3.18E-07	4.0502E-03
520587.71	4258963.16	23338.3425	0.19099	0.10306	0.18467	0.10737	4.05E-03	4.48E-07	2.11E-07	4.34E-07	2.11E-07	4.0492E-03
520639.41	4258355.93	23322.97248	0.13211	0.14877	0.12936	0.15575	4.05E-03	3.10E-07	3.05E-07	3.04E-07	3.07E-07	4.0465E-03
520650.1	4258815.25	23316.32291	0.14901	0.10949	0.14435	0.11307	4.04E-03	3.50E-07	2.25E-07	3.39E-07	2.23E-07	4.0452E-03
519919.51	4258905.94	23315.0329	0.63215	0.32951	0.68711	0.32253	4.04E-03	1.48E-06	6.76E-07	1.61E-06	6.35E-07	4.0483E-03
520178.42	4258162.63	23310.2344	0.18087	2.74569	0.18221	3.08811	4.04E-03	4.25E-07	5.63E-06	4.28E-07	6.08E-06	4.0556E-03
520659.52	4258768.81	23297.36592	0.14199	0.11254	0.13722	0.11641	4.04E-03	3.33E-07	2.31E-07	3.22E-07	2.29E-07	4.0419E-03
520055.74	4259167.23	23282.08738	8.30476	0.19836	14.50856	0.19186	4.04E-03	1.95E-05	4.07E-07	3.41E-05	3.78E-07	4.0925E-03
520638.18	4258378.55	23269.19934	0.13382	0.1485	0.13075	0.15524	4.04E-03	3.14E-07	3.05E-07	3.07E-07	3.06E-07	4.0372E-03
520624.97	4258473.23	23231.3259	0.14326	0.14903	0.13879	0.15615	4.03E-03	3.36E-07	3.06E-07	3.26E-07	3.07E-07	4.0306E-03
520640.15	4258267.98	23224.05388	0.1259	0.15394	0.12478	0.16016	4.03E-03	2.96E-07	3.16E-07	2.93E-07	3.15E-07	4.0293E-03
520039.85	4258457.01	23223.5358	0.41853	5.66527	0.45334	4.42804	4.03E-03	9.83E-07	1.16E-05	1.06E-06	8.72E-06	4.0504E-03
520055.59	4258376.43	23199.71239	0.29136	10.82716	0.31116	7.27638	4.02E-03	6.84E-07	2.22E-05	7.31E-07	1.43E-05	4.0618E-03
520168.6	4258172.6	23170.79373	0.1835	3.12981	0.1846	3.54394	4.02E-03	4.31E-07	6.42E-06	4.33E-07	6.98E-06	4.0331E-03
520663.5	4258735.36	23165.31515	0.13858	0.11535	0.13405	0.1195	4.02E-03	3.25E-07	2.37E-07	3.15E-07	2.35E-07	4.0190E-03
520653.75	4258806.54	23161.23668	0.14679	0.10984	0.14219	0.11336	4.02E-03	3.45E-07	2.25E-07	3.34E-07	2.23E-07	4.0183E-03
520610.51	4258923.7	23132.32818	0.17533	0.10351	0.17001	0.10767	4.01E-03	4.12E-07	2.12E-07	3.99E-07	2.12E-07	4.0134E-03
520630.96	4258437.21	23117.84318	0.13946	0.14839	0.13574	0.15532	4.01E-03	3.27E-07	3.04E-07	3.19E-07	3.06E-07	4.0109E-03
520099.76	4258272.38	23114.46709	0.22224	14.5729	0.23022	15.63921	4.01E-03	5.22E-07	2.99E-05	5.40E-07	3.08E-05	4.0708E-03
520661.22	4258692.92	23101.89752	0.13736	0.12073	0.13255	0.12476	4.01E-03	3.22E-07	2.48E-07	3.11E-07	2.46E-07	4.0080E-03
520663.05	4258760.37	23046.75285	0.14009	0.11265	0.13545	0.11659	4.00E-03	3.29E-07	2.31E-07	3.18E-07	2.30E-07	3.9985E-03
520599.35	4258948.34	23031.11502	0.18295	0.10255	0.17713	0.10678	3.99E-03	4.30E-07	2.10E-07	4.16E-07	2.10E-07	3.9959E-03
520634.38	4258420.31	23030.79356	0.13739	0.14788	0.13388	0.15465	3.99E-03	3.23E-07	3.03E-07	3.14E-07	3.04E-07	3.9958E-03
520642.21	4258278.88	23019.32858	0.12609	0.15208	0.12494	0.1585	3.99E-03	2.96E-07	3.12E-07	2.93E-07	3.12E-07	3.9938E-03
520019.52	4258531.13	23005.26402	0.58549	3.07551	0.67301	2.60592	3.99E-03	1.37E-06	6.31E-06	1.58E-06	5.13E-06	4.0046E-03
520094.86	4259199.84	23004.63348	12.10895	0.19453	11.59905	0.1839	3.99E-03	2.84E-05	3.99E-07	2.72E-05	3.62E-07	4.0465E-03
519921.88	4258941.68	22991.56255	0.67611	0.2957	0.73513	0.29139	3.99E-03	1.59E-06	6.06E-07	1.73E-06	5.74E-07	3.9923E-03
519923.78	4258952.46	22977.75188	0.69736	0.28716	0.7587	0.28345	3.99E-03	1.64E-06	5.89E-07	1.78E-06	5.58E-07	3.9900E-03
520657.4	4258797.82	22976.58277	0.1446	0.11003	0.14002	0.11354	3.99E-03	3.39E-07	2.26E-07	3.29E-07	2.24E-07	3.9863E-03
520664.09	4258710.02	22960.30826	0.13701	0.1181	0.1325	0.12216	3.98E-03	3.22E-07	2.42E-07	3.11E-07	2.40E-07	3.9835E-03
520158.78	4258182.57	22957.32893	0.18603	3.61134	0.18711	4.11445	3.98E-03	4.37E-07	7.41E-06	4.39E-07	8.10E-06	3.9982E-03
519917.77	4258829.41	22954.30457	0.54688	0.42243	0.59423	0.40684	3.98E-03	1.28E-06	8.66E-07	1.40E-06	8.01E-07	3.9857E-03
520129.29	4258222.47	22952.70116	0.20021	6.14098	0.20295	7.19255	3.98E-03	4.70E-07	1.26E-05	4.76E-07	1.42E-05	4.0087E-03
520643.29	4258314.37	22936.25512	0.12823	0.1491	0.12649	0.1561	3.98E-03	3.01E-07	3.06E-07	2.97E-07	3.07E-07	3.9794E-03
519932.56	4258744.48	22933.19194	0.52127	0.5962	0.57447	0.56825	3.98E-03	1.22E-06	1.22E-06	1.35E-06	1.12E-06	3.9826E-03
520643.02	4258339.53	22894.76208	0.1299	0.14792	0.12751	0.1549	3.97E-03	3.05E-07	3.03E-07	2.99E-07	3.05E-07	3.9722E-03
519944.62	4258701.24	22891.14518	0.52384	0.73815	0.58109	0.69978	3.97E-03	1.23E-06	1.51E-06	1.36E-06	1.38E-06	3.9759E-03
519915.34	4258871.78	22882.31903	0.5755	0.36453	0.62433	0.35395	3.97E-03	1.35E-06	7.48E-07	1.47E-06	6.97E-07	3.9731E-03
520637.9	4258403.69	22875.89102	0.13528	0.14724	0.13193	0.15387	3.97E-03	3.18E-07	3.02E-07	3.10E-07	3.03E-07	3.9690E-03
520586.48	4258973.68	22859.6558	0.19188	0.10194	0.18545	0.10619	3.96E-03	4.50E-07	2.09E-07	4.35E-07	2.09E-07	3.9662E-03
519915.82	4258897.03	22847.78384	0.60084	0.33616	0.652	0.32821	3.96E-03	1.41E-06	6.89E-07	1.53E-06	6.46E-07	3.9671E-03
520109.62	4258252.41	22839.28243	0.21205	10.22686	0.21773	11.89476	3.96E-03	4.98E-07	2.10E-05	5.11E-07	2.34E-05	4.0068E-03
520661.05	4258789.11	22759.51189	0.14247	0.11009	0.1379	0.11364	3.95E-03	3.34E-07	2.26E-07	3.24E-07	2.24E-07	3.9486E-03
520609.13	4258934.28	22750.83403	0.17638	0.10237	0.17098	0.10651	3.95E-03	4.14E-07	2.10E-07	4.01E-07	2.10E-07	3.9473E-03
520642.89	4258365.05	22730.29148	0.13146	0.1468	0.12852	0.15352	3.94E-03	3.09E-07	3.01E-07	3.02E-07	3.02E-07	3.9437E-03
520624.29	4258900.84	22728.92019	0.1664	0.10365	0.16152	0.1076	3.94E-03	3.91E-07	2.13E-07	3.79E-07	2.12E-07	3.9434E-03
520627.91	4258892.19	22722.89265	0.16406	0.10404	0.15926	0.10793	3.94E-03	3.85E-07	2.13E-07	3.74E-07	2.12E-07	3.9424E-03
520045.84	4259167.25	22722.2932	5.83543	0.19496	8.09977	0.18965	3.94E-03	1.37E-05	4.00E-07	1.90E-05	3.73E-07	3.9746E-03
520631.53	4258883.54	22707.31096	0.16174	0.10444	0.15702	0.10828	3.94E-03	3.80E-07	2.14E-07	3.69E-07	2.13E-07	3.9397E-03
520148.96	4258192.53	22702.01557	0.18853	4.22502	0.18976	4.85807	3.94E-03	4.43E-07	8.67E-06	4.45E-07	9.56E-06	3.9567E-03
520596.45	4258959.54	22697.16735	0.18495	0.10168	0.17895	0.10589	3.94E-03	4.34E-07	2.09E-07	4.20E-07	2.08E-07	3.9380E-03
519957.12	4258664.6	22684.43285	0.52919	0.90952	0.59369	0.85506	3.93E-03	1.24E-06	1.87E-06	1.39E-06	1.68E-06	3.9407E-03
520666.58	4258751.94	22682.96868	0.13811	0.11269	0.13363	0.11666	3.93E-03	3.24E-07	2.31E-07	3.14E-07	2.30E-07	3.9354E-03
519921.53	4258790.23	22682.78212	0.52272	0.48657	0.56813	0.4667	3.93E-03	1.23E-06	9.98E-07	1.33E-06	9.19E-07	3.9387E-03
520635.15	4258874.89	22682.54032	0.15943	0.10484	0.15479	0.10863	3.93E-03	3.74E-07	2.15E-07	3.63E-07	2.14E-07	3.9353E-03
520667.06	4258726.87	22680.44043	0.13666	0.11515	0.1322	0.11926	3.93E-03	3.21E-07	2.36E-07	3.10E-07	2.35E-07	3.9349E-03
520009.61	4258550.57	22660.34989	0.5914	2.41549	0.68775	2.10303	3.93E-03	1.39E-06	4.95E-06	1.61E-06	4.14E-06	3.9424E-03
520638.98	4258207.4	22642.89764	0.12195	0.15663	0.12058	0.16289	3.93E-03	2.86E-07	3.21E-07	2.83E-07	3.21E-07	3.9285E-03
520638.77	4258866.24	22642.40584	0.15715	0.1052	0.15256	0.10894	3.93E-03	3.69E-07	2.16E-07	3.58E-07	2.14E-07	3.9284E-03
520641.51	4258387.31	22639.89524	0.13315	0.14641	0.12994	0.15298	3.93E-03	3.13E-07	3.00E-07	3.05E-07	3.01E-07	3.9280E-03
520640.31	4258217.98	22638.61406	0.12225	0.15587	0.12087	0.16186	3.93E-03	2.87E-07	3.20E-07	2.84E-07	3.19E-07	3.9278E-03
519914.74	4258846.2	22633.51397	0.54687	0.3957	0.59318	0.38216	3.93E-03	1.28E-06	8.12E-07	1.39E-06	7.52E-07	3.9299E-03
519924.47	4258773.22	22632.01581	0.5174	0.52067	0.56341	0.49873	3.93E-03	1.21E-06	1.07E-06	1.32E-06	9.82E-07	3.9300E-03
520055.76	4259177.23	22624.27858	8.37566	0.19355	14.61722	0.18727	3.92E-03	1.97E-05	3.97E-07	3.43E-05	3.69E-07	3.9788E-03
520637.74	4258196.86	22600.652	0.12159	0.15726	0.12033	0.16382	3.92E-03	2.85E-07	3.23E-07	2.82E-07	3.22E-07	3.9212E-03
519918.48	4258807	22590.30133	0.5256	0.45524	0.57041	0.43735	3.92E-03	1.23E-06	9.34E-07	1.34E-06	8.61E-07	3.9226E-03
520642.4	4258857.59	22588.68168	0.15489	0.10543	0.15029	0.10914	3.92E-03	3.64E-07	2.16E-07	3.53E-07	2.15E-07	3.9191E-03
519916.17	4258922	22588.48017	0.62325	0.31049	0.67579	0.30476	3.92E-03	1.46E-06	6.37E-07	1.59E-06	6.00E-07	3.9222E-03
520628.28	4258481.9	22579.9256	0.14222	0.14702	0.13752	0.15394	3.92E-03	3.34E-07	3.02E-07	3.23E-07	3.03E-07	3.9176E-03
520084.96	4259199.85	22561.86465	16.23762	0.19199	18.48339	0.18254	3.91E-03	3.81E-05	3.94E-07	4.34E-05	3.59E-07	3.9955E-03
519935.46	4258727.38	22550.45274	0.51237	0.64005	0.56496	0.60942	3.91E-03	1.20E-06	1.31E-06	1.33E-06	1.20E-06	3.9163E-03
520646.02	4258848.94	22508.05849	0.15262	0.10573	0.14805	0.10939	3.90E-03	3.58E-07	2.17E-07	3.48E-07	2.15E-07	3.9051E-03
520056.13	4258366.21	22491.27721	0.27764	11.12471	0.29615	7.41828	3.90E-03	6.52E-07	2.28E-05	6.95E-07	1.46E-05	3.9398E-03
519999.69	4258570	22491.02055	0.58548	1.94363	0.68423	1.72989	3.90E-03	1.37E-06	3.99E-06	1.61E-06	3.41E-06	3.9113E-03
520207.91	4258122.72	22486.90932	0.16773	1.95411	0.16995	2.16398	3.90E-03	3.94E-07	4.01E-06	3.99E-07	4.26E-06	3.9093E-03
520198.09	4258132.69	22485.08716	0.17021	2.17317	0.1719	2.41859	3.90E-03	4.00E-07	4.46E-06	4.04E-07	4.76E-06	3.9100E-03
520664.69	4258780.39	22470.71961	0.14033	0.10998	0.13576	0.1136	3.90E-03	3.29E-07	2.26E-07	3.19E-07	2.24E-07	3.8985E-03
520217.73	4258112.75	22469.35682	0.16533	1.7671	0.16808	1.94961	3.90E-03	3.88E-07	3.62E-06	3.95E-07	3.84E-06	3.9055E-03
520649.64	4258840.29	22455.16805	0.15042	0.10626	0.14598	0.10984	3.89E-03	3.53E-07	2.18E-07	3.43E-07	2.16E-07	3.8959E-03
520643.35	4258229.3	22448.93518	0.12222	0.154	0.12083	0.1598	3.89E-03	2.87E-07	3.16E-07	2.84E-07	3.15E-07	3.8949E-03
520119.47	4258232.44	22442.70689	0.20227	7.74917	0.20614	9.10789	3.89E-03	4.75E-07	1.59E-05	4.84E-07	1.79E-05	3.9274E-03
520188.27	4258142.66	22435.78345	0.17266	2.43379	0.17392	2.72261	3.89E-03	4.05E-07	4.99E-06	4.08E-07	5.36E-06	3.9025E-03
520631.15	4258463.57	22414.17939	0.14045	0.14668	0.13619	0.15363	3.89E-03	3.30E-07	3.01E-07	3.20E-07	3.02E-07	3.8889E-03
520644.63	4258239.86	22413.22265	0.12259	0.15298	0.12127	0.15873	3.89E-03	2.88E-07	3.14E-07	2.85E-07	3.12E-07	3.8887E-03
520029.4	4258502	22405.19666	0.52468	4.05088	0.58428	3.33118	3.89E-03	1.23E-06	8.31E-06	1.37E-06	6.56E-06	3.9035E-03
520647.06	4258298.41	22399.85274	0.12595	0.14828	0.12455	0.15492	3.89E-03	2.96E-07	3.04E-07	2.92E-07	3.05E-07	3.8863E-03
519989.77	4258589.44	22391.05145	0.57069	1.59211	0.66639	1.44582	3.88E-03	1.34E-06	3.27E-06	1.56E-06	2.85E-06	3.8926E-03
520619.12	4258920.14	22387.75169	0.16992	0.10213	0.16487	0.10614	3.88E-03	3.99E-07	2.09E-07	3.87E-07	2.09E-07	3.8843E-03
519927.31	4258755.94	22383.97815	0.50852	0.55816	0.55652	0.53352	3.88E-03	1.19E-06	1.14E-06	1.31E-06	1.05E-06	3.8871E-03
520139.14	4258202.5	22366.00542	0.19086	5.03777	0.19256	5.83952	3.88E-03	4.48E-07	1.03E-05	4.52E-07	1.15E-05	3.9020E-03
520653.26	4258831.64	22365.78403	0.14822	0.10662	0.14384	0.11013	3.88E-03	3.48E-07	2.19E-07	3.38E-07	2.17E-07	3.8804E-03
520667.67	4258701.46	22361.5786	0.13512	0.11794	0.13062	0.12187	3.88E-03	3.17E-07	2.42E-07	3.07E-07	2.40E-07	3.8796E-03
520607.85	4258944.82	22359.06363	0.17733	0.10125	0.17183	0.10537	3.88E-03	4.16E-07	2.08E-07	4.03E-07	2.07E-07	3.8793E-03
520094.88	4259209.84	22340.17167	12.01625	0.18995	11.54891	0.17967	3.87E-03	2.82E-05	3.90E-07	2.71E-05	3.54E-07	3.9309E-03
519912.12	4258888.12	22331.39948	0.57078	0.3427	0.61826	0.33373	3.87E-03	1.34E-06	7.03E-07	1.45E-06	6.57E-07	3.8774E-03
520646.01	4258250.47	22330.31344	0.12293	0.1518	0.1217	0.15758	3.87E-03	2.89E-07	3.11E-07	2.86E-07	3.10E-07	3.8743E-03
520178.45	4258152.63	22325.66205	0.17504	2.74891	0.17602	3.08917	3.87E-03	4.11E-07	5.64E-06	4.13E-07	6.08E-06	3.8848E-03
520036.34	4258465.54	22305.19546	0.43028	5.0577	0.46772	4.02895	3.87E-03	1.01E-06	1.04E-05	1.10E-06	7.93E-06	3.8891E-03
520063.14	4258343.35	22294.95143	0.25853	17.72939	0.27538	9.49938	3.87E-03	6.07E-07	3.64E-05	6.47E-07	1.87E-05	3.9233E-03
520670.12	4258743.5	22284.22167	0.13619	0.11261	0.13183	0.11659	3.87E-03	3.20E-07	2.31E-07	3.09E-07	2.30E-07	3.8662E-03
520637.77	4258429.23	22270.87058	0.13655	0.14568	0.13291	0.15238	3.86E-03	3.21E-07	2.99E-07	3.12E-07	3.00E-07	3.8640E-03
520656.88	4258822.99	22254.58227	0.14608	0.10684	0.14168	0.11029	3.86E-03	3.43E-07	2.19E-07	3.33E-07	2.17E-07	3.8611E-03
520595.17	4258970.08	22252.4573	0.18583	0.10059	0.17972	0.10474	3.86E-03	4.36E-07	2.06E-07	4.22E-07	2.06E-07	3.8609E-03
519979.85	4258608.88	22236.97671	0.55146	1.32736	0.6343	1.2277	3.86E-03	1.29E-06	2.72E-06	1.49E-06	2.42E-06	3.8648E-03
519911.62	4258862.8	22236.72401	0.54535	0.37112	0.58996	0.35955	3.86E-03	1.28E-06	7.61E-07	1.39E-06	7.08E-07	3.8610E-03
519967.12	4258636.77	22236.26939	0.53208	1.07388	0.60001	1.00578	3.86E-03	1.25E-06	2.20E-06	1.41E-06	1.98E-06	3.8636E-03
520647.51	4258261.12	22207.33431	0.12322	0.15046	0.12207	0.15634	3.85E-03	2.89E-07	3.09E-07	2.87E-07	3.08E-07	3.8530E-03
519912.5	4258913.15	22189.78586	0.5936	0.3166	0.64259	0.31003	3.85E-03	1.39E-06	6.49E-07	1.51E-06	6.10E-07	3.8529E-03
520168.63	4258162.6	22181.16998	0.17745	3.13431	0.17825	3.54362	3.85E-03	4.17E-07	6.43E-06	4.18E-07	6.98E-06	3.8615E-03
520670.61	4258718.38	22169.63714	0.13477	0.11513	0.13041	0.11913	3.85E-03	3.16E-07	2.36E-07	3.06E-07	2.35E-07	3.8463E-03
520668.34	4258771.68	22141.62622	0.1382	0.10986	0.13369	0.11356	3.84E-03	3.24E-07	2.25E-07	3.14E-07	2.24E-07	3.8415E-03
520099.8	4258262.38	22127.29528	0.21349	14.61157	0.22087	15.68769	3.84E-03	5.01E-07	3.00E-05	5.19E-07	3.09E-05	3.8997E-03
520045.86	4259177.25	22113.01952	5.87577	0.19034	8.13971	0.18519	3.84E-03	1.38E-05	3.90E-07	1.91E-05	3.65E-07	3.8691E-03
520660.51	4258814.34	22111.17503	0.14393	0.10703	0.13953	0.11044	3.84E-03	3.38E-07	2.20E-07	3.28E-07	2.17E-07	3.8362E-03
520605.19	4258955.93	22072.07856	0.17914	0.10036	0.17347	0.10445	3.83E-03	4.21E-07	2.06E-07	4.07E-07	2.06E-07	3.8295E-03
520649.13	4258271.83	22048.50142	0.12348	0.14897	0.12235	0.15501	3.82E-03	2.90E-07	3.06E-07	2.87E-07	3.05E-07	3.8254E-03
519913.98	4258820.27	22047.54135	0.51496	0.42878	0.55801	0.41253	3.82E-03	1.21E-06	8.79E-07	1.31E-06	8.12E-07	3.8283E-03
520617.68	4258930.74	22040.98457	0.17096	0.10103	0.16583	0.10504	3.82E-03	4.01E-07	2.07E-07	3.89E-07	2.07E-07	3.8241E-03
520055.77	4259187.23	22005.07425	8.43678	0.18896	14.7269	0.18289	3.82E-03	1.98E-05	3.88E-07	3.46E-05	3.60E-07	3.8718E-03
520045.22	4258400.68	21996.90603	0.3101	6.8756	0.33054	5.24635	3.82E-03	7.28E-07	1.41E-05	7.76E-07	1.03E-05	3.8412E-03
520158.81	4258172.57	21984.34144	0.17982	3.61595	0.18061	4.11612	3.81E-03	4.22E-07	7.42E-06	4.24E-07	8.10E-06	3.8294E-03
520129.32	4258212.47	21965.22566	0.19301	6.15272	0.19548	7.19041	3.81E-03	4.53E-07	1.26E-05	4.59E-07	1.42E-05	3.8375E-03
520664.13	4258805.69	21964.66357	0.14186	0.10734	0.13751	0.11071	3.81E-03	3.33E-07	2.20E-07	3.23E-07	2.18E-07	3.8108E-03

520650.45	4258307.3	21950.3704	0.12551	0.14602	0.12386	0.15268	3.81E-03	2.95E-07	2.99E-07	2.91E-07	3.01E-07	3.8084E-03
520084.98	4259209.85	21920.88291	16.0936	0.18749	18.37711	0.17836	3.80E-03	3.78E-05	3.85E-07	4.31E-05	3.51E-07	3.8837E-03
520040.84	4258422.46	21916.90013	0.33981	5.89923	0.36327	4.61787	3.80E-03	7.98E-07	1.21E-05	8.53E-07	9.09E-06	3.8242E-03
519914.74	4258948.73	21904.55547	0.63321	0.2851	0.68615	0.28105	3.80E-03	1.49E-06	5.85E-07	1.61E-06	5.53E-07	3.8035E-03
519938.24	4258709.97	21902.41614	0.49892	0.68741	0.55147	0.65321	3.80E-03	1.17E-06	1.41E-06	1.29E-06	1.29E-06	3.8040E-03
520109.65	4258242.41	21859.06159	0.204	10.25357	0.20927	11.87741	3.79E-03	4.79E-07	2.10E-05	4.91E-07	2.34E-05	3.8367E-03
520671.99	4258762.96	21858.35334	0.13628	0.10986	0.13187	0.11364	3.79E-03	3.20E-07	2.25E-07	3.10E-07	2.24E-07	3.7923E-03
519910.98	4258837.14	21838.90512	0.51646	0.40206	0.55867	0.3877	3.79E-03	1.21E-06	8.25E-07	1.31E-06	7.63E-07	3.7920E-03
520673.65	4258735.07	21816.69491	0.13428	0.11229	0.12997	0.11628	3.78E-03	3.15E-07	2.30E-07	3.05E-07	2.29E-07	3.7851E-03
519947.12	4258683.15	21806.38265	0.50295	0.79367	0.55946	0.75043	3.78E-03	1.18E-06	1.63E-06	1.31E-06	1.48E-06	3.7878E-03
520667.75	4258797.04	21779.9798	0.13981	0.10748	0.13547	0.11085	3.78E-03	3.28E-07	2.20E-07	3.18E-07	2.18E-07	3.7787E-03
519908.43	4258879.21	21774.47485	0.54216	0.34896	0.58575	0.33904	3.78E-03	1.27E-06	7.16E-07	1.38E-06	6.67E-07	3.7807E-03
519908.83	4258904.31	21748.91201	0.56513	0.3227	0.61077	0.31521	3.77E-03	1.33E-06	6.62E-07	1.43E-06	6.20E-07	3.7763E-03
520671.25	4258692.91	21734.91315	0.13327	0.11758	0.12871	0.12141	3.77E-03	3.13E-07	2.41E-07	3.02E-07	2.39E-07	3.7709E-03
520148.99	4258182.53	21734.13692	0.18211	4.23212	0.18311	4.85666	3.77E-03	4.28E-07	8.68E-06	4.30E-07	9.56E-06	3.7888E-03
520646.59	4258200.65	21722.36263	0.11947	0.15263	0.11806	0.15872	3.77E-03	2.80E-07	3.13E-07	2.77E-07	3.12E-07	3.7688E-03
520634.62	4258472.69	21715.82923	0.13941	0.1446	0.13492	0.1514	3.77E-03	3.27E-07	2.97E-07	3.17E-07	2.98E-07	3.7678E-03
520647.89	4258211.22	21701.97585	0.11974	0.15196	0.11831	0.15775	3.76E-03	2.81E-07	3.12E-07	2.78E-07	3.11E-07	3.7653E-03
520616.34	4258941.3	21683.79938	0.1719	0.09993	0.16667	0.10392	3.76E-03	4.04E-07	2.05E-07	3.91E-07	2.05E-07	3.7622E-03
520603.85	4258966.49	21678.15081	0.18004	0.0993	0.17423	0.10334	3.76E-03	4.23E-07	2.04E-07	4.09E-07	2.03E-07	3.7612E-03
520649.28	4258221.83	21675.52869	0.12007	0.15108	0.11863	0.15671	3.76E-03	2.82E-07	3.10E-07	2.79E-07	3.08E-07	3.7607E-03
520095.31	4259220.66	21667.64588	11.78707	0.18528	11.30752	0.17533	3.76E-03	2.77E-05	3.80E-07	2.65E-05	3.45E-07	3.8131E-03
520631.32	4258907.99	21666.69247	0.16249	0.10113	0.15778	0.10496	3.76E-03	3.81E-07	2.07E-07	3.70E-07	2.07E-07	3.7592E-03
520634.91	4258899.4	21661.92698	0.16028	0.10151	0.15565	0.10528	3.76E-03	3.76E-07	2.08E-07	3.65E-07	2.07E-07	3.7583E-03
520638.51	4258890.81	21645.0008	0.15807	0.10188	0.15352	0.1056	3.75E-03	3.71E-07	2.09E-07	3.60E-07	2.08E-07	3.7554E-03
520674.17	4258709.89	21632.43669	0.13291	0.11512	0.12864	0.11897	3.75E-03	3.12E-07	2.36E-07	3.02E-07	2.34E-07	3.7531E-03
520642.11	4258882.22	21621.48989	0.15588	0.10226	0.15141	0.10593	3.75E-03	3.66E-07	2.10E-07	3.55E-07	2.09E-07	3.7513E-03
520046.24	4258390.27	21609.27118	0.29544	7.13838	0.31452	5.41589	3.75E-03	6.94E-07	1.46E-05	7.38E-07	1.07E-05	3.7748E-03
520645.7	4258873.63	21587.55408	0.15371	0.10262	0.1493	0.10624	3.74E-03	3.61E-07	2.10E-07	3.51E-07	2.09E-07	3.7454E-03
520637.83	4258455.25	21584.3424	0.13757	0.14404	0.13347	0.15081	3.74E-03	3.23E-07	2.95E-07	3.13E-07	2.97E-07	3.7449E-03
519914.81	4258798.15	21583.16131	0.49454	0.46059	0.53538	0.44248	3.74E-03	1.16E-06	9.45E-07	1.26E-06	8.71E-07	3.7477E-03
520207.94	4258112.72	21581.23858	0.16276	1.95586	0.16451	2.16442	3.74E-03	3.82E-07	4.01E-06	3.86E-07	4.26E-06	3.7522E-03
519957.12	4258655.32	21579.40761	0.50808	0.93077	0.56808	0.87603	3.74E-03	1.19E-06	1.91E-06	1.33E-06	1.72E-06	3.7490E-03
520198.12	4258122.69	21572.26872	0.16505	2.17512	0.16632	2.4193	3.74E-03	3.87E-07	4.46E-06	3.90E-07	4.76E-06	3.7516E-03
519917.82	4258781.3	21558.25079	0.49044	0.4914	0.53146	0.47164	3.74E-03	1.15E-06	1.01E-06	1.25E-06	9.28E-07	3.7435E-03
520675.64	4258754.24	21552.55334	0.13441	0.10992	0.13014	0.11373	3.74E-03	3.16E-07	2.25E-07	3.06E-07	2.24E-07	3.7393E-03
519907.89	4258853.81	21544.04826	0.51639	0.37739	0.55721	0.36493	3.74E-03	1.21E-06	7.74E-07	1.31E-06	7.18E-07	3.7407E-03
520649.3	4258865.04	21543.46457	0.15157	0.10289	0.14718	0.10648	3.74E-03	3.56E-07	2.11E-07	3.46E-07	2.10E-07	3.7377E-03
520045.87	4259187.25	21536.31597	5.898	0.18593	8.17959	0.18093	3.74E-03	1.38E-05	3.81E-07	1.92E-05	3.56E-07	3.7692E-03
520063.58	4258333.18	21534.87008	0.24735	18.29936	0.26303	9.6878	3.74E-03	5.81E-07	3.75E-05	6.18E-07	1.91E-05	3.7929E-03
520671.37	4258788.38	21532.57284	0.13776	0.10741	0.13341	0.11084	3.73E-03	3.23E-07	2.20E-07	3.13E-07	2.18E-07	3.7358E-03
520188.3	4258132.66	21528.64559	0.16736	2.43547	0.16822	2.72473	3.73E-03	3.93E-07	4.99E-06	3.95E-07	5.36E-06	3.7452E-03
520641.17	4258438.16	21528.23171	0.13568	0.14354	0.13188	0.15018	3.73E-03	3.19E-07	2.94E-07	3.10E-07	2.96E-07	3.7352E-03
519928.92	4258735.72	21524.73295	0.48705	0.5992	0.53411	0.57204	3.73E-03	1.14E-06	1.23E-06	1.25E-06	1.13E-06	3.7381E-03
519909	4258928.82	21509.18344	0.58455	0.29913	0.63157	0.29367	3.73E-03	1.37E-06	6.13E-07	1.48E-06	5.78E-07	3.7347E-03
520653.83	4258316.18	21508.93212	0.12508	0.14383	0.12311	0.15047	3.73E-03	2.94E-07	2.95E-07	2.89E-07	2.96E-07	3.7318E-03
520119.5	4258222.44	21504.06249	0.19495	7.762	0.19845	9.13619	3.73E-03	4.58E-07	1.59E-05	4.66E-07	1.80E-05	3.7646E-03
520652.9	4258856.44	21488.47926	0.14942	0.10317	0.14506	0.10672	3.73E-03	3.51E-07	2.12E-07	3.41E-07	2.10E-07	3.7282E-03
520032.83	4258474.07	21478.54246	0.44214	4.54755	0.48265	3.67788	3.73E-03	1.04E-06	9.33E-06	1.13E-06	7.24E-06	3.7441E-03
520652.07	4258233.03	21471.25971	0.12005	0.14934	0.11867	0.15485	3.72E-03	2.82E-07	3.06E-07	2.79E-07	3.05E-07	3.7253E-03
520654.25	4258291.42	21459.16066	0.12334	0.1451	0.12195	0.15142	3.72E-03	2.90E-07	2.98E-07	2.86E-07	2.98E-07	3.7232E-03
520029.36	4258492.3	21456.00994	0.48734	4.0818	0.53773	3.35986	3.72E-03	1.14E-06	8.37E-06	1.26E-06	6.61E-06	3.7388E-03
520656.5	4258847.85	21427.75959	0.14731	0.10363	0.14306	0.1071	3.72E-03	3.46E-07	2.13E-07	3.36E-07	2.11E-07	3.7177E-03
520139.17	4258192.5	21423.74751	0.18428	5.04568	0.18574	5.8407	3.72E-03	4.33E-07	1.03E-05	4.36E-07	1.15E-05	3.7386E-03
520178.48	4258142.63	21413.88246	0.16955	2.75115	0.17018	3.0912	3.71E-03	3.98E-07	5.64E-06	4.00E-07	6.08E-06	3.7267E-03
520613.93	4258952.31	21406.69531	0.17348	0.09907	0.16812	0.10305	3.71E-03	4.07E-07	2.03E-07	3.95E-07	2.03E-07	3.7141E-03
520653.41	4258243.62	21391.93252	0.12038	0.14826	0.11909	0.15378	3.71E-03	2.83E-07	3.04E-07	2.80E-07	3.03E-07	3.7115E-03
519920.74	4258764.21	21378.58328	0.48382	0.52504	0.52567	0.50332	3.71E-03	1.14E-06	1.08E-06	1.23E-06	9.91E-07	3.7125E-03
520677.18	4258726.64	21365.75251	0.13246	0.11222	0.12826	0.11614	3.71E-03	3.11E-07	2.30E-07	3.01E-07	2.29E-07	3.7069E-03
520660.09	4258839.26	21355.18312	0.1452	0.10405	0.14105	0.10744	3.70E-03	3.41E-07	2.13E-07	3.31E-07	2.11E-07	3.7051E-03
520626.23	4258927.2	21347.25164	0.16577	0.09967	0.16086	0.10355	3.70E-03	3.89E-07	2.04E-07	3.78E-07	2.04E-07	3.7038E-03
520036.38	4258441.17	21312.87662	0.36748	5.1098	0.39463	4.09337	3.70E-03	8.63E-07	1.05E-05	9.26E-07	8.06E-06	3.7169E-03
520019.48	4258521.43	21312.1974	0.54311	3.11741	0.61576	2.64249	3.70E-03	1.28E-06	6.39E-06	1.45E-06	5.20E-06	3.7108E-03
520654.85	4258254.25	21287.27911	0.12069	0.14701	0.11947	0.15264	3.69E-03	2.83E-07	3.02E-07	2.80E-07	3.00E-07	3.6933E-03
520674.99	4258779.73	21278.33961	0.13578	0.10739	0.13149	0.11089	3.69E-03	3.19E-07	2.20E-07	3.09E-07	2.18E-07	3.6917E-03
520085.41	4259220.68	21274.03973	15.74677	0.18291	17.82027	0.17407	3.69E-03	3.70E-05	3.75E-07	4.18E-05	3.43E-07	3.7694E-03
519905.17	4258895.46	21266.79744	0.53782	0.32873	0.58031	0.32029	3.69E-03	1.26E-06	6.74E-07	1.36E-06	6.30E-07	3.6926E-03
520168.66	4258152.6	21260.04375	0.17174	3.13782	0.17227	3.54327	3.69E-03	4.03E-07	6.44E-06	4.04E-07	6.97E-06	3.7017E-03
520663.69	4258830.67	21259.57254	0.14314	0.10435	0.13901	0.10767	3.69E-03	3.36E-07	2.14E-07	3.26E-07	2.12E-07	3.6885E-03
520055.26	4259199.9	21237.40478	8.3029	0.18328	14.25239	0.1775	3.68E-03	1.95E-05	3.76E-07	3.35E-05	3.49E-07	3.7372E-03
520099.83	4258252.38	21206.84799	0.20533	14.65645	0.21217	15.72365	3.68E-03	4.82E-07	3.01E-05	4.98E-07	3.10E-05	3.7402E-03
519904.73	4258870.3	21171.6787	0.51471	0.35488	0.55452	0.3441	3.67E-03	1.21E-06	7.28E-07	1.30E-06	6.77E-07	3.6760E-03
520679.29	4258745.53	21167.35049	0.1325	0.1099	0.12839	0.11372	3.67E-03	3.11E-07	2.25E-07	3.01E-07	2.24E-07	3.6724E-03
520656.41	4258264.93	21144.38484	0.12097	0.14563	0.11976	0.15141	3.67E-03	2.84E-07	2.99E-07	2.81E-07	2.98E-07	3.6686E-03
520667.29	4258822.08	21144.16031	0.14113	0.10449	0.13696	0.10777	3.67E-03	3.31E-07	2.14E-07	3.22E-07	2.12E-07	3.6684E-03
520047.06	4258379.95	21139.65758	0.2817	7.35746	0.29957	5.55724	3.67E-03	6.61E-07	1.51E-05	7.03E-07	1.09E-05	3.6940E-03
519905.23	4258919.72	21116.96492	0.55669	0.30497	0.60048	0.29867	3.66E-03	1.31E-06	6.25E-07	1.41E-06	5.88E-07	3.6666E-03
519910.19	4258811.13	21106.0122	0.48483	0.43419	0.52373	0.41766	3.66E-03	1.14E-06	8.90E-07	1.23E-06	8.22E-07	3.6648E-03
520638.09	4258481.82	21090.89776	0.13835	0.14258	0.13364	0.14919	3.66E-03	3.25E-07	2.92E-07	3.14E-07	2.94E-07	3.6593E-03
520677.72	4258701.39	21074.3778	0.13113	0.11497	0.12687	0.1187	3.66E-03	3.08E-07	2.36E-07	2.98E-07	2.34E-07	3.6563E-03
520158.84	4258162.57	21071.20597	0.17393	3.62043	0.1745	4.11545	3.65E-03	4.08E-07	7.43E-06	4.10E-07	8.10E-06	3.6710E-03
520095.33	4259230.66	21057.33166	11.72894	0.18105	11.2421	0.17142	3.65E-03	2.75E-05	3.71E-07	2.64E-05	3.37E-07	3.7069E-03
520129.35	4258202.47	21054.06771	0.18628	6.16192	0.18848	7.19834	3.65E-03	4.37E-07	1.26E-05	4.42E-07	1.42E-05	3.6794E-03
520657.61	4258300.24	21052.4063	0.12295	0.14289	0.12131	0.14929	3.65E-03	2.89E-07	2.93E-07	2.85E-07	2.94E-07	3.6526E-03
520612.53	4258962.89	21047.85431	0.1744	0.09802	0.16888	0.10196	3.65E-03	4.09E-07	2.01E-07	3.96E-07	2.01E-07	3.6519E-03
519940.87	4258692.19	21026.70548	0.48269	0.73699	0.53331	0.69943	3.65E-03	1.13E-06	1.51E-06	1.25E-06	1.38E-06	3.6523E-03
520624.84	4258937.78	21023.17104	0.1667	0.09861	0.16169	0.10248	3.65E-03	3.91E-07	2.02E-07	3.80E-07	2.02E-07	3.6475E-03
519907.23	4258828.09	21005.69672	0.48758	0.4077	0.52597	0.39282	3.64E-03	1.14E-06	8.36E-07	1.23E-06	7.73E-07	3.6473E-03
520678.62	4258771.08	21000.63915	0.13386	0.10734	0.12964	0.11091	3.64E-03	3.14E-07	2.20E-07	3.04E-07	2.18E-07	3.6435E-03
520670.88	4258813.49	20983.85832	0.13909	0.10465	0.13492	0.1079	3.64E-03	3.27E-07	2.15E-07	3.17E-07	2.12E-07	3.6406E-03
519931.79	4258718.53	20969.0141	0.47566	0.64186	0.52312	0.61159	3.64E-03	1.12E-06	1.32E-06	1.23E-06	1.20E-06	3.6418E-03
519923.53	4258746.84	20968.54431	0.47286	0.56176	0.51725	0.53714	3.64E-03	1.11E-06	1.15E-06	1.21E-06	1.06E-06	3.6414E-03
520109.68	4258232.41	20963.87994	0.19654	10.27337	0.20136	11.9517	3.64E-03	4.61E-07	2.11E-05	4.73E-07	2.35E-05	3.6816E-03
520656.94	4258350.21	20938.84714	0.12605	0.14094	0.12322	0.14726	3.63E-03	2.96E-07	2.89E-07	2.89E-07	2.90E-07	3.6329E-03
520653.31	4258392.43	20901.49855	0.1294	0.14064	0.12604	0.14682	3.63E-03	3.04E-07	2.88E-07	2.96E-07	2.89E-07	3.6264E-03
520641.26	4258464.26	20897.25349	0.13659	0.14207	0.13228	0.14871	3.62E-03	3.21E-07	2.91E-07	3.11E-07	2.93E-07	3.6257E-03
520009.56	4258540.87	20866.49543	0.55231	2.45583	0.63502	2.13794	3.62E-03	1.30E-06	5.04E-06	1.49E-06	4.21E-06	3.6312E-03
520674.48	4258804.9	20852.55573	0.13716	0.10488	0.13302	0.1081	3.62E-03	3.22E-07	2.15E-07	3.12E-07	2.13E-07	3.6178E-03
520655.45	4258204.44	20845.08248	0.11737	0.14816	0.11585	0.15381	3.62E-03	2.76E-07	3.04E-07	2.72E-07	3.03E-07	3.6166E-03
519947.12	4258673.87	20842.58495	0.48421	0.81349	0.53777	0.76919	3.62E-03	1.14E-06	1.67E-06	1.26E-06	1.51E-06	3.6206E-03
520149.02	4258172.53	20837.37993	0.17607	4.23751	0.17685	4.85736	3.61E-03	4.13E-07	8.69E-06	4.15E-07	9.56E-06	3.6332E-03
520656.81	4258215.03	20811.30406	0.11767	0.14736	0.11615	0.15283	3.61E-03	2.76E-07	3.02E-07	2.73E-07	3.01E-07	3.6108E-03
519904.17	4258844.83	20808.95654	0.48874	0.38316	0.52614	0.36998	3.61E-03	1.15E-06	7.86E-07	1.24E-06	7.28E-07	3.6131E-03
520063.96	4258323.03	20793.6551	0.23693	18.78887	0.25158	9.82144	3.61E-03	5.56E-07	3.85E-05	5.91E-07	1.93E-05	3.6656E-03
520045.36	4259199.92	20784.36055	5.85024	0.18034	8.03087	0.17558	3.60E-03	1.37E-05	3.70E-07	1.89E-05	3.46E-07	3.6383E-03
520029.32	4258482.6	20768.00252	0.45428	4.11072	0.49767	3.37868	3.60E-03	1.07E-06	8.43E-06	1.17E-06	6.65E-06	3.6194E-03
520622.67	4258948.69	20754.61656	0.16807	0.0977	0.16292	0.10157	3.60E-03	3.95E-07	2.00E-07	3.82E-07	2.00E-07	3.6010E-03
520682.94	4258736.81	20750.97498	0.13067	0.10973	0.12665	0.11354	3.60E-03	3.07E-07	2.25E-07	2.97E-07	2.24E-07	3.6002E-03
520658.26	4258225.67	20745.5361	0.11795	0.14641	0.11648	0.15178	3.60E-03	2.77E-07	3.00E-07	2.73E-07	2.99E-07	3.5994E-03
519901.5	4258886.61	20743.64558	0.51165	0.33448	0.55083	0.32515	3.60E-03	1.20E-06	6.86E-07	1.29E-06	6.40E-07	3.6017E-03
520198.15	4258112.69	20710.70292	0.16013	2.17684	0.16104	2.41905	3.59E-03	3.76E-07	4.46E-06	3.78E-07	4.76E-06	3.6022E-03
520682.24	4258762.43	20699.24892	0.13201	0.10727	0.12789	0.11091	3.59E-03	3.10E-07	2.20E-07	3.00E-07	2.18E-07	3.5912E-03
520656.79	4258375.69	20698.62791	0.12743	0.13995	0.12422	0.14606	3.59E-03	2.99E-07	2.87E-07	2.92E-07	2.88E-07	3.5912E-03
519999.65	4258560.31	20695.50058	0.55058	1.98023	0.63651	1.76235	3.59E-03	1.29E-06	4.06E-06	1.49E-06	3.47E-06	3.5999E-03
519901.45	4258910.62	20682.46033	0.5299	0.31075	0.57056	0.30357	3.59E-03	1.24E-06	6.37E-07	1.34E-06	5.98E-07	3.5911E-03
520638.35	4258915.13	20677.68898	0.15866	0.09872	0.15407	0.10242	3.59E-03	3.72E-07	2.02E-07	3.62E-07	2.02E-07	3.5876E-03
520085.43	4259230.68	20675.7744	15.79691	0.17873	17.66177	0.17018	3.59E-03	3.71E-05	3.67E-07	4.15E-05	3.35E-07	3.6654E-03
519989.73	4258579.74	20674.37442	0.54068	1.62784	0.62715	1.47508	3.59E-03	1.27E-06	3.34E-06	1.47E-06	2.90E-06	3.5949E-03
520188.33	4258122.66	20672.90001	0.16231	2.43701	0.16282	2.72582	3.59E-03	3.81E-07	5.00E-06	3.82E-07	5.37E-06	3.5967E-03
520641.92	4258906.59	20672.10396	0.15656	0.09908	0.15206	0.10273	3.59E-03	3.68E-07	2.03E-07	3.57E-07	2.02E-07	3.5866E-03
520678.08	4258796.31	20667.84733	0.13523	0.10498	0.13112	0.10822	3.58E-03	3.17E-07	2.15E-07	3.08E-07	2.13E-07	3.5858E-03
520055.28	4259209.9	20666.86716	8.32508	0.17911	14.36016	0.17351	3.58E-03	1.95E-05	3.67E-07	3.37E-05	3.42E-07	3.6385E-03
519979.81	4258599.18	20656.42493	0.52484	1.35722	0.60391	1.2525	3.58E-03	1.23E-06	2.78E-06	1.42E-06	2.47E-06	3.5907E-03
520645.5	4258898.06	20656.14146	0.15446	0.09944	0.15005	0.10304	3.58E-03	3.63E-07	2.04E-07	3.52E-07	2.03E-07	3.5838E-03
520660.97	4258309.06	20648.18784	0.12254	0.14075	0.1206	0.14717	3.58E-03	2.88E-07	2.89E-07	2.83E-07	2.90E-07	3.5825E-03
520649.07	4258889.52	20635.82308	0.15239	0.09981	0.14806	0.10336	3.58E-03	3.58E-07	2.05E-07	3.48E-07	2.03E-07	3.5803E-03
520047.74	4258369.68	20632.10161	0.26897	7.54648	0.28579	5.67799	3.58E-03	6.31E-07	1.55E-05	6.71E-07	1.12E-05	3.6065E-03
520119.53	4258212.44	20618.41027	0.18804	7.77724	0.19126	9.13248	3.58E-03	4.41E-07	1.60E-05	4.49E-07	1.80E-05	3.6110E-03
520652.65	4258880.99	20607.97794	0.15031	0.10018	0.14607	0.10368	3.57E-03	3.53E-07	2.05E-07	3.43E-07	2.04E-07	3.5755E-03
520661.58	4258284.79	20584.51992	0.12084	0.14186	0.11942	0.14794	3.57E-03	2.84E-07	2.91E-07	2.80E-07	2.91E-07	3.5714E-03
520178.51	4258132.63	20567.69602	0.16438	2.75241	0.16468	3.09419	3.57E-03	3.86E-07	5.64E-06	3.87E-07	6.09E-06	3.5799E-03
520656.22	4258872.46	20566.31483	0.14828	0.10047	0.14407	0.10394	3.57E-03	3.48E-07	2.06E-07	3.38E-07	2.05E-07	3.5682E-03
520054.26	4258347.01	20563.43368	0.25083	10.03674	0.26679	6.94661	3.57E-03	5.89E-07	2.06E-05	6.26E-07	1.37E-05	3.6021E-03
519911.14	4258789.3	20557.36981	0.46546	0.46481	0.50223	0.44693	3.57E-03	1.09E-06	9.53E-07	1.18E-06	8.80E-07	3.5697E-03
520660.79	4258236.77	20553.36257	0.11801	0.14477	0.11659	0.15013	3.56E-03	2.77E-07	2.97E-07	2.74E-07	2.96E-07	3.5660E-03
520139.2	4258182.5	20542.31207	0.17807	5.05349	0.17933	5.83902	3.56E-03	4.18E-07	1.04E-05	4.21E-07	1.15E-05	3.5857E-03
519901.03	4258861.38	20528.6378	0.48836	0.36049	0.52475	0.34896	3.56E-03	1.15E-06	7.39E-07	1.23E-06	6.87E-07	3.5644E-03
519969.89	4258618.62	20527.1137	0.5065	1.15231	0.57411	1.0773	3.56E-03	1.19E-06	2.36E-06	1.35E-06	2.12E-06	3.5674E-03
520659.79	4258863.92	20521.40625	0.14625	0.10076	0.14209	0.10419	3.56E-03	3.43E-07	2.07E-07	3.34E-07	2.05E-07	3.5604E-03
520032.97	4258449.47	20520.88354	0.37658	4.61742	0.40539	3.75703	3.56E-03	8.84E-07	9.47E-06	9.52E-07	7.40E-06	3.5780E-03
519901.96	4258935.97	20515.18549	0.55024	0.2883	0.59299	0.28306	3.56E-03	1.29E-06	5.91E-07	1.39E-06	5.57E-07	3.5621E-03
520681.28	4258692.9	20497.21156	0.1294	0.1147	0.1251	0.11832	3.56E-03	3.04E-07	2.35E-07	2.94E-07	2.33E-07	3.5562E-03
520095.34	4259240.66	20471.17866	11.68977	0.17698	11.17173	0.16766	3.55E-03	2.74E-05	3.63E-07	2.62E-05	3.30E-07	3.6050E-03
520663.37	4258855.39	20466.87288	0.14423	0.10117	0.14016	0.10453	3.55E-03	3.39E-07	2.07E-07	3.29E-07	2.06E-07	3.5510E-03
519957.12	4258646.05	20452.06007	0.48759	0.95035	0.54413	0.89559	3.55E-03	1.14E-06	1.95E-06	1.28E-06	1.76E-06	3.5535E-03
520662.19	4258247.38	20451.52988	0.11831	0.14362	0.11697	0.14906	3.55E-03	2.78E-07	2.95E-07	2.75E-07	2.93E-07	3.5484E-03
520681.67	4258787.72	20445.50447	0.13334	0.10498	0.12925	0.10828	3.55E-03	3.13E-07	2.15E-07	3.03E-07	2.13E-07	3.5472E-03
520660.35	4258359.17	20434.42235	0.12545	0.13905	0.12243	0.14516	3.54E-03	2.95E-07	2.85E-07	2.87E-07	2.86E-07	3.5454E-03
520621.22	4258959.3	20428.11653	0.16897	0.09671	0.16369	0.10054	3.54E-03	3.97E-07	1.98E-07	3.84E-07	1.98E-07	3.5443E-03
520684.24	4258709.77	20414.33128	0.12899	0.11225	0.12496	0.11591	3.54E-03	3.03E-07	2.30E-07	2.93E-07	2.28E-07	3.5418E-03
520168.69	4258142.6	20410.62146	0.16638	3.13997	0.16664	3.54552	3.54E-03	3.91E-07	6.44E-06	3.91E-07	6.98E-06	3.5543E-03
519914.12	4258772.38	20409.17189	0.45995	0.49531	0.49751	0.47577	3.54E-03	1.08E-06	1.02E-06	1.17E-06	9.37E-07	3.5441E-03
520666.94	4258846.85	20404.50429	0.14222	0.10154	0.13824	0.10483	3.54E-03	3.34E-07	2.08E-07	3.25E-07	2.06E-07	3.5401E-03
520685.86	4258753.78	20393.37171	0.13023	0.10727	0.12624	0.11094	3.54E-03	3.06E-07	2.20E-07	2.96E-07	2.18E-07	3.5382E-03
520633.34	4258934.27	20378.36431	0.16171	0.0973	0.15689	0.10105	3.53E-03	3.80E-07	2.00E-07	3.68E-07	1.99E-07	3.5357E-03
520099.86	4258242.38	20345.04431	0.19768	14.70342	0.20406	15.68575	3.53E-03	4.64E-07	3.02E-05	4.79E-07	3.09E-05	3.5907E-03
520670.51	4258838.32	20324.96019	0.14026	0.10185	0.13632	0.10507	3.53E-03	3.29E-07	2.09E-07	3.20E-07	2.07E-07	3.5263E-03
520663.69	4258258.03	20317.88214	0.11859	0.14235	0.11728	0.14792	3.52E-03	2.78E-07	2.92E-07	2.75E-07	2.91E-07	3.5252E-03
520686.59	4258728.1	20307.29609	0.12887	0.10963	0.12494	0.11336	3.52E-03	3.03E-07	2.25E-07	2.93E-07	2.23E-07	3.5233E-03
520644.69	4258473.28	20272.84284	0.13557	0.14025	0.13109	0.14671	3.52E-03	3.18E-07	2.88E-07	3.08E-07	2.89E-07	3.5174E-03
520656.79	4258401.56	20269.14633	0.12865	0.13867	0.1252	0.14474	3.52E-03	3.02E-07	2.84E-07	2.94E-07	2.85E-07	3.5168E-03
520045.38	4259209.92	20240.89581	5.87893	0.17626	8.07374	0.17164	3.51E-03	1.38E-05	3.61E-07	1.90E-05	3.38E-07	3.5441E-03
519934.53	4258701.03	20236.26888	0.4625	0.68657	0.50822	0.65358	3.51E-03	1.09E-06	1.41E-06	1.19E-06	1.29E-06	3.5149E-03
520664.33	4258317.88	20231.73792	0.12209	0.13872	0.11983	0.14508	3.51E-03	2.87E-07	2.85E-07	2.81E-07	2.86E-07	3.5102E-03
520674.09	4258829.78	20225.13151	0.13833	0.10209	0.13439	0.10525	3.51E-03	3.25E-07	2.09E-07	3.16E-07	2.07E-07	3.5090E-03
520158.87	4258152.57	20219.45916	0.16838	3.62397	0.16873	4.11477	3.51E-03	3.95E-07	7.43E-06	3.96E-07	8.10E-06	3.5233E-03
519897.68	4258901.52	20207.2529	0.50417	0.31645	0.54197	0.30835	3.50E-03	1.18E-06	6.49E-07	1.27E-06	6.07E-07	3.5086E-03
520665.05	4258293.92	20201.71223	0.12049	0.1396	0.1188	0.1458	3.50E-03	2.83E-07	2.86E-07	2.79E-07	2.87E-07	3.5050E-03
520129.38	4258192.47	20192.34757	0.17991	6.17362	0.18191	7.18863	3.50E-03	4.22E-07	1.27E-05	4.27E-07	1.42E-05	3.5299E-03
519897.83	4258877.77	20183.31123	0.48662	0.33987	0.52244	0.32976	3.50E-03	1.14E-06	6.97E-07	1.23E-06	6.49E-07	3.5044E-03
520685.27	4258779.13	20174.96377	0.13145	0.1049	0.12741	0.10827	3.50E-03	3.09E-07	2.15E-07	2.99E-07	2.13E-07	3.5003E-03
520647.97	4258456	20148.48562	0.13382	0.1396	0.1297	0.14606	3.49E-03	3.14E-07	2.86E-07	3.04E-07	2.88E-07	3.4959E-03
519898.22	4258926.94	20144.90772	0.52489	0.29366	0.56462	0.28764	3.49E-03	1.23E-06	6.02E-07	1.33E-06	5.66E-07	3.4978E-03
519903.47	4258819.03	20139.85292	0.46024	0.41248	0.49486	0.39744	3.49E-03	1.08E-06	8.46E-07	1.16E-06	7.82E-07	3.4970E-03
520660.23	4258384.72	20136.6087	0.12676	0.13798	0.12343	0.14396	3.49E-03	2.98E-07	2.83E-07	2.90E-07	2.83E-07	3.4938E-03
519906.4	4258801.98	20136.39137	0.45643	0.43863	0.49142	0.4222	3.49E-03	1.07E-06	9.00E-07	1.15E-06	8.31E-07	3.4965E-03
520055.71	4259219.9	20133.91703	8.47172	0.17521	14.95748	0.16973	3.49E-03	1.99E-05	3.59E-07	3.51E-05	3.34E-07	3.5478E-03
520663.98	4258342.85	20127.78447	0.1235	0.13802	0.12071	0.14418	3.49E-03	2.90E-07	2.83E-07	2.83E-07	2.84E-07	3.4922E-03
520631.41	4258945.07	20117.60027	0.16289	0.09636	0.15793	0.10011	3.49E-03	3.82E-07	1.98E-07	3.71E-07	1.97E-07	3.4905E-03
520109.71	4258222.41	20117.44065	0.18949	10.29732	0.19397	11.94461	3.49E-03	4.45E-07	2.11E-05	4.55E-07	2.35E-05	3.5348E-03
520677.66	4258821.25	20110.51796	0.13641	0.10221	0.13245	0.10533	3.49E-03	3.20E-07	2.10E-07	3.11E-07	2.07E-07	3.4891E-03
520085.44	4259240.68	20108.86279	15.71945	0.17473	17.48792	0.16646	3.49E-03	3.69E-05	3.58E-07	4.11E-05	3.28E-07	3.5664E-03
519917	4258755.21	20105.52742	0.45214	0.52833	0.49067	0.50683	3.49E-03	1.06E-06	1.08E-06	1.15E-06	9.98E-07	3.4915E-03
520048.31	4258359.46	20097.79486	0.25715	7.71063	0.27305	5.78155	3.49E-03	6.04E-07	1.58E-05	6.41E-07	1.14E-05	3.5143E-03
520064.3	4258312.91	20084.78507	0.22726	19.23788	0.24096	9.97406	3.48E-03	5.34E-07	3.95E-05	5.66E-07	1.96E-05	3.5438E-03
519925.29	4258726.96	20081.78069	0.45375	0.60104	0.4966	0.57417	3.48E-03	1.07E-06	1.23E-06	1.17E-06	1.13E-06	3.4877E-03
519900.44	4258835.85	20035.39242	0.46233	0.38824	0.49652	0.3746	3.48E-03	1.09E-06	7.96E-07	1.17E-06	7.37E-07	3.4788E-03
520019.44	4258511.74	20029.22996	0.50527	3.15246	0.56563	2.67421	3.47E-03	1.19E-06	6.47E-06	1.33E-06	5.26E-06	3.4882E-03
520689.48	4258745.13	20026.33313	0.12845	0.10726	0.12461	0.11092	3.47E-03	3.02E-07	2.20E-07	2.93E-07	2.18E-07	3.4745E-03
520149.05	4258162.53	20000.16386	0.17037	4.24204	0.17096	4.858	3.47E-03	4.00E-07	8.70E-06	4.01E-07	9.56E-06	3.4880E-03

520664.31	4258208.23	19999.23357	0.11534	0.14378	0.11374	0.14911	3.47E-03	2.71E-07	2.95E-07	2.67E-07	2.94E-07	3.4699E-03
520681.23	4258812.71	19969.67304	0.13453	0.1024	0.13058	0.10549	3.46E-03	3.16E-07	2.10E-07	3.07E-07	2.08E-07	3.4647E-03
520054.84	4258336.79	19963.55788	0.24036	10.30052	0.25539	7.09594	3.46E-03	5.64E-07	2.11E-05	6.00E-07	1.40E-05	3.4988E-03
520665.72	4258218.85	19938.13237	0.11563	0.1429	0.11405	0.14813	3.46E-03	2.71E-07	2.93E-07	2.68E-07	2.92E-07	3.4593E-03
520663.76	4258368.13	19929.14063	0.12484	0.13717	0.12166	0.1431	3.46E-03	2.93E-07	2.81E-07	2.86E-07	2.82E-07	3.4578E-03
520684.84	4258684.41	19907.5946	0.1277	0.11448	0.12338	0.11801	3.45E-03	3.00E-07	2.35E-07	2.90E-07	2.32E-07	3.4539E-03
520095.36	4259250.66	19905.24901	11.69115	0.17304	11.0871	0.16403	3.45E-03	2.74E-05	3.55E-07	2.60E-05	3.23E-07	3.5066E-03
520688.87	4258770.54	19893.29917	0.12963	0.1048	0.12567	0.10825	3.45E-03	3.04E-07	2.15E-07	2.95E-07	2.13E-07	3.4514E-03
520687.77	4258701.33	19892.43439	0.12729	0.11218	0.12329	0.1157	3.45E-03	2.99E-07	2.30E-07	2.89E-07	2.28E-07	3.4513E-03
519947.12	4258664.6	19862.53455	0.46604	0.83188	0.51656	0.78703	3.45E-03	1.09E-06	1.71E-06	1.21E-06	1.55E-06	3.4506E-03
520667.24	4258229.51	19859.70174	0.11593	0.14183	0.11439	0.14707	3.44E-03	2.72E-07	2.91E-07	2.69E-07	2.90E-07	3.4457E-03
520188.36	4258112.66	19854.56096	0.15745	2.43901	0.15771	2.72446	3.44E-03	3.70E-07	5.00E-06	3.70E-07	5.36E-06	3.4548E-03
519897.34	4258852.47	19849.95687	0.4632	0.36565	0.49644	0.35352	3.44E-03	1.09E-06	7.50E-07	1.17E-06	6.96E-07	3.4466E-03
520690.24	4258719.38	19839.74301	0.12712	0.10958	0.12327	0.1132	3.44E-03	2.98E-07	2.25E-07	2.89E-07	2.23E-07	3.4421E-03
520629.9	4258955.7	19822.08149	0.16379	0.09537	0.15868	0.09911	3.44E-03	3.85E-07	1.96E-07	3.73E-07	1.95E-07	3.4392E-03
520668.53	4258303.05	19804.98978	0.12007	0.13738	0.11808	0.14362	3.44E-03	2.82E-07	2.82E-07	2.77E-07	2.83E-07	3.4362E-03
520684.81	4258804.18	19796.43829	0.13266	0.1025	0.12873	0.1056	3.43E-03	3.11E-07	2.10E-07	3.02E-07	2.08E-07	3.4346E-03
520668.77	4258277.8	19796.2655	0.11849	0.13874	0.11699	0.14463	3.43E-03	2.78E-07	2.85E-07	2.75E-07	2.85E-07	3.4347E-03
520119.56	4258202.44	19792.77796	0.18156	7.79141	0.18451	9.1313	3.43E-03	4.26E-07	1.60E-05	4.33E-07	1.80E-05	3.4678E-03
520178.54	4258122.63	19770.45398	0.15945	2.75337	0.15947	3.09617	3.43E-03	3.74E-07	5.65E-06	3.74E-07	6.09E-06	3.4416E-03
520645.39	4258922.27	19752.40743	0.15491	0.09637	0.15038	0.09995	3.43E-03	3.64E-07	1.98E-07	3.53E-07	1.97E-07	3.4271E-03
520648.94	4258913.78	19746.26371	0.15291	0.09672	0.14849	0.10026	3.42E-03	3.59E-07	1.98E-07	3.49E-07	1.97E-07	3.4260E-03
519894.48	4258917.91	19738.25108	0.50055	0.29893	0.53727	0.2921	3.42E-03	1.18E-06	6.13E-07	1.26E-06	5.75E-07	3.4271E-03
520652.49	4258905.3	19732.55642	0.15093	0.09708	0.14661	0.10057	3.42E-03	3.54E-07	1.99E-07	3.44E-07	1.98E-07	3.4236E-03
520139.23	4258172.5	19732.20315	0.17226	5.05745	0.1733	5.84905	3.42E-03	4.04E-07	1.04E-05	4.07E-07	1.15E-05	3.4452E-03
520045.81	4259219.92	19730.08532	5.98326	0.17245	8.27515	0.16793	3.42E-03	1.40E-05	3.54E-07	1.94E-05	3.31E-07	3.4563E-03
520036.34	4258404.35	19727.09991	0.29839	5.13151	0.31683	4.15242	3.42E-03	7.01E-07	1.05E-05	7.44E-07	8.17E-06	3.4417E-03
520656.04	4258896.82	19713.73734	0.14895	0.09744	0.14472	0.10088	3.42E-03	3.50E-07	2.00E-07	3.40E-07	1.99E-07	3.4203E-03
520648.13	4258482.3	19711.298	0.13454	0.13846	0.12989	0.14472	3.42E-03	3.16E-07	2.84E-07	3.05E-07	2.85E-07	3.4200E-03
519893.91	4258892.43	19695.57417	0.47962	0.32181	0.5143	0.31289	3.42E-03	1.13E-06	6.60E-07	1.21E-06	6.16E-07	3.4197E-03
520659.59	4258888.33	19689.24808	0.14699	0.0978	0.14285	0.10119	3.42E-03	3.45E-07	2.01E-07	3.35E-07	1.99E-07	3.4161E-03
520669.52	4258240.5	19683.25469	0.11605	0.14026	0.11455	0.14559	3.41E-03	2.72E-07	2.88E-07	2.69E-07	2.87E-07	3.4151E-03
520684.89	4258674.93	19668.31814	0.12727	0.11517	0.1228	0.11872	3.41E-03	2.99E-07	2.36E-07	2.88E-07	2.34E-07	3.4124E-03
520667.37	4258351.74	19666.19584	0.12293	0.13621	0.11993	0.14216	3.41E-03	2.89E-07	2.79E-07	2.82E-07	2.80E-07	3.4121E-03
520663.15	4258879.85	19659.28056	0.14502	0.09816	0.14099	0.1015	3.41E-03	3.40E-07	2.01E-07	3.31E-07	2.00E-07	3.4109E-03
520660.26	4258410.69	19636.75726	0.12787	0.13671	0.12435	0.14269	3.41E-03	3.00E-07	2.80E-07	2.92E-07	2.81E-07	3.4071E-03
520693.1	4258736.48	19632.33065	0.1267	0.10724	0.12299	0.11084	3.41E-03	2.97E-07	2.20E-07	2.89E-07	2.18E-07	3.4062E-03
520168.72	4258132.6	19625.39065	0.16133	3.1407	0.16133	3.55034	3.40E-03	3.79E-07	6.44E-06	3.79E-07	6.99E-06	3.4181E-03
520692.46	4258761.95	19623.05703	0.12792	0.10477	0.12407	0.10827	3.40E-03	3.00E-07	2.15E-07	2.91E-07	2.13E-07	3.4045E-03
520666.7	4258871.37	19612.97495	0.14311	0.0984	0.13909	0.10171	3.40E-03	3.36E-07	2.02E-07	3.27E-07	2.00E-07	3.4028E-03
520055.72	4259229.9	19602.9869	8.55555	0.17129	15.13791	0.16599	3.40E-03	2.01E-05	3.51E-07	3.55E-05	3.27E-07	3.4564E-03
519919.76	4258737.74	19592.64565	0.44084	0.56397	0.48107	0.53973	3.40E-03	1.03E-06	1.16E-06	1.13E-06	1.06E-06	3.4026E-03
520688.38	4258795.64	19592.12583	0.13082	0.10252	0.1269	0.10565	3.40E-03	3.07E-07	2.10E-07	2.98E-07	2.08E-07	3.3992E-03
519894.16	4258868.92	19585.11416	0.46259	0.3449	0.4953	0.33414	3.40E-03	1.09E-06	7.07E-07	1.16E-06	6.58E-07	3.4006E-03
520670.25	4258862.89	19565.61031	0.1412	0.09873	0.13724	0.10199	3.39E-03	3.31E-07	2.02E-07	3.22E-07	2.01E-07	3.3946E-03
520663.67	4258393.76	19564.01361	0.12606	0.13604	0.12264	0.14192	3.39E-03	2.96E-07	2.79E-07	2.88E-07	2.79E-07	3.3944E-03
520085.46	4259250.68	19563.18816	15.66186	0.17087	17.2853	0.16287	3.39E-03	3.68E-05	3.50E-07	4.06E-05	3.21E-07	3.4712E-03
520099.89	4258232.38	19556.62523	0.19058	14.7417	0.19647	15.88256	3.39E-03	4.47E-07	3.02E-05	4.61E-07	3.13E-05	3.4544E-03
520670.97	4258251.13	19553.14054	0.11631	0.13909	0.11486	0.14453	3.39E-03	2.73E-07	2.85E-07	2.70E-07	2.85E-07	3.3925E-03
520037.55	4258393.86	19538.64378	0.28501	5.32387	0.30216	4.28954	3.39E-03	6.69E-07	1.09E-05	7.09E-07	8.44E-06	3.4096E-03
520651.36	4258464.93	19528.33809	0.13286	0.13779	0.12857	0.1441	3.39E-03	3.12E-07	2.83E-07	3.02E-07	2.84E-07	3.3883E-03
520673.8	4258854.4	19509.32005	0.13929	0.09907	0.13541	0.10227	3.38E-03	3.27E-07	2.03E-07	3.18E-07	2.01E-07	3.3849E-03
519907.47	4258780.46	19505.3606	0.43782	0.46825	0.47147	0.45066	3.38E-03	1.03E-06	9.60E-07	1.11E-06	8.87E-07	3.3871E-03
520640.15	4258941.45	19496.06371	0.15792	0.09506	0.15313	0.0987	3.38E-03	3.71E-07	1.95E-07	3.60E-07	1.94E-07	3.3826E-03
520033.64	4258415.45	19491.94429	0.31093	4.74342	0.33078	3.87537	3.38E-03	7.30E-07	9.73E-06	7.77E-07	7.63E-06	3.3997E-03
519928.13	4258709.69	19453.45345	0.44275	0.64164	0.48445	0.61235	3.37E-03	1.04E-06	1.32E-06	1.14E-06	1.21E-06	3.3788E-03
520677.35	4258845.92	19441.29684	0.13742	0.09936	0.13358	0.10249	3.37E-03	3.23E-07	2.04E-07	3.14E-07	2.02E-07	3.3730E-03
520158.9	4258142.57	19433.11661	0.16316	3.62597	0.1633	4.11823	3.37E-03	3.83E-07	7.44E-06	3.83E-07	8.11E-06	3.3869E-03
520672.21	4258286.85	19430.20256	0.11812	0.13654	0.1164	0.14255	3.37E-03	2.77E-07	2.80E-07	2.73E-07	2.81E-07	3.3712E-03
520684.94	4258665.44	19424.75725	0.12689	0.11597	0.12232	0.11957	3.37E-03	2.98E-07	2.38E-07	2.87E-07	2.35E-07	3.3702E-03
520658.19	4258431.12	19419.22395	0.12936	0.13651	0.12564	0.14263	3.37E-03	3.04E-07	2.80E-07	2.95E-07	2.81E-07	3.3693E-03
520667.17	4258377.09	19411.3212	0.1242	0.13531	0.1209	0.1411	3.37E-03	2.92E-07	2.78E-07	2.84E-07	2.78E-07	3.3679E-03
520129.41	4258182.47	19395.00844	0.17393	6.18218	0.17573	7.19121	3.36E-03	4.08E-07	1.27E-05	4.13E-07	1.42E-05	3.3916E-03
520064.6	4258302.8	19394.15944	0.21821	19.6311	0.23109	10.05715	3.36E-03	5.12E-07	4.03E-05	5.43E-07	1.98E-05	3.4249E-03
520672	4258312.17	19392.08647	0.11961	0.13532	0.11731	0.1415	3.36E-03	2.81E-07	2.78E-07	2.75E-07	2.79E-07	3.3646E-03
520691.95	4258787.11	19390.06791	0.12906	0.10254	0.12519	0.10572	3.36E-03	3.03E-07	2.10E-07	2.94E-07	2.08E-07	3.3641E-03
520055.34	4258326.6	19367.21491	0.23057	10.52954	0.24474	7.22773	3.36E-03	5.41E-07	2.16E-05	5.75E-07	1.42E-05	3.3961E-03
520671.05	4258335.53	19361.86318	0.12102	0.13516	0.11827	0.14115	3.36E-03	2.84E-07	2.77E-07	2.78E-07	2.78E-07	3.3593E-03
520680.9	4258837.44	19359.72192	0.13557	0.09961	0.13176	0.10268	3.36E-03	3.18E-07	2.04E-07	3.09E-07	2.02E-07	3.3589E-03
520095.38	4259260.66	19358.52312	11.70573	0.16925	10.99748	0.16052	3.36E-03	2.75E-05	3.47E-07	2.58E-05	3.16E-07	3.4116E-03
520691.3	4258692.9	19354.67302	0.12565	0.11199	0.12163	0.1154	3.36E-03	2.95E-07	2.30E-07	2.86E-07	2.27E-07	3.3580E-03
520693.89	4258710.67	19351.05602	0.1254	0.10958	0.12162	0.11305	3.36E-03	2.94E-07	2.25E-07	2.86E-07	2.23E-07	3.3574E-03
520109.74	4258212.41	19336.88921	0.18292	10.31592	0.18703	12.0048	3.35E-03	4.29E-07	2.12E-05	4.39E-07	2.36E-05	3.3996E-03
520009.52	4258531.17	19329.75075	0.51618	2.49318	0.58698	2.17029	3.35E-03	1.21E-06	5.11E-06	1.38E-06	4.27E-06	3.3646E-03
519957.12	4258636.77	19323.0011	0.46813	0.96858	0.52212	0.91391	3.35E-03	1.10E-06	1.99E-06	1.23E-06	1.80E-06	3.3576E-03
520696.06	4258753.36	19322.50101	0.12624	0.10479	0.12253	0.10831	3.35E-03	2.96E-07	2.15E-07	2.88E-07	2.13E-07	3.3524E-03
519890.73	4258908.88	19293.22798	0.47707	0.30406	0.51097	0.29643	3.35E-03	1.12E-06	6.24E-07	1.20E-06	5.84E-07	3.3498E-03
520684.46	4258828.95	19261.73554	0.13373	0.09984	0.12994	0.10285	3.34E-03	3.14E-07	2.05E-07	3.05E-07	2.02E-07	3.3419E-03
519937.12	4258683.15	19248.48916	0.44561	0.73301	0.49006	0.69676	3.34E-03	1.05E-06	1.50E-06	1.15E-06	1.37E-06	3.3436E-03
519910.42	4258763.46	19246.14786	0.43124	0.49829	0.46591	0.47901	3.34E-03	1.01E-06	1.02E-06	1.09E-06	9.43E-07	3.3422E-03
519899.71	4258809.97	19244.22131	0.43426	0.41646	0.4656	0.40152	3.34E-03	1.02E-06	8.54E-07	1.09E-06	7.90E-07	3.3416E-03
520038.53	4258383.47	19238.82263	0.27226	5.48569	0.28829	4.40686	3.34E-03	6.39E-07	1.13E-05	6.77E-07	8.67E-06	3.3581E-03
519896.72	4258826.87	19233.91479	0.43731	0.39258	0.46844	0.37879	3.34E-03	1.03E-06	8.05E-07	1.10E-06	7.46E-07	3.3397E-03
520638.58	4258952.11	19229.02908	0.15881	0.09413	0.15389	0.09776	3.34E-03	3.73E-07	1.93E-07	3.61E-07	1.92E-07	3.3363E-03
520045.82	4259229.92	19219.90283	6.01483	0.16865	8.32552	0.16426	3.33E-03	1.41E-05	3.46E-07	1.95E-05	3.23E-07	3.3679E-03
520149.08	4258152.53	19215.42744	0.16497	4.24599	0.1654	4.85748	3.33E-03	3.87E-07	8.71E-06	3.88E-07	9.56E-06	3.3519E-03
520696.73	4258727.83	19212.1974	0.12501	0.10715	0.12138	0.11068	3.33E-03	2.93E-07	2.20E-07	2.85E-07	2.18E-07	3.3333E-03
520670.75	4258360.62	19200.19455	0.12234	0.13442	0.11918	0.14019	3.33E-03	2.87E-07	2.76E-07	2.80E-07	2.76E-07	3.3313E-03
520673.17	4258212.02	19169.57905	0.11336	0.13953	0.1117	0.1446	3.32E-03	2.66E-07	2.86E-07	2.62E-07	2.85E-07	3.3260E-03
519969.85	4258608.92	19151.39117	0.48405	1.1755	0.54914	1.09825	3.32E-03	1.14E-06	2.41E-06	1.29E-06	2.16E-06	3.3287E-03
520685	4258655.96	19145.55574	0.12649	0.11671	0.12184	0.12039	3.32E-03	2.97E-07	2.39E-07	2.86E-07	2.37E-07	3.3218E-03
519890.13	4258883.33	19145.14707	0.45602	0.32685	0.48771	0.31722	3.32E-03	1.07E-06	6.70E-07	1.14E-06	6.24E-07	3.3241E-03
519979.77	4258589.48	19142.73486	0.49963	1.387	0.57406	1.27613	3.32E-03	1.17E-06	2.84E-06	1.35E-06	2.51E-06	3.3281E-03
519902.61	4258792.84	19141.82873	0.42954	0.44217	0.4612	0.42607	3.32E-03	1.01E-06	9.07E-07	1.08E-06	8.39E-07	3.3239E-03
520695.53	4258778.57	19141.16317	0.1273	0.10246	0.1235	0.10572	3.32E-03	2.99E-07	2.10E-07	2.90E-07	2.08E-07	3.3210E-03
520688.01	4258820.47	19134.31536	0.13191	0.1	0.12813	0.10298	3.32E-03	3.10E-07	2.05E-07	3.01E-07	2.03E-07	3.3198E-03
519893.64	4258843.56	19134.30818	0.43909	0.37023	0.46953	0.35773	3.32E-03	1.03E-06	7.59E-07	1.10E-06	7.04E-07	3.3224E-03
519999.61	4258550.61	19101.93836	0.51793	2.01437	0.59321	1.79191	3.31E-03	1.22E-06	4.13E-06	1.39E-06	3.53E-06	3.3234E-03
520055.74	4259239.9	19091.77945	8.60538	0.16754	15.38308	0.1624	3.31E-03	2.02E-05	3.44E-07	3.61E-05	3.20E-07	3.3684E-03
520674.64	4258222.66	19087.97445	0.11364	0.13856	0.11202	0.14362	3.31E-03	2.67E-07	2.84E-07	2.63E-07	2.83E-07	3.3118E-03
519989.69	4258570.05	19084.88471	0.51192	1.65962	0.58831	1.50242	3.31E-03	1.20E-06	3.40E-06	1.38E-06	2.96E-06	3.3191E-03
520675.95	4258270.8	19050.94863	0.11619	0.13568	0.11463	0.1414	3.30E-03	2.73E-07	2.78E-07	2.69E-07	2.78E-07	3.3054E-03
520675.66	4258295.9	19048.73604	0.11771	0.13437	0.11572	0.14043	3.30E-03	2.76E-07	2.76E-07	2.72E-07	2.76E-07	3.3050E-03
520019.4	4258502.04	19045.97721	0.47115	3.18109	0.52164	2.70255	3.30E-03	1.11E-06	6.52E-06	1.22E-06	5.32E-06	3.3176E-03
520085.48	4259260.68	19035.45382	15.64757	0.16714	17.07409	0.15939	3.30E-03	3.67E-05	3.43E-07	4.01E-05	3.14E-07	3.3791E-03
520026.15	4258466.06	19029.41185	0.39509	3.83016	0.42781	3.19431	3.30E-03	9.28E-07	7.86E-06	1.00E-06	6.29E-06	3.3166E-03
520663.74	4258419.81	19012.33298	0.12708	0.13473	0.12347	0.14067	3.30E-03	2.98E-07	2.76E-07	2.90E-07	2.77E-07	3.2987E-03
520119.59	4258192.44	19006.37974	0.17539	7.81034	0.17817	9.08187	3.30E-03	4.12E-07	1.60E-05	4.18E-07	1.79E-05	3.3313E-03
520178.57	4258112.63	19004.65954	0.1547	2.75524	0.15453	3.09456	3.30E-03	3.63E-07	5.65E-06	3.63E-07	6.09E-06	3.3087E-03
520676.22	4258233.35	19001.07453	0.11395	0.13731	0.11234	0.14251	3.30E-03	2.68E-07	2.82E-07	2.64E-07	2.81E-07	3.2967E-03
520691.56	4258811.99	18987.37156	0.13013	0.10014	0.12636	0.1031	3.29E-03	3.06E-07	2.05E-07	2.97E-07	2.03E-07	3.2943E-03
520667.11	4258402.8	18983.26977	0.12532	0.13415	0.12184	0.13994	3.29E-03	2.94E-07	2.75E-07	2.86E-07	2.75E-07	3.2937E-03
520029.38	4258433.94	18978.01154	0.33424	4.21109	0.35718	3.49151	3.29E-03	7.85E-07	8.64E-06	8.39E-07	6.87E-06	3.3088E-03
520699.66	4258744.77	18972.29863	0.12455	0.10481	0.12099	0.10829	3.29E-03	2.92E-07	2.15E-07	2.84E-07	2.13E-07	3.2917E-03
520654.76	4258473.85	18960.98497	0.13187	0.13605	0.12743	0.14219	3.29E-03	3.10E-07	2.79E-07	2.99E-07	2.80E-07	3.2899E-03
520139.26	4258162.5	18960.71709	0.16672	5.06368	0.16762	5.8466	3.29E-03	3.91E-07	1.04E-05	3.94E-07	1.15E-05	3.3113E-03
519890.49	4258860.07	18953.33508	0.43956	0.3495	0.46941	0.33826	3.29E-03	1.03E-06	7.17E-07	1.10E-06	6.66E-07	3.2909E-03
520045.38	4258350.68	18937.74456	0.24313	6.88366	0.25759	5.31291	3.28E-03	5.71E-07	1.41E-05	6.05E-07	1.05E-05	3.3104E-03
520674.4	4258344.35	18935.74323	0.12047	0.13343	0.11752	0.13922	3.28E-03	2.83E-07	2.74E-07	2.76E-07	2.74E-07	3.2854E-03
520652.54	4258929.11	18890.85357	0.15118	0.09415	0.14668	0.09763	3.28E-03	3.55E-07	1.93E-07	3.44E-07	1.92E-07	3.2776E-03
520670.58	4258386.05	18886.16444	0.12353	0.13347	0.12015	0.13914	3.28E-03	2.90E-07	2.74E-07	2.82E-07	2.74E-07	3.2768E-03
520656.2	4258920.38	18882.56718	0.14921	0.09448	0.14483	0.09791	3.28E-03	3.50E-07	1.94E-07	3.40E-07	1.93E-07	3.2762E-03
520699.1	4258770.04	18880.56364	0.12561	0.10238	0.12189	0.10571	3.27E-03	2.95E-07	2.10E-07	2.86E-07	2.08E-07	3.2757E-03
520168.75	4258122.6	18879.40497	0.15652	3.1416	0.15629	3.55243	3.27E-03	3.67E-07	6.44E-06	3.67E-07	6.99E-06	3.2887E-03
519947.12	4258655.32	18873.88321	0.44857	0.84872	0.49621	0.80389	3.27E-03	1.05E-06	1.74E-06	1.16E-06	1.58E-06	3.2791E-03
520659.85	4258911.66	18868.32107	0.14726	0.09483	0.14299	0.09821	3.27E-03	3.46E-07	1.94E-07	3.36E-07	1.93E-07	3.2737E-03
520039.34	4258373.15	18866.58445	0.2603	5.62352	0.27536	4.506	3.27E-03	6.11E-07	1.15E-05	6.46E-07	8.87E-06	3.2940E-03
520663.5	4258902.93	18848.38071	0.14533	0.09518	0.14115	0.09851	3.27E-03	3.41E-07	1.95E-07	3.31E-07	1.94E-07	3.2702E-03
520658.09	4258456.72	18847.87469	0.13022	0.13531	0.1261	0.14147	3.27E-03	3.06E-07	2.78E-07	2.96E-07	2.78E-07	3.2702E-03
520685.05	4258646.48	18847.50972	0.12611	0.11731	0.1214	0.12111	3.27E-03	2.96E-07	2.41E-07	2.85E-07	2.38E-07	3.2701E-03
520697.54	4258701.95	18843.71066	0.12373	0.10948	0.11997	0.11281	3.27E-03	2.90E-07	2.25E-07	2.82E-07	2.22E-07	3.2694E-03
520099.92	4258222.38	18823.11626	0.18393	14.77425	0.18935	16.12868	3.26E-03	4.32E-07	3.03E-05	4.45E-07	3.17E-05	3.3277E-03
520695.11	4258803.51	18822.46452	0.12838	0.10022	0.12463	0.10319	3.26E-03	3.01E-07	2.06E-07	2.93E-07	2.03E-07	3.2657E-03
520678.24	4258244.23	18822.1073	0.11408	0.13592	0.11251	0.14121	3.26E-03	2.68E-07	2.79E-07	2.64E-07	2.78E-07	3.2657E-03
520667.16	4258894.21	18821.67527	0.14339	0.09554	0.13932	0.09882	3.26E-03	3.37E-07	1.96E-07	3.27E-07	1.95E-07	3.2656E-03
519886.99	4258899.85	18814.42376	0.45457	0.30896	0.4857	0.30059	3.26E-03	1.07E-06	6.34E-07	1.14E-06	5.92E-07	3.2667E-03
519913.27	4258746.2	18811.91833	0.42187	0.53069	0.45807	0.50911	3.26E-03	9.90E-07	1.09E-06	1.08E-06	1.00E-06	3.2670E-03
520661.53	4258439.88	18808.76278	0.12853	0.13462	0.12467	0.14069	3.26E-03	3.02E-07	2.76E-07	2.93E-07	2.77E-07	3.2634E-03
520694.84	4258684.46	18803.57535	0.12405	0.11171	0.11999	0.11504	3.26E-03	2.91E-07	2.29E-07	2.82E-07	2.26E-07	3.2624E-03
520670.81	4258885.48	18793.27012	0.14147	0.0959	0.1375	0.09913	3.26E-03	3.32E-07	1.97E-07	3.23E-07	1.95E-07	3.2607E-03
520055.77	4258316.43	18779.4655	0.2214	10.72754	0.2348	7.3244	3.26E-03	5.20E-07	2.20E-05	5.51E-07	1.44E-05	3.2947E-03
520700.35	4258719.18	18772.0444	0.12336	0.10709	0.1198	0.11049	3.26E-03	2.90E-07	2.20E-07	2.81E-07	2.17E-07	3.2569E-03
520674.46	4258876.76	18755.45101	0.13957	0.09623	0.13568	0.09942	3.25E-03	3.28E-07	1.97E-07	3.19E-07	1.96E-07	3.2541E-03
520045.84	4259239.92	18728.14155	6.03691	0.16501	8.39069	0.16073	3.25E-03	1.42E-05	3.38E-07	1.97E-05	3.16E-07	3.2828E-03
520096.39	4259273.23	18727.14007	11.41923	0.16484	10.49985	0.15637	3.25E-03	2.68E-05	3.38E-07	2.47E-05	3.08E-07	3.3002E-03
520674.14	4258369.51	18720.35024	0.12171	0.13267	0.11845	0.13828	3.25E-03	2.86E-07	2.72E-07	2.78E-07	2.72E-07	3.2481E-03
520678.12	4258868.03	18707.94563	0.1377	0.09649	0.13385	0.09963	3.24E-03	3.23E-07	1.98E-07	3.14E-07	1.96E-07	3.2458E-03
520158.93	4258132.57	18701.84298	0.15823	3.62666	0.15817	4.12419	3.24E-03	3.71E-07	7.44E-06	3.71E-07	8.12E-06	3.2600E-03
520679.37	4258279.79	18688.06887	0.1158	0.13366	0.11407	0.13946	3.24E-03	2.72E-07	2.74E-07	2.68E-07	2.75E-07	3.2424E-03
519921.65	4258718.2	18683.61573	0.4235	0.60123	0.46175	0.57501	3.24E-03	9.94E-07	1.23E-06	1.08E-06	1.13E-06	3.2450E-03
520679.11	4258304.95	18660.145	0.11725	0.13242	0.11499	0.13843	3.24E-03	2.75E-07	2.72E-07	2.70E-07	2.72E-07	3.2376E-03
520681.77	4258859.31	18654.70531	0.13583	0.09678	0.13204	0.09987	3.24E-03	3.19E-07	1.98E-07	3.10E-07	1.97E-07	3.2366E-03
520129.44	4258172.47	18650.06812	0.16829	6.18924	0.16991	7.19675	3.23E-03	3.95E-07	1.27E-05	3.99E-07	1.42E-05	3.2624E-03
520647.27	4258948.51	18649.24994	0.15403	0.09289	0.14926	0.09641	3.23E-03	3.62E-07	1.91E-07	3.50E-07	1.90E-07	3.2357E-03
520698.66	4258795.02	18646.01942	0.12668	0.10026	0.12297	0.10327	3.23E-03	2.97E-07	2.06E-07	2.89E-07	2.03E-07	3.2351E-03
520702.67	4258761.5	18637.92262	0.12403	0.10238	0.12043	0.10574	3.23E-03	2.91E-07	2.10E-07	2.83E-07	2.08E-07	3.2337E-03
519930.83	4258692.09	18614.72996	0.4288	0.68378	0.46909	0.65189	3.23E-03	1.01E-06	1.40E-06	1.10E-06	1.28E-06	3.2334E-03
520055.76	4259249.9	18598.98899	8.67635	0.16391	15.67614	0.15893	3.23E-03	2.04E-05	3.36E-07	3.68E-05	3.13E-07	3.2837E-03
520703.25	4258736.18	18598.78408	0.12291	0.10476	0.11947	0.10818	3.23E-03	2.89E-07	2.15E-07	2.80E-07	2.13E-07	3.2269E-03
520109.77	4258202.41	18591.45668	0.17669	10.34008	0.18053	11.96041	3.22E-03	4.15E-07	2.12E-05	4.24E-07	2.35E-05	3.2702E-03
520685.42	4258850.58	18591.14138	0.13399	0.09708	0.13025	0.10011	3.22E-03	3.15E-07	1.99E-07	3.06E-07	1.97E-07	3.2256E-03
520694.89	4258674.98	18581.8938	0.12368	0.11241	0.11948	0.11577	3.22E-03	2.90E-07	2.31E-07	2.81E-07	2.28E-07	3.2240E-03
519886.36	4258874.23	18561.12347	0.43345	0.3315	0.46234	0.3213	3.22E-03	1.02E-06	6.80E-07	1.09E-06	6.32E-07	3.2228E-03
520063.3	4258293.35	18540.01116	0.20891	17.35354	0.22096	9.65838	3.22E-03	4.90E-07	3.56E-05	5.19E-07	1.90E-05	3.2713E-03
520685.1	4258637	18535.43147	0.12575	0.11782	0.12101	0.12176	3.21E-03	2.95E-07	2.42E-07	2.84E-07	2.40E-07	3.2159E-03
520689.08	4258841.86	18513.72506	0.13216	0.09736	0.12847	0.10032	3.21E-03	3.10E-07	2.00E-07	3.02E-07	1.97E-07	3.2121E-03
520677.76	4258353.17	18509.62549	0.11992	0.1317	0.11679	0.13733	3.21E-03	2.82E-07	2.70E-07	2.74E-07	2.70E-07	3.2115E-03
520149.11	4258142.53	18500.32975	0.15995	4.24595	0.16016	4.8699	3.21E-03	3.76E-07	8.71E-06	3.76E-07	9.59E-06	3.2278E-03
520046.09	4258340.4	18481.49415	0.23329	7.05446	0.2471	5.41804	3.21E-03	5.48E-07	1.45E-05	5.80E-07	1.07E-05	3.2318E-03
520658.16	4258482.77	18461.68841	0.13091	0.13427	0.12629	0.14024	3.20E-03	3.07E-07	2.75E-07	2.96E-07	2.76E-07	3.2033E-03
520702.21	4258786.54	18447.03642	0.12503	0.10025	0.12137	0.10332	3.20E-03	2.94E-07	2.06E-07	2.85E-07	2.03E-07	3.2005E-03
519903.81	4258771.61	18436.69654	0.41163	0.47101	0.44292	0.45366	3.20E-03	9.66E-07	9.66E-07	1.04E-06	8.93E-07	3.2016E-03
520086.48	4259273.24	18430.47624	15.24018	0.16285	15.97494	0.15532	3.20E-03	3.58E-05	3.34E-07	3.75E-05	3.06E-07	3.2706E-03
520692.73	4258833.13	18422.24049	0.13036	0.09761	0.1267	0.1005	3.20E-03	3.06E-07	2.00E-07	2.97E-07	1.98E-07	3.1963E-03
519892.99	4258817.88	18407.50096	0.41357	0.39612	0.44178	0.38248	3.19E-03	9.71E-07	8.12E-07	1.04E-06	7.53E-07	3.1963E-03
520670.55	4258411.84	18405.14795	0.12457	0.13226	0.12102	0.138	3.19E-03	2.92E-07	2.71E-07	2.84E-07	2.72E-07	3.1934E-03
520667.21	4258428.94	18402.51112	0.12627	0.13278	0.12255	0.13868	3.19E-03	2.96E-07	2.72E-07	2.88E-07	2.73E-07	3.1930E-03
519889.95	4258834.65	18389.39655	0.4161	0.3742	0.44409	0.36154	3.19E-03	9.77E-07	7.67E-07	1.04E-06	7.12E-07	3.1931E-03
520022.73	4258474.35	18387.60803	0.40425	3.51081	0.43921	2.95493	3.19E-03	9.49E-07	7.20E-06	1.03E-06	5.82E-06	3.2042E-03
519937.12	4258673.87	18382.58803	0.42999	0.74884	0.47202	0.7122	3.19E-03	1.01E-06	1.54E-06	1.11E-06	1.40E-06	3.1934E-03
520682.02	4258215.81	18365.75859	0.11142	0.1354	0.10973	0.14029	3.19E-03	2.62E-07	2.78E-07	2.58E-07	2.76E-07	3.1865E-03
520673.99	4258395.01	18354.20031	0.12284	0.13165	0.1194	0.13724	3.18E-03	2.88E-07	2.70E-07	2.80E-07	2.70E-07	3.1846E-03
520019.36	4258492.34	18352.72355	0.44076	3.20558	0.48362	2.7269	3.18E-03	1.03E-06	6.57E-06	1.14E-06	5.37E-06	3.1973E-03
520683.14	4258263.81	18335.50879	0.11394	0.13276	0.11232	0.13828	3.18E-03	2.67E-07	2.72E-07	2.64E-07	2.72E-07	3.1813E-03
520694.94	4258665.5	18335.13734	0.12332	0.11306	0.11899	0.11648	3.18E-03	2.90E-07	2.32E-07	2.79E-07	2.29E-07	3.1812E-03
520682.8	4258288.77	18333.25251	0.1154	0.13162	0.11344	0.13747	3.18E-03	2.71E-07	2.70E-07	2.66E-07	2.71E-07	3.1809E-03
520706.25	4258752.97	18330.24585	0.12242	0.10241	0.11897	0.10577	3.18E-03	2.87E-07	2.10E-07	2.79E-07	2.08E-07	3.1803E-03
519895.96	4258800.91	18327.15598	0.40966	0.41968	0.43823	0.40504	3.18E-03	9.62E-07	8.61E-07	1.03E-06	7.97E-07	3.1824E-03
519882.82	4258922.25	18321.9331	0.45211	0.28683	0.48247	0.28003	3.18E-03	1.06E-06	5.88E-07	1.13E-06	5.51E-07	3.1812E-03
520701.19	4258693.24	18320.81424	0.12212	0.10925	0.11833	0.11249	3.18E-03	2.87E-07	2.24E-07	2.78E-07	2.21E-07	3.1787E-03

520703.97	4258710.53	18312.5041	0.12175	0.10699	0.11822	0.11027	3.18E-03	2.86E-07	2.19E-07	2.78E-07	2.17E-07	3.1772E-03
520696.38	4258824.41	18308.82451	0.12857	0.0978	0.12494	0.10064	3.18E-03	3.02E-07	2.01E-07	2.93E-07	1.98E-07	3.1766E-03
519883.24	4258890.82	18300.221	0.43293	0.31353	0.46139	0.30452	3.17E-03	1.02E-06	6.43E-07	1.08E-06	5.99E-07	3.1774E-03
519886.82	4258851.23	18291.13112	0.41751	0.35359	0.44481	0.34206	3.17E-03	9.80E-07	7.25E-07	1.04E-06	6.73E-07	3.1759E-03
520661.45	4258465.56	18290.79808	0.1293	0.13356	0.12502	0.1396	3.17E-03	3.04E-07	2.74E-07	2.94E-07	2.75E-07	3.1736E-03
520119.62	4258182.44	18287.18717	0.16965	7.82114	0.1722	9.09417	3.17E-03	3.98E-07	1.60E-05	4.04E-07	1.79E-05	3.2066E-03
520682.55	4258314.01	18274.5752	0.11676	0.13065	0.11424	0.13654	3.17E-03	2.74E-07	2.68E-07	2.68E-07	2.69E-07	3.1707E-03
520683.55	4258226.48	18268.65798	0.1117	0.13433	0.11004	0.13929	3.17E-03	2.62E-07	2.76E-07	2.58E-07	2.74E-07	3.1697E-03
520045.86	4259249.92	18251.50847	6.08114	0.16145	8.46322	0.1573	3.17E-03	1.43E-05	3.31E-07	1.99E-05	3.10E-07	3.2004E-03
519915.99	4258728.64	18247.41579	0.41155	0.56481	0.44756	0.54114	3.16E-03	9.66E-07	1.16E-06	1.05E-06	1.07E-06	3.1692E-03
520139.29	4258152.5	18239.59569	0.1615	5.06849	0.16225	5.84583	3.16E-03	3.79E-07	1.04E-05	3.81E-07	1.15E-05	3.1862E-03
520677.52	4258378.4	18236.01905	0.12107	0.13093	0.11773	0.13641	3.16E-03	2.84E-07	2.69E-07	2.76E-07	2.69E-07	3.1641E-03
520096.4	4259283.23	18232.80974	11.41462	0.16135	10.41881	0.15315	3.16E-03	2.68E-05	3.31E-07	2.45E-05	3.01E-07	3.2143E-03
520685.16	4258627.52	18213.75445	0.1254	0.11831	0.12065	0.1224	3.16E-03	2.94E-07	2.43E-07	2.83E-07	2.41E-07	3.1602E-03
520705.77	4258778.06	18208.05134	0.12338	0.10016	0.1198	0.10331	3.16E-03	2.90E-07	2.05E-07	2.81E-07	2.03E-07	3.1591E-03
520706.85	4258727.59	18201.63895	0.12132	0.10466	0.11795	0.108	3.16E-03	2.85E-07	2.15E-07	2.77E-07	2.13E-07	3.1580E-03
520056.16	4258306.28	18200.55583	0.21281	10.90763	0.22553	7.40153	3.16E-03	5.00E-07	2.24E-05	5.29E-07	1.46E-05	3.1948E-03
520700.04	4258815.68	18171.6703	0.12682	0.09794	0.12321	0.10077	3.15E-03	2.98E-07	2.01E-07	2.89E-07	1.98E-07	3.1528E-03
520168.78	4258112.6	18161.39777	0.15187	3.14367	0.15152	3.54925	3.15E-03	3.57E-07	6.45E-06	3.56E-07	6.99E-06	3.1642E-03
519881.35	4258911.69	18152.42536	0.43945	0.29428	0.46835	0.28672	3.15E-03	1.03E-06	6.04E-07	1.10E-06	5.64E-07	3.1518E-03
520685.19	4258237.2	18149.70995	0.11195	0.13305	0.1103	0.13817	3.15E-03	2.63E-07	2.73E-07	2.59E-07	2.72E-07	3.1491E-03
519898.82	4258783.7	18131.34036	0.40417	0.44486	0.43294	0.42922	3.14E-03	9.49E-07	9.12E-07	1.02E-06	8.45E-07	3.1485E-03
520682.43	4258339.55	18126.63381	0.11794	0.13023	0.11497	0.13581	3.14E-03	2.77E-07	2.67E-07	2.70E-07	2.67E-07	3.1451E-03
520055.77	4259259.9	18121.59877	8.72331	0.16041	15.97142	0.15557	3.14E-03	2.05E-05	3.29E-07	3.75E-05	3.06E-07	3.2017E-03
520099.95	4258212.38	18119.40482	0.17763	14.81669	0.18269	16.12089	3.14E-03	4.17E-07	3.04E-05	4.29E-07	3.17E-05	3.2057E-03
520009.48	4258521.48	18100.38872	0.48322	2.52748	0.54365	2.19921	3.14E-03	1.13E-06	5.18E-06	1.28E-06	4.33E-06	3.1514E-03
520659.58	4258936.25	18083.01001	0.14759	0.09199	0.14308	0.09536	3.14E-03	3.46E-07	1.89E-07	3.36E-07	1.88E-07	3.1375E-03
519906.72	4258754.54	18080.76413	0.40429	0.50035	0.43639	0.4813	3.14E-03	9.49E-07	1.03E-06	1.02E-06	9.47E-07	3.1400E-03
520663.21	4258927.58	18074.34596	0.14573	0.09228	0.14133	0.0956	3.13E-03	3.42E-07	1.89E-07	3.32E-07	1.88E-07	3.1360E-03
520681.12	4258361.99	18067.89636	0.11932	0.13005	0.11608	0.1355	3.13E-03	2.80E-07	2.67E-07	2.73E-07	2.67E-07	3.1349E-03
520695	4258656.02	18065.29259	0.12296	0.11368	0.11855	0.1172	3.13E-03	2.89E-07	2.33E-07	2.78E-07	2.31E-07	3.1344E-03
520666.84	4258918.91	18060.15705	0.14388	0.0926	0.13959	0.09588	3.13E-03	3.38E-07	1.90E-07	3.28E-07	1.89E-07	3.1335E-03
520670.47	4258910.24	18040.97771	0.14204	0.09294	0.13786	0.09617	3.13E-03	3.33E-07	1.91E-07	3.24E-07	1.89E-07	3.1302E-03
520674.1	4258901.58	18016.93882	0.1402	0.0933	0.13614	0.09648	3.12E-03	3.29E-07	1.91E-07	3.20E-07	1.90E-07	3.1260E-03
520046.71	4258330.16	18013.50923	0.2241	7.2038	0.23726	5.52231	3.12E-03	5.26E-07	1.48E-05	5.57E-07	1.09E-05	3.1511E-03
520158.96	4258122.57	18001.69824	0.15351	3.62826	0.1533	4.12425	3.12E-03	3.60E-07	7.44E-06	3.60E-07	8.12E-06	3.1386E-03
520703.69	4258806.96	18001.19786	0.12508	0.098	0.12149	0.10084	3.12E-03	2.94E-07	2.01E-07	2.85E-07	1.99E-07	3.1232E-03
520709.82	4258744.43	17996.93449	0.12083	0.10239	0.11751	0.10571	3.12E-03	2.84E-07	2.10E-07	2.76E-07	2.08E-07	3.1225E-03
520686.54	4258272.74	17990.54502	0.11354	0.13084	0.11181	0.13643	3.12E-03	2.67E-07	2.68E-07	2.62E-07	2.69E-07	3.1214E-03
520677.73	4258892.91	17988.48878	0.13838	0.09362	0.13441	0.09676	3.12E-03	3.25E-07	1.92E-07	3.16E-07	1.90E-07	3.1210E-03
519924.46	4258700.84	17976.87101	0.41223	0.6395	0.44876	0.61134	3.12E-03	9.68E-07	1.31E-06	1.05E-06	1.20E-06	3.1225E-03
520686.22	4258297.76	17969.87416	0.11497	0.12959	0.11274	0.13543	3.12E-03	2.70E-07	2.66E-07	2.65E-07	2.67E-07	3.1179E-03
520709.32	4258769.57	17957.17477	0.12179	0.10008	0.11831	0.10328	3.11E-03	2.86E-07	2.05E-07	2.78E-07	2.03E-07	3.1156E-03
520681.36	4258884.24	17955.36247	0.13657	0.09397	0.1327	0.09706	3.11E-03	3.21E-07	1.93E-07	3.12E-07	1.91E-07	3.1153E-03
520086.5	4259283.24	17953.57969	15.16056	0.15944	15.78644	0.15213	3.11E-03	3.56E-05	3.27E-07	3.71E-05	2.99E-07	3.1872E-03
520129.47	4258162.47	17948.73231	0.16296	6.19612	0.16441	7.19761	3.11E-03	3.83E-07	1.27E-05	3.86E-07	1.42E-05	3.1408E-03
519882.59	4258865.13	17944.82181	0.41184	0.33565	0.43813	0.32509	3.11E-03	9.67E-07	6.88E-07	1.03E-06	6.40E-07	3.1158E-03
520063.64	4258283.22	17942.73312	0.20113	17.72943	0.2125	9.76668	3.11E-03	4.72E-07	3.64E-05	4.99E-07	1.92E-05	3.1686E-03
520684.98	4258875.57	17918.26517	0.13477	0.09431	0.131	0.09735	3.11E-03	3.16E-07	1.93E-07	3.08E-07	1.92E-07	3.1089E-03
519947.12	4258646.05	17890.38505	0.432	0.86409	0.4772	0.81973	3.10E-03	1.01E-06	1.77E-06	1.12E-06	1.61E-06	3.1085E-03
520685.21	4258618.03	17890.24322	0.12505	0.11883	0.12035	0.12304	3.10E-03	2.94E-07	2.44E-07	2.83E-07	2.42E-07	3.1040E-03
520109.8	4258192.41	17877.88222	0.17076	10.36886	0.17441	11.80161	3.10E-03	4.01E-07	2.13E-05	4.09E-07	2.32E-05	3.1461E-03
520688.61	4258866.9	17871.31867	0.13299	0.09461	0.12929	0.0976	3.10E-03	3.12E-07	1.94E-07	3.04E-07	1.92E-07	3.1007E-03
520707.59	4258701.88	17836.46907	0.12019	0.10682	0.11665	0.10999	3.09E-03	2.82E-07	2.19E-07	2.74E-07	2.17E-07	3.0946E-03
520707.34	4258798.23	17834.99668	0.12343	0.09804	0.11987	0.10092	3.09E-03	2.90E-07	2.01E-07	2.81E-07	1.99E-07	3.0944E-03
520673.99	4258420.88	17834.33812	0.12381	0.13039	0.12017	0.13609	3.09E-03	2.91E-07	2.67E-07	2.82E-07	2.68E-07	3.0944E-03
519969.81	4258599.22	17828.75657	0.46285	1.19921	0.52534	1.11813	3.09E-03	1.09E-06	2.46E-06	1.23E-06	2.20E-06	3.0993E-03
519959.89	4258618.66	17827.56056	0.44784	1.03195	0.5018	0.97281	3.09E-03	1.05E-06	2.12E-06	1.18E-06	1.91E-06	3.0984E-03
520677.4	4258403.97	17819.45754	0.12213	0.12984	0.11863	0.13537	3.09E-03	2.87E-07	2.66E-07	2.79E-07	2.66E-07	3.0918E-03
520692.24	4258858.23	17816.50809	0.13124	0.09485	0.12759	0.09779	3.09E-03	3.08E-07	1.95E-07	3.00E-07	1.92E-07	3.0912E-03
520149.14	4258132.54	17811.78251	0.15512	4.24828	0.1552	4.87086	3.09E-03	3.64E-07	8.71E-06	3.64E-07	9.59E-06	3.1084E-03
520670.69	4258438.06	17809.35232	0.12542	0.1309	0.12159	0.13676	3.09E-03	2.94E-07	2.68E-07	2.85E-07	2.69E-07	3.0901E-03
520045.87	4259259.92	17789.34351	6.10454	0.15803	8.54294	0.15401	3.09E-03	1.43E-05	3.24E-07	2.01E-05	3.03E-07	3.1205E-03
520704.84	4258684.52	17786.05247	0.12055	0.10896	0.11671	0.11213	3.08E-03	2.83E-07	2.23E-07	2.74E-07	2.21E-07	3.0859E-03
520710.45	4258719	17785.26879	0.11977	0.10455	0.11644	0.10779	3.08E-03	2.81E-07	2.14E-07	2.73E-07	2.12E-07	3.0858E-03
520664.82	4258474.39	17784.06255	0.12836	0.13188	0.12393	0.13776	3.08E-03	3.01E-07	2.70E-07	2.91E-07	2.71E-07	3.0857E-03
520695.05	4258646.54	17778.76221	0.12261	0.11423	0.11814	0.11787	3.08E-03	2.88E-07	2.34E-07	2.77E-07	2.32E-07	3.0847E-03
520096.42	4259293.23	17763.42573	11.36135	0.15802	10.33526	0.15005	3.08E-03	2.67E-05	3.24E-07	2.43E-05	2.95E-07	3.1325E-03
519879.5	4258881.79	17755.69846	0.41219	0.31775	0.43819	0.30825	3.08E-03	9.68E-07	6.52E-07	1.03E-06	6.07E-07	3.0829E-03
520695.87	4258849.56	17750.9293	0.1295	0.09511	0.12589	0.09797	3.08E-03	3.04E-07	1.95E-07	2.96E-07	1.93E-07	3.0798E-03
520680.9	4258387.29	17749.21511	0.12042	0.12918	0.11702	0.13457	3.08E-03	2.83E-07	2.65E-07	2.75E-07	2.65E-07	3.0796E-03
519979.73	4258579.79	17736.69483	0.47589	1.41467	0.54363	1.29929	3.08E-03	1.12E-06	2.90E-06	1.28E-06	2.56E-06	3.0842E-03
519999.56	4258540.91	17727.7182	0.48745	2.04543	0.55332	1.819	3.07E-03	1.14E-06	4.20E-06	1.30E-06	3.58E-06	3.0850E-03
520685.9	4258348.68	17713.60129	0.11737	0.12854	0.11424	0.13394	3.07E-03	2.76E-07	2.64E-07	2.68E-07	2.64E-07	3.0734E-03
520712.87	4258761.09	17707.9625	0.12028	0.10006	0.11691	0.10329	3.07E-03	2.82E-07	2.05E-07	2.74E-07	2.03E-07	3.0723E-03
520027.45	4258408.01	17705.42129	0.28722	4.03022	0.30444	3.3828	3.07E-03	6.74E-07	8.27E-06	7.15E-07	6.66E-06	3.0872E-03
520668.2	4258457.4	17679.32654	0.12679	0.13109	0.12266	0.13701	3.07E-03	2.98E-07	2.69E-07	2.88E-07	2.70E-07	3.0675E-03
520699.5	4258840.9	17672.41842	0.12778	0.09536	0.12421	0.09816	3.07E-03	3.00E-07	1.96E-07	2.92E-07	1.93E-07	3.0662E-03
520028.87	4258397.44	17668.7709	0.27495	4.18292	0.29081	3.50053	3.06E-03	6.45E-07	8.58E-06	6.83E-07	6.89E-06	3.0814E-03
520690.33	4258256.83	17662.0149	0.11175	0.12991	0.11009	0.13525	3.06E-03	2.62E-07	2.66E-07	2.58E-07	2.66E-07	3.0644E-03
520689.94	4258281.66	17652.43328	0.11315	0.12893	0.11122	0.13458	3.06E-03	2.66E-07	2.64E-07	2.61E-07	2.65E-07	3.0628E-03
519989.65	4258560.35	17651.45848	0.48451	1.68792	0.55185	1.52776	3.06E-03	1.14E-06	3.46E-06	1.30E-06	3.01E-06	3.0705E-03
520022.69	4258450.19	17647.77569	0.34893	3.5502	0.37448	3.00497	3.06E-03	8.19E-07	7.28E-06	8.79E-07	5.92E-06	3.0758E-03
520713.39	4258735.9	17639.92041	0.11931	0.10226	0.11606	0.10553	3.06E-03	2.80E-07	2.10E-07	2.72E-07	2.08E-07	3.0605E-03
520711	4258789.51	17636.92227	0.12179	0.09801	0.11829	0.10096	3.06E-03	2.86E-07	2.01E-07	2.78E-07	1.99E-07	3.0600E-03
519886.25	4258825.74	17623.44082	0.3943	0.3774	0.41984	0.36489	3.06E-03	9.26E-07	7.74E-07	9.86E-07	7.18E-07	3.0601E-03
520684.48	4258370.81	17620.12075	0.1187	0.1284	0.11539	0.1337	3.06E-03	2.79E-07	2.63E-07	2.71E-07	2.63E-07	3.0572E-03
520119.65	4258172.44	17611.90221	0.16422	7.83074	0.16657	9.10763	3.05E-03	3.86E-07	1.61E-05	3.91E-07	1.79E-05	3.0895E-03
520689.64	4258306.74	17609.06478	0.1145	0.12778	0.11201	0.13353	3.05E-03	2.69E-07	2.62E-07	2.63E-07	2.63E-07	3.0553E-03
519883.15	4258842.38	17599.20413	0.39638	0.35718	0.42156	0.34554	3.05E-03	9.31E-07	7.33E-07	9.90E-07	6.80E-07	3.0558E-03
520690.88	4258219.6	17585.31389	0.10953	0.13137	0.10781	0.13614	3.05E-03	2.57E-07	2.69E-07	2.53E-07	2.68E-07	3.0511E-03
520703.13	4258832.23	17579.04295	0.12607	0.09557	0.12254	0.09832	3.05E-03	2.96E-07	1.96E-07	2.88E-07	1.94E-07	3.0500E-03
520139.32	4258142.5	17575.16661	0.1566	5.06941	0.15719	5.85904	3.05E-03	3.68E-07	1.04E-05	3.69E-07	1.15E-05	3.0710E-03
520704.89	4258675.04	17570.38647	0.12022	0.10962	0.11624	0.11281	3.05E-03	2.82E-07	2.25E-07	2.73E-07	2.22E-07	3.0485E-03
520685.26	4258608.55	17569.97017	0.12473	0.11933	0.12007	0.12363	3.05E-03	2.93E-07	2.45E-07	2.82E-07	2.43E-07	3.0485E-03
519909.53	4258737.19	17567.6603	0.39478	0.53164	0.42761	0.51047	3.05E-03	9.27E-07	1.09E-06	1.00E-06	1.00E-06	3.0511E-03
519889.27	4258808.9	17559.69366	0.39102	0.39902	0.41686	0.38567	3.05E-03	9.18E-07	8.18E-07	9.79E-07	7.59E-07	3.0491E-03
520047.25	4258319.95	17540.46536	0.21548	7.33462	0.22802	5.61451	3.04E-03	5.06E-07	1.50E-05	5.35E-07	1.11E-05	3.0694E-03
520030	4258386.98	17525.84029	0.26322	4.3102	0.27791	3.59891	3.04E-03	6.18E-07	8.84E-06	6.52E-07	7.08E-06	3.0570E-03
519937.12	4258664.6	17504.2284	0.41479	0.76352	0.45474	0.72676	3.04E-03	9.74E-07	1.57E-06	1.07E-06	1.43E-06	3.0411E-03
520086.52	4259293.24	17494.4617	15.07173	0.15614	15.59979	0.14906	3.03E-03	3.54E-05	3.20E-07	3.66E-05	2.93E-07	3.1070E-03
520695.1	4258637.05	17478.89696	0.12228	0.11474	0.11778	0.11851	3.03E-03	2.87E-07	2.35E-07	2.77E-07	2.33E-07	3.0327E-03
520692.47	4258230.3	17478.47282	0.1098	0.13019	0.10809	0.13511	3.03E-03	2.58E-07	2.67E-07	2.54E-07	2.66E-07	3.0326E-03
520706.76	4258823.56	17468.53018	0.12441	0.09576	0.1209	0.09847	3.03E-03	2.92E-07	1.96E-07	2.84E-07	1.94E-07	3.0308E-03
520099.98	4258202.38	17452.47096	0.17168	14.86159	0.17643	15.99199	3.03E-03	4.03E-07	3.05E-05	4.14E-07	3.15E-05	3.0898E-03
520051.83	4259272.06	17443.63894	7.50513	0.15542	12.08496	0.15108	3.03E-03	1.76E-05	3.19E-07	2.84E-05	2.97E-07	3.0721E-03
520036.49	4258354.35	17418.44102	0.23555	5.15313	0.24839	4.20998	3.02E-03	5.53E-07	1.06E-05	5.83E-07	8.29E-06	3.0411E-03
520714.65	4258780.78	17417.60487	0.12019	0.09795	0.11677	0.10096	3.02E-03	2.82E-07	2.01E-07	2.74E-07	1.99E-07	3.0220E-03
520716.42	4258752.61	17410.00689	0.11876	0.10007	0.11553	0.10329	3.02E-03	2.79E-07	2.05E-07	2.71E-07	2.03E-07	3.0206E-03
519892.2	4258791.85	17393.01381	0.38637	0.42216	0.41254	0.40792	3.02E-03	9.07E-07	8.66E-07	9.69E-07	8.03E-07	3.0203E-03
520054.41	4258297.01	17383.71009	0.20354	9.92769	0.21547	6.99899	3.02E-03	4.78E-07	2.04E-05	5.06E-07	1.38E-05	3.0502E-03
519900.14	4258762.77	17373.18774	0.38723	0.47281	0.41598	0.45583	3.01E-03	9.09E-07	9.70E-07	9.77E-07	8.97E-07	3.0171E-03
520063.95	4258273.1	17362.33975	0.19382	18.06496	0.20457	9.84206	3.01E-03	4.55E-07	3.70E-05	4.80E-07	1.94E-05	3.0688E-03
520714.04	4258710.4	17352.6035	0.11827	0.10441	0.11494	0.10753	3.01E-03	2.78E-07	2.14E-07	2.70E-07	2.12E-07	3.0107E-03
520711.21	4258693.23	17347.04686	0.11868	0.10659	0.11509	0.10967	3.01E-03	2.79E-07	2.19E-07	2.70E-07	2.16E-07	3.0097E-03
520710.39	4258814.89	17338.86817	0.12277	0.09588	0.11929	0.09858	3.01E-03	2.88E-07	1.97E-07	2.80E-07	1.94E-07	3.0083E-03
520159	4258112.57	17337.11544	0.14901	3.62941	0.14869	4.12012	3.01E-03	3.50E-07	7.44E-06	3.49E-07	8.11E-06	3.0233E-03
520693.71	4258265.69	17336.98739	0.11137	0.12806	0.10961	0.13347	3.01E-03	2.61E-07	2.63E-07	2.57E-07	2.63E-07	3.0081E-03
519918.02	4258709.44	17335.57702	0.39584	0.59975	0.42946	0.57453	3.01E-03	9.29E-07	1.23E-06	1.01E-06	1.13E-06	3.0111E-03
519874.04	4258918.7	17332.56187	0.41594	0.28323	0.44189	0.27603	3.01E-03	9.76E-07	5.81E-07	1.04E-06	5.43E-07	3.0094E-03
520704.94	4258665.56	17331.23255	0.1199	0.11018	0.11579	0.11345	3.01E-03	2.81E-07	2.26E-07	2.72E-07	2.23E-07	3.0070E-03
520668.18	4258483.23	17327.22142	0.12743	0.1302	0.12285	0.13591	3.01E-03	2.99E-07	2.67E-07	2.88E-07	2.68E-07	3.0064E-03
520693.33	4258290.58	17319.09193	0.11275	0.12695	0.11057	0.13262	3.00E-03	2.65E-07	2.60E-07	2.60E-07	2.61E-07	3.0050E-03
519878.81	4258856.03	17298.15331	0.39113	0.33927	0.4151	0.32855	3.00E-03	9.18E-07	6.96E-07	9.75E-07	6.47E-07	3.0035E-03
520689.38	4258357.8	17292.47879	0.11678	0.12687	0.11353	0.13211	3.00E-03	2.74E-07	2.60E-07	2.67E-07	2.60E-07	3.0004E-03
520129.5	4258152.47	17291.22682	0.15791	6.20159	0.15923	7.20094	3.00E-03	3.71E-07	1.27E-05	3.74E-07	1.42E-05	3.0267E-03
520030.94	4258376.61	17288.1181	0.25209	4.41898	0.26579	3.68365	3.00E-03	5.92E-07	9.06E-06	6.24E-07	7.25E-06	3.0161E-03
520680.82	4258412.93	17285.09424	0.1214	0.12805	0.11784	0.13354	3.00E-03	2.85E-07	2.63E-07	2.77E-07	2.63E-07	2.9991E-03
520677.44	4258429.92	17269.2358	0.123	0.1286	0.11928	0.13426	3.00E-03	2.89E-07	2.64E-07	2.80E-07	2.64E-07	2.9964E-03
520716.97	4258727.36	17263.68346	0.11781	0.10216	0.11462	0.10534	2.99E-03	2.77E-07	2.10E-07	2.69E-07	2.07E-07	2.9953E-03
520684.29	4258396.18	17259.49001	0.11976	0.12742	0.11629	0.13276	2.99E-03	2.81E-07	2.61E-07	2.73E-07	2.61E-07	2.9947E-03
520685.32	4258599.07	17257.36996	0.12441	0.1198	0.11981	0.12417	2.99E-03	2.92E-07	2.46E-07	2.81E-07	2.44E-07	2.9943E-03
520693.06	4258315.73	17251.83448	0.114	0.12632	0.11129	0.1319	2.99E-03	2.68E-07	2.59E-07	2.61E-07	2.60E-07	2.9933E-03
520109.83	4258182.41	17225.52692	0.16523	10.38729	0.16864	11.79446	2.99E-03	3.88E-07	2.13E-05	3.96E-07	2.32E-05	3.0330E-03
520714.02	4258806.22	17183.41816	0.12115	0.09593	0.11771	0.09865	2.98E-03	2.84E-07	1.97E-07	2.76E-07	1.94E-07	2.9813E-03
519875.75	4258872.76	17180.76239	0.39225	0.32153	0.41601	0.3117	2.98E-03	9.21E-07	6.59E-07	9.77E-07	6.14E-07	2.9831E-03
520718.3	4258772.05	17176.27324	0.11864	0.09786	0.11531	0.10093	2.98E-03	2.79E-07	2.01E-07	2.71E-07	1.99E-07	2.9801E-03
520671.53	4258466.16	17174.11015	0.1259	0.12942	0.12163	0.13521	2.98E-03	2.96E-07	2.65E-07	2.86E-07	2.66E-07	2.9799E-03
520687.84	4258379.63	17173.25566	0.11809	0.12672	0.11471	0.13193	2.98E-03	2.77E-07	2.60E-07	2.69E-07	2.60E-07	2.9797E-03
520695.16	4258627.57	17170.58791	0.12195	0.1152	0.11745	0.11911	2.98E-03	2.86E-07	2.36E-07	2.76E-07	2.34E-07	2.9792E-03
520092.31	4259304.47	17150.56632	12.72305	0.15367	11.94546	0.14631	2.97E-03	2.99E-05	3.15E-07	2.80E-05	2.88E-07	3.0332E-03
520149.18	4258122.54	17150.441	0.15048	4.25158	0.1505	4.86062	2.97E-03	3.53E-07	8.72E-06	3.53E-07	9.57E-06	2.9937E-03
520009.44	4258511.78	17145.172	0.45302	2.55742	0.50431	2.22523	2.97E-03	1.06E-06	5.25E-06	1.18E-06	4.38E-06	2.9856E-03
520041.93	4259272.07	17133.49297	5.38645	0.15319	7.24762	0.14956	2.97E-03	1.26E-05	3.14E-07	1.70E-05	2.94E-07	3.0020E-03
519872.52	4258908.12	17128.07961	0.40401	0.29013	0.4286	0.28229	2.97E-03	9.48E-07	5.95E-07	1.01E-06	5.56E-07	2.9739E-03
519895.03	4258774.56	17108.32386	0.38019	0.44694	0.40671	0.43166	2.97E-03	8.93E-07	9.17E-07	9.55E-07	8.50E-07	2.9710E-03
520692.89	4258341.17	17100.934	0.1151	0.12598	0.11202	0.13125	2.97E-03	2.70E-07	2.58E-07	2.63E-07	2.58E-07	2.9671E-03
520719.97	4258744.13	17091.6466	0.11726	0.10002	0.11416	0.1032	2.96E-03	2.75E-07	2.05E-07	2.68E-07	2.03E-07	2.9654E-03
520037.34	4258344.01	17089.44427	0.22637	5.27908	0.23866	4.30336	2.96E-03	5.31E-07	1.08E-05	5.60E-07	8.47E-06	2.9845E-03
520705	4258656.07	17071.27907	0.11957	0.11077	0.11538	0.11413	2.96E-03	2.81E-07	2.27E-07	2.71E-07	2.25E-07	2.9619E-03
519927.12	4258683.15	17068.96143	0.39817	0.67877	0.43376	0.64827	2.96E-03	9.35E-07	1.39E-06	1.02E-06	1.28E-06	2.9652E-03
520022.36	4258426.74	17047.55935	0.30586	3.55203	0.32553	3.02045	2.96E-03	7.18E-07	7.28E-06	7.64E-07	5.95E-06	2.9715E-03
520031.72	4258366.3	17024.91962	0.24172	4.51135	0.25458	3.75647	2.95E-03	5.67E-07	9.25E-06	5.98E-07	7.39E-06	2.9707E-03
520697.08	4258274.56	17021.83588	0.111	0.12618	0.10907	0.13166	2.95E-03	2.61E-07	2.59E-07	2.56E-07	2.59E-07	2.9534E-03
520019.35	4258458.31	17021.41641	0.35631	3.27749	0.38324	2.79822	2.95E-03	8.37E-07	6.72E-06	9.00E-07	5.51E-06	2.9663E-03
520697.65	4258250.16	17017.45636	0.10962	0.12704	0.1079	0.13221	2.95E-03	2.57E-07	2.61E-07	2.53E-07	2.60E-07	2.9526E-03
520051.84	4259282.06	17012.88221	7.39373	0.15229	12.24817	0.14806	2.95E-03	1.74E-05	3.12E-07	2.88E-05	2.91E-07	2.9975E-03
520717.65	4258797.55	17004.91021	0.11957	0.09591	0.11617	0.09869	2.95E-03	2.81E-07	1.97E-07	2.73E-07	1.94E-07	2.9504E-03
520696.73	4258299.51	16980.94778	0.11231	0.12517	0.10987	0.13077	2.95E-03	2.64E-07	2.57E-07	2.58E-07	2.57E-07	2.9463E-03
520119.68	4258162.44	16976.85398	0.1591	7.83906	0.16126	9.12156	2.94E-03	3.74E-07	1.61E-05	3.79E-07	1.80E-05	2.9793E-03
520685.37	4258589.59	16959.71285	0.12411	0.12031	0.11955	0.12471	2.94E-03	2.91E-07	2.47E-07	2.81E-07	2.45E-07	2.9426E-03
520139.36	4258132.5	16937.35661	0.1519	5.07212	0.15239	5.8555	2.94E-03	3.57E-07	1.04E-05	3.58E-07	1.15E-05	2.9604E-03
519912.21	4258719.55	16934.00077	0.38445	0.56413	0.41643	0.54118	2.94E-03	9.03E-07	1.16E-06	9.78E-07	1.07E-06	2.9412E-03
519903.02	4258745.61	16925.35106	0.37912	0.50146	0.40873	0.48263	2.94E-03	8.90E-07	1.03E-06	9.60E-07	9.50E-07	2.9395E-03
520721.96	4258763.33	16924.35815	0.11713	0.09779	0.11392	0.1009	2.94E-03	2.75E-07	2.01E-07	2.67E-07	1.99E-07	2.9364E-03
519947.12	4258636.77	16918.08316	0.41632	0.87852	0.45981	0.83464	2.93E-03	9.77E-07	1.80E-06	1.08E-06	1.64E-06	2.9399E-03
520717.64	4258701.81	16904.83475	0.1168	0.10423	0.11344	0.10724	2.93E-03	2.74E-07	2.14E-07	2.66E-07	2.11E-07	2.9330E-03
519879.49	4258833.54	16887.54596	0.37629	0.36014	0.39954	0.3486	2.93E-03	8.83E-07	7.39E-07	9.38E-07	6.86E-07	2.9323E-03
520054.86	4258286.84	16881.04395	0.1962	10.10755	0.20752	7.11162	2.93E-03	4.61E-07	2.07E-05	4.87E-07	1.40E-05	2.9636E-03
519870.89	4258897.5	16875.83215	0.3917	0.29694	0.41494	0.28852	2.93E-03	9.20E-07	6.09E-07	9.74E-07	5.68E-07	2.9301E-03
520720.54	4258718.83	16871.11411	0.11635	0.10201	0.11318	0.1051	2.93E-03	2.73E-07	2.09E-07	2.66E-07	2.07E-07	2.9272E-03
520082.41	4259304.48	16869.75814	15.83084	0.15168	19.20433	0.14522	2.93E-03	3.72E-05	3.11E-07	4.51E-05	2.86E-07	3.0088E-03
520695.21	4258618.09	16861.14067	0.12164	0.11564	0.11717	0.11969	2.92E-03	2.86E-07	2.37E-07	2.75E-07	2.36E-07	2.9255E-03
520692.85	4258366.93	16860.25631	0.11616	0.12524	0.11285	0.13033	2.92E-03	2.73E-07	2.57E-07	2.65E-07	2.57E-07	2.9254E-03
520714.83	4258684.58	16847.08807	0.1172	0.1063	0.11357	0.10931	2.92E-03	2.75E-07	2.18E-07	2.67E-07	2.15E-07	2.9230E-03
519882.56	4258816.83	16839.44921	0.37359	0.38001	0.39704	0.36779	2.92E-03	8.77E-07	7.79E-07	9.32E-07	7.24E-07	2.9240E-03
520699.74	4258223.39	16833.98056	0.10767	0.12747	0.10593	0.13217	2.92E-03	2.53E-07	2.61E-07	2.49E-07	2.60E-07	2.9208E-03
520721.28	4258788.88	16814.47575	0.11804	0.09587	0.11471	0.09871	2.92E-03	2.77E-07	1.97E-07	2.69E-07	1.94E-07	2.9173E-03
520100.01	4258192.38	16810.26871	0.16601	14.90134	0.17054	15.57916	2.92E-03	3.90E-07	3.06E-05	4.00E-07	3.07E-05	2.9777E-03
520064.23	4258263	16802.94892	0.18695	18.34822	0.19714	9.89889	2.91E-03	4.39E-07	3.76E-05	4.63E-07	1.95E-05	2.9724E-03
520705.05	4258646.59	16795.88171	0.11925	0.1113	0.11501	0.11479	2.91E-03	2.80E-07	2.28E-07	2.70E-07	2.26E-07	2.9142E-03
520687.67	4258405.06	16765.40987	0.11907	0.12569	0.11556	0.131	2.91E-03	2.80E-07	2.58E-07	2.71E-07	2.58E-07	2.9090E-03
520684.23	4258421.89	16757.49961	0.12064	0.1263	0.11702	0.13177	2.91E-03	2.83E-07	2.59E-07	2.75E-07	2.59E-07	2.9076E-03
520723.52	4258735.64	16752.31763	0.11582	0.0999	0.11278	0.10302	2.91E-03	2.72E-07	2.05E-07	2.65E-07	2.03E-07	2.9066E-03
520038.08	4258333.72	16735.63655	0.2177	5.39226	0.22954	4.38017	2.90E-03	5.11E-07	1.11E-05	5.39E-07	8.62E-06	2.9235E-03
520680.88	4258438.96	16726.96032	0.12217	0.12685	0.11836	0.13246	2.90E-03	2.87E-07	2.60E-07	2.78E-07	2.61E-07	2.9023E-03
520691.2	4258388.46	16721.8921	0.11746	0.12502	0.11402	0.13019	2.90E-03	2.76E-07	2.56E-07	2.68E-07	2.56E-07	2.9014E-03
520041.94	4259282.07	16718.47338	5.34692	0.15014	7.31716	0.1466	2.90E-03	1.26E-05	3.08E-07	1.72E-05	2.89E-07	2.9301E-03
520696.34	4258350.22	16712.24245	0.11453	0.1244	0.11133	0.12949	2.90E-03	2.69E-07	2.55E-07	2.61E-07	2.55E-07	2.8997E-03
520674.87	4258474.92	16710.70554	0.12499	0.12785	0.1206	0.13349	2.90E-03	2.93E-07	2.62E-07	2.83E-07	2.63E-07	2.8995E-03

520677.64	4258456.32	16710.68648	0.12366	0.12739	0.11958	0.13308	2.90E-03	2.90E-07	2.61E-07	2.81E-07	2.62E-07	2.8995E-03
520092.32	4259314.47	16706.97309	12.82561	0.15053	11.83066	0.1434	2.90E-03	3.01E-05	3.09E-07	2.78E-05	2.82E-07	2.9562E-03
520700.46	4258283.43	16702.51377	0.11059	0.12442	0.10846	0.12992	2.90E-03	2.60E-07	2.55E-07	2.55E-07	2.56E-07	2.8980E-03
520701.12	4258259.29	16699.33494	0.10925	0.12521	0.10744	0.13046	2.90E-03	2.56E-07	2.57E-07	2.52E-07	2.57E-07	2.8974E-03
519885.54	4258799.92	16694.82215	0.36958	0.40131	0.39347	0.38831	2.90E-03	8.68E-07	8.23E-07	9.24E-07	7.64E-07	2.8990E-03
520685.42	4258580.11	16680.68189	0.12382	0.12082	0.11928	0.12522	2.89E-03	2.91E-07	2.48E-07	2.80E-07	2.46E-07	2.8943E-03
520129.54	4258142.47	16673.09348	0.15314	6.2048	0.15432	7.20189	2.89E-03	3.60E-07	1.27E-05	3.62E-07	1.42E-05	2.9195E-03
519959.85	4258608.96	16664.70385	0.42975	1.05064	0.48197	0.98977	2.89E-03	1.01E-06	2.15E-06	1.13E-06	1.95E-06	2.8967E-03
520700.13	4258308.43	16646.94528	0.11183	0.12367	0.10917	0.12913	2.89E-03	2.63E-07	2.54E-07	2.56E-07	2.54E-07	2.8884E-03
520714.89	4258675.09	16636.29603	0.1169	0.10689	0.11313	0.10994	2.89E-03	2.74E-07	2.19E-07	2.66E-07	2.16E-07	2.8865E-03
520725.61	4258754.6	16635.16912	0.11564	0.09777	0.11257	0.10087	2.89E-03	2.71E-07	2.01E-07	2.64E-07	1.99E-07	2.8862E-03
519937.12	4258655.32	16628.65181	0.40029	0.77694	0.43836	0.7405	2.88E-03	9.40E-07	1.59E-06	1.03E-06	1.46E-06	2.8892E-03
519875.04	4258846.93	16625.47711	0.37132	0.34244	0.39345	0.33171	2.88E-03	8.72E-07	7.02E-07	9.24E-07	6.53E-07	2.8868E-03
520109.86	4258172.41	16614.49276	0.16002	10.40377	0.1632	11.81847	2.88E-03	3.76E-07	2.13E-05	3.83E-07	2.33E-05	2.9271E-03
520724.91	4258780.21	16596.98357	0.11653	0.09578	0.11329	0.09869	2.88E-03	2.74E-07	1.96E-07	2.66E-07	1.94E-07	2.8796E-03
520051.86	4259292.06	16595.42506	7.30459	0.14925	12.41777	0.14512	2.88E-03	1.71E-05	3.06E-07	2.92E-05	2.86E-07	2.9253E-03
519872.01	4258863.73	16580.74354	0.3732	0.32483	0.39496	0.31488	2.88E-03	8.76E-07	6.66E-07	9.27E-07	6.20E-07	2.8789E-03
519969.77	4258589.53	16571.40155	0.4426	1.2229	0.50181	1.13712	2.87E-03	1.04E-06	2.51E-06	1.18E-06	2.24E-06	2.8812E-03
519999.52	4258531.21	16559.24122	0.45924	2.07456	0.51681	1.84421	2.87E-03	1.08E-06	4.25E-06	1.21E-06	3.63E-06	2.8823E-03
520695.26	4258608.61	16555.11295	0.12135	0.1161	0.11691	0.12023	2.87E-03	2.85E-07	2.38E-07	2.74E-07	2.37E-07	2.8724E-03
519920.79	4258692	16552.30571	0.38406	0.63573	0.41656	0.60863	2.87E-03	9.02E-07	1.30E-06	9.78E-07	1.20E-06	2.8753E-03
520149.21	4258112.54	16537.47067	0.14611	4.25292	0.14604	4.85883	2.87E-03	3.43E-07	8.72E-06	3.43E-07	9.56E-06	2.8873E-03
520705.1	4258637.11	16508.32819	0.11894	0.11176	0.11467	0.11538	2.86E-03	2.79E-07	2.29E-07	2.69E-07	2.27E-07	2.8643E-03
519868.5	4258886.57	16496.72798	0.37675	0.30316	0.39842	0.29428	2.86E-03	8.84E-07	6.22E-07	9.35E-07	5.79E-07	2.8643E-03
520724.11	4258710.29	16463.22722	0.11493	0.10186	0.11176	0.10484	2.86E-03	2.70E-07	2.09E-07	2.62E-07	2.06E-07	2.8564E-03
519888.44	4258782.79	16450.99941	0.3644	0.42394	0.38846	0.41013	2.85E-03	8.55E-07	8.69E-07	9.12E-07	8.07E-07	2.8568E-03
520721.24	4258693.22	16445.12209	0.11537	0.10399	0.11197	0.10692	2.85E-03	2.71E-07	2.13E-07	2.63E-07	2.10E-07	2.8533E-03
519979.69	4258570.09	16444.64425	0.45294	1.43973	0.51339	1.32095	2.85E-03	1.06E-06	2.95E-06	1.21E-06	2.60E-06	2.8601E-03
520082.42	4259314.48	16444.11344	15.90091	0.14861	18.91807	0.14235	2.85E-03	3.73E-05	3.05E-07	4.44E-05	2.80E-07	2.9345E-03
520696.33	4258376.05	16428.13875	0.11554	0.12356	0.11217	0.12858	2.85E-03	2.71E-07	2.53E-07	2.63E-07	2.53E-07	2.8504E-03
520685.48	4258570.63	16423.66438	0.12356	0.12118	0.11899	0.12561	2.85E-03	2.90E-07	2.49E-07	2.79E-07	2.47E-07	2.8497E-03
520009.4	4258502.08	16422.74489	0.42546	2.58246	0.4689	2.24849	2.85E-03	9.99E-07	5.30E-06	1.10E-06	4.43E-06	2.8603E-03
520704.83	4258243.18	16418.40152	0.10758	0.1243	0.10579	0.12931	2.85E-03	2.53E-07	2.55E-07	2.48E-07	2.55E-07	2.8487E-03
520714.94	4258665.61	16405.32534	0.1166	0.10746	0.11272	0.11058	2.85E-03	2.74E-07	2.20E-07	2.65E-07	2.18E-07	2.8464E-03
520727.08	4258727.16	16395.32902	0.11441	0.09979	0.11142	0.10283	2.84E-03	2.69E-07	2.05E-07	2.62E-07	2.02E-07	2.8446E-03
519989.61	4258550.65	16394.64822	0.45857	1.71424	0.51831	1.55112	2.84E-03	1.08E-06	3.52E-06	1.22E-06	3.05E-06	2.8524E-03
520055.27	4258276.69	16388.0124	0.18927	10.27597	0.20006	7.19542	2.84E-03	4.44E-07	2.11E-05	4.70E-07	1.42E-05	2.8786E-03
520703.84	4258292.29	16385.68651	0.11017	0.12269	0.1078	0.12815	2.84E-03	2.59E-07	2.52E-07	2.53E-07	2.52E-07	2.8430E-03
520704.6	4258268.42	16385.0199	0.10885	0.12339	0.10691	0.12871	2.84E-03	2.56E-07	2.53E-07	2.51E-07	2.53E-07	2.8429E-03
519865.27	4258915.14	16378.19053	0.38344	0.2793	0.4056	0.27184	2.84E-03	9.00E-07	5.73E-07	9.52E-07	5.35E-07	2.8437E-03
520119.72	4258152.44	16376.82808	0.15423	7.84537	0.15623	9.12063	2.84E-03	3.62E-07	1.61E-05	3.67E-07	1.80E-05	2.8753E-03
520038.72	4258323.47	16364.16915	0.20958	5.48863	0.22093	4.45692	2.84E-03	4.92E-07	1.13E-05	5.19E-07	8.77E-06	2.8593E-03
520728.54	4258771.55	16353.09758	0.11505	0.09566	0.11191	0.09863	2.84E-03	2.70E-07	1.96E-07	2.63E-07	1.94E-07	2.8373E-03
519905.8	4258728.19	16352.48618	0.36972	0.53141	0.3993	0.51071	2.84E-03	8.68E-07	1.09E-06	9.37E-07	1.01E-06	2.8402E-03
520139.39	4258122.5	16331.21059	0.14742	5.07602	0.14784	5.84708	2.83E-03	3.46E-07	1.04E-05	3.47E-07	1.15E-05	2.8552E-03
519896.47	4258753.92	16325.19281	0.36457	0.47363	0.39049	0.45716	2.83E-03	8.56E-07	9.71E-07	9.17E-07	9.00E-07	2.8352E-03
520729.26	4258745.88	16324.87562	0.11418	0.09772	0.11123	0.10078	2.83E-03	2.68E-07	2.00E-07	2.61E-07	1.98E-07	2.8324E-03
520699.79	4258359.27	16318.79892	0.11395	0.12282	0.11067	0.12777	2.83E-03	2.68E-07	2.52E-07	2.60E-07	2.52E-07	2.8315E-03
520041.96	4259292.07	16314.972	5.32238	0.14715	7.38698	0.14369	2.83E-03	1.25E-05	3.02E-07	1.73E-05	2.83E-07	2.8602E-03
520703.53	4258317.35	16314.50015	0.11132	0.12227	0.10847	0.12756	2.83E-03	2.61E-07	2.51E-07	2.55E-07	2.51E-07	2.8307E-03
519927.12	4258673.87	16292.10239	0.38505	0.69152	0.41874	0.66105	2.83E-03	9.04E-07	1.42E-06	9.83E-07	1.30E-06	2.8304E-03
520678.21	4258483.68	16291.78551	0.12408	0.12636	0.11958	0.13182	2.83E-03	2.91E-07	2.59E-07	2.81E-07	2.59E-07	2.8268E-03
520064.49	4258252.91	16282.52963	0.18054	18.60954	0.19014	10.03676	2.82E-03	4.24E-07	3.82E-05	4.46E-07	1.98E-05	2.8829E-03
520045.53	4258300.68	16280.5128	0.19815	6.84725	0.20938	5.33975	2.82E-03	4.65E-07	1.40E-05	4.92E-07	1.05E-05	2.8493E-03
520092.34	4259324.47	16276.83213	12.95923	0.14748	11.70976	0.14057	2.82E-03	3.04E-05	3.02E-07	2.75E-05	2.77E-07	2.8816E-03
520691.06	4258413.95	16269.12062	0.11835	0.12401	0.1148	0.12929	2.82E-03	2.78E-07	2.54E-07	2.70E-07	2.55E-07	2.8229E-03
520694.56	4258397.28	16260.7368	0.1168	0.12339	0.11333	0.1285	2.82E-03	2.74E-07	2.53E-07	2.66E-07	2.53E-07	2.8214E-03
520695.32	4258599.13	16257.05741	0.12105	0.11657	0.11667	0.12076	2.82E-03	2.84E-07	2.39E-07	2.74E-07	2.38E-07	2.8207E-03
520687.64	4258430.85	16241.9711	0.11986	0.12459	0.11617	0.13003	2.82E-03	2.81E-07	2.56E-07	2.73E-07	2.56E-07	2.8182E-03
520100.05	4258182.38	16221.96072	0.16072	14.92564	0.16498	15.50809	2.81E-03	3.77E-07	3.06E-05	3.87E-07	3.05E-05	2.8755E-03
520681.11	4258465.44	16218.48367	0.12276	0.12574	0.11855	0.13131	2.81E-03	2.88E-07	2.58E-07	2.78E-07	2.58E-07	2.8141E-03
520705.16	4258627.63	16213.19634	0.11865	0.11219	0.11438	0.11595	2.81E-03	2.79E-07	2.30E-07	2.69E-07	2.28E-07	2.8131E-03
520685.53	4258561.14	16193.83258	0.1233	0.12158	0.11869	0.12602	2.81E-03	2.89E-07	2.49E-07	2.79E-07	2.48E-07	2.8098E-03
519866.94	4258875.98	16178.80738	0.36493	0.30971	0.38546	0.30049	2.81E-03	8.57E-07	6.35E-07	9.05E-07	5.92E-07	2.8091E-03
519875.82	4258824.69	16161.58274	0.35726	0.36243	0.37853	0.35122	2.80E-03	8.39E-07	7.43E-07	8.89E-07	6.91E-07	2.8063E-03
520703.32	4258342.69	16160.78692	0.11236	0.12194	0.1092	0.12692	2.80E-03	2.64E-07	2.50E-07	2.56E-07	2.50E-07	2.8040E-03
520715	4258656.13	16154.67269	0.1163	0.10799	0.11234	0.11121	2.80E-03	2.73E-07	2.21E-07	2.64E-07	2.19E-07	2.8029E-03
519863.68	4258904.54	16141.51843	0.37215	0.28558	0.39307	0.27763	2.80E-03	8.74E-07	5.86E-07	9.23E-07	5.47E-07	2.8026E-03
520052.7	4259304.53	16116.6157	7.50665	0.1457	13.47389	0.14166	2.80E-03	1.76E-05	2.99E-07	3.16E-05	2.79E-07	2.8452E-03
520708.29	4258252.24	16116.42076	0.1072	0.12258	0.10537	0.12767	2.80E-03	2.52E-07	2.51E-07	2.47E-07	2.51E-07	2.7963E-03
520732.17	4258762.88	16105.73713	0.11363	0.09558	0.1106	0.09857	2.79E-03	2.67E-07	1.96E-07	2.60E-07	1.94E-07	2.7944E-03
520129.57	4258132.47	16092.25774	0.14862	6.20763	0.14967	7.21008	2.79E-03	3.49E-07	1.27E-05	3.51E-07	1.42E-05	2.8188E-03
519891.24	4258765.42	16086.67476	0.35767	0.4483	0.38214	0.43332	2.79E-03	8.40E-07	9.19E-07	8.97E-07	8.53E-07	2.7937E-03
520708.07	4258277.54	16076.39943	0.10845	0.12162	0.10631	0.12697	2.79E-03	2.55E-07	2.49E-07	2.50E-07	2.50E-07	2.7894E-03
520707.21	4258301.16	16073.37917	0.10972	0.12112	0.10712	0.12648	2.79E-03	2.58E-07	2.48E-07	2.51E-07	2.49E-07	2.7889E-03
520109.9	4258162.41	16042.15075	0.15511	10.41422	0.15806	11.86834	2.78E-03	3.64E-07	2.14E-05	3.71E-07	2.34E-05	2.8279E-03
520727.69	4258701.76	16041.50044	0.11354	0.10165	0.11034	0.10454	2.78E-03	2.67E-07	2.08E-07	2.59E-07	2.06E-07	2.7833E-03
519878.86	4258807.91	16037.97881	0.35385	0.3821	0.37562	0.37021	2.78E-03	8.31E-07	7.84E-07	8.82E-07	7.29E-07	2.7849E-03
520082.44	4259324.48	16034.1997	15.91924	0.14565	18.63394	0.13957	2.78E-03	3.74E-05	2.99E-07	4.37E-05	2.75E-07	2.8628E-03
519914.39	4258700.67	16033.29726	0.37022	0.59668	0.39979	0.5726	2.78E-03	8.69E-07	1.22E-06	9.39E-07	1.13E-06	2.7851E-03
520730.63	4258718.68	16023.80271	0.11304	0.09965	0.11006	0.10258	2.78E-03	2.65E-07	2.04E-07	2.58E-07	2.02E-07	2.7802E-03
520027.61	4258358.01	16006.97461	0.2282	4.05937	0.23976	3.43629	2.78E-03	5.36E-07	8.33E-06	5.63E-07	6.76E-06	2.7925E-03
520732.92	4258737.15	15994.72809	0.11277	0.09761	0.10988	0.10061	2.77E-03	2.65E-07	2.00E-07	2.58E-07	1.98E-07	2.7751E-03
520685.58	4258551.66	15993.18904	0.12305	0.12188	0.11839	0.12637	2.77E-03	2.89E-07	2.50E-07	2.78E-07	2.49E-07	2.7750E-03
520699.8	4258385.18	15991.63159	0.11491	0.12188	0.11149	0.12684	2.77E-03	2.70E-07	2.50E-07	2.62E-07	2.50E-07	2.7747E-03
520020.18	4258401.03	15986.17555	0.26529	3.39902	0.2803	2.92213	2.77E-03	6.23E-07	6.97E-06	6.58E-07	5.75E-06	2.7867E-03
520039.28	4258313.25	15982.96698	0.20192	5.5738	0.21284	4.52268	2.77E-03	4.74E-07	1.14E-05	5.00E-07	8.90E-06	2.7935E-03
520680.86	4258510.71	15977.06868	0.12373	0.12466	0.11898	0.1297	2.77E-03	2.90E-07	2.56E-07	2.79E-07	2.55E-07	2.7722E-03
520724.83	4258684.63	15976.98525	0.11397	0.10371	0.11053	0.10659	2.77E-03	2.68E-07	2.13E-07	2.59E-07	2.10E-07	2.7721E-03
520695.37	4258589.65	15974.32189	0.12077	0.11705	0.11643	0.12127	2.77E-03	2.84E-07	2.40E-07	2.73E-07	2.39E-07	2.7717E-03
520021.48	4258390.5	15959.73454	0.25451	3.50495	0.26837	3.00751	2.77E-03	5.98E-07	7.19E-06	6.30E-07	5.92E-06	2.7825E-03
519868.26	4258854.71	15954.96669	0.35492	0.32767	0.37502	0.31773	2.77E-03	8.33E-07	6.72E-07	8.80E-07	6.25E-07	2.7703E-03
520012.66	4258474.56	15943.87679	0.3708	2.81823	0.40094	2.43911	2.77E-03	8.71E-07	5.78E-06	9.41E-07	4.80E-06	2.7778E-03
519871.27	4258837.83	15933.10801	0.35247	0.34501	0.37293	0.33446	2.76E-03	8.27E-07	7.08E-07	8.76E-07	6.58E-07	2.7666E-03
520681.2	4258501.58	15928.68257	0.12344	0.12473	0.11876	0.12989	2.76E-03	2.90E-07	2.56E-07	2.79E-07	2.56E-07	2.7638E-03
520009.36	4258492.38	15920.10755	0.40069	2.60367	0.43773	2.2687	2.76E-03	9.41E-07	5.34E-06	1.03E-06	4.47E-06	2.7730E-03
520703.23	4258368.33	15919.55494	0.11336	0.12124	0.11002	0.12609	2.76E-03	2.66E-07	2.49E-07	2.58E-07	2.48E-07	2.7622E-03
520705.21	4258618.15	15917.20986	0.11837	0.1126	0.11412	0.11648	2.76E-03	2.78E-07	2.31E-07	2.68E-07	2.29E-07	2.7618E-03
520681.54	4258492.44	15916.95774	0.12316	0.12493	0.1186	0.13019	2.76E-03	2.89E-07	2.56E-07	2.78E-07	2.56E-07	2.7618E-03
520055.63	4258266.55	15908.04325	0.18274	10.42051	0.19302	7.27358	2.76E-03	4.29E-07	2.14E-05	4.53E-07	1.43E-05	2.7957E-03
520015.77	4258442.74	15899.95718	0.31785	3.05378	0.33934	2.63912	2.76E-03	7.46E-07	6.26E-06	7.97E-07	5.20E-06	2.7708E-03
520715.05	4258646.65	15890.04704	0.11601	0.10847	0.112	0.11181	2.76E-03	2.72E-07	2.22E-07	2.63E-07	2.20E-07	2.7570E-03
520092.36	4259334.47	15870.98586	12.9653	0.14457	11.59682	0.13786	2.75E-03	3.04E-05	2.97E-07	2.72E-05	2.71E-07	2.8110E-03
520046.09	4258290.46	15866.78021	0.19123	6.96703	0.20198	5.43134	2.75E-03	4.49E-07	1.43E-05	4.74E-07	1.07E-05	2.7779E-03
519861.99	4258893.9	15860.51045	0.36058	0.29172	0.38032	0.28337	2.75E-03	8.47E-07	5.98E-07	8.93E-07	5.58E-07	2.7538E-03
520022.54	4258380.08	15856.19319	0.24427	3.59457	0.25711	3.08006	2.75E-03	5.73E-07	7.37E-06	6.04E-07	6.06E-06	2.7648E-03
520042.8	4259304.55	15852.07143	5.44814	0.14368	7.74943	0.14029	2.75E-03	1.28E-05	2.95E-07	1.82E-05	2.76E-07	2.7810E-03
520712.03	4258236.19	15848.33141	0.10558	0.12173	0.10374	0.12656	2.75E-03	2.48E-07	2.50E-07	2.44E-07	2.49E-07	2.7498E-03
520735.8	4258754.21	15832.49589	0.11224	0.09551	0.10932	0.09849	2.75E-03	2.64E-07	1.96E-07	2.57E-07	1.94E-07	2.7470E-03
519881.82	4258790.94	15825.93432	0.34941	0.40296	0.37145	0.39036	2.74E-03	8.20E-07	8.26E-07	8.72E-07	7.68E-07	2.7482E-03
520685.64	4258542.18	15823.70812	0.12281	0.12219	0.11812	0.12674	2.74E-03	2.88E-07	2.51E-07	2.77E-07	2.49E-07	2.7456E-03
520711.74	4258261.3	15820.43565	0.10683	0.12077	0.10488	0.12595	2.74E-03	2.51E-07	2.48E-07	2.46E-07	2.48E-07	2.7450E-03
520119.75	4258142.44	15816.31654	0.14965	7.84944	0.15148	9.15061	2.74E-03	3.51E-07	1.61E-05	3.56E-07	1.80E-05	2.7781E-03
519899.32	4258736.69	15799.36067	0.35593	0.50149	0.38285	0.483	2.74E-03	8.36E-07	1.03E-06	8.99E-07	9.51E-07	2.7440E-03
520697.92	4258406.1	15797.72005	0.11611	0.12178	0.11263	0.12686	2.74E-03	2.73E-07	2.50E-07	2.64E-07	2.50E-07	2.7411E-03
520028.6	4258347.62	15788.40846	0.21963	4.15991	0.23065	3.51465	2.74E-03	5.16E-07	8.53E-06	5.41E-07	6.92E-06	2.7549E-03
520694.44	4258422.84	15780.54074	0.11761	0.12237	0.11401	0.12762	2.74E-03	2.76E-07	2.51E-07	2.68E-07	2.51E-07	2.7381E-03
520724.89	4258675.15	15772.31763	0.1137	0.10426	0.11013	0.10718	2.74E-03	2.67E-07	2.14E-07	2.59E-07	2.11E-07	2.7366E-03
520684.58	4258474.57	15769.82912	0.12183	0.12422	0.11753	0.12963	2.74E-03	2.86E-07	2.55E-07	2.76E-07	2.55E-07	2.7363E-03
520711.54	4258286.67	15769.63206	0.10801	0.12	0.10567	0.1253	2.74E-03	2.54E-07	2.46E-07	2.48E-07	2.47E-07	2.7362E-03
520139.42	4258112.5	15767.30283	0.1432	5.07727	0.14353	5.84917	2.73E-03	3.36E-07	1.04E-05	3.37E-07	1.15E-05	2.7574E-03
519937.12	4258646.05	15766.53398	0.38661	0.78932	0.42324	0.75345	2.73E-03	9.08E-07	1.62E-06	9.94E-07	1.48E-06	2.7396E-03
520710.59	4258310.02	15762.68806	0.10925	0.11969	0.10644	0.12489	2.73E-03	2.56E-07	2.45E-07	2.50E-07	2.46E-07	2.7350E-03
520691.05	4258439.81	15743.21699	0.11906	0.12296	0.11528	0.12836	2.73E-03	2.80E-07	2.52E-07	2.71E-07	2.53E-07	2.7316E-03
520052.72	4259314.53	15729.71568	7.49717	0.14282	13.7302	0.1389	2.73E-03	1.76E-05	2.93E-07	3.22E-05	2.73E-07	2.7786E-03
520687.76	4258457.04	15725.34115	0.12047	0.12357	0.11644	0.12903	2.73E-03	2.83E-07	2.53E-07	2.73E-07	2.54E-07	2.7286E-03
520695.42	4258580.16	15708.02879	0.12049	0.11758	0.11618	0.12179	2.72E-03	2.83E-07	2.41E-07	2.73E-07	2.40E-07	2.7255E-03
520685.69	4258532.7	15688.62408	0.12259	0.12249	0.11788	0.12713	2.72E-03	2.88E-07	2.51E-07	2.77E-07	2.50E-07	2.7222E-03
520100.08	4258172.38	15675.462	0.15576	14.96626	0.15973	15.6528	2.72E-03	3.66E-07	3.07E-05	3.75E-07	3.08E-05	2.7811E-03
519908.44	4258710.45	15673.58459	0.35967	0.5619	0.38766	0.53997	2.72E-03	8.44E-07	1.15E-06	9.10E-07	1.06E-06	2.7225E-03
520063.45	4258243.35	15667.68562	0.17396	16.89893	0.18306	9.64845	2.72E-03	4.08E-07	3.47E-05	4.30E-07	1.90E-05	2.7720E-03
520736.57	4258728.43	15648.81295	0.11137	0.09755	0.10856	0.10045	2.71E-03	2.61E-07	2.00E-07	2.55E-07	1.98E-07	2.7151E-03
520082.46	4259334.48	15642.35225	15.82203	0.1428	18.37836	0.1369	2.71E-03	3.71E-05	2.93E-07	4.31E-05	2.69E-07	2.7939E-03
520734.18	4258710.19	15638.52723	0.11169	0.09952	0.10872	0.10234	2.71E-03	2.62E-07	2.04E-07	2.55E-07	2.01E-07	2.7134E-03
519999.48	4258521.52	15627.62468	0.43308	2.10159	0.4833	1.86737	2.71E-03	1.02E-06	4.31E-06	1.13E-06	3.68E-06	2.7207E-03
520705.26	4258608.67	15624.9238	0.1181	0.11301	0.11389	0.11698	2.71E-03	2.77E-07	2.32E-07	2.67E-07	2.30E-07	2.7111E-03
519949.89	4258618.7	15622.58145	0.40001	0.93111	0.44393	0.88381	2.71E-03	9.39E-07	1.91E-06	1.04E-06	1.74E-06	2.7153E-03
520715.1	4258637.17	15614.47807	0.11574	0.10887	0.11169	0.11235	2.71E-03	2.72E-07	2.23E-07	2.62E-07	2.21E-07	2.7092E-03
520731.26	4258693.22	15610.11702	0.11218	0.10147	0.10896	0.10427	2.71E-03	2.63E-07	2.08E-07	2.56E-07	2.05E-07	2.7084E-03
520685.75	4258523.22	15586.73664	0.12238	0.12268	0.11767	0.12744	2.70E-03	2.87E-07	2.52E-07	2.76E-07	2.51E-07	2.7045E-03
520715.45	4258245.19	15562.19976	0.10521	0.1201	0.10336	0.12501	2.70E-03	2.47E-07	2.46E-07	2.43E-07	2.46E-07	2.7002E-03
519959.81	4258599.26	15555.50399	0.41254	1.06971	0.46281	1.00599	2.70E-03	9.69E-07	2.19E-06	1.09E-06	1.98E-06	2.7043E-03
520724.94	4258665.67	15548.99997	0.11343	0.10481	0.10976	0.1078	2.70E-03	2.66E-07	2.15E-07	2.58E-07	2.12E-07	2.6979E-03
520129.6	4258122.47	15546.10156	0.14433	6.2087	0.14526	7.22412	2.70E-03	3.39E-07	1.27E-05	3.41E-07	1.42E-05	2.7240E-03
520703.28	4258394.31	15544.68814	0.11424	0.12024	0.11081	0.12516	2.70E-03	2.68E-07	2.47E-07	2.60E-07	2.46E-07	2.6972E-03
520739.43	4258745.54	15535.96152	0.11087	0.09545	0.10806	0.09839	2.69E-03	2.60E-07	1.96E-07	2.54E-07	1.94E-07	2.6955E-03
520029.45	4258337.28	15532.31925	0.21151	4.24793	0.22205	3.58367	2.69E-03	4.97E-07	8.71E-06	5.21E-07	7.05E-06	2.7108E-03
520715.19	4258270.36	15526.97125	0.10644	0.11905	0.10432	0.12427	2.69E-03	2.50E-07	2.44E-07	2.45E-07	2.45E-07	2.6941E-03
519927.12	4258664.6	15514.54089	0.3724	0.70324	0.40449	0.67309	2.69E-03	8.74E-07	1.44E-06	9.50E-07	1.32E-06	2.6955E-03
520706.68	4258377.38	15512.3567	0.11274	0.11967	0.10938	0.12445	2.69E-03	2.65E-07	2.45E-07	2.57E-07	2.45E-07	2.6916E-03
519884.69	4258773.74	15508.41777	0.3437	0.42524	0.366	0.41172	2.69E-03	8.07E-07	8.72E-07	8.59E-07	8.10E-07	2.6932E-03
520109.93	4258152.41	15500.57112	0.15045	10.42545	0.15319	11.92105	2.69E-03	3.53E-07	2.14E-05	3.60E-07	2.35E-05	2.7341E-03
519859.86	4258883.07	15495.66851	0.34768	0.29742	0.36623	0.2888	2.69E-03	8.16E-07	6.10E-07	8.60E-07	5.68E-07	2.6905E-03
520042.82	4259314.55	15477.2618	5.45125	0.14087	7.83104	0.13757	2.68E-03	1.28E-05	2.89E-07	1.84E-05	2.71E-07	2.7162E-03
520695.48	4258570.68	15467.73416	0.12026	0.11794	0.11591	0.12217	2.68E-03	2.82E-07	2.42E-07	2.72E-07	2.40E-07	2.6838E-03
520715.02	4258295.79	15466.10442	0.10757	0.11838	0.10499	0.1236	2.68E-03	2.53E-07	2.43E-07	2.46E-07	2.43E-07	2.6835E-03
520092.79	4259345.29	15461.40228	12.73861	0.14161	11.30437	0.13508	2.68E-03	2.99E-05	2.90E-07	2.65E-05	2.66E-07	2.7387E-03
519856.49	4258911.59	15458.08704	0.35415	0.2749	0.373	0.26738	2.68E-03	8.31E-07	5.64E-07	8.76E-07	5.26E-07	2.6839E-03
520055.96	4258256.43	15453.08673	0.17661	10.54756	0.18638	7.3588	2.68E-03	4.15E-07	2.16E-05	4.38E-07	1.45E-05	2.7172E-03
520046.58	4258280.27	15453.08023	0.18466	7.07317	0.19499	5.5055	2.68E-03	4.34E-07	1.45E-05	4.58E-07	1.08E-05	2.7065E-03
520713.96	4258318.89	15449.59271	0.10873	0.11843	0.10578	0.12343	2.68E-03	2.55E-07	2.43E-07	2.48E-07	2.43E-07	2.6807E-03
519872.15	4258815.84	15418.53852	0.33906	0.36432	0.35887	0.35343	2.67E-03	7.96E-07	7.47E-07	8.43E-07	6.96E-07	2.6774E-03
519969.73	4258579.83	15415.52802	0.42341	1.24492	0.47763	1.15578	2.67E-03	9.94E-07	2.55E-06	1.12E-06	2.28E-06	2.6807E-03
520014.92	4258420.56	15366.58308	0.28202	3.02335	0.29909	2.62484	2.67E-03	6.62E-07	6.20E-06	7.02E-07	5.17E-06	2.6780E-03
520688.06	4258483.69	15364.31329	0.12089	0.12283	0.11652	0.12805	2.66E-03	2.84E-07	2.52E-07	2.74E-07	2.52E-07	2.6659E-03
520052.74	4259324.53	15355.93396	7.50525	0.14004	13.98496	0.13623	2.66E-03	1.76E-05	2.87E-07	3.28E-05	2.68E-07	2.7144E-03
520701.28	4258414.92	15341.2015	0.11542	0.12014	0.1119	0.12522	2.66E-03	2.71E-07	2.46E-07	2.63E-07	2.46E-07	2.6619E-03
520705.32	4258599.18	15341.04234	0.11783	0.11345	0.11366	0.11748	2.66E-03	2.77E-07	2.33E-07	2.67E-07	2.31E-07	2.6618E-03
520715.16	4258627.69	15331.91973	0.11547	0.10927	0.11143	0.11289	2.66E-03	2.71E-07	2.24E-07	2.62E-07	2.22E-07	2.6602E-03
519989.56	4258540.95	15313.79697	0.43445	1.73883	0.4876	1.57246	2.66E-03	1.02E-06	3.57E-06	1.14E-06	3.10E-06	2.6649E-03
519864.52	4258845.68	15310.2832	0.33748	0.33003	0.3562	0.32025	2.66E-03	7.92E-07	6.77E-07	8.36E-07	6.30E-07	2.6584E-03
520725	4258656.19	15307.8122	0.11315	0.10531	0.10941	0.1084	2.66E-03	2.66E-07	2.16E-07	2.57E-07	2.13E-07	2.6560E-03
520697.82	4258431.73	15302.87927	0.11685	0.12079	0.1132	0.12601	2.65E-03	2.74E-07	2.48E-07	2.66E-07	2.48E-07	2.6553E-03
519979.65	4258560.39	15290.61825	0.43101	1.46209	0.48483	1.34114	2.65E-03	1.01E-06	3.00E-06	1.14E-06	2.64E-06	2.6599E-03
520119.78	4258132.44	15287.77568	0.1453	7.85158	0.14697	9.18409	2.65E-03	3.41E-07	1.61E-05	3.45E-07	1.81E-05	2.6865E-03
520740.22	4258719.7	15286.75623	0.11002	0.09743	0.10723	0.10023	2.65E-03	2.58E-07	2.00E-07	2.52E-07	1.97E-07	2.6523E-03
520691.2	4258466.08	15275.80269	0.11959	0.12205	0.11546	0.12738	2.65E-03	2.81E-07	2.50E-07	2.71E-07	2.51E-07	2.6506E-03
520718.88	4258254.2	15275.43891	0.10483	0.11847	0.1029	0.12345	2.65E-03	2.46E-07	2.43E-07	2.42E-07	2.43E-07	2.6504E-03
519892.8	4258745.07	15265.90599	0.34273	0.47415	0.36715	0.45763	2.65E-03	8.05E-07	9.72E-07	8.62E-07	9.01E-07	2.6513E-03
520695.53	4258561.2	15252.05656	0.12003	0.11826	0.11563	0.12251	2.65E-03	2.82E-07	2.43E-07	2.71E-07	2.41E-07	2.6464E-03
520030.19	4258326.99	15251.20441	0.20383	4.32546	0.21395	3.64536	2.65E-03	4.79E-07	8.87E-06	5.02E-07	7.18E-06	2.6623E-03
520082.89	4259345.31	15244.01047	14.18758	0.1399	17.71265	0.13415	2.64E-03	3.33E-05	2.87E-07	4.16E-05	2.64E-07	2.7194E-03
520737.73	4258701.71	15241.63616	0.11038	0.09934	0.10738	0.10208	2.64E-03	2.59E-07	2.04E-07	2.52E-07	2.01E-07	2.6445E-03
520718.64	4258279.43	15238.48915	0.10602	0.11754	0.10371	0.12273	2.64E-03	2.49E-07	2.41E-07	2.43E-07	2.42E-07	2.6440E-03
519875.16	4258799	15229.53312	0.33517	0.38366	0.35543	0.37211	2.64E-03	7.87E-07	7.87E-07	8.34E-07	7.32E-07	2.6446E-03
519867.49	4258828.73	15227.76334	0.33461	0.34692	0.35338	0.33675	2.64E-03	7.86E-07	7.12E-07	8.30E-07	6.63E-07	2.6442E-03
520743.06	4258736.87	15222.28988	0.10953	0.09541	0.10681	0.09827	2.64E-03	2.57E-07	1.96E-07	2.51E-07	1.93E-07	2.6411E-03
519917.12	4258683.15	15204.04509	0.35847	0.63018	0.38748	0.6044	2.64E-03	8.42E-07	1.29E-06	9.10E-07	1.19E-06	2.6413E-03
520063.74	4258233.24	15197.68779	0.16831	17.14835	0.17691	9.73966	2.64E-03	3.95E-07	3.52E-05	4.15E-07	1.92E-05	2.6911E-03
519854.84	4258900.97	15195.11542	0.3435	0.28058	0.36129	0.27273	2.64E-03	8.06E-07	5.75E-07	8.48E-07	5.37E-07	2.6383E-03

519902.06	4258719.18	15174.16914	0.34655	0.52989	0.37302	0.50981	2.63E-03	8.14E-07	1.09E-06	8.76E-07	1.00E-06	2.6357E-03
520734.83	4258684.69	15170.27029	0.11085	0.10122	0.1076	0.10398	2.63E-03	2.60E-07	2.08E-07	2.53E-07	2.05E-07	2.6321E-03
520718.49	4258304.92	15166.41201	0.1071	0.11689	0.10431	0.12197	2.63E-03	2.51E-07	2.40E-07	2.45E-07	2.40E-07	2.6315E-03
520100.11	4258162.38	15160.16116	0.15106	14.99827	0.15476	15.85769	2.63E-03	3.55E-07	3.08E-05	3.63E-07	3.12E-05	2.6922E-03
520042.84	4259324.55	15115.00865	5.45596	0.13815	7.91258	0.13494	2.62E-03	1.28E-05	2.83E-07	1.86E-05	2.66E-07	2.6536E-03
520706.75	4258403.43	15097.23054	0.11356	0.11861	0.11011	0.12351	2.62E-03	2.67E-07	2.43E-07	2.59E-07	2.43E-07	2.6196E-03
520092.8	4259355.29	15086.3754	12.69207	0.13889	11.20425	0.13255	2.62E-03	2.98E-05	2.85E-07	2.63E-05	2.61E-07	2.6733E-03
519887.45	4258756.28	15078.11	0.33667	0.44876	0.35897	0.43414	2.62E-03	7.90E-07	9.20E-07	8.43E-07	8.55E-07	2.6186E-03
520705.37	4258589.7	15072.39623	0.11757	0.11392	0.11344	0.11797	2.61E-03	2.76E-07	2.34E-07	2.66E-07	2.32E-07	2.6152E-03
520695.58	4258551.72	15065.17332	0.1198	0.11858	0.11535	0.12287	2.61E-03	2.81E-07	2.43E-07	2.71E-07	2.42E-07	2.6140E-03
520690.85	4258511.08	15053.71739	0.12051	0.12123	0.11593	0.12604	2.61E-03	2.83E-07	2.49E-07	2.72E-07	2.48E-07	2.6121E-03
520725.05	4258646.71	15053.62612	0.1129	0.10574	0.1091	0.10896	2.61E-03	2.65E-07	2.17E-07	2.56E-07	2.14E-07	2.6119E-03
520715.21	4258618.2	15048.94509	0.11521	0.10968	0.11119	0.11341	2.61E-03	2.70E-07	2.25E-07	2.61E-07	2.23E-07	2.6112E-03
520047.03	4258270.1	15041.23875	0.17844	7.17285	0.1884	5.56741	2.61E-03	4.19E-07	1.47E-05	4.42E-07	1.10E-05	2.6354E-03
520129.63	4258112.47	15024.82122	0.14024	6.21097	0.14108	7.22608	2.61E-03	3.29E-07	1.27E-05	3.31E-07	1.42E-05	2.6336E-03
520691.19	4258501.95	15011.55438	0.12024	0.12129	0.11572	0.12621	2.60E-03	2.82E-07	2.49E-07	2.72E-07	2.48E-07	2.6047E-03
520722.31	4258263.2	15006.49958	0.10448	0.11672	0.10239	0.12178	2.60E-03	2.45E-07	2.39E-07	2.40E-07	2.40E-07	2.6038E-03
520691.53	4258492.82	15002.58732	0.11996	0.12144	0.11554	0.12646	2.60E-03	2.82E-07	2.49E-07	2.71E-07	2.49E-07	2.6032E-03
520052.75	4259334.53	14994.65095	7.5258	0.13735	14.22908	0.13364	2.60E-03	1.77E-05	2.82E-07	3.34E-05	2.63E-07	2.6524E-03
520109.96	4258142.41	14990.11578	0.14604	10.43302	0.14858	11.98875	2.60E-03	3.43E-07	2.14E-05	3.49E-07	2.36E-05	2.6457E-03
520734.89	4258675.21	14971.57139	0.11061	0.10173	0.10724	0.10453	2.60E-03	2.60E-07	2.09E-07	2.52E-07	2.06E-07	2.5977E-03
520722.09	4258288.49	14954.4451	0.10558	0.11602	0.10307	0.12113	2.59E-03	2.48E-07	2.38E-07	2.42E-07	2.38E-07	2.5947E-03
520030.84	4258316.73	14952.36096	0.19659	4.39365	0.20633	3.70121	2.59E-03	4.62E-07	9.01E-06	4.84E-07	7.29E-06	2.6107E-03
519878.09	4258781.96	14951.16246	0.33031	0.40406	0.35072	0.39179	2.59E-03	7.75E-07	8.29E-07	8.23E-07	7.71E-07	2.5964E-03
519937.12	4258636.77	14921.6155	0.37368	0.80119	0.40941	0.76569	2.59E-03	8.77E-07	1.64E-06	9.61E-07	1.51E-06	2.5931E-03
519999.44	4258511.82	14916.92714	0.40894	2.12648	0.45261	1.88851	2.59E-03	9.60E-07	4.36E-06	1.06E-06	3.72E-06	2.5974E-03
520743.87	4258710.98	14911.28123	0.1087	0.09729	0.10591	0.09998	2.59E-03	2.55E-07	2.00E-07	2.49E-07	1.97E-07	2.5872E-03
520695.64	4258542.24	14907.70145	0.11958	0.1188	0.11508	0.12317	2.59E-03	2.81E-07	2.44E-07	2.70E-07	2.42E-07	2.5867E-03
520037.31	4258294.09	14897.66231	0.18626	5.23396	0.19607	4.30669	2.58E-03	4.37E-07	1.07E-05	4.60E-07	8.48E-06	2.6040E-03
520746.69	4258728.2	14892.87957	0.10822	0.09531	0.10555	0.09808	2.58E-03	2.54E-07	1.95E-07	2.48E-07	1.93E-07	2.5840E-03
519853.09	4258890.3	14890.37448	0.33263	0.28607	0.34945	0.27799	2.58E-03	7.81E-07	5.87E-07	8.20E-07	5.47E-07	2.5854E-03
520704.63	4258423.74	14887.09914	0.11469	0.11862	0.11114	0.12367	2.58E-03	2.69E-07	2.43E-07	2.61E-07	2.43E-07	2.5831E-03
520082.9	4259355.31	14878.35828	14.12594	0.13722	17.49195	0.13164	2.58E-03	3.32E-05	2.81E-07	4.11E-05	2.59E-07	2.6554E-03
520721.97	4258314.05	14867.77638	0.1066	0.1156	0.10365	0.12048	2.58E-03	2.50E-07	2.37E-07	2.43E-07	2.37E-07	2.5797E-03
520694.64	4258475.12	14865.61534	0.1187	0.12066	0.1145	0.12582	2.58E-03	2.79E-07	2.47E-07	2.69E-07	2.48E-07	2.5794E-03
520054.57	4258247.01	14856.30836	0.17008	9.7882	0.17936	7.01779	2.58E-03	3.99E-07	2.01E-05	4.21E-07	1.38E-05	2.6115E-03
520009.19	4258458.73	14840.57631	0.32975	2.65368	0.35317	2.32304	2.57E-03	7.74E-07	5.44E-06	8.29E-07	4.57E-06	2.5856E-03
520741.28	4258693.23	14834.9504	0.1091	0.0991	0.10606	0.10177	2.57E-03	2.56E-07	2.03E-07	2.49E-07	2.00E-07	2.5740E-03
520697.87	4258457.73	14822.34055	0.11739	0.11996	0.11345	0.12517	2.57E-03	2.76E-07	2.46E-07	2.66E-07	2.46E-07	2.5719E-03
520705.42	4258580.22	14820.53233	0.11731	0.11441	0.11321	0.11845	2.57E-03	2.75E-07	2.35E-07	2.66E-07	2.33E-07	2.5716E-03
520720.71	4258336.62	14806.72886	0.10765	0.11583	0.10453	0.12042	2.57E-03	2.53E-07	2.38E-07	2.45E-07	2.37E-07	2.5691E-03
520011.26	4258429.45	14802.62341	0.28763	2.79869	0.30536	2.44862	2.57E-03	6.75E-07	5.74E-06	7.17E-07	4.82E-06	2.5794E-03
520725.1	4258637.22	14789.16945	0.11265	0.10612	0.10883	0.10947	2.57E-03	2.64E-07	2.18E-07	2.55E-07	2.15E-07	2.5661E-03
520119.81	4258122.44	14785.16607	0.14115	7.85414	0.14269	9.20502	2.56E-03	3.31E-07	1.61E-05	3.35E-07	1.81E-05	2.5993E-03
520695.69	4258532.76	14783.72937	0.11938	0.11909	0.11486	0.12353	2.56E-03	2.80E-07	2.44E-07	2.70E-07	2.43E-07	2.5652E-03
519910.75	4258691.91	14783.43051	0.34655	0.59226	0.37302	0.56925	2.56E-03	8.14E-07	1.21E-06	8.76E-07	1.12E-06	2.5681E-03
520715.26	4258608.72	14770.43226	0.11496	0.11008	0.11098	0.1139	2.56E-03	2.70E-07	2.26E-07	2.61E-07	2.24E-07	2.5628E-03
520042.85	4259334.55	14764.49393	5.46518	0.13552	7.9915	0.13239	2.56E-03	1.28E-05	2.78E-07	1.88E-05	2.61E-07	2.5930E-03
520734.94	4258665.73	14755.85206	0.11037	0.10224	0.1069	0.10511	2.56E-03	2.59E-07	2.10E-07	2.51E-07	2.07E-07	2.5603E-03
520064	4258223.15	14746.21532	0.16295	17.40711	0.17112	9.81808	2.56E-03	3.83E-07	3.57E-05	4.02E-07	1.93E-05	2.6135E-03
519927.12	4258655.32	14742.89504	0.36031	0.71407	0.39121	0.68444	2.56E-03	8.46E-07	1.46E-06	9.18E-07	1.35E-06	2.5617E-03
520725.74	4258272.21	14734.39648	0.10407	0.11518	0.10181	0.12024	2.56E-03	2.44E-07	2.36E-07	2.39E-07	2.37E-07	2.5566E-03
520092.82	4259365.29	14724.19497	12.63571	0.13626	11.09954	0.1301	2.55E-03	2.97E-05	2.79E-07	2.61E-05	2.56E-07	2.6101E-03
520018.73	4258361.68	14702.17606	0.22112	3.30649	0.23196	2.86913	2.55E-03	5.19E-07	6.78E-06	5.45E-07	5.65E-06	2.5635E-03
520695.75	4258523.27	14690.86864	0.11918	0.11925	0.11465	0.12381	2.55E-03	2.80E-07	2.45E-07	2.69E-07	2.44E-07	2.5491E-03
519895.62	4258727.77	14680.97162	0.33373	0.50051	0.35866	0.48214	2.55E-03	7.83E-07	1.03E-06	8.42E-07	9.49E-07	2.5499E-03
520725.54	4258297.55	14673.90199	0.10513	0.1146	0.10242	0.11959	2.55E-03	2.47E-07	2.35E-07	2.40E-07	2.35E-07	2.5461E-03
519868.48	4258807	14666.98087	0.32178	0.36578	0.34035	0.35519	2.54E-03	7.55E-07	7.50E-07	7.99E-07	6.99E-07	2.5469E-03
520100.14	4258152.38	14663.7744	0.14658	15.02436	0.15006	15.85514	2.54E-03	3.44E-07	3.08E-05	3.52E-07	3.12E-05	2.6061E-03
520053.18	4259344.53	14654.75487	7.69063	0.13481	14.97615	0.13118	2.54E-03	1.81E-05	2.76E-07	3.52E-05	2.58E-07	2.5955E-03
519860.78	4258836.65	14653.74431	0.32094	0.33185	0.3383	0.32239	2.54E-03	7.53E-07	6.81E-07	7.94E-07	6.35E-07	2.5445E-03
520047.43	4258259.95	14647.72851	0.1726	7.25673	0.18214	5.63286	2.54E-03	4.05E-07	1.49E-05	4.28E-07	1.11E-05	2.5674E-03
519949.85	4258609	14638.07597	0.38517	0.94644	0.42781	0.89773	2.54E-03	9.04E-07	1.94E-06	1.00E-06	1.77E-06	2.5445E-03
520720.52	4258361.97	14609.94761	0.10861	0.11524	0.10533	0.11973	2.53E-03	2.55E-07	2.36E-07	2.47E-07	2.36E-07	2.5350E-03
519854.6	4258863.81	14605.08885	0.32129	0.30531	0.33772	0.29665	2.53E-03	7.54E-07	6.26E-07	7.93E-07	5.84E-07	2.5359E-03
520705.48	4258570.74	14593.6653	0.11709	0.11475	0.11296	0.11881	2.53E-03	2.75E-07	2.35E-07	2.65E-07	2.34E-07	2.5322E-03
519847.71	4258908.04	14574.61512	0.32771	0.27013	0.34376	0.26273	2.53E-03	7.69E-07	5.54E-07	8.07E-07	5.17E-07	2.5305E-03
520019.85	4258351.23	14572.86798	0.21312	3.38911	0.22332	2.93651	2.53E-03	5.00E-07	6.95E-06	5.24E-07	5.78E-06	2.5414E-03
519880.93	4258764.68	14571.60298	0.32421	0.42591	0.34483	0.4126	2.53E-03	7.61E-07	8.74E-07	8.10E-07	8.12E-07	2.5306E-03
520037.9	4258283.86	14555.67372	0.18006	5.31391	0.18955	4.37136	2.52E-03	4.23E-07	1.09E-05	4.45E-07	8.60E-06	2.5450E-03
520750.32	4258719.53	14549.10918	0.10695	0.09513	0.10428	0.09781	2.52E-03	2.51E-07	1.95E-07	2.45E-07	1.93E-07	2.5244E-03
520012.95	4258394.02	14537.16838	0.24609	2.92041	0.25925	2.55849	2.52E-03	5.78E-07	5.99E-06	6.09E-07	5.04E-06	2.5336E-03
520082.92	4259365.31	14523.57991	15.70952	0.13463	17.25251	0.1292	2.52E-03	3.69E-05	2.76E-07	4.05E-05	2.54E-07	2.5970E-03
520747.53	4258702.25	14523.48259	0.10742	0.09707	0.10459	0.09968	2.52E-03	2.52E-07	1.99E-07	2.46E-07	1.96E-07	2.5199E-03
520735	4258656.24	14523.3266	0.11013	0.10269	0.10659	0.10567	2.52E-03	2.59E-07	2.11E-07	2.50E-07	2.08E-07	2.5199E-03
520725.16	4258627.74	14519.12696	0.11241	0.10649	0.10859	0.10997	2.52E-03	2.64E-07	2.18E-07	2.55E-07	2.16E-07	2.5192E-03
520014.14	4258383.54	14518.92111	0.23662	2.99651	0.24885	2.62189	2.52E-03	5.56E-07	6.15E-06	5.84E-07	5.16E-06	2.5307E-03
519917.12	4258673.87	14509.4049	0.34739	0.64051	0.37494	0.61505	2.52E-03	8.16E-07	1.31E-06	8.80E-07	1.21E-06	2.5208E-03
519863.72	4258819.63	14508.43744	0.31759	0.34848	0.3351	0.33865	2.52E-03	7.46E-07	7.15E-07	7.87E-07	6.67E-07	2.5193E-03
520109.99	4258132.41	14506.38579	0.14185	10.43818	0.14421	12.05007	2.52E-03	3.33E-07	2.14E-05	3.39E-07	2.37E-05	2.5619E-03
520724.09	4258345.48	14506.19695	0.10718	0.1144	0.10395	0.11889	2.52E-03	2.52E-07	2.35E-07	2.44E-07	2.34E-07	2.5170E-03
519959.77	4258589.57	14506.05203	0.39593	1.08894	0.44387	1.02148	2.52E-03	9.30E-07	2.23E-06	1.04E-06	2.01E-06	2.5222E-03
520715.32	4258599.24	14500.34474	0.11472	0.11047	0.11078	0.11435	2.52E-03	2.69E-07	2.27E-07	2.60E-07	2.25E-07	2.5160E-03
520698.09	4258484.15	14492.46164	0.11779	0.11934	0.11354	0.12432	2.51E-03	2.77E-07	2.45E-07	2.67E-07	2.45E-07	2.5147E-03
520729.17	4258281.21	14466.8689	0.10367	0.11355	0.1012	0.11858	2.51E-03	2.43E-07	2.33E-07	2.38E-07	2.33E-07	2.5102E-03
519904.67	4258701.35	14464.06876	0.33678	0.55816	0.36134	0.53741	2.51E-03	7.91E-07	1.14E-06	8.48E-07	1.06E-06	2.5126E-03
520054.94	4258236.87	14443.55596	0.16468	9.9189	0.17353	7.0919	2.51E-03	3.87E-07	2.03E-05	4.07E-07	1.40E-05	2.5403E-03
520015.14	4258373.14	14442.68389	0.2276	3.0623	0.23899	2.67703	2.51E-03	5.34E-07	6.28E-06	5.61E-07	5.27E-06	2.5177E-03
520043.28	4259344.55	14434.82779	5.55415	0.13304	8.22942	0.12997	2.50E-03	1.30E-05	2.73E-07	1.93E-05	2.56E-07	2.5365E-03
519989.52	4258531.26	14425.57278	0.41206	1.76187	0.45928	1.59249	2.50E-03	9.67E-07	3.61E-06	1.08E-06	3.13E-06	2.5108E-03
519871.47	4258790.09	14420.74264	0.31757	0.38468	0.33637	0.37346	2.50E-03	7.46E-07	7.89E-07	7.90E-07	7.35E-07	2.5043E-03
520744.83	4258684.75	14420.72666	0.10785	0.09881	0.10478	0.10145	2.50E-03	2.53E-07	2.03E-07	2.46E-07	2.00E-07	2.5021E-03
520701.29	4258466.69	14411.56046	0.11655	0.1185	0.11252	0.1236	2.50E-03	2.74E-07	2.43E-07	2.64E-07	2.43E-07	2.5006E-03
520020.82	4258340.84	14402.6648	0.20552	3.46188	0.21513	2.99744	2.50E-03	4.82E-07	7.10E-06	5.05E-07	5.90E-06	2.5121E-03
520728.99	4258306.62	14395.50825	0.10467	0.11323	0.10177	0.11805	2.50E-03	2.46E-07	2.32E-07	2.39E-07	2.32E-07	2.4978E-03
520705.53	4258561.26	14391.07705	0.11688	0.11504	0.11269	0.11913	2.50E-03	2.74E-07	2.36E-07	2.65E-07	2.35E-07	2.4971E-03
520092.84	4259375.29	14371.19927	12.60874	0.13369	10.98905	0.12771	2.49E-03	2.96E-05	2.74E-07	2.58E-05	2.51E-07	2.5485E-03
519969.69	4258570.13	14359.50609	0.40473	1.26526	0.45362	1.17316	2.49E-03	9.50E-07	2.59E-06	1.06E-06	2.31E-06	2.4975E-03
519999.4	4258502.12	14354.94726	0.38642	2.14822	0.42408	1.90778	2.49E-03	9.07E-07	4.41E-06	9.96E-07	3.76E-06	2.4999E-03
520053.2	4259354.53	14317.09151	7.75148	0.13229	15.27015	0.12876	2.48E-03	1.82E-05	2.71E-07	3.58E-05	2.53E-07	2.5378E-03
520064.24	4258213.06	14312.54883	0.15789	17.62013	0.16563	9.88711	2.48E-03	3.71E-07	3.61E-05	3.89E-07	1.95E-05	2.5388E-03
520119.84	4258112.44	14304.22998	0.13719	7.85872	0.13862	9.20207	2.48E-03	3.22E-07	1.61E-05	3.25E-07	1.81E-05	2.5159E-03
519846.01	4258897.39	14290.67221	0.31771	0.27522	0.33289	0.26764	2.48E-03	7.46E-07	5.64E-07	7.82E-07	5.27E-07	2.4813E-03
519979.61	4258550.69	14285.54215	0.41015	1.48279	0.45838	1.35989	2.48E-03	9.63E-07	3.04E-06	1.08E-06	2.68E-06	2.4855E-03
520720.43	4258387.62	14284.43809	0.10943	0.11445	0.10611	0.11899	2.48E-03	2.57E-07	2.35E-07	2.49E-07	2.34E-07	2.4785E-03
520735.05	4258646.76	14279.25377	0.1099	0.10309	0.10631	0.10619	2.48E-03	2.58E-07	2.11E-07	2.50E-07	2.09E-07	2.4776E-03
519889.13	4258736.23	14257.67052	0.32301	0.47329	0.34491	0.45729	2.47E-03	7.58E-07	9.71E-07	8.10E-07	9.00E-07	2.4764E-03
520723.91	4258370.89	14255.78725	0.10804	0.11383	0.10475	0.11825	2.47E-03	2.54E-07	2.33E-07	2.46E-07	2.33E-07	2.4736E-03
520725.21	4258618.26	14249.32684	0.11217	0.10687	0.10838	0.11046	2.47E-03	2.63E-07	2.19E-07	2.54E-07	2.17E-07	2.4724E-03
520715.37	4258589.76	14245.14559	0.11449	0.11087	0.11057	0.11478	2.47E-03	2.69E-07	2.27E-07	2.60E-07	2.26E-07	2.4717E-03
520007.6	4258438.34	14243.98891	0.29317	2.59818	0.31161	2.28841	2.47E-03	6.88E-07	5.33E-06	7.32E-07	4.50E-06	2.4818E-03
520027.77	4258308.01	14240.00197	0.18762	4.06165	0.19657	3.46285	2.47E-03	4.40E-07	8.33E-06	4.61E-07	6.82E-06	2.4859E-03
520744.89	4258675.26	14227.85486	0.10764	0.0993	0.10445	0.10199	2.47E-03	2.53E-07	2.04E-07	2.45E-07	2.01E-07	2.4687E-03
520705.58	4258551.78	14216.16103	0.11668	0.11535	0.11243	0.11947	2.47E-03	2.74E-07	2.37E-07	2.64E-07	2.35E-07	2.4667E-03
520038.43	4258273.65	14212.86357	0.17416	5.38672	0.18337	4.42712	2.47E-03	4.09E-07	1.10E-05	4.30E-07	8.71E-06	2.4858E-03
520700.84	4258511.46	14206.74688	0.1174	0.11785	0.11299	0.12244	2.46E-03	2.76E-07	2.42E-07	2.65E-07	2.41E-07	2.4651E-03
520732.6	4258290.22	14204.35118	0.10323	0.11227	0.10058	0.11718	2.46E-03	2.42E-07	2.30E-07	2.36E-07	2.31E-07	2.4646E-03
520021.66	4258330.5	14200.33809	0.19828	3.52608	0.20742	3.05073	2.46E-03	4.65E-07	7.23E-06	4.87E-07	6.01E-06	2.4772E-03
520100.17	4258142.38	14196.26664	0.14233	15.04492	0.1456	15.91239	2.46E-03	3.34E-07	3.09E-05	3.42E-07	3.13E-05	2.5251E-03
520753.95	4258710.86	14193.44198	0.10571	0.09495	0.10303	0.09754	2.46E-03	2.48E-07	1.95E-07	2.42E-07	1.92E-07	2.4627E-03
520082.94	4259375.31	14183.30432	15.65256	0.13212	17.01862	0.12685	2.46E-03	3.67E-05	2.71E-07	4.00E-05	2.50E-07	2.5373E-03
520727.46	4258354.35	14182.52505	0.10663	0.11307	0.10339	0.11744	2.46E-03	2.50E-07	2.32E-07	2.43E-07	2.31E-07	2.4609E-03
520701.18	4258502.33	14169.80421	0.11715	0.11796	0.11279	0.12265	2.46E-03	2.75E-07	2.42E-07	2.65E-07	2.41E-07	2.4587E-03
520701.53	4258493.19	14162.80034	0.1169	0.118	0.11261	0.1228	2.46E-03	2.74E-07	2.42E-07	2.64E-07	2.42E-07	2.4575E-03
520751.18	4258693.53	14126.86506	0.10616	0.09681	0.1033	0.09937	2.45E-03	2.49E-07	1.99E-07	2.43E-07	1.96E-07	2.4511E-03
520732.44	4258315.68	14117.04144	0.10417	0.11199	0.10116	0.11663	2.45E-03	2.45E-07	2.30E-07	2.37E-07	2.30E-07	2.4495E-03
520043.3	4259354.55	14106.81781	5.57877	0.13058	8.31975	0.12758	2.45E-03	1.31E-05	2.68E-07	1.95E-05	2.51E-07	2.4799E-03
519874.37	4258772.97	14082.80594	0.3123	0.40479	0.33127	0.39271	2.44E-03	7.33E-07	8.30E-07	7.78E-07	7.73E-07	2.4457E-03
519883.66	4258747.14	14075.29301	0.31674	0.44886	0.33762	0.43423	2.44E-03	7.44E-07	9.21E-07	7.93E-07	8.55E-07	2.4446E-03
520045.69	4258250.68	14075.2646	0.16614	6.78528	0.17518	5.35522	2.44E-03	3.90E-07	1.39E-05	4.11E-07	1.05E-05	2.4665E-03
520705.64	4258542.29	14069.38826	0.11648	0.11556	0.11217	0.11974	2.44E-03	2.73E-07	2.37E-07	2.63E-07	2.36E-07	2.4413E-03
519898.33	4258710.17	14061.21806	0.32564	0.52695	0.34881	0.50795	2.44E-03	7.64E-07	1.08E-06	8.19E-07	1.00E-06	2.4425E-03
520055.28	4258226.75	14044.48202	0.15957	10.04245	0.16802	7.15987	2.44E-03	3.75E-07	2.06E-05	3.94E-07	1.41E-05	2.4714E-03
520110.02	4258122.41	14042.49321	0.13785	10.44651	0.14005	12.04597	2.44E-03	3.24E-07	2.14E-05	3.29E-07	2.37E-05	2.4814E-03
519850.96	4258855.16	14040.68429	0.30668	0.30698	0.32205	0.29854	2.44E-03	7.20E-07	6.30E-07	7.56E-07	5.88E-07	2.4380E-03
520092.85	4259385.29	14036.80581	12.48859	0.13124	10.8918	0.12542	2.43E-03	2.93E-05	2.69E-07	2.56E-05	2.47E-07	2.4900E-03
520704.7	4258475.65	14035.27931	0.11568	0.11719	0.1116	0.12213	2.43E-03	2.72E-07	2.40E-07	2.62E-07	2.40E-07	2.4354E-03
519847.6	4258870.98	14027.11967	0.30735	0.29316	0.32225	0.2851	2.43E-03	7.22E-07	6.01E-07	7.57E-07	5.61E-07	2.4356E-03
520735.1	4258637.28	14026.46689	0.10968	0.10346	0.10607	0.10669	2.43E-03	2.57E-07	2.12E-07	2.49E-07	2.10E-07	2.4338E-03
520744.94	4258665.78	14019.30218	0.10742	0.09976	0.10414	0.10253	2.43E-03	2.52E-07	2.05E-07	2.44E-07	2.02E-07	2.4325E-03
520715.42	4258580.28	14008.34904	0.11427	0.1113	0.11036	0.11521	2.43E-03	2.68E-07	2.28E-07	2.59E-07	2.27E-07	2.4307E-03
520007.92	4258413.3	14005.02339	0.26059	2.63683	0.27533	2.32687	2.43E-03	6.12E-07	5.41E-06	6.46E-07	4.58E-06	2.4404E-03
520707.98	4258458.39	13996.83081	0.11445	0.11644	0.11059	0.12143	2.43E-03	2.69E-07	2.39E-07	2.60E-07	2.39E-07	2.4287E-03
520053.22	4259364.53	13990.65864	7.80478	0.12985	15.58313	0.12641	2.43E-03	1.83E-05	2.66E-07	3.66E-05	2.49E-07	2.4820E-03
519927.12	4258646.05	13987.66337	0.34887	0.72427	0.37905	0.69514	2.43E-03	8.19E-07	1.49E-06	8.90E-07	1.37E-06	2.4307E-03
519857.03	4258827.62	13986.3514	0.3052	0.33319	0.3213	0.3241	2.43E-03	7.17E-07	6.83E-07	7.54E-07	6.38E-07	2.4287E-03
520725.26	4258608.78	13983.95926	0.11195	0.10724	0.10819	0.11092	2.43E-03	2.63E-07	2.20E-07	2.54E-07	2.18E-07	2.4264E-03
520022.41	4258320.21	13976.28843	0.19144	3.58397	0.20017	3.09898	2.42E-03	4.49E-07	7.35E-06	4.70E-07	6.10E-06	2.4385E-03
520002.61	4258474.73	13975.19984	0.34126	2.3269	0.36748	2.05643	2.42E-03	8.01E-07	4.77E-06	8.63E-07	4.05E-06	2.4344E-03
520028.53	4258297.71	13972.60874	0.1814	4.13345	0.1901	3.52006	2.42E-03	4.26E-07	8.48E-06	4.46E-07	6.93E-06	2.4398E-03
519999.36	4258492.42	13956.3272	0.36589	2.16708	0.39833	1.925	2.42E-03	8.59E-07	4.44E-06	9.35E-07	3.79E-06	2.4307E-03
520705.69	4258532.81	13954.8524	0.11629	0.1158	0.11196	0.12006	2.42E-03	2.73E-07	2.37E-07	2.63E-07	2.36E-07	2.4214E-03
520732.39	4258341.42	13947.32997	0.105	0.11173	0.10184	0.11607	2.42E-03	2.47E-07	2.29E-07	2.39E-07	2.28E-07	2.4200E-03
520736.02	4258299.22	13943.90935	0.10277	0.11105	0.09996	0.1158	2.42E-03	2.41E-07	2.28E-07	2.35E-07	2.28E-07	2.4194E-03
519864.81	4258798.15	13913.61352	0.30542	0.36679	0.32278	0.35648	2.41E-03	7.17E-07	7.52E-07	7.58E-07	7.02E-07	2.4162E-03
520727.31	4258379.82	13891.82767	0.10743	0.11244	0.10418	0.11681	2.41E-03	2.52E-07	2.31E-07	2.45E-07	2.30E-07	2.4104E-03
520723.85	4258396.6	13891.76892	0.10879	0.113	0.10548	0.11751	2.41E-03	2.55E-07	2.32E-07	2.48E-07	2.31E-07	2.4104E-03
520038.91	4258263.47	13872.62353	0.16859	5.45238	0.17752	4.47766	2.41E-03	3.96E-07	1.12E-05	4.17E-07	8.81E-06	2.4270E-03
520705.75	4258523.33	13870.55887	0.11611	0.116	0.11176	0.12035	2.41E-03	2.73E-07	2.38E-07	2.62E-07	2.37E-07	2.4068E-03
520082.95	4259385.31	13858.71222	15.48663	0.12972	16.81339	0.12459	2.40E-03	3.64E-05	2.66E-07	3.95E-05	2.45E-07	2.4801E-03
520730.84	4258363.21	13851.8994	0.10607	0.11173	0.10284	0.11602	2.40E-03	2.49E-07	2.29E-07	2.41E-07	2.28E-07	2.4035E-03
520720.47	4258413.59	13836.62374	0.11007	0.11364	0.10673	0.11829	2.40E-03	2.58E-07	2.33E-07	2.51E-07	2.33E-07	2.4009E-03
520757.58	4258702.2	13827.65383	0.1045	0.09476	0.10179	0.09728	2.40E-03	2.45E-07	1.94E-07	2.39E-07	1.91E-07	2.3992E-03
519917.12	4258664.6	13819.87054	0.33674	0.65002	0.36318	0.62508	2.40E-03	7.91E-07	1.33E-06	8.53E-07	1.23E-06	2.4012E-03
520063.35	4258203.44	13815.54656	0.15269	16.2997	0.16013	9.53009	2.40E-03	3.58E-07	3.34E-05	3.76E-07	1.88E-05	2.4492E-03
519939.89	4258618.74	13803.07463	0.36035	0.84549	0.39661	0.80722	2.39E-03	8.46E-07	1.73E-06	9.31E-07	1.59E-06	2.3992E-03
520745	4258656.3	13795.85294	0.10721	0.10016	0.10386	0.10303	2.39E-03	2.52E-07	2.05E-07	2.44E-07	2.03E-07	2.3937E-03
520715.48	4258570.8	13792.36419	0.11406	0.11162	0.11012	0.11554	2.39E-03	2.68E-07	2.29E-07	2.59E-07	2.27E-07	2.3932E-03
520043.32	4259364.55	13789.4761	5.60916	0.12819	8.41254	0.12527	2.39E-03	1.32E-05	2.63E-07	1.97E-05	2.47E-07	2.4251E-03
519859.95	4258810.54	13782.80826	0.30142	0.34971	0.31789	0.34014	2.39E-03	7.08E-07	7.17E-07	7.46E-07	6.70E-07	2.3934E-03
520735.16	4258627.8	13768.39287	0.10946	0.1038	0.10585	0.10716	2.39E-03	2.57E-07	2.13E-07	2.49E-07	2.11E-07	2.3890E-03
520100.2	4258132.38	13753.08727	0.1383	15.06047	0.14136	15.96666	2.39E-03	3.25E-07	3.09E-05	3.32E-07	3.14E-05	2.4484E-03
519838.93	4258904.49	13728.54681	0.30381	0.26501	0.3175	0.25789	2.38E-03	7.13E-07	5.44E-07	7.45E-07	5.08E-07	2.3837E-03
520725.32	4258599.3	13727.08255	0.11173	0.1076	0.108	0.11134	2.38E-03	2.62E-07	2.21E-07	2.54E-07	2.19E-07	2.3819E-03
520754.83	4258684.8	13723.07729	0.10495	0.09646	0.10204	0.099	2.38E-03	2.46E-07	1.98E-07	2.40E-07	1.95E-07	2.3811E-03
520046.14	4258240.51	13716.28351	0.16099	6.87349	0.1697	5.41591	2.38E-03	3.78E-07	1.41E-05	3.98E-07	1.07E-05	2.4046E-03
520003.95	4258447.22	13712.29719	0.29869	2.41874	0.31788	2.14282	2.38E-03	7.01E-07	4.96E-06	7.46E-07	4.22E-06	2.3890E-03
519949.81	4258599.31	13702.88299	0.37093	0.96202	0.41211	0.91107	2.38E-03	8.71E-07	1.97E-06	9.68E-07	1.79E-06	2.3823E-03
520029.21	4258287.44	13696.16921	0.17552	4.1974	0.18397	3.57333	2.38E-03	4.12E-07	8.61E-06	4.32E-07	7.03E-06	2.3920E-03
520708.11	4258484.61	13695.27799	0.11482	0.11589	0.11069	0.12067	2.38E-03	2.70E-07	2.38E-07	2.60E-07	2.38E-07	2.3764E-03
519989.48	4258521.56	13687.6774	0.39084	1.78305	0.43265	1.61122	2.37E-03	9.18E-07	3.66E-06	1.02E-06	3.17E-06	2.3828E-03
520739.45	4258308.23	13683.22465	0.1023	0.10981	0.09936	0.11439	2.37E-03	2.40E-07	2.25E-07	2.33E-07	2.25E-07	2.3742E-03
520053.23	4259374.53	13674.85115	7.86009	0.12749	15.89956	0.12414	2.37E-03	1.85E-05	2.61E-07	3.73E-05	2.44E-07	2.4281E-03
520055.59	4258216.63	13657.86582	0.15471	10.1548	0.16279	7.22087	2.37E-03	3.63E-07	2.08E-05	3.82E-07	1.42E-05	2.4047E-03
520089.57	4259395.71	13651.26178	13.53983	0.12831	12.26189	0.12287	2.37E-03	3.18E-05	2.63E-07	2.88E-05	2.42E-07	2.4288E-03
519877.17	4258755.62	13646.34042	0.30591	0.42595	0.32498	0.41279	2.37E-03	7.18E-07	8.74E-07	7.63E-07	8.13E-07	2.3701E-03
520735.87	4258350.55	13639.32394	0.10448	0.11037	0.10128	0.11461	2.37E-03	2.45E-07	2.26E-07	2.38E-07	2.26E-07	2.3666E-03
519891.92	4258718.84	13629.47439	0.31393	0.49834	0.33639	0.48056	2.36E-03	7.37E-07	1.02E-06	7.90E-07	9.46E-07	2.3675E-03
520711.36	4258467.28	13618.06892	0.11362	0.11514	0.10971	0.12001	2.36E-03	2.67E-07	2.36E-07	2.58E-07	2.36E-07	2.3630E-03
519867.77	4258781.18	13612.63234	0.30089	0.38528	0.31835	0.37428	2.36E-03	7.06E-07	7.90E-07	7.47E-07	7.37E-07	2.3640E-03

519907.12	4258683.15	13607.63183	0.32501	0.58641	0.3489	0.56469	2.36E-03	7.63E-07	1.20E-06	8.19E-07	1.11E-06	2.3641E-03
520715.53	4258561.31	13601.37858	0.11386	0.11194	0.10987	0.11587	2.36E-03	2.67E-07	2.30E-07	2.58E-07	2.28E-07	2.3601E-03
520110.05	4258112.41	13599.35505	0.13402	10.45566	0.1361	12.00483	2.36E-03	3.15E-07	2.14E-05	3.20E-07	2.36E-05	2.4045E-03
520745.05	4258646.82	13561.76708	0.10701	0.10051	0.10361	0.10351	2.35E-03	2.51E-07	2.06E-07	2.43E-07	2.04E-07	2.3531E-03
519959.73	4258579.87	13552.97295	0.38017	1.10675	0.42426	1.03673	2.35E-03	8.93E-07	2.27E-06	9.96E-07	2.04E-06	2.3569E-03
520754.89	4258675.32	13536.2278	0.10477	0.09692	0.10174	0.09951	2.35E-03	2.46E-07	1.99E-07	2.39E-07	1.96E-07	2.3487E-03
520730.71	4258388.74	13525.76086	0.10682	0.11105	0.10359	0.11539	2.35E-03	2.51E-07	2.28E-07	2.43E-07	2.27E-07	2.3469E-03
520734.21	4258372.08	13518.45524	0.10551	0.11038	0.1023	0.11462	2.34E-03	2.48E-07	2.26E-07	2.40E-07	2.26E-07	2.3457E-03
520004.35	4258421.99	13517.61263	0.26525	2.46118	0.28045	2.18456	2.34E-03	6.23E-07	5.05E-06	6.58E-07	4.30E-06	2.3552E-03
520735.21	4258618.32	13511.02193	0.10925	0.10414	0.10567	0.10761	2.34E-03	2.56E-07	2.14E-07	2.48E-07	2.12E-07	2.3444E-03
519843.98	4258862.39	13499.85382	0.2938	0.29463	0.30775	0.2868	2.34E-03	6.90E-07	6.04E-07	7.22E-07	5.65E-07	2.3441E-03
520009.85	4258365.34	13497.86049	0.21431	2.75852	0.22462	2.44038	2.34E-03	5.03E-07	5.66E-06	5.27E-07	4.80E-06	2.3526E-03
520727.27	4258405.59	13496.58946	0.10813	0.11159	0.10484	0.11609	2.34E-03	2.54E-07	2.29E-07	2.46E-07	2.29E-07	2.3419E-03
520725.37	4258589.82	13484.7708	0.11153	0.10795	0.10781	0.11172	2.34E-03	2.62E-07	2.21E-07	2.53E-07	2.20E-07	2.3398E-03
520043.33	4259374.55	13482.18444	5.64531	0.12587	8.50373	0.12303	2.34E-03	1.33E-05	2.58E-07	2.00E-05	2.42E-07	2.3721E-03
520079.67	4259395.72	13475.5324	16.36914	0.12678	20.03811	0.12202	2.34E-03	3.84E-05	2.60E-07	4.70E-05	2.40E-07	2.4232E-03
519840.47	4258877.85	13467.65591	0.29389	0.28178	0.30734	0.27429	2.34E-03	6.90E-07	5.78E-07	7.22E-07	5.40E-07	2.3384E-03
519847.32	4258846.51	13466.4475	0.29273	0.30827	0.30715	0.30012	2.34E-03	6.87E-07	6.32E-07	7.21E-07	5.91E-07	2.3383E-03
520761.2	4258693.53	13453.67071	0.1033	0.09456	0.10058	0.09701	2.33E-03	2.43E-07	1.94E-07	2.36E-07	1.91E-07	2.3343E-03
520011.11	4258354.84	13444.74143	0.20688	2.82895	0.21655	2.49953	2.33E-03	4.86E-07	5.80E-06	5.08E-07	4.92E-06	2.3436E-03
520715.58	4258551.83	13437.49698	0.11368	0.11221	0.10963	0.11618	2.33E-03	2.67E-07	2.30E-07	2.57E-07	2.29E-07	2.3317E-03
520710.84	4258511.83	13428.18787	0.11441	0.11467	0.11018	0.11905	2.33E-03	2.69E-07	2.35E-07	2.59E-07	2.34E-07	2.3301E-03
520723.92	4258422.64	13424.76196	0.10936	0.11221	0.10601	0.11684	2.33E-03	2.57E-07	2.30E-07	2.49E-07	2.30E-07	2.3294E-03
519969.65	4258560.43	13421.42302	0.38686	1.28331	0.43075	1.18952	2.33E-03	9.08E-07	2.63E-06	1.01E-06	2.34E-06	2.3348E-03
520742.88	4258317.23	13421.42057	0.10182	0.1086	0.09878	0.11301	2.33E-03	2.39E-07	2.23E-07	2.32E-07	2.22E-07	2.3288E-03
520063.61	4258193.35	13420.95286	0.14816	16.52504	0.15526	9.59285	2.33E-03	3.48E-07	3.39E-05	3.65E-07	1.89E-05	2.3813E-03
520029.82	4258277.2	13412.34215	0.16993	4.25475	0.17816	3.6214	2.33E-03	3.99E-07	8.73E-06	4.18E-07	7.13E-06	2.3430E-03
519979.56	4258541	13408.81911	0.39036	1.50209	0.4337	1.37707	2.33E-03	9.16E-07	3.08E-06	1.02E-06	2.71E-06	2.3334E-03
520711.18	4258502.7	13393.6232	0.11417	0.11472	0.10999	0.1192	2.32E-03	2.68E-07	2.35E-07	2.58E-07	2.35E-07	2.3241E-03
520711.52	4258493.57	13390.83229	0.11395	0.11468	0.10981	0.11927	2.32E-03	2.68E-07	2.35E-07	2.58E-07	2.35E-07	2.3236E-03
520053.25	4259384.53	13368.84592	7.97432	0.12518	16.24682	0.12192	2.32E-03	1.87E-05	2.57E-07	3.81E-05	2.40E-07	2.3761E-03
520046.56	4258230.35	13366.11498	0.15611	6.9574	0.1645	5.4729	2.32E-03	3.66E-07	1.43E-05	3.86E-07	1.08E-05	2.3441E-03
520720.65	4258439.94	13354.27753	0.11059	0.11271	0.10705	0.11748	2.32E-03	2.60E-07	2.31E-07	2.51E-07	2.31E-07	2.3172E-03
520012.19	4258344.4	13345.65486	0.19975	2.89047	0.2088	2.55239	2.31E-03	4.69E-07	5.93E-06	4.90E-07	5.02E-06	2.3267E-03
520089.58	4259405.71	13344.56976	13.34105	0.12603	12.14676	0.12073	2.31E-03	3.13E-05	2.58E-07	2.85E-05	2.38E-07	2.3749E-03
520754.94	4258665.84	13335.03518	0.10458	0.09735	0.10147	0.10002	2.31E-03	2.46E-07	2.00E-07	2.38E-07	1.97E-07	2.3138E-03
520100.23	4258122.38	13330.49556	0.13446	15.07372	0.13734	15.96652	2.31E-03	3.16E-07	3.09E-05	3.22E-07	3.14E-05	2.3751E-03
520036.8	4258254.35	13323.21804	0.16218	5.11207	0.1706	4.24758	2.31E-03	3.81E-07	1.05E-05	4.01E-07	8.36E-06	2.3305E-03
520739.34	4258359.68	13321.77189	0.10393	0.10904	0.10074	0.11319	2.31E-03	2.44E-07	2.24E-07	2.37E-07	2.23E-07	2.3115E-03
520745.1	4258637.34	13319.69126	0.10682	0.10083	0.1034	0.10397	2.31E-03	2.51E-07	2.07E-07	2.43E-07	2.05E-07	2.3111E-03
519853.29	4258818.59	13310.46106	0.29019	0.33431	0.30536	0.32548	2.31E-03	6.81E-07	6.86E-07	7.17E-07	6.41E-07	2.3114E-03
519900.89	4258692.25	13308.08877	0.3156	0.55324	0.33769	0.53354	2.31E-03	7.41E-07	1.13E-06	7.93E-07	1.05E-06	2.3119E-03
520005.75	4258387.01	13301.95688	0.22922	2.54609	0.2408	2.26479	2.31E-03	5.38E-07	5.22E-06	5.65E-07	4.46E-06	2.3179E-03
520715.64	4258542.35	13301.06866	0.11349	0.11247	0.10939	0.11648	2.31E-03	2.66E-07	2.31E-07	2.57E-07	2.29E-07	2.3080E-03
520018.88	4258311.68	13295.22742	0.18259	3.31427	0.19059	2.89457	2.31E-03	4.29E-07	6.80E-06	4.47E-07	5.70E-06	2.3194E-03
520714.75	4258476.17	13271.79658	0.11279	0.11387	0.10883	0.11859	2.30E-03	2.65E-07	2.34E-07	2.55E-07	2.33E-07	2.3029E-03
519885.46	4258727.38	13262.50169	0.30418	0.47176	0.32444	0.45597	2.30E-03	7.14E-07	9.68E-07	7.62E-07	8.98E-07	2.3037E-03
520725.42	4258580.33	13260.00173	0.11133	0.1083	0.10761	0.11207	2.30E-03	2.61E-07	2.22E-07	2.53E-07	2.21E-07	2.3008E-03
520735.26	4258608.84	13258.15945	0.10905	0.10449	0.1055	0.10804	2.30E-03	2.56E-07	2.14E-07	2.48E-07	2.13E-07	2.3005E-03
519927.12	4258636.77	13252.63084	0.33805	0.73424	0.36787	0.7053	2.30E-03	7.94E-07	1.51E-06	8.64E-07	1.39E-06	2.3032E-03
520742.79	4258342.87	13252.30622	0.10261	0.10832	0.09948	0.11246	2.30E-03	2.41E-07	2.22E-07	2.34E-07	2.21E-07	2.2995E-03
520718.07	4258459.03	13236.63954	0.11161	0.11309	0.10786	0.11788	2.30E-03	2.62E-07	2.32E-07	2.53E-07	2.32E-07	2.2968E-03
519870.64	4258763.99	13226.05349	0.29537	0.40485	0.31286	0.39295	2.29E-03	6.93E-07	8.30E-07	7.34E-07	7.74E-07	2.2970E-03
520000.29	4258456.11	13220.66004	0.30412	2.25667	0.32419	2.00938	2.29E-03	7.14E-07	4.63E-06	7.61E-07	3.96E-06	2.3031E-03
520013.14	4258334.02	13212.90196	0.19294	2.94594	0.20147	2.59929	2.29E-03	4.53E-07	6.04E-06	4.73E-07	5.12E-06	2.3038E-03
520715.69	4258532.87	13194.53009	0.11332	0.11268	0.10918	0.11676	2.29E-03	2.66E-07	2.31E-07	2.56E-07	2.30E-07	2.2895E-03
520043.35	4259384.55	13184.91109	5.70134	0.12362	8.59936	0.12084	2.29E-03	1.34E-05	2.54E-07	2.02E-05	2.38E-07	2.3209E-03
520737.59	4258380.94	13182.42671	0.10495	0.10898	0.10175	0.11319	2.29E-03	2.46E-07	2.24E-07	2.39E-07	2.23E-07	2.2874E-03
520054.39	4258207.14	13180.8256	0.14956	9.54213	0.15734	6.92649	2.29E-03	3.51E-07	1.96E-05	3.69E-07	1.36E-05	2.3201E-03
520079.68	4259405.72	13176.50391	16.11421	0.12454	19.76931	0.1199	2.29E-03	3.78E-05	2.55E-07	4.64E-05	2.36E-07	2.3701E-03
519861.14	4258789.3	13161.34504	0.28995	0.36735	0.30611	0.35726	2.28E-03	6.81E-07	7.53E-07	7.19E-07	7.03E-07	2.2856E-03
520734.11	4258397.66	13151.86666	0.10618	0.10972	0.103	0.11402	2.28E-03	2.49E-07	2.25E-07	2.42E-07	2.24E-07	2.2821E-03
519917.12	4258655.32	13142.27325	0.3266	0.65889	0.35232	0.63455	2.28E-03	7.67E-07	1.35E-06	8.27E-07	1.25E-06	2.2837E-03
519989.44	4258511.86	13134.84945	0.37127	1.80311	0.40832	1.62855	2.28E-03	8.72E-07	3.70E-06	9.59E-07	3.21E-06	2.2869E-03
520030.38	4258266.99	13126.57486	0.16463	4.30797	0.17266	3.66458	2.28E-03	3.86E-07	8.84E-06	4.05E-07	7.21E-06	2.2936E-03
520754.99	4258656.36	13120.78441	0.1044	0.09773	0.10123	0.1005	2.28E-03	2.45E-07	2.00E-07	2.38E-07	1.98E-07	2.2766E-03
520715.74	4258523.39	13117.85351	0.11316	0.11289	0.109	0.11706	2.28E-03	2.66E-07	2.32E-07	2.56E-07	2.30E-07	2.2762E-03
519879.86	4258738	13104.46814	0.29827	0.44779	0.31745	0.43338	2.27E-03	7.00E-07	9.18E-07	7.45E-07	8.53E-07	2.2761E-03
520730.69	4258414.57	13102.65092	0.10745	0.11024	0.10418	0.11472	2.27E-03	2.52E-07	2.26E-07	2.45E-07	2.26E-07	2.2735E-03
520019.75	4258301.33	13093.38073	0.17672	3.37395	0.18442	2.94481	2.27E-03	4.15E-07	6.92E-06	4.33E-07	5.80E-06	2.2846E-03
520745.16	4258627.86	13073.38184	0.10662	0.10118	0.10321	0.10443	2.27E-03	2.50E-07	2.08E-07	2.42E-07	2.06E-07	2.2684E-03
520764.83	4258684.86	13072.78467	0.10215	0.0942	0.09939	0.09664	2.27E-03	2.40E-07	1.93E-07	2.33E-07	1.90E-07	2.2683E-03
520725.48	4258570.85	13055.78547	0.11114	0.10861	0.10739	0.1124	2.26E-03	2.61E-07	2.23E-07	2.52E-07	2.21E-07	2.2654E-03
519856.17	4258801.44	13054.30318	0.28609	0.35052	0.30153	0.34115	2.26E-03	6.72E-07	7.19E-07	7.08E-07	6.72E-07	2.2670E-03
520013.97	4258323.69	13051.66667	0.18646	2.99478	0.19453	2.64122	2.26E-03	4.38E-07	6.14E-06	4.57E-07	5.20E-06	2.2760E-03
520063.85	4258183.26	13050.78713	0.14389	16.70083	0.15062	9.66763	2.26E-03	3.38E-07	3.43E-05	3.54E-07	1.90E-05	2.3176E-03
520090.41	4258132.35	13044.06622	0.13471	25.66983	0.13843	17.09441	2.26E-03	3.16E-07	5.26E-05	3.25E-07	3.37E-05	2.3494E-03
520089.6	4259415.71	13043.89012	13.20119	0.1238	12.01849	0.11864	2.26E-03	3.10E-05	2.54E-07	2.82E-05	2.34E-07	2.3221E-03
520000.77	4258430.68	13029.4315	0.26983	2.30145	0.28548	2.05423	2.26E-03	6.33E-07	4.72E-06	6.70E-07	4.04E-06	2.2700E-03
520727.36	4258431.7	13024.77862	0.10863	0.11083	0.10525	0.11543	2.26E-03	2.55E-07	2.27E-07	2.47E-07	2.27E-07	2.2600E-03
520046.94	4258220.2	13023.90875	0.15146	7.03249	0.15954	5.52358	2.26E-03	3.56E-07	1.44E-05	3.75E-07	1.09E-05	2.2850E-03
520037.34	4258244.14	13015.14398	0.15728	5.18007	0.16547	4.29917	2.26E-03	3.69E-07	1.06E-05	3.88E-07	8.46E-06	2.2773E-03
520735.32	4258599.35	13013.94234	0.10885	0.10483	0.10533	0.10843	2.26E-03	2.56E-07	2.15E-07	2.47E-07	2.13E-07	2.2581E-03
520742.82	4258368.8	12996.81183	0.10336	0.10771	0.10021	0.1118	2.25E-03	2.43E-07	2.21E-07	2.35E-07	2.20E-07	2.2552E-03
520049.96	4259394.95	12996.74451	7.20017	0.12234	12.75539	0.11933	2.25E-03	1.69E-05	2.51E-07	2.99E-05	2.35E-07	2.3016E-03
519894.59	4258701.16	12989.56257	0.30608	0.52283	0.32671	0.50485	2.25E-03	7.19E-07	1.07E-06	7.67E-07	9.94E-07	2.2565E-03
519907.12	4258673.87	12987.38325	0.31558	0.59486	0.33841	0.57362	2.25E-03	7.41E-07	1.22E-06	7.94E-07	1.13E-06	2.2565E-03
519939.85	4258609.05	12966.42429	0.34797	0.8582	0.38328	0.81876	2.25E-03	8.17E-07	1.76E-06	9.00E-07	1.61E-06	2.2541E-03
519840.37	4258853.79	12962.90019	0.28086	0.29579	0.29398	0.28824	2.25E-03	6.59E-07	6.07E-07	6.90E-07	5.67E-07	2.2509E-03
520746.24	4258351.93	12960.62073	0.10209	0.10704	0.09896	0.11109	2.25E-03	2.40E-07	2.20E-07	2.32E-07	2.19E-07	2.2489E-03
520724.13	4258449.06	12960.36727	0.10981	0.11134	0.10622	0.11604	2.25E-03	2.58E-07	2.28E-07	2.49E-07	2.28E-07	2.2489E-03
519833.48	4258885.03	12960.27665	0.28179	0.27104	0.29393	0.26406	2.25E-03	6.62E-07	5.56E-07	6.90E-07	5.20E-07	2.2503E-03
520718.13	4258485.06	12959.24161	0.11195	0.11268	0.10797	0.11724	2.25E-03	2.63E-07	2.31E-07	2.53E-07	2.31E-07	2.2487E-03
519836.75	4258869	12955.94208	0.28087	0.28317	0.2935	0.27591	2.25E-03	6.59E-07	5.81E-07	6.89E-07	5.43E-07	2.2496E-03
520100.26	4258112.38	12933.32263	0.13082	15.08266	0.13351	16.12367	2.24E-03	3.07E-07	3.09E-05	3.13E-07	3.17E-05	2.3065E-03
520106.08	4258102.11	12910.53662	0.12906	11.99693	0.13124	13.56271	2.24E-03	3.03E-07	2.46E-05	3.08E-07	2.67E-05	2.2912E-03
520755.05	4258646.88	12895.54311	0.10422	0.09804	0.10101	0.10094	2.24E-03	2.45E-07	2.01E-07	2.37E-07	1.99E-07	2.2376E-03
520764.89	4258675.38	12891.79233	0.102	0.09462	0.09913	0.09712	2.24E-03	2.39E-07	1.94E-07	2.33E-07	1.91E-07	2.2369E-03
520079.7	4259415.72	12888.76323	15.85025	0.12237	19.49327	0.11785	2.24E-03	3.72E-05	2.51E-07	4.58E-05	2.32E-07	2.3190E-03
520721.43	4258467.85	12886.57406	0.11081	0.11189	0.10702	0.11655	2.24E-03	2.60E-07	2.29E-07	2.51E-07	2.29E-07	2.2361E-03
519843.68	4258837.86	12884.04621	0.27942	0.30926	0.29302	0.30139	2.23E-03	6.56E-07	6.34E-07	6.88E-07	5.93E-07	2.2373E-03
520020.53	4258291.03	12876.4942	0.17113	3.42831	0.1786	2.98985	2.23E-03	4.02E-07	7.03E-06	4.19E-07	5.89E-06	2.2471E-03
520725.53	4258561.37	12876.3508	0.11096	0.10896	0.10717	0.11275	2.23E-03	2.60E-07	2.23E-07	2.52E-07	2.22E-07	2.2343E-03
520000.91	4258406.07	12836.04019	0.24184	2.32534	0.25454	2.08075	2.23E-03	5.68E-07	4.77E-06	5.98E-07	4.10E-06	2.2364E-03
520054.73	4258197.01	12831.59383	0.14523	9.65938	0.15268	6.99027	2.23E-03	3.41E-07	1.98E-05	3.58E-07	1.38E-05	2.2599E-03
520740.97	4258389.81	12831.1545	0.10433	0.10773	0.10119	0.11191	2.23E-03	2.45E-07	2.21E-07	2.38E-07	2.20E-07	2.2264E-03
520745.21	4258618.37	12827.66543	0.10643	0.10152	0.10305	0.10487	2.22E-03	2.50E-07	2.08E-07	2.42E-07	2.06E-07	2.2258E-03
519949.77	4258589.61	12826.62717	0.35715	0.97771	0.39649	0.92395	2.22E-03	8.38E-07	2.01E-06	9.31E-07	1.82E-06	2.2303E-03
520040.06	4259394.96	12823.37819	5.21773	0.12085	7.47668	0.11828	2.22E-03	1.22E-05	2.48E-07	1.76E-05	2.33E-07	2.2544E-03
519864.08	4258772.27	12815.50683	0.28518	0.38545	0.30136	0.37461	2.22E-03	6.70E-07	7.91E-07	7.07E-07	7.37E-07	2.2257E-03
520735.37	4258589.87	12783.93522	0.10867	0.10514	0.10516	0.10878	2.22E-03	2.55E-07	2.16E-07	2.47E-07	2.14E-07	2.2182E-03
520737.5	4258406.59	12782.38221	0.10554	0.10838	0.10238	0.11267	2.22E-03	2.48E-07	2.22E-07	2.40E-07	2.22E-07	2.2180E-03
519996.63	4258465	12781.94091	0.30942	2.1098	0.33065	1.88733	2.22E-03	7.26E-07	4.33E-06	7.76E-07	3.72E-06	2.2265E-03
520089.62	4259425.71	12753.94116	13.03529	0.12163	11.8887	0.11661	2.21E-03	3.06E-05	2.49E-07	2.79E-05	2.30E-07	2.2711E-03
519873.42	4258746.56	12747.44398	0.28887	0.42517	0.30635	0.41225	2.21E-03	6.78E-07	8.72E-07	7.19E-07	8.12E-07	2.2141E-03
520725.58	4258551.89	12722.11779	0.11078	0.10925	0.10694	0.11306	2.21E-03	2.60E-07	2.24E-07	2.51E-07	2.23E-07	2.2076E-03
520734.11	4258423.56	12713.02113	0.10673	0.10894	0.10348	0.11339	2.21E-03	2.51E-07	2.23E-07	2.43E-07	2.23E-07	2.2060E-03
520049.98	4259404.95	12712.62167	7.31155	0.1202	12.97143	0.11727	2.20E-03	1.72E-05	2.47E-07	3.05E-05	2.31E-07	2.2530E-03
520720.83	4258512.21	12711.78671	0.11154	0.11153	0.10748	0.11573	2.20E-03	2.62E-07	2.29E-07	2.52E-07	2.28E-07	2.2058E-03
520037.84	4258233.95	12711.42201	0.15262	5.24363	0.1606	4.34703	2.20E-03	3.58E-07	1.08E-05	3.77E-07	8.56E-06	2.2248E-03
519979.52	4258531.3	12699.51655	0.37207	1.52051	0.41104	1.39331	2.20E-03	8.74E-07	3.12E-06	9.65E-07	2.74E-06	2.2104E-03
520764.94	4258665.9	12697.6504	0.10184	0.095	0.09889	0.09759	2.20E-03	2.39E-07	1.95E-07	2.32E-07	1.92E-07	2.2032E-03
519989.4	4258502.16	12692.8227	0.35279	1.82147	0.38543	1.64454	2.20E-03	8.28E-07	3.74E-06	9.05E-07	3.24E-06	2.2102E-03
520064.08	4258173.18	12690.69499	0.13982	16.86979	0.14622	9.72724	2.20E-03	3.28E-07	3.46E-05	3.43E-07	1.91E-05	2.2556E-03
519959.69	4258570.17	12683.05881	0.36479	1.12301	0.40466	1.05109	2.20E-03	8.56E-07	2.30E-06	9.50E-07	2.07E-06	2.2060E-03
520721.17	4258503.08	12681.36046	0.11132	0.11155	0.1073	0.11584	2.20E-03	2.61E-07	2.29E-07	2.52E-07	2.28E-07	2.2005E-03
520721.51	4258493.94	12678.48547	0.11111	0.11155	0.10713	0.11594	2.20E-03	2.61E-07	2.29E-07	2.52E-07	2.28E-07	2.2000E-03
520746.29	4258377.93	12664.02533	0.10277	0.10641	0.09967	0.11046	2.20E-03	2.41E-07	2.18E-07	2.34E-07	2.17E-07	2.1974E-03
520755.1	4258637.39	12663.80033	0.10405	0.09834	0.10082	0.10137	2.20E-03	2.44E-07	2.02E-07	2.37E-07	2.00E-07	2.1974E-03
520749.7	4258361	12661.82883	0.10156	0.10573	0.09845	0.10973	2.20E-03	2.38E-07	2.17E-07	2.31E-07	2.16E-07	2.1970E-03
520090.44	4258122.35	12661.29794	0.13104	25.70709	0.13455	17.29996	2.20E-03	3.08E-07	5.27E-05	3.16E-07	3.41E-05	2.2834E-03
520021.22	4258280.75	12646.67152	0.16581	3.47589	0.17307	3.0309	2.19E-03	3.89E-07	7.13E-06	4.06E-07	5.97E-06	2.2074E-03
520730.81	4258440.75	12638.73373	0.10788	0.10952	0.10447	0.11407	2.19E-03	2.53E-07	2.25E-07	2.45E-07	2.25E-07	2.1931E-03
519849.54	4258809.56	12630.97046	0.27591	0.33509	0.29021	0.32644	2.19E-03	6.48E-07	6.87E-07	6.81E-07	6.43E-07	2.1934E-03
519888.22	4258709.92	12628.90984	0.29574	0.49506	0.31596	0.47803	2.19E-03	6.94E-07	1.02E-06	7.42E-07	9.41E-07	2.1938E-03
520079.72	4259425.72	12617.15597	15.41232	0.1203	19.24512	0.11588	2.19E-03	3.62E-05	2.47E-07	4.52E-05	2.28E-07	2.2702E-03
519969.61	4258550.74	12607.01906	0.36988	1.2994	0.40935	1.20492	2.19E-03	8.68E-07	2.66E-06	9.61E-07	2.37E-06	2.1935E-03
520753.17	4258344.24	12604.90303	0.10028	0.10509	0.09722	0.10905	2.19E-03	2.35E-07	2.16E-07	2.28E-07	2.15E-07	2.1872E-03
520027.92	4258258.01	12601.08256	0.15829	4.04527	0.16581	3.47211	2.19E-03	3.72E-07	8.30E-06	3.89E-07	6.83E-06	2.2015E-03
520725.64	4258542.41	12594.2987	0.11061	0.1095	0.10672	0.11334	2.18E-03	2.60E-07	2.25E-07	2.51E-07	2.23E-07	2.1854E-03
520727.6	4258458.19	12591.43857	0.10901	0.11009	0.10538	0.11468	2.18E-03	2.56E-07	2.26E-07	2.47E-07	2.26E-07	2.1849E-03
520745.26	4258608.89	12587.01551	0.10625	0.10185	0.1029	0.10528	2.18E-03	2.49E-07	2.09E-07	2.42E-07	2.07E-07	2.1841E-03
520735.42	4258580.39	12570.67549	0.1085	0.10538	0.10496	0.10905	2.18E-03	2.55E-07	2.16E-07	2.46E-07	2.15E-07	2.1813E-03
520724.79	4258476.67	12567.99218	0.11	0.11072	0.10618	0.11523	2.18E-03	2.58E-07	2.27E-07	2.49E-07	2.27E-07	2.1808E-03
520045.43	4258210.84	12565.39333	0.14637	6.64334	0.15414	5.28473	2.18E-03	3.44E-07	1.36E-05	3.62E-07	1.04E-05	2.2041E-03
519997.2	4258439.37	12558.69888	0.27435	2.15685	0.29049	1.93475	2.18E-03	6.44E-07	4.42E-06	6.82E-07	3.81E-06	2.1878E-03
520040.08	4259404.96	12547.06365	5.27491	0.11875	7.55354	0.11625	2.18E-03	1.24E-05	2.44E-07	1.77E-05	2.29E-07	2.2068E-03
520106.11	4258092.11	12535.65858	0.12569	11.99699	0.1277	13.72723	2.17E-03	2.95E-07	2.46E-05	3.00E-07	2.70E-05	2.2265E-03
520725.69	4258532.92	12494.81597	0.11046	0.10971	0.10652	0.11362	2.17E-03	2.59E-07	2.25E-07	2.50E-07	2.24E-07	2.1681E-03
520055.04	4258186.9	12493.80626	0.14111	9.76226	0.14825	7.0465	2.17E-03	3.31E-07	2.00E-05	3.48E-07	1.39E-05	2.2016E-03
520764.99	4258656.41	12491.46104	0.10168	0.09534	0.09868	0.09803	2.17E-03	2.39E-07	1.96E-07	2.32E-07	1.93E-07	2.1674E-03
519917.12	4258646.05	12482.55802	0.31697	0.66742	0.34239	0.64349	2.17E-03	7.44E-07	1.37E-06	8.04E-07	1.27E-06	2.1692E-03
519826.48	4258892.21	12482.33989	0.2704	0.261	0.28142	0.25445	2.17E-03	6.35E-07	5.35E-07	6.61E-07	5.01E-07	2.1673E-03
519829.78	4258876.24	12480.46639	0.26965	0.27231	0.28112	0.26554	2.16E-03	6.33E-07	5.58E-07	6.60E-07	5.23E-07	2.1671E-03
520089.63	4259435.71	12479.48032	12.81139	0.11956	11.7699	0.11466	2.16E-03	3.01E-05	2.45E-07	2.76E-05	2.26E-07	2.2227E-03
520744.34	4258398.67	12477.96253	0.1037	0.10649	0.10062	0.11063	2.16E-03	2.43E-07	2.18E-07	2.36E-07	2.18E-07	2.1652E-03
520050	4259414.95	12438.2199	7.44017	0.11812	13.1941	0.11527	2.16E-03	1.75E-05	2.42E-07	3.10E-05	2.27E-07	2.2063E-03
519833.03	4258860.16	12433.81486	0.26843	0.28423	0.28035	0.27724	2.16E-03	6.30E-07	5.83E-07	6.58E-07	5.46E-07	2.1590E-03
520755.16	4258627.91	12428.7513	0.10388	0.09863	0.10066	0.10179	2.16E-03	2.44E-07	2.02E-07	2.36E-07	2.00E-07	2.1566E-03
520725.74	4258523.44	12423.58164	0.11031	0.10986	0.10635	0.11386	2.15E-03	2.59E-07	2.25E-07	2.50E-07	2.24E-07	2.1558E-03
519836.75	4258845.2	12417.08441	0.26846	0.29668	0.28089	0.2894	2.15E-03	6.30E-07	6.08E-07	6.59E-07	5.70E-07	2.1562E-03
519857.47	4258780.46	12416.82929	0.27533	0.36751	0.29032	0.35758	2.15E-03	6.46E-07	7.54E-07	6.82E-07	7.04E-07	2.1564E-03
520740.9	4258415.51	12416.75976	0.10488	0.10706	0.10173	0.11135	2.15E-03	2.46E-07	2.20E-07	2.39E-07	2.19E-07	2.1546E-03
520038.29	4258223.77	12411.14841	0.14818	5.30041	0.15593	4.38955	2.15E-03	3.48E-07	1.09E-05	3.66E-07	8.64E-06	2.1729E-03
520021.85	4258270.5	12409.75605	0.16076	3.51953	0.16782	3.06791	2.15E-03	3.77E-07	7.22E-06	3.94E-07	6.04E-06	2.1664E-03
519997.4	4258414.6	12408.36107	0.24571	2.18472	0.25878	1.96332	2.15E-03	5.77E-07	4.48E-06	6.08E-07	3.86E-06	2.1617E-03
519992.98	4258473.88	12402.62311	0.31458	1.97633	0.33747	1.77542	2.15E-03	7.39E-07	4.05E-06	7.92E-07	3.49E-06	2.1603E-03
520002.36	4258358.45	12399.47615	0.20082	2.40472	0.21	2.15826	2.15E-03	4.71E-07	4.93E-06	4.93E-07	4.25E-06	2.1608E-03
520000.96	4258369.01	12391.26646	0.20771	2.34375	0.21742	2.10594	2.15E-03	4.88E-07	4.81E-06	5.10E-07	4.15E-06	2.1592E-03
519866.92	4258755.01	12382.62754	0.27941	0.40444	0.29572	0.3926	2.15E-03	6.56E-07	8.29E-07	6.94E-07	7.73E-07	2.1507E-03
520735.48	4258570.91	12377.88746	0.10833	0.10575	0.10477	0.1094	2.15E-03	2.54E-07	2.17E-07	2.46E-07	2.15E-07	2.1478E-03
519907.12	4258664.6	12377.44379	0.30656	0.60266	0.32866	0.58204	2.15E-03	7.20E-07	1.24E-06	7.72E-07	1.15E-06	2.1507E-03
520003.56	4258347.96	12360.81621	0.19417	2.45839	0.20281	2.2047	2.14E-03	4.56E-07	5.04E-06	4.76E-07	4.34E-06	2.1542E-03
519989.36	4258492.47	12355.71407	0.33564	1.8381	0.36422	1.65909	2.14E-03	7.88E-07	3.77E-06	8.55E-07	3.27E-06	2.1517E-03
520745.32	4258599.41	12355.14581	0.10608	0.10215	0.10275	0.10563	2.14E-03	2.49E-07	2.10E-07	2.41E-07	2.08E-07	2.1439E-03
520753.15	4258370.06	12354.70027	0.10101	0.10445	0.09794	0.1084	2.14E-03	2.37E-07	2.14E-07	2.30E-07	2.13E-07	2.1438E-03
520079.73	4259435.72	12346.92365	13.75175	0.11828	19.00838	0.11397	2.14E-03	3.23E-05	2.43E-07	4.46E-05	2.24E-07	2.2189E-03
520028.55	4258247.77	12341.01187	0.15363	4.09988	0.161	3.51621	2.14E-03	3.61E-07	8.41E-06	3.78E-07	6.92E-06	2.1566E-03
520064.29	4258163.1	12337.24086	0.13589	17.07678	0.14204	9.77496	2.14E-03	3.19E-07	3.50E-05	3.33E-07	1.92E-05	2.1948E-03
520737.54	4258432.54	12335.66528	0.106	0.10768	0.10275	0.11208	2.14E-03	2.49E-07	2.21E-07	2.41E-07	2.21E-07	2.1405E-03
519852.4	4258792.34	12330.65655	0.27162	0.35092	0.28602	0.34171	2.14E-03	6.38E-07	7.20E-07	6.71E-07	6.73E-07	2.1414E-03
520756.6	4258353.25	12329.96836	0.09978	0.10385	0.09674	0.10774	2.14E-03	2.34E-07	2.13E-07	2.27E-07	2.12E-07	2.1395E-03
520749.77	4258387.05	12321.01975	0.10215	0.10516	0.09912	0.10916	2.14E-03	2.40E-07	2.16E-07	2.33E-07	2.15E-07	2.1379E-03
520107.26	4258084.19	12314.50712	0.12344	11.52707	0.12528	13.29827	2.14E-03	2.90E-07	2.36E-05	2.94E-07	2.62E-05	2.1863E-03
519881.79	4258718.53	12309.27503	0.28672	0.46918	0.30542	0.45375	2.13E-03	6.73E-07	9.62E-07	7.17E-07	8.93E-07	2.1382E-03
519840.04	4258829.2	12296.36403	0.26673	0.30996	0.27956	0.30234	2.13E-03	6.26E-07	6.36E-07	6.56E-07	5.95E-07	2.1353E-03
520090.47	4258112.35	12295.88407	0.12754	25.74522	0.13085	17.47521	2.13E-03	2.99E-07	5.28E-05	3.07E-07	3.44E-05	2.2205E-03
520096.29	4258102.08	12291.90353	0.12597	18.23749	0.12873	18.28798	2.13E-03	2.96E-07	3.74E-05	3.02E-07	3.60E-05	2.2060E-03
520004.61	4258337.54	12285.75709	0.18778	2.50638	0.19591	2.24628	2.13E-03	4.41E-07	5.14E-06	4.60E-07	4.42E-06	2.1414E-03
519929.89	4258618.79	12282.25945	0.32693	0.77206	0.3574	0.74068	2.13E-03	7.68E-07	1.58E-06	8.39E-07	1.46E-06	2.1349E-03

520728.15	4258485.5	12279.09501	0.10919	0.1096	0.10536	0.11396	2.13E-03	2.56E-07	2.25E-07	2.47E-07	2.24E-07	2.1307E-03
520040.1	4259414.96	12278.77625	5.34353	0.11672	7.63229	0.11427	2.13E-03	1.25E-05	2.39E-07	1.79E-05	2.25E-07	2.1606E-03
520765.05	4258646.93	12275.72801	0.10153	0.09564	0.09849	0.09845	2.13E-03	2.38E-07	1.96E-07	2.31E-07	1.94E-07	2.1300E-03
520734.26	4258449.8	12275.54506	0.10713	0.10825	0.10367	0.11274	2.13E-03	2.52E-07	2.22E-07	2.43E-07	2.22E-07	2.1301E-03
520010.97	4258304.96	12257.93404	0.17221	2.82106	0.17925	2.5077	2.13E-03	4.04E-07	5.79E-06	4.21E-07	4.94E-06	2.1376E-03
520045.84	4258200.68	12254.68573	0.14222	6.72003	0.14973	5.33613	2.13E-03	3.34E-07	1.38E-05	3.52E-07	1.05E-05	2.1505E-03
520731.07	4258467.32	12249.48212	0.10819	0.10894	0.10454	0.1134	2.12E-03	2.54E-07	2.23E-07	2.45E-07	2.23E-07	2.1256E-03
519998.56	4258379.99	12234.75779	0.21419	2.24553	0.22437	2.02286	2.12E-03	5.03E-07	4.61E-06	5.27E-07	3.98E-06	2.1317E-03
519897.12	4258683.15	12233.26188	0.29648	0.54693	0.3164	0.52863	2.12E-03	6.96E-07	1.12E-06	7.43E-07	1.04E-06	2.1254E-03
520089.65	4259445.71	12212.86549	12.59876	0.11754	11.63442	0.11276	2.12E-03	2.96E-05	2.41E-07	2.73E-05	2.22E-07	2.1756E-03
520735.53	4258561.43	12208.31623	0.10816	0.10609	0.10456	0.10974	2.12E-03	2.54E-07	2.18E-07	2.45E-07	2.16E-07	2.1184E-03
520755.21	4258618.43	12195.04043	0.10371	0.09896	0.10052	0.10221	2.12E-03	2.43E-07	2.03E-07	2.36E-07	2.01E-07	2.1161E-03
519876.07	4258728.86	12181.82002	0.28142	0.4457	0.29871	0.4318	2.11E-03	6.61E-07	9.14E-07	7.01E-07	8.50E-07	2.1160E-03
520005.53	4258327.18	12180.25534	0.18167	2.54908	0.18933	2.28334	2.11E-03	4.27E-07	5.23E-06	4.44E-07	4.49E-06	2.1232E-03
519939.81	4258599.35	12176.30281	0.33603	0.87106	0.37019	0.82992	2.11E-03	7.89E-07	1.79E-06	8.69E-07	1.63E-06	2.1170E-03
520050.01	4259424.95	12171.18381	7.58902	0.11611	13.41094	0.11332	2.11E-03	1.78E-05	2.38E-07	3.15E-05	2.23E-07	2.1608E-03
520055.34	4258176.79	12167.95247	0.1372	9.85915	0.14402	7.09809	2.11E-03	3.22E-07	2.02E-05	3.38E-07	1.40E-05	2.1453E-03
520745.37	4258589.93	12136.97217	0.10592	0.10243	0.1026	0.10595	2.11E-03	2.49E-07	2.10E-07	2.41E-07	2.09E-07	2.1060E-03
520747.72	4258407.54	12133.34008	0.10309	0.10518	0.10002	0.10933	2.10E-03	2.42E-07	2.16E-07	2.35E-07	2.15E-07	2.1054E-03
519979.48	4258521.6	12123.42309	0.35485	1.53755	0.38981	1.40854	2.10E-03	8.33E-07	3.15E-06	9.15E-07	2.77E-06	2.1104E-03
519993.62	4258448.05	12117.00303	0.2788	2.02518	0.29555	1.82435	2.10E-03	6.55E-07	4.15E-06	6.94E-07	3.59E-06	2.1107E-03
520011.84	4258294.61	12093.41459	0.16691	2.86681	0.17363	2.54735	2.10E-03	3.92E-07	5.88E-06	4.08E-07	5.01E-06	2.1092E-03
520079.75	4259445.72	12081.47121	15.79727	0.11632	18.72106	0.1121	2.10E-03	3.71E-05	2.39E-07	4.40E-05	2.21E-07	2.1770E-03
519989.32	4258482.77	12079.85437	0.31952	1.85285	0.34446	1.67211	2.10E-03	7.50E-07	3.80E-06	8.09E-07	3.29E-06	2.1038E-03
520029.12	4258237.55	12079.63051	0.14918	4.1485	0.15641	3.55536	2.10E-03	3.50E-07	8.51E-06	3.67E-07	7.00E-06	2.1114E-03
520735.58	4258551.94	12062.82494	0.10801	0.10632	0.10434	0.10999	2.09E-03	2.54E-07	2.18E-07	2.45E-07	2.17E-07	2.0932E-03
520744.3	4258424.43	12054.89005	0.1042	0.10582	0.10106	0.11008	2.09E-03	2.45E-07	2.17E-07	2.37E-07	2.17E-07	2.0918E-03
520765.1	4258637.45	12054.53176	0.10138	0.09593	0.09833	0.09887	2.09E-03	2.38E-07	1.97E-07	2.31E-07	1.95E-07	2.0917E-03
520730.82	4258512.58	12050.9731	0.10878	0.10846	0.10489	0.11248	2.09E-03	2.55E-07	2.22E-07	2.46E-07	2.21E-07	2.0911E-03
520760.02	4258362.25	12043.50338	0.09925	0.10265	0.09626	0.10649	2.09E-03	2.33E-07	2.11E-07	2.26E-07	2.10E-07	2.0898E-03
519949.73	4258579.91	12035.94659	0.34403	0.99217	0.38027	0.93661	2.09E-03	8.08E-07	2.03E-06	8.93E-07	1.84E-06	2.0932E-03
520756.6	4258379.12	12034.98197	0.10042	0.10327	0.09742	0.10718	2.09E-03	2.36E-07	2.12E-07	2.29E-07	2.11E-07	2.0883E-03
519860.38	4258763.36	12033.15617	0.2704	0.38503	0.2853	0.37436	2.09E-03	6.35E-07	7.90E-07	6.70E-07	7.37E-07	2.0899E-03
519822.8	4258883.48	12031.95823	0.25909	0.26212	0.26951	0.25579	2.09E-03	6.08E-07	5.38E-07	6.33E-07	5.04E-07	2.0892E-03
520731.16	4258503.45	12023.42572	0.10859	0.10845	0.10471	0.11257	2.09E-03	2.55E-07	2.22E-07	2.46E-07	2.22E-07	2.0864E-03
520731.51	4258494.32	12021.08317	0.10839	0.10848	0.10456	0.11269	2.09E-03	2.54E-07	2.22E-07	2.45E-07	2.22E-07	2.0859E-03
520040.11	4259424.96	12019.83999	5.41791	0.11475	7.71109	0.11235	2.08E-03	1.27E-05	2.35E-07	1.81E-05	2.21E-07	2.1161E-03
519826.08	4258867.46	11990.63807	0.25803	0.27332	0.26894	0.26678	2.08E-03	6.06E-07	5.61E-07	6.31E-07	5.25E-07	2.0820E-03
520753.24	4258396.18	11986.87575	0.10156	0.10382	0.09856	0.10784	2.08E-03	2.38E-07	2.13E-07	2.31E-07	2.12E-07	2.0800E-03
519890.86	4258692.16	11980.2727	0.28815	0.51762	0.30677	0.50077	2.08E-03	6.76E-07	1.06E-06	7.20E-07	9.86E-07	2.0814E-03
519993.89	4258423.14	11979.06136	0.24956	2.0554	0.26293	1.85559	2.08E-03	5.86E-07	4.22E-06	6.17E-07	3.65E-06	2.0868E-03
520740.96	4258441.53	11977.77258	0.10528	0.10645	0.102	0.1108	2.08E-03	2.47E-07	2.18E-07	2.39E-07	2.18E-07	2.0784E-03
520036.47	4258214.54	11970.51088	0.14315	5.01769	0.15057	4.1931	2.08E-03	3.36E-07	1.03E-05	3.53E-07	8.25E-06	2.0955E-03
520755.26	4258608.95	11965.70498	0.10355	0.09928	0.1004	0.1026	2.08E-03	2.43E-07	2.04E-07	2.36E-07	2.02E-07	2.0763E-03
519845.8	4258800.53	11955.20778	0.26243	0.33548	0.27579	0.32699	2.07E-03	6.16E-07	6.88E-07	6.47E-07	6.44E-07	2.0762E-03
520107.29	4258074.19	11954.78216	0.12027	11.53685	0.12202	13.28157	2.07E-03	2.82E-07	2.37E-05	2.86E-07	2.61E-05	2.1239E-03
520046.23	4258190.53	11953.07557	0.13827	6.79314	0.14553	5.38525	2.07E-03	3.25E-07	1.39E-05	3.42E-07	1.06E-05	2.0984E-03
520063.54	4258153.43	11946.84478	0.13191	16.02437	0.13786	9.43431	2.07E-03	3.10E-07	3.29E-05	3.24E-07	1.86E-05	2.1242E-03
520735.64	4258542.46	11942.77135	0.10785	0.10658	0.10414	0.11029	2.07E-03	2.53E-07	2.19E-07	2.44E-07	2.17E-07	2.0724E-03
520096.32	4258092.08	11940.37032	0.1227	18.25557	0.12531	18.34495	2.07E-03	2.88E-07	3.74E-05	2.94E-07	3.61E-05	2.1451E-03
520734.55	4258476.44	11938.22306	0.10737	0.10781	0.10371	0.11213	2.07E-03	2.52E-07	2.21E-07	2.43E-07	2.21E-07	2.0716E-03
520745.42	4258580.45	11935.09625	0.10577	0.10269	0.10243	0.10622	2.07E-03	2.48E-07	2.11E-07	2.40E-07	2.09E-07	2.0710E-03
520737.7	4258458.86	11934.55778	0.10636	0.10708	0.10287	0.11146	2.07E-03	2.50E-07	2.20E-07	2.42E-07	2.19E-07	2.0709E-03
520050.03	4259434.95	11918.96021	7.72817	0.11417	13.66492	0.11144	2.07E-03	1.81E-05	2.34E-07	3.21E-05	2.19E-07	2.1180E-03
520012.62	4258284.3	11913.96795	0.16185	2.90839	0.16831	2.58291	2.07E-03	3.80E-07	5.96E-06	3.95E-07	5.08E-06	2.0782E-03
519969.56	4258541.04	11908.73189	0.35359	1.31493	0.38941	1.21897	2.07E-03	8.30E-07	2.70E-06	9.14E-07	2.40E-06	2.0724E-03
520019.04	4258261.68	11906.96371	0.15451	3.3041	0.16106	2.9022	2.07E-03	3.63E-07	6.78E-06	3.78E-07	5.71E-06	2.0784E-03
519829.31	4258851.31	11903.54626	0.25654	0.28504	0.26784	0.2783	2.06E-03	6.02E-07	5.85E-07	6.29E-07	5.48E-07	2.0670E-03
520084.71	4259456.12	11881.74333	14.1073	0.11492	14.22784	0.11053	2.06E-03	3.31E-05	2.36E-07	3.34E-05	2.18E-07	2.1278E-03
519869.66	4258737.5	11873.47415	0.27288	0.42364	0.28903	0.41093	2.06E-03	6.41E-07	8.69E-07	6.79E-07	8.09E-07	2.0624E-03
519833.14	4258836.61	11867.27345	0.25664	0.29735	0.26844	0.29028	2.06E-03	6.03E-07	6.10E-07	6.30E-07	5.71E-07	2.0607E-03
519959.65	4258560.47	11864.04826	0.34905	1.13651	0.38439	1.06443	2.06E-03	8.19E-07	2.33E-06	9.02E-07	2.10E-06	2.0639E-03
520055.61	4258166.69	11852.96095	0.13345	9.9536	0.14	7.14562	2.06E-03	3.13E-07	2.04E-05	3.29E-07	1.41E-05	2.0910E-03
520735.69	4258532.98	11849.73804	0.10771	0.10679	0.10396	0.11054	2.06E-03	2.53E-07	2.19E-07	2.44E-07	2.18E-07	2.0562E-03
519917.12	4258636.77	11844.39598	0.30782	0.67588	0.33314	0.65201	2.05E-03	7.23E-07	1.39E-06	7.82E-07	1.28E-06	2.0585E-03
520765.16	4258627.97	11830.2323	0.10123	0.09621	0.0982	0.09926	2.05E-03	2.38E-07	1.97E-07	2.31E-07	1.95E-07	2.0528E-03
519993.89	4258398.88	11823.69401	0.22528	2.07028	0.23627	1.87393	2.05E-03	5.29E-07	4.25E-06	5.55E-07	3.69E-06	2.0598E-03
520029.64	4258227.34	11819.04909	0.14493	4.1947	0.15204	3.59212	2.05E-03	3.40E-07	8.60E-06	3.57E-07	7.07E-06	2.0663E-03
520751.09	4258416.4	11791.58106	0.10246	0.1039	0.09939	0.10805	2.05E-03	2.41E-07	2.13E-07	2.33E-07	2.13E-07	2.0461E-03
520735.74	4258523.5	11783.27108	0.10758	0.1069	0.10379	0.11073	2.04E-03	2.53E-07	2.19E-07	2.44E-07	2.18E-07	2.0447E-03
519907.12	4258655.32	11780.79762	0.29794	0.61008	0.31971	0.58999	2.04E-03	6.99E-07	1.25E-06	7.51E-07	1.16E-06	2.0472E-03
520040.13	4259434.96	11770.74179	5.49993	0.11284	7.79856	0.11049	2.04E-03	1.29E-05	2.31E-07	1.83E-05	2.17E-07	2.0733E-03
520745.48	4258570.96	11751.98623	0.10561	0.10299	0.10224	0.10652	2.04E-03	2.48E-07	2.11E-07	2.40E-07	2.10E-07	2.0392E-03
520763.45	4258371.26	11748.21916	0.0987	0.10147	0.09577	0.10526	2.04E-03	2.32E-07	2.08E-07	2.25E-07	2.07E-07	2.0385E-03
520074.81	4259456.13	11746.51704	14.42934	0.11358	25.77511	0.10977	2.04E-03	3.39E-05	2.33E-07	6.05E-05	2.16E-07	2.1322E-03
520755.32	4258599.47	11745.45988	0.1034	0.09957	0.10027	0.10294	2.04E-03	2.43E-07	2.04E-07	2.35E-07	2.03E-07	2.0381E-03
520097.47	4258084.16	11738.06705	0.12055	17.26476	0.12298	17.8146	2.04E-03	2.83E-07	3.54E-05	2.89E-07	3.51E-05	2.1070E-03
520013.32	4258274.02	11722.50018	0.15701	2.9455	0.16327	2.61488	2.03E-03	3.69E-07	6.04E-06	3.83E-07	5.15E-06	2.0452E-03
519990.05	4258456.74	11716.47688	0.28318	1.90516	0.30079	1.7227	2.03E-03	6.65E-07	3.91E-06	7.06E-07	3.39E-06	2.0408E-03
520760.05	4258388.18	11707.82395	0.0998	0.1021	0.0969	0.10596	2.03E-03	2.34E-07	2.09E-07	2.27E-07	2.09E-07	2.0315E-03
519836.4	4258820.55	11707.00572	0.25461	0.31049	0.26678	0.30301	2.03E-03	5.98E-07	6.37E-07	6.26E-07	5.96E-07	2.0330E-03
520747.7	4258433.35	11705.48582	0.1035	0.10462	0.10035	0.10884	2.03E-03	2.43E-07	2.15E-07	2.36E-07	2.14E-07	2.0312E-03
519884.52	4258701	11704.51647	0.27958	0.4906	0.29732	0.47487	2.03E-03	6.56E-07	1.01E-06	6.98E-07	9.35E-07	2.0334E-03
520036.96	4258204.35	11696.79983	0.1392	5.07521	0.14642	4.23562	2.03E-03	3.27E-07	1.04E-05	3.44E-07	8.34E-06	2.0482E-03
520019.75	4258251.4	11691.25483	0.15006	3.35222	0.15652	2.94191	2.03E-03	3.52E-07	6.88E-06	3.67E-07	5.79E-06	2.0412E-03
519853.81	4258771.61	11685.86542	0.26156	0.36724	0.27541	0.35745	2.03E-03	6.14E-07	7.53E-07	6.47E-07	7.04E-07	2.0296E-03
519897.12	4258673.87	11681.57349	0.28844	0.55387	0.30758	0.53619	2.03E-03	6.77E-07	1.14E-06	7.22E-07	1.06E-06	2.0297E-03
520050.05	4259444.95	11674.51042	7.86108	0.1123	13.94759	0.10964	2.02E-03	1.85E-05	2.30E-07	3.27E-05	2.16E-07	2.0765E-03
519979.44	4258511.9	11670.54364	0.33868	1.55357	0.37008	1.42282	2.02E-03	7.95E-07	3.19E-06	8.69E-07	2.80E-06	2.0319E-03
520738.02	4258485.57	11659.7419	0.10656	0.1067	0.10289	0.11086	2.02E-03	2.50E-07	2.19E-07	2.42E-07	2.18E-07	2.0233E-03
520046.59	4258180.4	11659.59405	0.13452	6.86117	0.14151	5.4277	2.02E-03	3.16E-07	1.41E-05	3.32E-07	1.07E-05	2.0477E-03
520756.72	4258405.31	11647.61068	0.10094	0.10253	0.09796	0.10655	2.02E-03	2.37E-07	2.10E-07	2.30E-07	2.10E-07	2.0211E-03
520744.38	4258450.51	11639.39312	0.10454	0.10529	0.10123	0.10956	2.02E-03	2.45E-07	2.16E-07	2.38E-07	2.16E-07	2.0197E-03
520063.76	4258143.35	11631.13195	0.1284	16.22394	0.13409	9.4817	2.02E-03	3.01E-07	3.33E-05	3.15E-07	1.87E-05	2.0699E-03
520084.73	4259466.12	11630.84794	13.77693	0.11304	13.98689	0.10876	2.02E-03	3.23E-05	2.32E-07	3.28E-05	2.14E-07	2.0829E-03
520741.15	4258467.91	11617.89946	0.10556	0.10599	0.10206	0.11023	2.02E-03	2.48E-07	2.17E-07	2.40E-07	2.17E-07	2.0160E-03
519848.63	4258783.24	11616.02611	0.25798	0.35085	0.27128	0.34179	2.01E-03	6.06E-07	7.20E-07	6.37E-07	6.73E-07	2.0174E-03
520107.32	4258064.19	11614.82128	0.11726	11.54345	0.1189	13.28956	2.01E-03	2.75E-07	2.37E-05	2.79E-07	2.62E-05	2.0649E-03
520765.21	4258618.49	11607.65013	0.10109	0.0965	0.09808	0.09965	2.01E-03	2.37E-07	1.98E-07	2.30E-07	1.96E-07	2.0142E-03
520745.53	4258561.48	11591.58988	0.10546	0.1033	0.10205	0.10682	2.01E-03	2.48E-07	2.12E-07	2.40E-07	2.10E-07	2.0114E-03
519819.13	4258874.75	11572.79623	0.24826	0.263	0.25817	0.25691	2.01E-03	5.83E-07	5.39E-07	6.06E-07	5.06E-07	2.0095E-03
519929.85	4258609.09	11571.9195	0.31649	0.78265	0.34614	0.75038	2.01E-03	7.43E-07	1.61E-06	8.13E-07	1.48E-06	2.0117E-03
519863.19	4258746.03	11564.74219	0.26447	0.40319	0.27958	0.39154	2.01E-03	6.21E-07	8.27E-07	6.56E-07	7.71E-07	2.0087E-03
520001.12	4258319.01	11561.47168	0.17311	2.35762	0.18013	2.12849	2.01E-03	4.06E-07	4.84E-06	4.23E-07	4.19E-06	2.0151E-03
519990.38	4258431.67	11559.43407	0.25332	1.93677	0.26699	1.75597	2.00E-03	5.95E-07	3.97E-06	6.27E-07	3.46E-06	2.0136E-03
520755.37	4258589.98	11538.22886	0.10326	0.09985	0.10013	0.10325	2.00E-03	2.42E-07	2.05E-07	2.35E-07	2.03E-07	2.0021E-03
520040.15	4259444.96	11529.83938	5.58981	0.11098	7.89275	0.10869	2.00E-03	1.31E-05	2.28E-07	1.85E-05	2.14E-07	2.0319E-03
520074.83	4259466.13	11500.63861	14.3175	0.11173	25.2064	0.10801	1.99E-03	3.36E-05	2.29E-07	5.92E-05	2.13E-07	2.0880E-03
519822.39	4258858.67	11494.11395	0.24695	0.27402	0.2573	0.26774	1.99E-03	5.80E-07	5.62E-07	6.04E-07	5.27E-07	1.9959E-03
520054.59	4258157.12	11474.88823	0.1295	9.45464	0.13587	6.8905	1.99E-03	3.04E-07	1.94E-05	3.19E-07	1.36E-05	2.0238E-03
520020.39	4258241.14	11469.35438	0.14581	3.38971	0.15216	2.9737	1.99E-03	3.42E-07	6.95E-06	3.57E-07	5.85E-06	2.0028E-03
520002.19	4258308.58	11466.04232	0.16786	2.40161	0.1745	2.16658	1.99E-03	3.94E-07	4.93E-06	4.10E-07	4.26E-06	1.9987E-03
520745.58	4258552	11454.28654	0.10533	0.10354	0.10185	0.10707	1.99E-03	2.47E-07	2.12E-07	2.39E-07	2.11E-07	1.9876E-03
520754.47	4258425.27	11452.73628	0.10179	0.10273	0.09873	0.10686	1.99E-03	2.39E-07	2.11E-07	2.32E-07	2.10E-07	1.9873E-03
519994.93	4258351.52	11446.81165	0.18874	2.12186	0.19687	1.92717	1.99E-03	4.43E-07	4.35E-06	4.62E-07	3.79E-06	1.9944E-03
519939.77	4258589.65	11446.76697	0.32451	0.88393	0.35707	0.84077	1.99E-03	7.62E-07	1.81E-06	8.38E-07	1.66E-06	1.9905E-03
520766.88	4258380.26	11443.98906	0.09812	0.10033	0.09527	0.10407	1.98E-03	2.30E-07	2.06E-07	2.24E-07	2.05E-07	1.9858E-03
520740.81	4258512.96	11439.92732	0.10613	0.10549	0.1024	0.10936	1.98E-03	2.49E-07	2.16E-07	2.40E-07	2.15E-07	1.9851E-03
519993.61	4258362.05	11436.14783	0.19491	2.07488	0.20347	1.88569	1.98E-03	4.58E-07	4.26E-06	4.78E-07	3.71E-06	1.9925E-03
520037.42	4258194.17	11428.96272	0.13541	5.13176	0.14247	4.27669	1.98E-03	3.18E-07	1.05E-05	3.34E-07	8.42E-06	2.0019E-03
520050.06	4259454.95	11427.61853	8.09177	0.11042	14.20794	0.10783	1.98E-03	1.90E-05	2.26E-07	3.34E-05	2.12E-07	2.0349E-03
519996.08	4258341.06	11419.63228	0.18276	2.16383	0.19048	1.96419	1.98E-03	4.29E-07	4.44E-06	4.47E-07	3.87E-06	1.9899E-03
520741.16	4258503.83	11413.85342	0.10594	0.10552	0.10223	0.10946	1.98E-03	2.49E-07	2.16E-07	2.40E-07	2.15E-07	1.9806E-03
519878.13	4258709.69	11413.29674	0.27083	0.46558	0.28794	0.45079	1.98E-03	6.36E-07	9.55E-07	6.76E-07	8.87E-07	1.9827E-03
520741.5	4258494.69	11412.88106	0.10576	0.10558	0.10209	0.1096	1.98E-03	2.48E-07	2.17E-07	2.40E-07	2.16E-07	1.9804E-03
520097.5	4258074.16	11409.83044	0.11752	17.28431	0.11981	17.82044	1.98E-03	2.76E-07	3.54E-05	2.81E-07	3.51E-05	2.0501E-03
520027.51	4258218.24	11395.77086	0.13996	3.97313	0.14671	3.42692	1.98E-03	3.29E-07	8.15E-06	3.44E-07	6.75E-06	1.9921E-03
520763.5	4258397.25	11392.10153	0.09923	0.10085	0.09635	0.10472	1.98E-03	2.33E-07	2.07E-07	2.26E-07	2.06E-07	1.9768E-03
520765.26	4258609	11389.44132	0.10095	0.0968	0.09798	0.10002	1.98E-03	2.37E-07	1.99E-07	2.30E-07	1.97E-07	1.9763E-03
520084.75	4259476.12	11387.90235	13.65237	0.11118	13.6865	0.10701	1.98E-03	3.21E-05	2.28E-07	3.21E-05	2.11E-07	2.0398E-03
519992.08	4258372.67	11380.50649	0.20126	2.02181	0.21023	1.83931	1.97E-03	4.72E-07	4.15E-06	4.94E-07	3.62E-06	1.9826E-03
520046.92	4258170.27	11374.12586	0.13091	6.92348	0.13767	5.46662	1.97E-03	3.07E-07	1.42E-05	3.23E-07	1.08E-05	1.9984E-03
520751.09	4258442.28	11373.04022	0.1028	0.10346	0.09962	0.10764	1.97E-03	2.41E-07	2.12E-07	2.34E-07	2.12E-07	1.9735E-03
519825.58	4258842.46	11367.70512	0.24516	0.28564	0.25591	0.27909	1.97E-03	5.76E-07	5.86E-07	6.01E-07	5.49E-07	1.9740E-03
519986.47	4258465.43	11361.43497	0.28741	1.79455	0.3063	1.62836	1.97E-03	6.75E-07	3.68E-06	7.19E-07	3.21E-06	1.9789E-03
519997.09	4258330.66	11361.22735	0.17701	2.2015	0.18432	1.99732	1.97E-03	4.16E-07	4.52E-06	4.33E-07	3.93E-06	1.9798E-03
520003.15	4258298.19	11348.32202	0.16283	2.4407	0.1691	2.20078	1.97E-03	3.82E-07	5.01E-06	3.97E-07	4.33E-06	1.9784E-03
520755.42	4258580.5	11346.70541	0.10313	0.10011	0.09998	0.10351	1.97E-03	2.42E-07	2.05E-07	2.35E-07	2.04E-07	1.9689E-03
520745.64	4258542.52	11340.92501	0.10519	0.10376	0.10166	0.10733	1.97E-03	2.47E-07	2.13E-07	2.39E-07	2.11E-07	1.9679E-03
520744.6	4258476.96	11331.1041	0.10477	0.10492	0.10126	0.10902	1.97E-03	2.46E-07	2.15E-07	2.38E-07	2.15E-07	1.9662E-03
520063.98	4258133.27	11330.64887	0.12505	16.43267	0.13048	9.54957	1.97E-03	2.94E-07	3.37E-05	3.06E-07	1.88E-05	2.0183E-03
520747.8	4258459.5	11327.87989	0.10381	0.10414	0.10045	0.10833	1.96E-03	2.44E-07	2.14E-07	2.36E-07	2.13E-07	1.9657E-03
519969.52	4258531.34	11324.73535	0.33839	1.32981	0.37092	1.23227	1.96E-03	7.94E-07	2.73E-06	8.71E-07	2.43E-06	1.9710E-03
519829.52	4258828.01	11314.48529	0.24533	0.29782	0.25654	0.29088	1.96E-03	5.76E-07	6.11E-07	6.02E-07	5.73E-07	1.9648E-03
520760.19	4258414.43	11308.97063	0.1003	0.1013	0.09734	0.10531	1.96E-03	2.35E-07	2.08E-07	2.29E-07	2.07E-07	1.9624E-03
519979.4	4258502.21	11307.06942	0.32335	1.56857	0.35147	1.43612	1.96E-03	7.59E-07	3.22E-06	8.25E-07	2.83E-06	1.9688E-03
519872.28	4258719.71	11301.42977	0.26583	0.44272	0.28146	0.42944	1.96E-03	6.24E-07	9.08E-07	6.61E-07	8.45E-07	1.9632E-03
520040.16	4259454.96	11293.96818	5.68902	0.10917	7.99091	0.10693	1.96E-03	1.34E-05	2.24E-07	1.88E-05	2.10E-07	1.9914E-03
519842.05	4258791.5	11285.32075	0.24965	0.3355	0.26207	0.32711	1.96E-03	5.86E-07	6.88E-07	6.15E-07	6.44E-07	1.9599E-03
519856.69	4258754.44	11265.21833	0.25641	0.38419	0.27037	0.37358	1.95E-03	6.02E-07	7.88E-07	6.35E-07	7.35E-07	1.9567E-03
520074.85	4259476.13	11262.50929	16.26559	0.10991	24.47647	0.10628	1.95E-03	3.82E-05	2.25E-07	5.75E-05	2.09E-07	2.0495E-03
520745.69	4258533.04	11253.45094	0.10506	0.10396	0.10149	0.10757	1.95E-03	2.47E-07	2.13E-07	2.38E-07	2.12E-07	1.9528E-03
520020.99	4258230.91	11246.76693	0.14175	3.42655	0.14802	3.00374	1.95E-03	3.33E-07	7.03E-06	3.48E-07	5.91E-06	1.9643E-03
520106.57	4258053.98	11245.37638	0.11412	11.87464	0.1157	13.63537	1.95E-03	2.68E-07	2.44E-05	2.72E-07	2.68E-05	2.0022E-03
520010.16	4258265.34	11242.19437	0.15086	2.76812	0.15665	2.4733	1.95E-03	3.54E-07	5.68E-06	3.68E-07	4.87E-06	1.9612E-03
519959.61	4258550.78	11227.98053	0.33546	1.15048	0.3679	1.07708	1.95E-03	7.88E-07	2.36E-06	8.64E-07	2.12E-06	1.9536E-03
520004.02	4258287.85	11213.43607	0.158	2.47515	0.16396	2.23093	1.94E-03	3.71E-07	5.08E-06	3.85E-07	4.39E-06	1.9551E-03
519949.69	4258570.21	11204.95883	0.32834	1.00353	0.35999	0.94758	1.94E-03	7.71E-07	2.06E-06	8.45E-07	1.87E-06	1.9490E-03
519907.12	4258646.05	11203.77788	0.28974	0.61734	0.31148	0.59752	1.94E-03	6.80E-07	1.27E-06	7.31E-07	1.18E-06	1.9471E-03
520745.74	4258523.56	11191.34786	0.10495	0.10407	0.10133	0.10775	1.94E-03	2.46E-07	2.13E-07	2.38E-07	2.12E-07	1.9420E-03
520054.88	4258147.02	11187.97148	0.12612	9.5546	0.13224	6.93828	1.94E-03	2.96E-07	1.96E-05	3.10E-07	1.37E-05	1.9744E-03
520765.32	4258599.52	11179.78712	0.10081	0.09707	0.09787	0.10034	1.94E-03	2.37E-07	1.99E-07	2.30E-07	1.98E-07	1.9399E-03
520755.48	4258571.02	11173.40605	0.10299	0.10038	0.09981	0.10378	1.94E-03	2.42E-07	2.06E-07	2.34E-07	2.04E-07	1.9389E-03
520037.84	4258184.01	11166.20338	0.13179	5.18194	0.13868	4.31285	1.94E-03	3.09E-07	1.06E-05	3.26E-07	8.49E-06	1.9565E-03
519986.87	4258440.2	11161.51388	0.25701	1.8281	0.27109	1.66355	1.94E-03	6.03E-07	3.75E-06	6.36E-07	3.27E-06	1.9442E-03
520028.08	4258208.01	11157.04798	0.13618	4.02	0.14283	3.46318	1.94E-03	3.20E-07	8.24E-06	3.35E-07	6.82E-06	1.9509E-03
520084.76	4259486.12	11152.60518	13.26241	0.1094	13.34248	0.10533	1.93E-03	3.11E-05	2.24E-07	3.13E-05	2.07E-07	1.9973E-03
519897.12	4258664.6	11142.53322	0.28074	0.56036	0.29945	0.5433	1.93E-03	6.59E-07	1.15E-06	7.03E-07	1.07E-06	1.9362E-03
520770.31	4258389.26	11138.8966	0.09754	0.09918	0.09476	0.1029	1.93E-03	2.29E-07	2.03E-07	2.22E-07	2.03E-07	1.9328E-03
520757.84	4258434.14	11123.29574	0.1011	0.10166	0.09805	0.10573	1.93E-03	2.37E-07	2.08E-07	2.30E-07	2.08E-07	1.9302E-03
519832.76	4258811.9	11117.62642	0.24305	0.31078	0.2546	0.30336	1.93E-03	5.71E-07	6.37E-07	5.98E-07	5.97E-07	1.9307E-03
519815.46	4258866.02	11106.23991	0.23791	0.2636	0.2473	0.25776	1.93E-03	5.59E-07	5.41E-07	5.81E-07	5.07E-07	1.9285E-03
520045.13	4259466.18	11104.74966	6.8697	0.10784	10.48169	0.10548	1.93E-03	1.61E-05	2.21E-07	2.46E-05	2.08E-07	1.9672E-03
520097.53	4258064.16	11095.06439	0.11461	17.30617	0.11679	17.78716	1.92E-03	2.69E-07	3.55E-05	2.74E-07	3.50E-05	1.9954E-03
520748.05	4258486.01	11075.012	0.10399	0.10386	0.10048	0.10782	1.92E-03	2.44E-07	2.13E-07	2.36E-07	2.12E-07	1.9218E-03
520766.95	4258406.31	11072.93479	0.09863	0.09962	0.09577	0.1035	1.92E-03	2.32E-07	2.04E-07	2.25E-07	2.04E-07	1.9214E-03
520010.95	4258255.03	11066.25063	0.14662	2.80633	0.15226	2.50599	1.92E-03	3.44E-07	5.76E-06	3.57E-07	4.93E-06	1.9308E-03
520004.8	4258277.54	11064.40339	0.1534	2.5081	0.15909	2.25965	1.92E-03	3.60E-07	5.14E-06	3.73E-07	4.45E-06	1.9294E-03
519986.98	4258415.68	11064.18011	0.23181	1.849	0.24324	1.68584	1.92E-03	5.44E-07	3.79E-06	5.71E-07	3.32E-06	1.9273E-03
520754.49	4258451.2	11060.9247	0.10209	0.10233	0.09888	0.10644	1.92E-03	2.40E-07	2.10E-07	2.32E-07	2.10E-07	1.9194E-03
519982.9	4258474.12	11056.06162	0.2915	1.69232	0.31206	1.54092	1.92E-03	6.84E-07	3.47E-06	7.33E-07	3.03E-06	1.9255E-03
519887.12	4258683.15	11046.09996	0.27195	0.51119	0.28874	0.49584	1.92E-03	6.38E-07	1.05E-06	6.78E-07	9.76E-07	1.9192E-03
520064.18	4258123.2	11040.33094	0.12185	16.62208	0.12704	9.59777	1.91E-03	2.86E-07	3.41E-05	2.98E-07	1.89E-05	1.9685E-03
519865.9	4258728.44	11040.09877	0.25811	0.42122	0.27293	0.40891	1.91E-03	6.06E-07	8.64E-07	6.41E-07	8.05E-07	1.9178E-03
520751.22	4258468.49	11037.42749	0.10305	0.10309	0.09968	0.10715	1.91E-03	2.42E-07	2.11E-07	2.34E-07	2.11E-07	1.9153E-03
520074.86	4259486.13	11031.69951	15.94607	0.10816	23.43619	0.10461	1.91E-03	3.74E-05	2.22E-07	5.50E-05	2.06E-07	2.0063E-03
519979.36	4258492.51	11022.02567	0.3089	1.58261	0.33394	1.44847	1.91E-03	7.25E-07	3.25E-06	7.84E-07	2.85E-06	1.9193E-03
520755.53	4258561.54	11021.30182	0.10286	0.10066	0.09963	0.10405	1.91E-03	2.41E-07	2.06E-07	2.34E-07	2.05E-07	1.9125E-03
520045.64	4258160.82	11015.99486	0.12702	6.5996	0.13358	5.26288	1.91E-03	2.98E-07	1.35E-05	3.14E-07	1.04E-05	1.9352E-03
519919.89	4258618.83	11009.96033	0.29854	0.70827	0.3243	0.68249	1.91E-03	7.01E-07	1.45E-06	7.61E-07	1.34E-06	1.9139E-03

519818.69	4258849.89	10991.9581	0.23633	0.27455	0.24619	0.26845	1.91E-03	5.55E-07	5.63E-07	5.78E-07	5.28E-07	1.9087E-03
520765.37	4258590.04	10982.86187	0.10069	0.09736	0.09775	0.10064	1.90E-03	2.36E-07	2.00E-07	2.29E-07	1.98E-07	1.9058E-03
520763.67	4258423.56	10976.73472	0.09963	0.10016	0.09668	0.10414	1.90E-03	2.34E-07	2.05E-07	2.27E-07	2.05E-07	1.9047E-03
519850.14	4258762.77	10972.44601	0.24861	0.36636	0.26133	0.35678	1.90E-03	5.84E-07	7.51E-07	6.14E-07	7.02E-07	1.9058E-03
520035.22	4259466.2	10971.5653	4.9616	0.10665	6.60344	0.10459	1.90E-03	1.16E-05	2.19E-07	1.55E-05	2.06E-07	1.9305E-03
519986.86	4258391.7	10939.36884	0.21056	1.85797	0.22008	1.69827	1.90E-03	4.94E-07	3.81E-06	5.17E-07	3.34E-06	1.9055E-03
520106.6	4258043.98	10933.64853	0.11136	11.88598	0.11285	13.52951	1.90E-03	2.61E-07	2.44E-05	2.65E-07	2.66E-05	1.9479E-03
520084.78	4259496.12	10925.16323	12.91227	0.10767	12.93859	0.10368	1.89E-03	3.03E-05	2.21E-07	3.04E-05	2.04E-07	1.9560E-03
520028.61	4258197.81	10921.1159	0.13257	4.06418	0.13911	3.49663	1.89E-03	3.11E-07	8.34E-06	3.27E-07	6.88E-06	1.9101E-03
519844.85	4258774.14	10914.81807	0.2451	0.35033	0.25735	0.34141	1.89E-03	5.75E-07	7.18E-07	6.04E-07	6.72E-07	1.8957E-03
520055.16	4258136.91	10910.03442	0.12288	9.65391	0.12877	6.98286	1.89E-03	2.88E-07	1.98E-05	3.02E-07	1.37E-05	1.9264E-03
520038.24	4258173.86	10909.75408	0.12835	5.2302	0.13504	4.34501	1.89E-03	3.01E-07	1.07E-05	3.17E-07	8.55E-06	1.9121E-03
519929.81	4258599.39	10907.35103	0.30641	0.79332	0.33505	0.75982	1.89E-03	7.19E-07	1.63E-06	7.87E-07	1.50E-06	1.8965E-03
520755.58	4258552.06	10891.38907	0.10274	0.10089	0.09945	0.10429	1.89E-03	2.41E-07	2.07E-07	2.33E-07	2.05E-07	1.8899E-03
520011.67	4258244.74	10882.57233	0.14255	2.84	0.14808	2.53522	1.89E-03	3.35E-07	5.82E-06	3.48E-07	4.99E-06	1.8990E-03
520045.14	4259476.18	10881.7947	6.88458	0.10619	10.69573	0.10386	1.89E-03	1.62E-05	2.18E-07	2.51E-05	2.04E-07	1.9291E-03
520750.81	4258513.33	10873.8756	0.10356	0.10271	0.1	0.10641	1.89E-03	2.43E-07	2.11E-07	2.35E-07	2.09E-07	1.8869E-03
519969.48	4258521.64	10859.61698	0.32418	1.34376	0.3537	1.24481	1.88E-03	7.61E-07	2.76E-06	8.30E-07	2.45E-06	1.8903E-03
520751.15	4258504.2	10849.85966	0.10339	0.10273	0.09984	0.1065	1.88E-03	2.43E-07	2.11E-07	2.34E-07	2.10E-07	1.8828E-03
520751.49	4258495.07	10848.92829	0.10322	0.10279	0.09971	0.10662	1.88E-03	2.42E-07	2.11E-07	2.34E-07	2.10E-07	1.8826E-03
520018.55	4258221.93	10840.01517	0.13683	3.24406	0.14273	2.85985	1.88E-03	3.21E-07	6.65E-06	3.35E-07	5.63E-06	1.8931E-03
520773.74	4258398.27	10838.64	0.09698	0.098	0.09423	0.10174	1.88E-03	2.28E-07	2.01E-07	2.21E-07	2.00E-07	1.8808E-03
519821.86	4258833.61	10830.06899	0.2343	0.28607	0.24455	0.27962	1.88E-03	5.50E-07	5.87E-07	5.74E-07	5.50E-07	1.8807E-03
519880.82	4258692.07	10826.97524	0.26444	0.48514	0.28031	0.47075	1.88E-03	6.21E-07	9.95E-07	6.58E-07	9.27E-07	1.8811E-03
520761.22	4258443	10810.47096	0.1004	0.1006	0.09734	0.10461	1.88E-03	2.36E-07	2.06E-07	2.29E-07	2.06E-07	1.8759E-03
520074.88	4259496.13	10808.20329	15.68911	0.10645	22.17807	0.10298	1.87E-03	3.68E-05	2.18E-07	5.21E-05	2.03E-07	1.9640E-03
520765.42	4258580.56	10800.78768	0.10056	0.09766	0.09762	0.10094	1.87E-03	2.36E-07	2.00E-07	2.29E-07	1.99E-07	1.8742E-03
519979.32	4258482.81	10795.64776	0.29536	1.59577	0.31754	1.45977	1.87E-03	6.93E-07	3.27E-06	7.45E-07	2.87E-06	1.8800E-03
519983.36	4258448.73	10794.27214	0.26067	1.72826	0.2754	1.57766	1.87E-03	6.12E-07	3.54E-06	6.47E-07	3.11E-06	1.8801E-03
519859.47	4258737.04	10786.78924	0.25076	0.40115	0.26451	0.3899	1.87E-03	5.89E-07	8.23E-07	6.21E-07	7.68E-07	1.8737E-03
520755.64	4258542.58	10784.31248	0.10261	0.10111	0.09927	0.10453	1.87E-03	2.41E-07	2.07E-07	2.33E-07	2.06E-07	1.8714E-03
519939.73	4258579.95	10772.59679	0.31305	0.89514	0.3427	0.85118	1.87E-03	7.35E-07	1.84E-06	8.05E-07	1.68E-06	1.8735E-03
520754.64	4258477.47	10772.49718	0.10229	0.10208	0.09891	0.10601	1.87E-03	2.40E-07	2.09E-07	2.32E-07	2.09E-07	1.8693E-03
519992.24	4258322.68	10771.63474	0.16858	2.03556	0.17524	1.85996	1.87E-03	3.96E-07	4.17E-06	4.11E-07	3.66E-06	1.8769E-03
520757.89	4258460.12	10768.89645	0.10138	0.10122	0.09813	0.10523	1.87E-03	2.38E-07	2.08E-07	2.30E-07	2.07E-07	1.8687E-03
519825.91	4258819.42	10761.01318	0.23451	0.29814	0.24524	0.29122	1.87E-03	5.51E-07	6.11E-07	5.76E-07	5.73E-07	1.8688E-03
520770.4	4258415.37	10753.70131	0.09799	0.09849	0.09516	0.10235	1.87E-03	2.30E-07	2.02E-07	2.23E-07	2.01E-07	1.8660E-03
520035.24	4259476.2	10753.56069	5.00497	0.10501	6.70911	0.10299	1.87E-03	1.18E-05	2.15E-07	1.58E-05	2.03E-07	1.8931E-03
520046	4258150.68	10750.72962	0.12375	6.66743	0.13012	5.30283	1.86E-03	2.91E-07	1.37E-05	3.05E-07	1.04E-05	1.8894E-03
520096.78	4258053.95	10750.35762	0.11157	18.01865	0.11367	18.14535	1.86E-03	2.62E-07	3.70E-05	2.67E-07	3.57E-05	1.9378E-03
519993.42	4258312.2	10719.6628	0.16365	2.07438	0.16998	1.89404	1.86E-03	3.84E-07	4.25E-06	3.99E-07	3.73E-06	1.8680E-03
520755.69	4258533.09	10701.34579	0.1025	0.10128	0.09911	0.10474	1.86E-03	2.41E-07	2.08E-07	2.33E-07	2.06E-07	1.8570E-03
520061.5	4258116.61	10697.18628	0.11884	13.65703	0.12402	8.64626	1.86E-03	2.79E-07	2.80E-05	2.91E-07	1.70E-05	1.9010E-03
520012.34	4258234.48	10694.52747	0.13866	2.86959	0.1441	2.5603	1.85E-03	3.26E-07	5.89E-06	3.38E-07	5.04E-06	1.8665E-03
519983.52	4258424.08	10688.57444	0.23499	1.75046	0.24662	1.60169	1.85E-03	5.52E-07	3.59E-06	5.79E-07	3.15E-06	1.8618E-03
520029.1	4258187.62	10688.22207	0.1291	4.10761	0.13555	3.52922	1.85E-03	3.03E-07	8.42E-06	3.18E-07	6.95E-06	1.8698E-03
520045.16	4259486.18	10665.26858	7.02856	0.10452	11.02098	0.10225	1.85E-03	1.65E-05	2.14E-07	2.59E-05	2.01E-07	1.8926E-03
520082.08	4259506.95	10656.25792	13.40689	0.10552	14.06741	0.10178	1.85E-03	3.15E-05	2.16E-07	3.30E-05	2.00E-07	1.9132E-03
520767.14	4258432.68	10654.39551	0.09893	0.09911	0.096	0.10304	1.85E-03	2.32E-07	2.03E-07	2.25E-07	2.03E-07	1.8488E-03
519907.12	4258636.77	10652.02122	0.28198	0.62453	0.30367	0.60476	1.85E-03	6.62E-07	1.28E-06	7.13E-07	1.19E-06	1.8514E-03
519994.47	4258301.78	10643.77811	0.15889	2.10997	0.16491	1.92504	1.85E-03	3.73E-07	4.33E-06	3.87E-07	3.79E-06	1.8550E-03
520755.74	4258523.61	10643.00193	0.10241	0.10135	0.09897	0.10488	1.85E-03	2.40E-07	2.08E-07	2.32E-07	2.06E-07	1.8469E-03
520106.64	4258033.98	10640.27187	0.10872	11.88694	0.11013	13.52701	1.85E-03	2.55E-07	2.44E-05	2.59E-07	2.66E-05	1.8970E-03
520055.42	4258126.82	10640.112	0.11978	9.74745	0.12545	7.01866	1.85E-03	2.81E-07	2.00E-05	2.95E-07	1.38E-05	1.8799E-03
520765.48	4258571.08	10636.57503	0.10045	0.09792	0.09747	0.10119	1.84E-03	2.36E-07	2.01E-07	2.29E-07	1.99E-07	1.8457E-03
520019.2	4258211.68	10635.23792	0.13323	3.28858	0.13909	2.89728	1.84E-03	3.13E-07	6.74E-06	3.27E-07	5.70E-06	1.8577E-03
519811.79	4258857.29	10635.08246	0.22796	0.26414	0.23698	0.25845	1.84E-03	5.35E-07	5.42E-07	5.56E-07	5.09E-07	1.8467E-03
519959.56	4258541.08	10634.53003	0.32166	1.16311	0.35129	1.08859	1.84E-03	7.55E-07	2.39E-06	8.25E-07	2.14E-06	1.8506E-03
519838.31	4258782.47	10628.09417	0.23761	0.33507	0.24905	0.32682	1.84E-03	5.58E-07	6.87E-07	5.85E-07	6.43E-07	1.8459E-03
519897.12	4258655.32	10616.61773	0.27333	0.56668	0.29202	0.55002	1.84E-03	6.42E-07	1.16E-06	6.86E-07	1.08E-06	1.8450E-03
519987.55	4258344.58	10613.32298	0.17786	1.89087	0.18501	1.73451	1.84E-03	4.18E-07	3.88E-06	4.34E-07	3.41E-06	1.8490E-03
520001.27	4258269.01	10603.63537	0.14734	2.35602	0.15261	2.13509	1.84E-03	3.46E-07	4.83E-06	3.58E-07	4.20E-06	1.8489E-03
519986.31	4258355.08	10601.84911	0.18343	1.85405	0.1909	1.70155	1.84E-03	4.31E-07	3.80E-06	4.48E-07	3.35E-06	1.8469E-03
519983.45	4258400	10601.2884	0.21338	1.76232	0.22303	1.61602	1.84E-03	5.01E-07	3.61E-06	5.24E-07	3.18E-06	1.8466E-03
519988.65	4258334.14	10594.41997	0.17247	1.92421	0.17931	1.76432	1.84E-03	4.05E-07	3.95E-06	4.21E-07	3.47E-06	1.8458E-03
519874.46	4258700.84	10575.77307	0.25635	0.46102	0.27196	0.44715	1.83E-03	6.02E-07	9.46E-07	6.38E-07	8.80E-07	1.8374E-03
520036.69	4258164.51	10563.71496	0.1245	4.99211	0.13097	4.17592	1.83E-03	2.92E-07	1.02E-05	3.07E-07	8.22E-06	1.8513E-03
519887.12	4258673.87	10555.25032	0.26503	0.51696	0.28131	0.50225	1.83E-03	6.22E-07	1.06E-06	6.60E-07	9.89E-07	1.8341E-03
519984.87	4258365.66	10551.81349	0.18914	1.81234	0.19695	1.66432	1.83E-03	4.44E-07	3.72E-06	4.62E-07	3.28E-06	1.8381E-03
519995.42	4258291.4	10547.68496	0.15431	2.14017	0.16	1.9521	1.83E-03	3.62E-07	4.39E-06	3.76E-07	3.84E-06	1.8384E-03
520072.18	4259506.97	10542.71872	14.75712	0.1043	25.19065	0.10106	1.83E-03	3.46E-05	2.14E-07	5.91E-05	1.99E-07	1.9228E-03
520035.26	4259486.2	10541.93905	5.07758	0.10338	6.82972	0.10139	1.83E-03	1.19E-05	2.12E-07	1.60E-05	2.00E-07	1.8568E-03
519949.65	4258560.52	10539.86989	0.3147	1.01372	0.34318	0.95744	1.83E-03	7.39E-07	2.08E-06	8.06E-07	1.88E-06	1.8336E-03
520777.17	4258407.27	10536.71452	0.09639	0.09686	0.09366	0.1006	1.83E-03	2.26E-07	1.99E-07	2.20E-07	1.98E-07	1.8284E-03
520758.06	4258486.46	10535.17352	0.10153	0.10109	0.09816	0.10489	1.83E-03	2.38E-07	2.07E-07	2.30E-07	2.06E-07	1.8282E-03
520062	4258109.76	10534.94741	0.11695	14.08256	0.12197	8.78526	1.83E-03	2.75E-07	2.89E-05	2.86E-07	1.73E-05	1.8740E-03
519829.12	4258803.25	10534.87652	0.2321	0.31072	0.24293	0.30336	1.83E-03	5.45E-07	6.37E-07	5.70E-07	5.97E-07	1.8296E-03
519852.99	4258745.53	10525.48493	0.24335	0.38257	0.25633	0.37215	1.83E-03	5.71E-07	7.85E-07	6.02E-07	7.33E-07	1.8283E-03
520764.59	4258451.87	10519.03891	0.09971	0.09955	0.09662	0.10348	1.82E-03	2.34E-07	2.04E-07	2.27E-07	2.04E-07	1.8253E-03
520761.29	4258469.05	10498.70058	0.10064	0.10026	0.09738	0.10415	1.82E-03	2.36E-07	2.06E-07	2.29E-07	2.05E-07	1.8218E-03
520046.34	4258140.55	10497.27864	0.12064	6.73129	0.1268	5.33984	1.82E-03	2.83E-07	1.38E-05	2.98E-07	1.05E-05	1.8456E-03
520765.53	4258561.6	10492.73178	0.10034	0.09815	0.0973	0.10141	1.82E-03	2.36E-07	2.01E-07	2.28E-07	2.00E-07	1.8208E-03
519814.99	4258841.1	10486.96361	0.22617	0.27495	0.23559	0.26894	1.82E-03	5.31E-07	5.64E-07	5.53E-07	5.29E-07	1.8211E-03
519969.44	4258511.95	10479.55788	0.31066	1.35671	0.33741	1.25662	1.82E-03	7.29E-07	2.78E-06	7.92E-07	2.47E-06	1.8244E-03
520002.15	4258258.66	10465.7646	0.14329	2.39178	0.14837	2.16553	1.82E-03	3.36E-07	4.91E-06	3.48E-07	4.26E-06	1.8251E-03
519979.85	4258457.26	10464.44738	0.26423	1.63585	0.27996	1.49764	1.82E-03	6.20E-07	3.36E-06	6.57E-07	2.95E-06	1.8226E-03
520096.82	4258043.95	10464.23976	0.10891	18.03618	0.11091	17.95999	1.81E-03	2.56E-07	3.70E-05	2.60E-07	3.54E-05	1.8878E-03
519868.49	4258710.57	10461.93637	0.25126	0.43893	0.26568	0.42624	1.81E-03	5.90E-07	9.00E-07	6.24E-07	8.39E-07	1.8175E-03
520029.55	4258177.44	10458.05669	0.12578	4.14291	0.13211	3.55467	1.81E-03	2.95E-07	8.50E-06	3.10E-07	7.00E-06	1.8300E-03
520045.18	4259496.18	10455.25736	7.16622	0.1029	11.48355	0.10067	1.81E-03	1.68E-05	2.11E-07	2.70E-05	1.98E-07	1.8576E-03
520082.1	4259516.95	10444.02112	13.05274	0.10388	13.52034	0.10022	1.81E-03	3.06E-05	2.13E-07	3.17E-05	1.97E-07	1.8743E-03
520773.85	4258424.44	10439.01492	0.09733	0.09746	0.09452	0.10128	1.81E-03	2.28E-07	2.00E-07	2.22E-07	1.99E-07	1.8114E-03
519996.27	4258281.06	10435.60227	0.14992	2.16925	0.15531	1.97764	1.81E-03	3.52E-07	4.45E-06	3.65E-07	3.89E-06	1.8191E-03
520019.8	4258201.44	10424.14289	0.12973	3.31428	0.13554	2.91303	1.81E-03	3.05E-07	6.80E-06	3.18E-07	5.73E-06	1.8212E-03
519919.85	4258609.13	10408.39853	0.28969	0.7171	0.31466	0.69075	1.81E-03	6.80E-07	1.47E-06	7.39E-07	1.36E-06	1.8095E-03
520781.19	4258599.97	10370.77127	0.0969	0.09327	0.09421	0.09637	1.80E-03	2.27E-07	1.91E-07	2.21E-07	1.90E-07	1.7996E-03
520765.58	4258552.11	10369.38629	0.10023	0.09836	0.09713	0.10162	1.80E-03	2.35E-07	2.02E-07	2.28E-07	2.00E-07	1.7994E-03
520106.67	4258023.98	10356.90929	0.10619	11.89394	0.10752	13.4786	1.80E-03	2.49E-07	2.44E-05	2.52E-07	2.65E-05	1.8478E-03
520760.8	4258513.71	10349.3448	0.10108	0.10006	0.09769	0.1036	1.80E-03	2.37E-07	2.05E-07	2.29E-07	2.04E-07	1.7959E-03
520770.62	4258441.81	10346.09765	0.09822	0.09809	0.09529	0.10195	1.79E-03	2.31E-07	2.01E-07	2.24E-07	2.01E-07	1.7953E-03
520035.28	4259496.2	10336.33645	5.16322	0.10178	6.98422	0.09984	1.79E-03	1.21E-05	2.09E-07	1.64E-05	1.97E-07	1.8217E-03
520072.2	4259516.97	10334.70885	14.37437	0.1027	23.54454	0.09953	1.79E-03	3.37E-05	2.11E-07	5.53E-05	1.96E-07	1.8819E-03
520037.12	4258154.35	10329.10641	0.12137	5.04232	0.1277	4.21132	1.79E-03	2.85E-07	1.03E-05	3.00E-07	8.29E-06	1.8108E-03
519980.06	4258432.48	10327.91799	0.23809	1.65945	0.25	1.5232	1.79E-03	5.59E-07	3.40E-06	5.87E-07	3.00E-06	1.7989E-03
520761.14	4258504.58	10326.32292	0.10093	0.10006	0.09755	0.10366	1.79E-03	2.37E-07	2.05E-07	2.29E-07	2.04E-07	1.7919E-03
520761.49	4258495.44	10324.6985	0.10077	0.10008	0.09742	0.10375	1.79E-03	2.37E-07	2.05E-07	2.29E-07	2.04E-07	1.7916E-03
520002.95	4258248.34	10317.26396	0.13941	2.4217	0.14432	2.19158	1.79E-03	3.27E-07	4.97E-06	3.39E-07	4.31E-06	1.7994E-03
520009.59	4258225.63	10303.97238	0.13381	2.71691	0.13889	2.43628	1.79E-03	3.14E-07	5.57E-06	3.26E-07	4.80E-06	1.7982E-03
519929.77	4258589.69	10299.41785	0.2967	0.80389	0.32387	0.76903	1.79E-03	6.97E-07	1.65E-06	7.60E-07	1.51E-06	1.7910E-03
519818.14	4258824.77	10292.5285	0.22395	0.28628	0.2337	0.27986	1.79E-03	5.26E-07	5.87E-07	5.49E-07	5.51E-07	1.7874E-03
519846.47	4258753.92	10272.66861	0.23627	0.36519	0.24831	0.35564	1.78E-03	5.55E-07	7.49E-07	5.83E-07	7.00E-07	1.7843E-03
520765.64	4258542.63	10267.75417	0.10013	0.09854	0.09697	0.10182	1.78E-03	2.35E-07	2.02E-07	2.28E-07	2.00E-07	1.7818E-03
519862.15	4258719.38	10258.22028	0.24466	0.41795	0.25808	0.4063	1.78E-03	5.74E-07	8.57E-07	6.06E-07	8.00E-07	1.7821E-03
520764.68	4258477.97	10251.97358	0.09988	0.09938	0.09665	0.10313	1.78E-03	2.34E-07	2.04E-07	2.27E-07	2.03E-07	1.7790E-03
520046.65	4258130.44	10250.01371	0.11765	6.78975	0.12362	5.37168	1.78E-03	2.76E-07	1.39E-05	2.90E-07	1.06E-05	1.8029E-03
520767.97	4258460.73	10246.91772	0.09901	0.09856	0.0959	0.10239	1.78E-03	2.32E-07	2.02E-07	2.25E-07	2.02E-07	1.7781E-03
520082.12	4259526.95	10237.74045	12.93918	0.10227	12.98519	0.0987	1.78E-03	3.04E-05	2.10E-07	3.05E-05	1.94E-07	1.8370E-03
519841.08	4258765.04	10233.92164	0.23305	0.34921	0.24424	0.34053	1.78E-03	5.47E-07	7.16E-07	5.73E-07	6.70E-07	1.7775E-03
520780.59	4258416.28	10233.32037	0.09575	0.09583	0.09307	0.09954	1.77E-03	2.25E-07	1.97E-07	2.18E-07	1.96E-07	1.7758E-03
520020.35	4258191.23	10223.83649	0.12644	3.35863	0.13221	2.95208	1.77E-03	2.97E-07	6.89E-06	3.10E-07	5.81E-06	1.7866E-03
519822.29	4258810.82	10212.61565	0.22424	0.2981	0.23433	0.29123	1.77E-03	5.26E-07	6.11E-07	5.50E-07	5.73E-07	1.7736E-03
520042.48	4259507.02	10203.14337	6.67455	0.10088	10.25519	0.09879	1.77E-03	1.57E-05	2.07E-07	2.41E-05	1.94E-07	1.8098E-03
520778.28	4258583.39	10203.08164	0.09743	0.09447	0.09472	0.0976	1.77E-03	2.29E-07	1.94E-07	2.22E-07	1.92E-07	1.7705E-03
520096.85	4258033.95	10194.0866	0.10638	18.05343	0.10826	18.0902	1.77E-03	2.50E-07	3.70E-05	2.54E-07	3.56E-05	1.8413E-03
520765.69	4258533.15	10189.31154	0.10004	0.09868	0.09682	0.102	1.77E-03	2.35E-07	2.02E-07	2.27E-07	2.01E-07	1.7682E-03
519959.52	4258531.38	10177.30844	0.30932	1.17559	0.33664	1.0997	1.77E-03	7.26E-07	2.41E-06	7.90E-07	2.16E-06	1.7713E-03
520059.08	4258101.95	10176.29182	0.11372	11.71354	0.11872	7.89602	1.77E-03	2.67E-07	2.40E-05	2.79E-07	1.55E-05	1.8051E-03
519976.34	4258465.79	10175.01483	0.26766	1.54944	0.2847	1.42297	1.76E-03	6.28E-07	3.18E-06	6.68E-07	2.80E-06	1.7721E-03
519969.4	4258502.25	10174.482	0.29781	1.36903	0.32207	1.26774	1.76E-03	6.99E-07	2.81E-06	7.56E-07	2.50E-06	1.7715E-03
520051.71	4258116.57	10164.12809	0.11537	8.22773	0.12097	6.20541	1.76E-03	2.71E-07	1.69E-05	2.84E-07	1.22E-05	1.7926E-03
520003.69	4258238.05	10161.88672	0.13568	2.44963	0.14047	2.21563	1.76E-03	3.19E-07	5.02E-06	3.30E-07	4.36E-06	1.7726E-03
519808.11	4258848.56	10160.47539	0.21843	0.26449	0.22707	0.2589	1.76E-03	5.13E-07	5.42E-07	5.33E-07	5.10E-07	1.7644E-03
519979.54	4258385.23	10135.8031	0.19762	1.67173	0.20584	1.54142	1.76E-03	4.64E-07	3.43E-06	4.83E-07	3.03E-06	1.7654E-03
520777.3	4258433.5	10135.73052	0.09665	0.09646	0.09386	0.10022	1.76E-03	2.27E-07	1.98E-07	2.20E-07	1.97E-07	1.7588E-03
520765.74	4258523.67	10133.90903	0.09995	0.09878	0.09669	0.10216	1.76E-03	2.35E-07	2.03E-07	2.27E-07	2.01E-07	1.7585E-03
520072.22	4259526.97	10133.05515	13.88786	0.10114	22.06855	0.09804	1.76E-03	3.26E-05	2.07E-07	5.18E-05	1.93E-07	1.8423E-03
520010.31	4258215.34	10129.31854	0.13035	2.75175	0.1354	2.46564	1.76E-03	3.06E-07	5.64E-06	3.18E-07	4.85E-06	1.7680E-03
520027.74	4258168.2	10124.38825	0.12198	3.95364	0.12807	3.40939	1.76E-03	2.86E-07	8.11E-06	3.01E-07	6.71E-06	1.7714E-03
519897.12	4258646.05	10113.0582	0.2663	0.5729	0.28508	0.55643	1.75E-03	6.25E-07	1.17E-06	6.69E-07	1.10E-06	1.7576E-03
520037.52	4258144.2	10095.20871	0.11836	5.0891	0.12456	4.24224	1.75E-03	2.78E-07	1.04E-05	2.92E-07	8.35E-06	1.7703E-03
519949.61	4258550.82	10093.60485	0.30621	1.02802	0.33318	0.96999	1.75E-03	7.19E-07	2.11E-06	7.82E-07	1.91E-06	1.7562E-03
520106.7	4258013.98	10089.12547	0.10377	11.89491	0.10501	13.54855	1.75E-03	2.44E-07	2.44E-05	2.47E-07	2.67E-05	1.8015E-03
519939.69	4258570.26	10089.12041	0.30001	0.90522	0.32637	0.86026	1.75E-03	7.04E-07	1.86E-06	7.66E-07	1.69E-06	1.7549E-03
520032.58	4259507.04	10088.69869	4.85894	0.09981	6.44808	0.09797	1.75E-03	1.14E-05	2.05E-07	1.51E-05	1.93E-07	1.7768E-03
519887.12	4258664.6	10078.4998	0.25839	0.52245	0.27449	0.5083	1.75E-03	6.07E-07	1.07E-06	6.44E-07	1.00E-06	1.7514E-03
520774.09	4258450.94	10058.92857	0.09752	0.0971	0.09458	0.10087	1.74E-03	2.29E-07	1.99E-07	2.22E-07	1.99E-07	1.7455E-03
519855.74	4258728.06	10042.19271	0.23794	0.39842	0.25057	0.38761	1.74E-03	5.59E-07	8.17E-07	5.88E-07	7.63E-07	1.7445E-03
520768.08	4258486.89	10033.0629	0.09915	0.09842	0.09592	0.10205	1.74E-03	2.33E-07	2.02E-07	2.25E-07	2.01E-07	1.7410E-03
520775.96	4258565.45	10033.04954	0.09785	0.09545	0.09501	0.0986	1.74E-03	2.30E-07	1.96E-07	2.23E-07	1.94E-07	1.7410E-03
519983.35	4258326.34	10031.90073	0.16415	1.77835	0.17031	1.64112	1.74E-03	3.85E-07	3.65E-06	4.00E-07	3.23E-06	1.7477E-03
520020.87	4258181.03	10020.27596	0.12326	3.38716	0.12898	2.97338	1.74E-03	2.89E-07	6.95E-06	3.03E-07	5.85E-06	1.7514E-03
520052.22	4258109.73	10018.80533	0.11359	8.39058	0.11904	6.29267	1.74E-03	2.67E-07	1.72E-05	2.79E-07	1.24E-05	1.7679E-03
519984.64	4258315.82	10017.04248	0.15953	1.81298	0.16547	1.67193	1.74E-03	3.75E-07	3.72E-06	3.88E-07	3.29E-06	1.7452E-03
519877.12	4258683.15	10009.35538	0.25051	0.47891	0.26507	0.46586	1.74E-03	5.88E-07	9.82E-07	6.22E-07	9.17E-07	1.7392E-03
520042.5	4259517.02	10006.70586	6.84583	0.09935	10.7863	0.0973	1.74E-03	1.61E-05	2.04E-07	2.53E-05	1.92E-07	1.7774E-03
519992.39	4258272.68	9994.83025	0.14395	2.03695	0.14895	1.86679	1.73E-03	3.38E-07	4.18E-06	3.50E-07	3.67E-06	1.7421E-03
520771.34	4258469.6	9994.017	0.09828	0.09769	0.09518	0.10139	1.73E-03	2.31E-07	2.00E-07	2.23E-07	2.00E-07	1.7343E-03
519976.61	4258440.89	9991.89084	0.24116	1.57546	0.25356	1.45005	1.73E-03	5.66E-07	3.23E-06	5.95E-07	2.85E-06	1.7403E-03
519834.56	4258773.44	9983.49861	0.2262	0.33428	0.23684	0.32613	1.73E-03	5.31E-07	6.86E-07	5.56E-07	6.42E-07	1.7340E-03
519811.3	4258832.31	9983.23171	0.2165	0.27511	0.22542	0.26917	1.73E-03	5.08E-07	5.64E-07	5.29E-07	5.30E-07	1.7337E-03
519985.78	4258305.36	9976.12458	0.15504	1.84378	0.16074	1.69941	1.73E-03	3.64E-07	3.78E-06	3.77E-07	3.35E-06	1.7382E-03
520078.01	4259538.19	9971.70159	14.22257	0.10006	14.94506	0.09678	1.73E-03	3.34E-05	2.05E-07	3.51E-05	1.91E-07	1.7984E-03
519825.48	4258794.6	9965.48379	0.22181	0.31015	0.2317	0.30298	1.73E-03	5.21E-07	6.36E-07	5.44E-07	5.96E-07	1.7308E-03
520010.98	4258205.08	9951.99143	0.12702	2.77954	0.13204	2.48754	1.73E-03	2.98E-07	5.70E-06	3.10E-07	4.90E-06	1.7373E-03
520784.02	4258425.28	9942.41132	0.09513	0.09479	0.09244	0.09847	1.72E-03	2.23E-07	1.94E-07	2.17E-07	1.94E-07	1.7253E-03
519909.89	4258618.87	9940.68631	0.27423	0.65229	0.29599	0.63125	1.72E-03	6.44E-07	1.34E-06	6.95E-07	1.24E-06	1.7281E-03
520096.88	4258023.95	9934.04371	0.10395	18.0718	0.10572	18.1656	1.72E-03	2.44E-07	3.71E-05	2.48E-07	3.58E-05	1.7963E-03
519972.83	4258474.32	9926.4727	0.2709	1.46845	0.2894	1.3531	1.72E-03	6.36E-07	3.01E-06	6.79E-07	2.66E-06	1.7287E-03
520059.11	4258091.95	9925.04438	0.11097	11.69128	0.11579	7.87756	1.72E-03	2.61E-07	2.40E-05	2.72E-07	1.55E-05	1.7615E-03
519976.62	4258416.58	9922.5313	0.21884	1.5909	0.22876	1.4674	1.72E-03	5.14E-07	3.26E-06	5.37E-07	2.89E-06	1.7282E-03
519969.36	4258492.55	9921.36641	0.28555	1.38068	0.30747	1.27815	1.72E-03	6.70E-07	2.83E-06	7.22E-07	2.52E-06	1.7276E-03
519986.81	4258294.95	9914.61432	0.1507	1.87096	0.15614	1.72373	1.72E-03	3.54E-07	3.84E-06	3.67E-07	3.39E-06	1.7276E-03
520028.23	4258158.01	9913.54666	0.11898	3.99708	0.12499	3.44306	1.72E-03	2.79E-07	8.20E-06	2.93E-07	6.78E-06	1.7350E-03
520032.6	4259517.04	9896.32076	4.95994	0.0983	6.63476	0.0965	1.72E-03	1.16E-05	2.02E-07	1.56E-05	1.90E-07	1.7441E-03
519993.35	4258262.29	9888.76579	0.14007	2.06373	0.14482	1.89033	1.72E-03	3.29E-07	4.23E-06	3.40E-07	3.72E-06	1.7238E-03
519980.21	4258337.62	9878.65998	0.168	1.69896	0.17426	1.57146	1.71E-03	3.94E-07	3.48E-06	4.09E-07	3.09E-06	1.7208E-03
520068.11	4259538.21	9870.62395	14.21053	0.09896	27.75039	0.09611	1.71E-03	3.34E-05	2.03E-07	6.51E-05	1.89E-07	1.8109E-03
520037.89	4258134.05	9869.63373	0.11549	5.1323	0.12153	4.26959	1.71E-03	2.71E-07	1.05E-05	2.85E-07	8.40E-06	1.7313E-03
519979.03	4258348.1	9865.72732	0.17304	1.66956	0.17955	1.54474	1.71E-03	4.06E-07	3.42E-06	4.22E-07	3.04E-06	1.7185E-03
520770.79	4258514.08	9861.72157	0.09868	0.09758	0.09547	0.10095	1.71E-03	2.32E-07	2.00E-07	2.24E-07	1.99E-07	1.7113E-03
520780.75	4258442.56	9852.89672	0.09598	0.09545	0.09317	0.09915	1.71E-03	2.25E-07	1.96E-07	2.19E-07	1.95E-07	1.7098E-03
519919.81	4258599.43	9843.87008	0.28104	0.72617	0.30522	0.69875	1.71E-03	6.60E-07	1.49E-06	7.17E-07	1.38E-06	1.7116E-03
520771.14	4258504.95	9839.16681	0.09855	0.09753	0.09533	0.10097	1.71E-03	2.31E-07	2.00E-07	2.24E-07	1.99E-07	1.7074E-03
520771.48	4258495.82	9837.53114	0.09841	0.09748	0.09521	0.10099	1.71E-03	2.31E-07	2.00E-07	2.24E-07	1.99E-07	1.7071E-03
519987.74	4258284.58	9835.6641	0.14653	1.89605	0.1517	1.74604	1.71E-03	3.44E-07	3.89E-06	3.56E-07	3.44E-06	1.7140E-03
520106.73	4258003.98	9834.53072	0.10146	11.89223	0.1026	13.68468	1.71E-03	2.38E-07	2.44E-05	2.41E-07	2.69E-05	1.7576E-03
519849.29	4258736.62	9822.04362	0.23127	0.38024	0.24322	0.37018	1.70E-03	5.43E-07	7.80E-07	5.71E-07	7.29E-07	1.7062E-03
519977.68	4258358.64	9821.03607	0.17821	1.63632	0.18497	1.5147	1.70E-03	4.18E-07	3.36E-06	4.34E-07	2.98E-06	1.7106E-03
519870.79	4258692	9816.54117	0.24364	0.4556	0.25757	0.44315	1.70E-03	5.72E-07	9.34E-07	6.05E-07	8.72E-07	1.7056E-03
520042.51	4259527.02	9815.9378	7.01281	0.09786	11.38372	0.09585	1.70E-03	1.65E-05	2.01E-07	2.67E-05	1.89E-07	1.7461E-03

519975.88	4258394.11	9805.55861	0.20022	1.58521	0.20852	1.46598	1.70E-03	4.70E-07	3.25E-06	4.90E-07	2.89E-06	1.7078E-03
519959.48	4258521.68	9800.85386	0.29761	1.1874	0.32273	1.11019	1.70E-03	6.99E-07	2.44E-06	7.58E-07	2.19E-06	1.7060E-03
520777.57	4258460.06	9792.3888	0.0968	0.09616	0.09385	0.09982	1.70E-03	2.27E-07	1.97E-07	2.20E-07	1.96E-07	1.6993E-03
520000.63	4258229.33	9786.83834	0.13091	2.31813	0.13535	2.10655	1.70E-03	3.07E-07	4.75E-06	3.18E-07	4.15E-06	1.7070E-03
520060.26	4258084.04	9783.85703	0.10921	12.47338	0.11384	8.17456	1.70E-03	2.56E-07	2.56E-05	2.67E-07	1.61E-05	1.7392E-03
520078.02	4259548.19	9780.24726	13.67845	0.09856	14.27527	0.09535	1.70E-03	3.21E-05	2.02E-07	3.35E-05	1.88E-07	1.7624E-03
520011.61	4258194.84	9774.10277	0.12385	2.8111	0.12885	2.51358	1.70E-03	2.91E-07	5.77E-06	3.02E-07	4.95E-06	1.7066E-03
520774.72	4258478.46	9768.6547	0.09757	0.09675	0.09447	0.10034	1.69E-03	2.29E-07	1.98E-07	2.22E-07	1.98E-07	1.6952E-03
519994.23	4258251.94	9765.24516	0.13633	2.08716	0.14086	1.91061	1.69E-03	3.20E-07	4.28E-06	3.31E-07	3.76E-06	1.7024E-03
519814.42	4258815.92	9761.40448	0.21414	0.28615	0.22325	0.2798	1.69E-03	5.03E-07	5.87E-07	5.24E-07	5.51E-07	1.6952E-03
519929.73	4258580	9737.53833	0.28716	0.81393	0.31238	0.77783	1.69E-03	6.74E-07	1.67E-06	7.33E-07	1.53E-06	1.6935E-03
520788.42	4258583.44	9733.13381	0.09504	0.0921	0.09249	0.09513	1.69E-03	2.23E-07	1.89E-07	2.17E-07	1.87E-07	1.6890E-03
520776.55	4258540.86	9730.70751	0.09752	0.09579	0.09451	0.09895	1.69E-03	2.29E-07	1.96E-07	2.22E-07	1.95E-07	1.6886E-03
519969.32	4258482.85	9716.63933	0.2739	1.39181	0.2936	1.28781	1.69E-03	6.43E-07	2.85E-06	6.89E-07	2.54E-06	1.6920E-03
520032.61	4259527.04	9709.45867	5.0545	0.09684	6.84375	0.09507	1.68E-03	1.19E-05	1.99E-07	1.61E-05	1.87E-07	1.7124E-03
520028.69	4258147.84	9706.57336	0.11609	4.03433	0.12203	3.47004	1.68E-03	2.73E-07	8.27E-06	2.86E-07	6.83E-06	1.6992E-03
520018.79	4258171.9	9697.86576	0.11949	3.22835	0.12496	2.84429	1.68E-03	2.81E-07	6.62E-06	2.93E-07	5.60E-06	1.6948E-03
519804.44	4258839.83	9686.40759	0.20935	0.26463	0.21754	0.2591	1.68E-03	4.91E-07	5.43E-07	5.11E-07	5.10E-07	1.6821E-03
520096.91	4258013.95	9683.71756	0.10161	18.0904	0.10328	18.227	1.68E-03	2.39E-07	3.71E-05	2.42E-07	3.59E-05	1.7531E-03
520049.29	4258101.92	9682.97867	0.11046	7.43598	0.11587	5.7418	1.68E-03	2.59E-07	1.53E-05	2.72E-07	1.13E-05	1.7066E-03
520068.12	4259548.21	9682.44278	16.11111	0.09748	25.7271	0.0947	1.68E-03	3.78E-05	2.00E-07	6.04E-05	1.86E-07	1.7780E-03
519818.67	4258802.23	9675.87551	0.21457	0.29765	0.22384	0.29091	1.68E-03	5.04E-07	6.10E-07	5.26E-07	5.73E-07	1.6804E-03
519864.7	4258701.43	9670.97579	0.23769	0.43422	0.25119	0.42223	1.68E-03	5.58E-07	8.91E-07	5.90E-07	8.31E-07	1.6803E-03
520787.45	4258434.29	9662.25981	0.09449	0.09378	0.09179	0.09742	1.68E-03	2.22E-07	1.92E-07	2.15E-07	1.92E-07	1.6767E-03
519995.03	4258241.62	9647.27085	0.1328	2.11694	0.13716	1.93654	1.67E-03	3.12E-07	4.34E-06	3.22E-07	3.81E-06	1.6821E-03
520001.43	4258219.01	9640.99006	0.12758	2.34414	0.13194	2.12809	1.67E-03	3.00E-07	4.81E-06	3.10E-07	4.19E-06	1.6818E-03
519897.12	4258636.77	9635.59389	0.25966	0.57906	0.27838	0.56262	1.67E-03	6.10E-07	1.19E-06	6.54E-07	1.11E-06	1.6748E-03
519887.12	4258655.32	9615.97693	0.25199	0.52789	0.26823	0.51403	1.67E-03	5.92E-07	1.08E-06	6.30E-07	1.01E-06	1.6712E-03
519949.56	4258541.12	9613.25704	0.29479	1.03852	0.31968	0.97966	1.67E-03	6.92E-07	2.13E-06	7.51E-07	1.93E-06	1.6729E-03
520785.55	4258566.75	9610.21114	0.0956	0.09314	0.09292	0.09618	1.67E-03	2.24E-07	1.91E-07	2.18E-07	1.89E-07	1.6677E-03
519842.8	4258745.07	9606.34751	0.22485	0.36324	0.23601	0.35395	1.67E-03	5.28E-07	7.45E-07	5.54E-07	6.97E-07	1.6687E-03
519939.65	4258560.56	9599.20249	0.29083	0.91612	0.31523	0.87023	1.66E-03	6.83E-07	1.88E-06	7.40E-07	1.71E-06	1.6700E-03
520012.18	4258184.61	9594.70575	0.12078	2.84047	0.12577	2.53661	1.66E-03	2.84E-07	5.83E-06	2.95E-07	4.99E-06	1.6756E-03
520078.04	4259558.19	9594.27016	13.29701	0.0971	13.63606	0.09396	1.66E-03	3.12E-05	1.99E-07	3.20E-05	1.85E-07	1.7277E-03
520784.2	4258451.63	9586.0977	0.0953	0.09451	0.09247	0.09812	1.66E-03	2.24E-07	1.94E-07	2.17E-07	1.93E-07	1.6635E-03
520106.76	4257993.98	9584.91434	0.09922	11.8949	0.10029	13.68228	1.66E-03	2.33E-07	2.44E-05	2.35E-07	2.69E-05	1.7143E-03
519877.12	4258673.87	9573.60401	0.24453	0.48377	0.25879	0.47135	1.66E-03	5.74E-07	9.92E-07	6.08E-07	9.28E-07	1.6636E-03
519837.31	4258755.94	9568.23654	0.22156	0.34788	0.23219	0.33923	1.66E-03	5.20E-07	7.13E-07	5.45E-07	6.68E-07	1.6620E-03
520038.4	4259538.26	9565.66084	6.23596	0.09581	9.40905	0.09395	1.66E-03	1.46E-05	1.96E-07	2.21E-05	1.85E-07	1.6962E-03
520778.1	4258487.33	9564.37232	0.09686	0.09581	0.09376	0.09929	1.66E-03	2.27E-07	1.96E-07	2.20E-07	1.95E-07	1.6597E-03
520781.04	4258469.19	9550.27142	0.09609	0.09523	0.09313	0.09878	1.66E-03	2.26E-07	1.95E-07	2.19E-07	1.94E-07	1.6573E-03
520060.29	4258074.04	9546.30997	0.10664	12.44701	0.11111	8.15151	1.66E-03	2.50E-07	2.55E-05	2.61E-07	1.60E-05	1.6978E-03
519858.39	4258710.33	9522.97999	0.23224	0.41387	0.24444	0.40304	1.65E-03	5.45E-07	8.49E-07	5.74E-07	7.93E-07	1.6545E-03
520783.03	4258549.27	9515.25567	0.09607	0.09404	0.09322	0.09711	1.65E-03	2.26E-07	1.93E-07	2.19E-07	1.91E-07	1.6512E-03
520780.1	4258532.72	9511.41173	0.09663	0.09509	0.09364	0.09822	1.65E-03	2.27E-07	1.95E-07	2.20E-07	1.93E-07	1.6505E-03
520019.35	4258161.68	9510.49903	0.11662	3.26852	0.12207	2.87756	1.65E-03	2.74E-07	6.70E-06	2.87E-07	5.66E-06	1.6625E-03
520068.14	4259558.21	9499.75991	15.78501	0.09604	23.91989	0.09332	1.65E-03	3.71E-05	1.97E-07	5.62E-05	1.84E-07	1.7413E-03
520029.13	4258137.67	9499.72082	0.11332	4.06927	0.11917	3.49439	1.65E-03	2.66E-07	8.35E-06	2.80E-07	6.88E-06	1.6635E-03
520002.17	4258208.72	9491.05378	0.1244	2.37366	0.12871	2.15308	1.65E-03	2.92E-07	4.87E-06	3.02E-07	4.24E-06	1.6559E-03
519807.6	4258823.53	9483.97154	0.2073	0.27496	0.21561	0.2691	1.64E-03	4.87E-07	5.64E-07	5.06E-07	5.30E-07	1.6470E-03
519959.44	4258511.99	9474.3596	0.28613	1.19796	0.30903	1.12	1.64E-03	6.72E-07	2.46E-06	7.26E-07	2.20E-06	1.6493E-03
519972.23	4258403	9473.71837	0.20279	1.50523	0.21117	1.39581	1.64E-03	4.76E-07	3.09E-06	4.96E-07	2.75E-06	1.6500E-03
520028.5	4259538.27	9463.30576	4.55887	0.09485	6.01299	0.09318	1.64E-03	1.07E-05	1.95E-07	1.41E-05	1.83E-07	1.6666E-03
520049.32	4258091.92	9453.36662	0.10785	7.42415	0.11308	5.7286	1.64E-03	2.53E-07	1.52E-05	2.65E-07	1.13E-05	1.6667E-03
519972.52	4258378.02	9450.30447	0.18572	1.51985	0.1928	1.41171	1.64E-03	4.36E-07	3.12E-06	4.53E-07	2.78E-06	1.6459E-03
520780.44	4258523.59	9448.97268	0.09649	0.09513	0.09347	0.09829	1.64E-03	2.27E-07	1.95E-07	2.19E-07	1.93E-07	1.6397E-03
520096.94	4258003.95	9444.07918	0.09937	18.1056	0.10094	18.34843	1.64E-03	2.33E-07	3.71E-05	2.37E-07	3.61E-05	1.7118E-03
519909.85	4258609.17	9426.16712	0.26659	0.65977	0.28772	0.63827	1.63E-03	6.26E-07	1.35E-06	6.75E-07	1.26E-06	1.6388E-03
520108.08	4257984.88	9417.26912	0.09751	11.35439	0.09847	13.21272	1.63E-03	2.29E-07	2.33E-05	2.31E-07	2.60E-05	1.6831E-03
519983.51	4258276.34	9414.48667	0.14066	1.78113	0.14545	1.6478	1.63E-03	3.30E-07	3.65E-06	3.41E-07	3.24E-06	1.6405E-03
520078.06	4259568.19	9413.69793	12.92113	0.09567	13.03476	0.0926	1.63E-03	3.03E-05	1.96E-07	3.06E-05	1.82E-07	1.6941E-03
519969.69	4258457.69	9411.29972	0.24709	1.42358	0.26139	1.31703	1.63E-03	5.80E-07	2.92E-06	6.14E-07	2.59E-06	1.6391E-03
520780.79	4258514.46	9407.48737	0.09637	0.09509	0.09332	0.09832	1.63E-03	2.26E-07	1.95E-07	2.19E-07	1.94E-07	1.6325E-03
519821.84	4258785.95	9404.81432	0.212	0.30938	0.22115	0.30232	1.63E-03	4.98E-07	6.35E-07	5.19E-07	5.95E-07	1.6335E-03
520790.88	4258443.29	9394.91741	0.09382	0.09287	0.09112	0.09643	1.63E-03	2.20E-07	1.90E-07	2.14E-07	1.90E-07	1.6303E-03
520038.42	4259548.26	9387.78631	6.40719	0.09441	9.86949	0.09258	1.63E-03	1.50E-05	1.94E-07	2.32E-05	1.82E-07	1.6669E-03
520781.13	4258505.32	9385.85562	0.09625	0.09502	0.09318	0.0983	1.63E-03	2.26E-07	1.95E-07	2.19E-07	1.94E-07	1.6288E-03
520781.47	4258496.19	9383.73054	0.09614	0.09493	0.09307	0.09829	1.63E-03	2.26E-07	1.95E-07	2.18E-07	1.93E-07	1.6284E-03
519830.82	4258764.41	9360.18907	0.21549	0.33297	0.22538	0.32498	1.62E-03	5.06E-07	6.83E-07	5.29E-07	6.40E-07	1.6258E-03
519975.86	4258319.45	9358.35243	0.15549	1.60027	0.16088	1.48798	1.62E-03	3.65E-07	3.28E-06	3.78E-07	2.93E-06	1.6301E-03
519977.1	4258308.95	9348.50648	0.15129	1.62839	0.15653	1.5133	1.62E-03	3.55E-07	3.34E-06	3.67E-07	2.98E-06	1.6285E-03
520789.18	4258558.43	9346.82036	0.09472	0.09246	0.09204	0.09545	1.62E-03	2.22E-07	1.90E-07	2.16E-07	1.88E-07	1.6220E-03
519974.47	4258330.01	9343.13279	0.1598	1.56974	0.16535	1.46035	1.62E-03	3.75E-07	3.22E-06	3.88E-07	2.87E-06	1.6274E-03
519852.02	4258719.08	9338.94971	0.22606	0.395	0.23772	0.38475	1.62E-03	5.31E-07	8.10E-07	5.58E-07	7.57E-07	1.6225E-03
519984.56	4258265.92	9338.34752	0.13697	1.80536	0.14153	1.66929	1.62E-03	3.22E-07	3.70E-06	3.32E-07	3.29E-06	1.6273E-03
520787.65	4258460.69	9337.84691	0.0946	0.09363	0.09177	0.09714	1.62E-03	2.22E-07	1.92E-07	2.15E-07	1.91E-07	1.6204E-03
520002.86	4258198.45	9335.21178	0.12132	2.3922	0.12558	2.16703	1.62E-03	2.85E-07	4.91E-06	2.95E-07	4.27E-06	1.6289E-03
520784.51	4258478.31	9331.38379	0.09538	0.09429	0.09241	0.09773	1.62E-03	2.24E-07	1.93E-07	2.17E-07	1.92E-07	1.6193E-03
520050.47	4258084.01	9330.49645	0.1062	7.74807	0.11126	5.91875	1.62E-03	2.49E-07	1.59E-05	2.61E-07	1.17E-05	1.6464E-03
519919.77	4258589.73	9325.94472	0.27263	0.73527	0.29571	0.70653	1.62E-03	6.40E-07	1.51E-06	6.94E-07	1.39E-06	1.6218E-03
520019.87	4258151.48	9324.93641	0.11385	3.30234	0.11927	2.90367	1.62E-03	2.67E-07	6.77E-06	2.80E-07	5.72E-06	1.6304E-03
520068.16	4259568.21	9322.18872	15.5962	0.09463	22.34603	0.09198	1.62E-03	3.66E-05	1.94E-07	5.25E-05	1.81E-07	1.7063E-03
520060.32	4258064.04	9316.86843	0.10417	12.42092	0.10848	8.11523	1.62E-03	2.45E-07	2.55E-05	2.55E-07	1.60E-05	1.6579E-03
519978.21	4258298.5	9316.75908	0.1472	1.65378	0.15228	1.53609	1.62E-03	3.46E-07	3.39E-06	3.58E-07	3.02E-06	1.6231E-03
520786.56	4258541.19	9289.57364	0.09521	0.09337	0.09237	0.09641	1.61E-03	2.24E-07	1.91E-07	2.17E-07	1.90E-07	1.6121E-03
520028.52	4259548.27	9288.97956	4.65018	0.09347	6.19428	0.09183	1.61E-03	1.09E-05	1.92E-07	1.45E-05	1.81E-07	1.6370E-03
519991.67	4258233.03	9288.29264	0.12811	2.00629	0.13216	1.8425	1.61E-03	3.01E-07	4.11E-06	3.10E-07	3.63E-06	1.6194E-03
519969.8	4258433.17	9286.65983	0.22411	1.44246	0.23461	1.33715	1.61E-03	5.26E-07	2.96E-06	5.51E-07	2.63E-06	1.6174E-03
520009.85	4258175.59	9284.92134	0.11707	2.71117	0.1218	2.43023	1.61E-03	2.75E-07	5.56E-06	2.86E-07	4.78E-06	1.6213E-03
519979.21	4258288.1	9266.24954	0.14324	1.67597	0.14813	1.55614	1.61E-03	3.36E-07	3.44E-06	3.48E-07	3.06E-06	1.6144E-03
519985.51	4258255.54	9242.89527	0.13339	1.82578	0.13772	1.68731	1.60E-03	3.13E-07	3.74E-06	3.23E-07	3.32E-06	1.6108E-03
519810.69	4258807.07	9239.13126	0.20486	0.28565	0.21321	0.27942	1.60E-03	4.81E-07	5.86E-07	5.01E-07	5.50E-07	1.6046E-03
519929.69	4258570.3	9230.2262	0.27779	0.82342	0.30089	0.78623	1.60E-03	6.52E-07	1.69E-06	7.06E-07	1.55E-06	1.6055E-03
519949.52	4258531.42	9226.61256	0.28431	1.04888	0.30744	0.98896	1.60E-03	6.67E-07	2.15E-06	7.22E-07	1.95E-06	1.6058E-03
519800.77	4258831.1	9215.91684	0.20072	0.2645	0.20835	0.25904	1.60E-03	4.71E-07	5.42E-07	4.89E-07	5.10E-07	1.6005E-03
520038.44	4259558.26	9214.92422	6.59381	0.09304	10.38266	0.09125	1.60E-03	1.55E-05	1.91E-07	2.44E-05	1.80E-07	1.6385E-03
519971.77	4258341.11	9212.19228	0.16361	1.51317	0.16924	1.40975	1.60E-03	3.84E-07	3.10E-06	3.97E-07	2.78E-06	1.6045E-03
520096.97	4257993.95	9211.90676	0.0972	18.12302	0.09869	18.37007	1.60E-03	2.28E-07	3.72E-05	2.32E-07	3.62E-05	1.6716E-03
519959.4	4258502.29	9196.64156	0.27507	1.20778	0.29593	1.12923	1.60E-03	6.46E-07	2.48E-06	6.95E-07	2.22E-06	1.6012E-03
520108.11	4257974.88	9191.18774	0.09545	11.34093	0.09632	13.25142	1.59E-03	2.24E-07	2.33E-05	2.26E-07	2.61E-05	1.6440E-03
520003.5	4258188.2	9182.01906	0.11839	2.42265	0.12264	2.19267	1.59E-03	2.78E-07	4.97E-06	2.88E-07	4.32E-06	1.6024E-03
520795.64	4258566.91	9179.07729	0.0933	0.09085	0.09079	0.09378	1.59E-03	2.19E-07	1.86E-07	2.13E-07	1.85E-07	1.5929E-03
520073.53	4259579.43	9176.91376	14.01962	0.09365	15.29984	0.09085	1.59E-03	3.29E-05	1.92E-07	3.59E-05	1.79E-07	1.6609E-03
519887.12	4258646.05	9174.82797	0.24589	0.53331	0.26231	0.51949	1.59E-03	5.77E-07	1.09E-06	6.16E-07	1.02E-06	1.5946E-03
519966.23	4258466.09	9173.17028	0.24986	1.35425	0.26537	1.25654	1.59E-03	5.87E-07	2.78E-06	6.23E-07	2.47E-06	1.5975E-03
519970.5	4258351.62	9172.05425	0.16829	1.48644	0.17415	1.38533	1.59E-03	3.95E-07	3.05E-06	4.09E-07	2.73E-06	1.5974E-03
519939.61	4258550.86	9170.87981	0.28145	0.9259	0.3042	0.87931	1.59E-03	6.61E-07	1.90E-06	7.14E-07	1.73E-06	1.5957E-03
519992.55	4258222.68	9169.81687	0.12493	2.03179	0.12884	1.86413	1.59E-03	2.93E-07	4.17E-06	3.02E-07	3.67E-06	1.5989E-03
519845.6	4258727.71	9156.44241	0.22008	0.3773	0.23109	0.36772	1.59E-03	5.17E-07	7.74E-07	5.43E-07	7.24E-07	1.5907E-03
519968.92	4258386.77	9154.02493	0.18797	1.44673	0.19508	1.34722	1.59E-03	4.41E-07	2.97E-06	4.58E-07	2.65E-06	1.5942E-03
519877.12	4258664.6	9152.52742	0.23879	0.48847	0.25301	0.47652	1.59E-03	5.61E-07	1.00E-06	5.94E-07	9.38E-07	1.5906E-03
519815.06	4258793.63	9150.26747	0.20541	0.29685	0.21388	0.29029	1.59E-03	4.82E-07	6.09E-07	5.02E-07	5.71E-07	1.5892E-03
519986.38	4258245.19	9149.26541	0.13	1.84963	0.13412	1.70791	1.59E-03	3.05E-07	3.79E-06	3.15E-07	3.36E-06	1.5947E-03
519968.57	4258411.89	9144.65833	0.20531	1.43072	0.21379	1.33004	1.59E-03	4.82E-07	2.93E-06	5.02E-07	2.62E-06	1.5926E-03
520794.31	4258452.29	9144.34753	0.09315	0.09201	0.09044	0.09548	1.59E-03	2.19E-07	1.89E-07	2.12E-07	1.88E-07	1.5869E-03
520020.36	4258141.29	9140.88848	0.11118	3.3309	0.11658	2.92466	1.59E-03	2.61E-07	6.83E-06	2.74E-07	5.76E-06	1.5986E-03
520787.99	4258487.44	9134.14999	0.09466	0.09339	0.0917	0.09671	1.58E-03	2.22E-07	1.92E-07	2.15E-07	1.90E-07	1.5851E-03
520028.53	4259558.27	9119.36458	4.75639	0.09212	6.38938	0.09052	1.58E-03	1.12E-05	1.89E-07	1.50E-05	1.78E-07	1.6082E-03
520010.47	4258165.34	9118.70179	0.1143	2.73877	0.11904	2.45173	1.58E-03	2.68E-07	5.62E-06	2.79E-07	4.83E-06	1.5926E-03
520050.5	4258074.01	9115.86746	0.10377	7.73284	0.10865	5.90757	1.58E-03	2.44E-07	1.59E-05	2.55E-07	1.16E-05	1.6091E-03
520791.1	4258469.75	9112.84737	0.09391	0.09274	0.09107	0.09614	1.58E-03	2.20E-07	1.90E-07	2.14E-07	1.89E-07	1.5814E-03
519867.12	4258683.15	9105.61893	0.23174	0.44955	0.24455	0.43844	1.58E-03	5.44E-07	9.22E-07	5.74E-07	8.63E-07	1.5822E-03
520063.63	4259579.45	9088.08683	14.7088	0.09262	29.17623	0.09021	1.58E-03	3.45E-05	1.90E-07	6.85E-05	1.78E-07	1.6797E-03
520098.29	4257984.85	9057.52745	0.09557	16.98966	0.09692	17.78398	1.57E-03	2.24E-07	3.48E-05	2.28E-07	3.50E-05	1.6413E-03
520059.57	4258053.82	9052.75742	0.10151	11.8343	0.10573	7.79413	1.57E-03	2.38E-07	2.43E-05	2.48E-07	1.53E-05	1.6103E-03
520038.45	4259568.26	9046.83487	6.78536	0.09171	10.95257	0.08995	1.57E-03	1.59E-05	1.88E-07	2.57E-05	1.77E-07	1.6111E-03
519993.36	4258212.35	9044.7432	0.12186	2.05745	0.12567	1.88502	1.57E-03	2.86E-07	4.22E-06	2.95E-07	3.71E-06	1.5773E-03
519899.89	4258618.91	9025.0365	0.25304	0.60311	0.2717	0.58573	1.57E-03	5.94E-07	1.24E-06	6.38E-07	1.15E-06	1.5690E-03
520790.44	4258523.96	9024.35512	0.09424	0.09274	0.09138	0.09577	1.57E-03	2.21E-07	1.90E-07	2.15E-07	1.89E-07	1.5660E-03
520073.55	4259589.43	9008.68365	13.47585	0.09231	14.54239	0.08957	1.56E-03	3.16E-05	1.89E-07	3.41E-05	1.76E-07	1.6287E-03
519966.38	4258441.47	9000.30575	0.22666	1.37529	0.23782	1.27769	1.56E-03	5.32E-07	2.82E-06	5.58E-07	2.52E-06	1.5675E-03
519803.9	4258814.74	8989.96271	0.19854	0.27457	0.20624	0.26877	1.56E-03	4.66E-07	5.63E-07	4.84E-07	5.29E-07	1.5613E-03
520790.78	4258514.83	8984.51318	0.09414	0.0927	0.09124	0.09578	1.56E-03	2.21E-07	1.90E-07	2.14E-07	1.89E-07	1.5591E-03
519959.36	4258492.59	8982.68706	0.26474	1.21761	0.28385	1.13808	1.56E-03	6.22E-07	2.50E-06	6.66E-07	2.24E-06	1.5640E-03
519839.13	4258736.23	8976.09505	0.21431	0.36067	0.22456	0.35181	1.56E-03	5.03E-07	7.40E-07	5.27E-07	6.93E-07	1.5593E-03
519962.78	4258474.49	8970.95114	0.25243	1.28892	0.26905	1.19979	1.56E-03	5.93E-07	2.64E-06	6.32E-07	2.36E-06	1.5622E-03
520108.14	4257964.88	8964.35861	0.09342	11.34151	0.09424	13.27536	1.55E-03	2.19E-07	2.33E-05	2.21E-07	2.61E-05	1.6047E-03
520791.12	4258505.7	8963.18617	0.09403	0.09262	0.09111	0.09576	1.55E-03	2.21E-07	1.90E-07	2.14E-07	1.89E-07	1.5554E-03
519860.91	4258692.29	8960.72871	0.22586	0.42876	0.23823	0.41796	1.55E-03	5.30E-07	8.79E-07	5.59E-07	8.23E-07	1.5570E-03
520791.46	4258496.57	8960.48903	0.09393	0.09255	0.09101	0.09575	1.55E-03	2.21E-07	1.90E-07	2.14E-07	1.88E-07	1.5550E-03
520028.55	4259568.27	8954.55006	4.86811	0.09081	6.60112	0.08924	1.55E-03	1.14E-05	1.86E-07	1.55E-05	1.76E-07	1.5804E-03
520011.05	4258155.12	8953.39691	0.11164	2.76509	0.11639	2.47229	1.55E-03	2.62E-07	5.67E-06	2.73E-07	4.87E-06	1.5640E-03
519909.81	4258599.47	8944.34895	0.25907	0.6676	0.27963	0.64511	1.55E-03	6.08E-07	1.37E-06	6.56E-07	1.27E-06	1.5553E-03
519833.53	4258746.84	8940.22306	0.21103	0.3457	0.22077	0.3374	1.55E-03	4.95E-07	7.09E-07	5.18E-07	6.64E-07	1.5530E-03
520063.65	4259589.45	8922.5916	14.4781	0.0913	26.94141	0.08894	1.55E-03	3.40E-05	1.87E-07	6.32E-05	1.75E-07	1.6452E-03
519994.11	4258202.06	8914.47694	0.11891	2.07672	0.12263	1.90169	1.55E-03	2.79E-07	4.26E-06	2.88E-07	3.74E-06	1.5547E-03
520797.74	4258461.3	8911.78299	0.09246	0.09122	0.08975	0.09457	1.55E-03	2.17E-07	1.87E-07	2.11E-07	1.86E-07	1.5465E-03
520794.56	4258478.82	8907.95756	0.0932	0.09189	0.09037	0.09517	1.55E-03	2.19E-07	1.88E-07	2.12E-07	1.87E-07	1.5459E-03
520050.53	4258064.01	8902.56692	0.10141	7.72122	0.10615	5.88472	1.54E-03	2.38E-07	1.58E-05	2.49E-07	1.16E-05	1.5720E-03
519949.48	4258521.73	8900.89283	0.27425	1.05857	0.29563	0.99771	1.54E-03	6.44E-07	2.17E-06	6.94E-07	1.96E-06	1.5493E-03
520796.45	4258541.79	8885.13853	0.09301	0.09106	0.09032	0.09397	1.54E-03	2.18E-07	1.87E-07	2.12E-07	1.85E-07	1.5419E-03
519974.63	4258280.01	8863.91661	0.13745	1.57454	0.14195	1.4677	1.54E-03	3.23E-07	3.23E-06	3.33E-07	2.89E-06	1.5442E-03
519818.2	4258777.3	8860.20399	0.20274	0.3082	0.21119	0.30131	1.54E-03	4.76E-07	6.32E-07	4.96E-07	5.93E-07	1.5390E-03
519965.32	4258395.52	8855.13286	0.19021	1.37884	0.19736	1.28693	1.54E-03	4.47E-07	2.83E-06	4.63E-07	2.53E-06	1.5422E-03
519919.73	4258580.04	8853.01449	0.26442	0.74371	0.28585	0.71401	1.54E-03	6.21E-07	1.53E-06	6.71E-07	1.41E-06	1.5397E-03
520073.56	4259599.43	8845.02578	13.07194	0.091	13.84045	0.08832	1.53E-03	3.07E-05	1.87E-07	3.25E-05	1.74E-07	1.5977E-03
520059.61	4258043.82	8843.50032	0.09925	11.81149	0.10333	7.76919	1.53E-03	2.33E-07	2.42E-05	2.43E-07	1.53E-05	1.5739E-03
520098.32	4257974.85	8843.1843	0.09356	16.98425	0.09482	17.83434	1.53E-03	2.20E-07	3.48E-05	2.23E-07	3.51E-05	1.6042E-03
519965.5	4258370.84	8831.42814	0.17497	1.38821	0.18107	1.29801	1.53E-03	4.11E-07	2.85E-06	4.25E-07	2.56E-06	1.5380E-03
519964.92	4258420.77	8827.45443	0.20778	1.36154	0.2165	1.26858	1.53E-03	4.88E-07	2.79E-06	5.08E-07	2.50E-06	1.5374E-03
519854.63	4258701.27	8825.564	0.22049	0.4092	0.23204	0.39907	1.53E-03	5.18E-07	8.39E-07	5.45E-07	7.86E-07	1.5334E-03
520033.93	4259579.5	8822.99983	5.95768	0.08984	8.87668	0.08821	1.53E-03	1.40E-05	1.84E-07	2.08E-05	1.74E-07	1.5655E-03
519975.76	4258269.55	8815.39873	0.13396	1.59552	0.13829	1.4868	1.53E-03	3.14E-07	3.27E-06	3.25E-07	2.93E-06	1.5358E-03
519982.71	4258236.72	8808.59411	0.1254	1.75547	0.12925	1.6264	1.53E-03	2.94E-07	3.60E-06	3.03E-07	3.20E-06	1.5352E-03
519959.32	4258482.89	8801.03942	0.25473	1.22719	0.2722	1.1463	1.53E-03	5.98E-07	2.52E-06	6.39E-07	2.26E-06	1.5325E-03
520011.6	4258144.9	8789.42364	0.10908	2.79117	0.11384	2.49159	1.52E-03	2.56E-07	5.72E-06	2.67E-07	4.90E-06	1.5356E-03
519994.81	4258191.78	8780.81851	0.11607	2.09722	0.11973	1.91837	1.52E-03	2.72E-07	4.30E-06	2.81E-07	3.78E-06	1.5316E-03
519929.65	4258560.6	8778.5465	0.26869	0.83179	0.28974	0.79415	1.52E-03	6.31E-07	1.71E-06	6.80E-07	1.56E-06	1.5272E-03
519827.08	4258755.38	8765.42683	0.20555	0.3311	0.21461	0.32341	1.52E-03	4.83E-07	6.79E-07	5.04E-07	6.37E-07	1.5226E-03
520063.66	4259599.45	8761.68017	14.19236	0.09002	24.9672	0.0877	1.52E-03	3.33E-05	1.85E-07	5.86E-05	1.73E-07	1.6120E-03
519887.12	4258636.77	8759.89005	0.24012	0.53865	0.2565	0.52481	1.52E-03	5.64E-07	1.10E-06	6.02E-07	1.03E-06	1.5227E-03
519968.41	4258312.53	8757.96979	0.14757	1.44984	0.15225	1.35662	1.52E-03	3.46E-07	2.97E-06	3.57E-07	2.67E-06	1.5254E-03
519939.57	4258541.16	8756.39624	0.27158	0.9346	0.29264	0.88749	1.52E-03	6.38E-07	1.92E-06	6.87E-07	1.75E-06	1.5237E-03
519969.61	4258302.05	8752.73214	0.14375	1.4742	0.14834	1.37828	1.52E-03	3.37E-07	3.02E-06	3.48E-07	2.71E-06	1.5245E-03
519797.1	4258822.37	8750.09706	0.19248	0.26416	0.19956	0.25876	1.52E-03	4.52E-07	5.42E-07	4.69E-07	5.09E-07	1.5196E-03
519877.12	4258655.32	8748.40032	0.23328	0.49313	0.24762	0.48145	1.52E-03	5.48E-07	1.01E-06	5.81E-07	9.48E-07	1.5205E-03
520108.17	4257954.88	8748.21794	0.09148	11.33367	0.09224	13.29763	1.52E-03	2.15E-07	2.32E-05	2.17E-07	2.62E-05	1.5672E-03
519976.79	4258259.14	8744.64003	0.13055	1.61333	0.13469	1.50286	1.52E-03	3.06E-07	3.31E-06	3.16E-07	2.96E-06	1.5236E-03
519967.08	4258323.07	8742.57837	0.1515	1.42495	0.1563	1.33387	1.52E-03	3.56E-07	2.92E-06	3.67E-07	2.63E-06	1.5226E-03
520001.59	4258169.01	8737.8633	0.11206	2.3344	0.11607	2.11718	1.52E-03	2.63E-07	4.79E-06	2.72E-07	4.17E-06	1.5250E-03
520024.03	4259579.51	8733.98286	4.34388	0.08899	5.70676	0.08751	1.51E-03	1.02E-05	1.83E-07	1.34E-05	1.72E-07	1.5388E-03
519806.97	4258798.23	8728.61323	0.19608	0.2848	0.2037	0.27874	1.51E-03	4.60E-07	5.84E-07	4.78E-07	5.49E-07	1.5160E-03
519970.69	4258291.62	8727.98354	0.14001	1.4953	0.1445	1.39727	1.51E-03	3.29E-07	3.07E-06	3.39E-07	2.75E-06	1.5203E-03
520798.01	4258487.88	8725.62464	0.0925	0.09105	0.08968	0.09422	1.51E-03	2.17E-07	1.87E-07	2.11E-07	1.85E-07	1.5142E-03
519867.12	4258673.87	8720.07195	0.22658	0.45368	0.2392	0.44317	1.51E-03	5.32E-07	9.30E-07	5.62E-07	8.72E-07	1.5154E-03
519983.67	4258226.34	8715.09671	0.12236	1.77951	0.12603	1.64661	1.51E-03	2.87E-07	3.65E-06	2.96E-07	3.24E-06	1.5191E-03
520802.86	4258550.38	8706.58068	0.09164	0.08952	0.08912	0.09235	1.51E-03	2.15E-07	1.84E-07	2.09E-07	1.82E-07	1.5109E-03
520801.16	4258470.3	8702.653	0.09178	0.09039	0.08907	0.09364	1.51E-03	2.15E-07	1.85E-07	2.09E-07	1.84E-07	1.5102E-03
519965.59	4258333.67	8702.088	0.15549	1.39713	0.16042	1.30851	1.51E-03	3.65E-07	2.87E-06	3.77E-07	2.58E-06	1.5155E-03
520073.58	4259609.43	8686.03294	12.69509	0.08972	13.16367	0.0871	1.51E-03	2.98E-05	1.84E-07	3.09E-05	1.71E-07	1.5676E-03

520800.09	4258533.47	8685.76217	0.09218	0.09037	0.0895	0.09325	1.51E-03	2.16E-07	1.85E-07	2.10E-07	1.84E-07	1.5073E-03
519848.29	4258710.1	8675.83386	0.21495	0.3909	0.22589	0.38128	1.50E-03	5.05E-07	8.02E-07	5.30E-07	7.51E-07	1.5074E-03
519977.73	4258248.76	8674.66154	0.12731	1.63443	0.13127	1.52116	1.50E-03	2.99E-07	3.35E-06	3.08E-07	2.99E-06	1.5115E-03
520033.94	4259589.5	8665.97333	6.10968	0.08858	9.29212	0.08698	1.50E-03	1.43E-05	1.82E-07	2.18E-05	1.71E-07	1.5396E-03
520049.79	4258053.79	8659.7136	0.09886	7.48118	0.10351	5.70835	1.50E-03	2.32E-07	1.53E-05	2.43E-07	1.12E-05	1.5290E-03
520059.64	4258033.82	8643.83059	0.09709	11.78613	0.10102	7.76828	1.50E-03	2.28E-07	2.42E-05	2.37E-07	1.53E-05	1.5392E-03
519811.44	4258785.04	8635.90186	0.1967	0.29577	0.20449	0.28938	1.50E-03	4.62E-07	6.07E-07	4.80E-07	5.70E-07	1.5000E-03
520098.35	4257964.85	8630.39604	0.09159	17.00253	0.0928	17.84891	1.50E-03	2.15E-07	3.49E-05	2.18E-07	3.51E-05	1.5673E-03
520800.43	4258524.34	8628.65184	0.09207	0.09043	0.08935	0.09333	1.50E-03	2.16E-07	1.85E-07	2.10E-07	1.84E-07	1.4974E-03
519984.55	4258215.99	8613.38912	0.11942	1.80161	0.12294	1.66492	1.49E-03	2.80E-07	3.69E-06	2.89E-07	3.28E-06	1.5015E-03
519949.44	4258512.03	8612.49906	0.26443	1.06738	0.28406	1.00591	1.49E-03	6.21E-07	2.19E-06	6.67E-07	1.98E-06	1.4993E-03
520063.68	4259609.45	8605.38064	13.80921	0.08876	23.1832	0.0865	1.49E-03	3.24E-05	1.82E-07	5.44E-05	1.70E-07	1.5798E-03
519963.34	4258344.59	8593.14387	0.15927	1.35759	0.16433	1.27261	1.49E-03	3.74E-07	2.78E-06	3.86E-07	2.51E-06	1.4965E-03
520002.23	4258158.76	8591.90534	0.1095	2.35647	0.11352	2.13449	1.49E-03	2.57E-07	4.83E-06	2.67E-07	4.20E-06	1.4998E-03
520800.77	4258515.21	8589.32955	0.09197	0.09041	0.08922	0.09336	1.49E-03	2.16E-07	1.85E-07	2.09E-07	1.84E-07	1.4906E-03
519899.85	4258609.21	8582.40452	0.24638	0.6095	0.26454	0.59174	1.49E-03	5.78E-07	1.25E-06	6.21E-07	1.16E-06	1.4922E-03
520024.04	4259589.51	8579.86585	4.41989	0.08775	5.86682	0.0863	1.49E-03	1.04E-05	1.80E-07	1.38E-05	1.70E-07	1.5126E-03
520801.11	4258506.07	8568.50003	0.09188	0.09034	0.08911	0.09334	1.49E-03	2.16E-07	1.85E-07	2.09E-07	1.84E-07	1.4870E-03
520801.46	4258496.94	8564.78883	0.09179	0.09026	0.08901	0.09331	1.49E-03	2.15E-07	1.85E-07	2.09E-07	1.84E-07	1.4863E-03
519961.94	4258379.47	8562.15274	0.1769	1.32553	0.18298	1.24218	1.49E-03	4.15E-07	2.72E-06	4.30E-07	2.45E-06	1.4911E-03
519961.72	4258404.27	8557.80579	0.19238	1.31535	0.1996	1.23018	1.48E-03	4.52E-07	2.70E-06	4.69E-07	2.42E-06	1.4904E-03
520108.2	4257944.88	8540.73115	0.0896	11.32107	0.09032	13.32047	1.48E-03	2.10E-07	2.32E-05	2.12E-07	2.62E-05	1.5312E-03
520073.6	4259619.43	8531.6094	12.22302	0.08848	12.508	0.08591	1.48E-03	2.87E-05	1.81E-07	2.94E-05	1.69E-07	1.5382E-03
519841.9	4258718.8	8529.83704	0.20969	0.37372	0.21988	0.36474	1.48E-03	4.92E-07	7.66E-07	5.16E-07	7.18E-07	1.4820E-03
519961.26	4258429.66	8527.47625	0.21018	1.2967	0.21936	1.21071	1.48E-03	4.93E-07	2.66E-06	5.15E-07	2.38E-06	1.4851E-03
519959.56	4258458.05	8515.8988	0.23155	1.25234	0.24464	1.16925	1.48E-03	5.44E-07	2.57E-06	5.74E-07	2.30E-06	1.4830E-03
520033.96	4259599.5	8513.27595	6.27546	0.08736	9.75832	0.08579	1.48E-03	1.47E-05	1.79E-07	2.29E-05	1.69E-07	1.5146E-03
520804.59	4258479.31	8513.18824	0.0911	0.08958	0.0884	0.09272	1.48E-03	2.14E-07	1.84E-07	2.08E-07	1.83E-07	1.4774E-03
519800.21	4258805.95	8506.61892	0.19026	0.27384	0.19731	0.26817	1.48E-03	4.47E-07	5.62E-07	4.63E-07	5.28E-07	1.4774E-03
519985.37	4258205.66	8505.2372	0.11658	1.82032	0.11996	1.68085	1.48E-03	2.74E-07	3.73E-06	2.82E-07	3.31E-06	1.4828E-03
520806.47	4258542.11	8500.1315	0.09084	0.08878	0.0883	0.09157	1.47E-03	2.13E-07	1.82E-07	2.07E-07	1.80E-07	1.4751E-03
519909.77	4258589.78	8498.54102	0.25168	0.67561	0.27152	0.65171	1.47E-03	5.91E-07	1.39E-06	6.37E-07	1.28E-06	1.4779E-03
519991.95	4258182.97	8492.74386	0.11246	2.00103	0.11588	1.83563	1.47E-03	2.64E-07	4.10E-06	2.72E-07	3.61E-06	1.4813E-03
520049.82	4258043.79	8466.39703	0.0967	7.46664	0.10121	5.69014	1.47E-03	2.27E-07	1.53E-05	2.38E-07	1.12E-05	1.4954E-03
520063.7	4259619.45	8453.44406	15.30187	0.08754	21.59285	0.08532	1.47E-03	3.59E-05	1.80E-07	5.07E-05	1.68E-07	1.5532E-03
520059.67	4258023.82	8453.28413	0.09503	11.7595	0.09879	7.78925	1.47E-03	2.23E-07	2.41E-05	2.32E-07	1.53E-05	1.5061E-03
520002.83	4258148.52	8445.72991	0.10702	2.37794	0.11107	2.15133	1.46E-03	2.51E-07	4.88E-06	2.61E-07	4.23E-06	1.4745E-03
520024.06	4259599.51	8429.9877	4.50212	0.08655	6.03702	0.08512	1.46E-03	1.06E-05	1.78E-07	1.42E-05	1.68E-07	1.4872E-03
520098.38	4257954.85	8429.70678	0.08972	16.99525	0.09085	17.89593	1.46E-03	2.11E-07	3.49E-05	2.13E-07	3.52E-05	1.5326E-03
519919.69	4258570.34	8423.22993	0.25631	0.75176	0.27599	0.72115	1.46E-03	6.02E-07	1.54E-06	6.48E-07	1.42E-06	1.4652E-03
519939.52	4258531.47	8413.37607	0.26239	0.94297	0.28203	0.89516	1.46E-03	6.16E-07	1.93E-06	6.62E-07	1.76E-06	1.4642E-03
519986.13	4258195.36	8391.78156	0.11384	1.83219	0.11709	1.69148	1.46E-03	2.67E-07	3.76E-06	2.75E-07	3.33E-06	1.4631E-03
519929.61	4258550.9	8380.75071	0.25984	0.8394	0.27918	0.80155	1.45E-03	6.10E-07	1.72E-06	6.55E-07	1.58E-06	1.4582E-03
519835.46	4258727.38	8379.70208	0.20448	0.35756	0.21394	0.34922	1.45E-03	4.80E-07	7.33E-07	5.02E-07	6.87E-07	1.4558E-03
519949.4	4258502.33	8372.37702	0.25504	1.07563	0.27306	1.01368	1.45E-03	5.99E-07	2.21E-06	6.41E-07	2.00E-06	1.4576E-03
519992.7	4258172.68	8367.20354	0.1099	2.01927	0.11328	1.85054	1.45E-03	2.58E-07	4.14E-06	2.66E-07	3.64E-06	1.4596E-03
519877.12	4258646.05	8364.76888	0.228	0.4978	0.24248	0.48617	1.45E-03	5.35E-07	1.02E-06	5.69E-07	9.57E-07	1.4539E-03
520033.98	4259609.5	8364.72698	6.42369	0.08616	10.26254	0.08462	1.45E-03	1.51E-05	1.77E-07	2.41E-05	1.67E-07	1.4903E-03
520070.31	4259629.84	8350.57319	12.64934	0.08693	13.73692	0.08452	1.45E-03	2.97E-05	1.78E-07	3.22E-05	1.66E-07	1.5107E-03
519867.12	4258664.6	8348.60193	0.22158	0.45773	0.23426	0.44762	1.45E-03	5.20E-07	9.39E-07	5.50E-07	8.81E-07	1.4509E-03
519973.75	4258240.42	8348.25058	0.12277	1.54942	0.12646	1.4464	1.45E-03	2.88E-07	3.18E-06	2.97E-07	2.85E-06	1.4546E-03
519829.76	4258737.74	8345.33736	0.20125	0.343	0.21017	0.33515	1.45E-03	4.72E-07	7.03E-07	4.93E-07	6.60E-07	1.4498E-03
520808.02	4258488.31	8343.84675	0.09041	0.08877	0.08773	0.0918	1.45E-03	2.12E-07	1.82E-07	2.06E-07	1.81E-07	1.4480E-03
519965.74	4258283.67	8341.81323	0.13429	1.4027	0.13834	1.31575	1.45E-03	3.15E-07	2.88E-06	3.25E-07	2.59E-06	1.4530E-03
520108.23	4257934.88	8341.03208	0.0878	11.30504	0.08846	13.32766	1.45E-03	2.06E-07	2.32E-05	2.08E-07	2.62E-05	1.4965E-03
519814.56	4258768.65	8336.43542	0.19406	0.30658	0.2018	0.29994	1.45E-03	4.56E-07	6.29E-07	4.74E-07	5.90E-07	1.4481E-03
519966.96	4258273.18	8317.23167	0.13101	1.42308	0.13498	1.33445	1.44E-03	3.08E-07	2.92E-06	3.17E-07	2.63E-06	1.4488E-03
519857.12	4258683.15	8313.33045	0.21515	0.42278	0.22661	0.41327	1.44E-03	5.05E-07	8.67E-07	5.32E-07	8.14E-07	1.4446E-03
519958.39	4258388.1	8301.57092	0.1789	1.26814	0.18499	1.19031	1.44E-03	4.20E-07	2.60E-06	4.34E-07	2.34E-06	1.4457E-03
519958.46	4258363.67	8293.29343	0.16532	1.27523	0.17057	1.19846	1.44E-03	3.88E-07	2.62E-06	4.00E-07	2.36E-06	1.4442E-03
519793.42	4258813.64	8291.55989	0.18463	0.26353	0.19115	0.25822	1.44E-03	4.33E-07	5.40E-07	4.49E-07	5.08E-07	1.4401E-03
520024.08	4259609.51	8284.14679	4.57352	0.08537	6.21031	0.08397	1.44E-03	1.07E-05	1.75E-07	1.46E-05	1.65E-07	1.4625E-03
520049.85	4258033.79	8280.59908	0.09463	7.45115	0.099	5.67487	1.44E-03	2.22E-07	1.53E-05	2.32E-07	1.12E-05	1.4631E-03
519968.07	4258262.74	8277.73503	0.12781	1.44114	0.13167	1.35084	1.44E-03	3.00E-07	2.96E-06	3.09E-07	2.66E-06	1.4420E-03
519974.78	4258230.01	8277.19192	0.11987	1.57246	0.1234	1.46573	1.44E-03	2.81E-07	3.22E-06	2.90E-07	2.89E-06	1.4423E-03
520060.41	4259629.86	8274.43994	14.2798	0.086	25.60142	0.08393	1.44E-03	3.35E-05	1.76E-07	6.01E-05	1.65E-07	1.5291E-03
519958.12	4258413.02	8267.84038	0.1945	1.25572	0.2019	1.17667	1.43E-03	4.57E-07	2.58E-06	4.74E-07	2.32E-06	1.4398E-03
520059.7	4258013.82	8262.04532	0.093	11.73031	0.09665	7.73232	1.43E-03	2.18E-07	2.41E-05	2.27E-07	1.52E-05	1.4727E-03
520810.42	4258524.71	8257.98298	0.08997	0.0881	0.08738	0.09089	1.43E-03	2.11E-07	1.81E-07	2.05E-07	1.79E-07	1.4331E-03
519957.6	4258438.55	8252.09557	0.21251	1.23575	0.22243	1.15629	1.43E-03	4.99E-07	2.53E-06	5.22E-07	2.28E-06	1.4371E-03
519993.41	4258162.4	8239.99635	0.10742	2.03771	0.1108	1.86525	1.43E-03	2.52E-07	4.18E-06	2.60E-07	3.67E-06	1.4376E-03
519889.89	4258618.95	8235.40739	0.23443	0.5597	0.25066	0.54512	1.43E-03	5.50E-07	1.15E-06	5.88E-07	1.07E-06	1.4318E-03
520098.41	4257944.85	8234.79901	0.0879	16.98183	0.08897	17.9227	1.43E-03	2.06E-07	3.48E-05	2.09E-07	3.53E-05	1.4988E-03
519803.25	4258789.38	8230.10061	0.18775	0.28367	0.19473	0.27778	1.43E-03	4.41E-07	5.82E-07	4.57E-07	5.47E-07	1.4295E-03
519969.08	4258252.33	8225.20857	0.1247	1.45875	0.12845	1.36647	1.43E-03	2.93E-07	2.99E-06	3.02E-07	2.69E-06	1.4329E-03
519961.01	4258305.6	8221.48515	0.14033	1.32253	0.14438	1.24371	1.43E-03	3.29E-07	2.71E-06	3.39E-07	2.45E-06	1.4318E-03
520033.99	4259619.5	8220.1895	6.4907	0.085	10.75897	0.08349	1.43E-03	1.52E-05	1.74E-07	2.53E-05	1.64E-07	1.4666E-03
520810.77	4258515.58	8219.78912	0.08988	0.08813	0.08726	0.09095	1.43E-03	2.11E-07	1.81E-07	2.05E-07	1.79E-07	1.4265E-03
519962.16	4258295.14	8218.2439	0.13682	1.34204	0.1408	1.26124	1.43E-03	3.21E-07	2.75E-06	3.31E-07	2.48E-06	1.4313E-03
519959.73	4258316.12	8205.40008	0.14391	1.30057	0.14803	1.22383	1.42E-03	3.38E-07	2.67E-06	3.48E-07	2.41E-06	1.4290E-03
520070.33	4259639.84	8204.8411	12.85691	0.08573	13.08477	0.08338	1.42E-03	3.02E-05	1.76E-07	3.07E-05	1.64E-07	1.4843E-03
520811.11	4258506.45	8198.90697	0.0898	0.08809	0.08716	0.09096	1.42E-03	2.11E-07	1.81E-07	2.05E-07	1.79E-07	1.4228E-03
519823.33	4258746.35	8198.42087	0.19626	0.32873	0.20456	0.32142	1.42E-03	4.61E-07	6.74E-07	4.80E-07	6.33E-07	1.4242E-03
519975.74	4258219.63	8197.1414	0.11705	1.59166	0.12042	1.48204	1.42E-03	2.75E-07	3.26E-06	2.83E-07	2.92E-06	1.4285E-03
520811.45	4258497.32	8194.78395	0.08972	0.08801	0.08708	0.09093	1.42E-03	2.11E-07	1.81E-07	2.04E-07	1.79E-07	1.4221E-03
519850.88	4258692.21	8181.65504	0.20967	0.40393	0.22076	0.39458	1.42E-03	4.92E-07	8.28E-07	5.18E-07	7.77E-07	1.4217E-03
519949.36	4258492.63	8180.97518	0.2462	1.08384	0.26284	1.02119	1.42E-03	5.78E-07	2.22E-06	6.17E-07	2.01E-06	1.4244E-03
519899.81	4258599.52	8172.26441	0.23984	0.61622	0.25753	0.59761	1.42E-03	5.63E-07	1.26E-06	6.05E-07	1.18E-06	1.4210E-03
519958.3	4258326.69	8167.12555	0.14755	1.27765	0.15179	1.20282	1.42E-03	3.46E-07	2.62E-06	3.56E-07	2.37E-06	1.4222E-03
519952.73	4258474.64	8153.56106	0.23579	1.1422	0.25062	1.07252	1.41E-03	5.54E-07	2.34E-06	5.88E-07	2.11E-06	1.4198E-03
520108.26	4257924.88	8149.80056	0.08606	11.28447	0.08667	13.35796	1.41E-03	2.02E-07	2.31E-05	2.03E-07	2.63E-05	1.4634E-03
520024.09	4259619.51	8142.1185	4.62133	0.08423	6.37637	0.08284	1.41E-03	1.08E-05	1.73E-07	1.50E-05	1.63E-07	1.4384E-03
519807.83	4258776.44	8138.62067	0.18849	0.29434	0.19566	0.28816	1.41E-03	4.43E-07	6.04E-07	4.59E-07	5.67E-07	1.4137E-03
519939.48	4258521.77	8134.10583	0.25381	0.9512	0.27213	0.90258	1.41E-03	5.96E-07	1.95E-06	6.39E-07	1.78E-06	1.4158E-03
520060.43	4259639.86	8131.62282	13.87968	0.08485	23.71832	0.08282	1.41E-03	3.26E-05	1.74E-07	5.57E-05	1.63E-07	1.4990E-03
519983	4258186.67	8113.86371	0.11027	1.74587	0.1133	1.61567	1.41E-03	2.59E-07	3.58E-06	2.66E-07	3.18E-06	1.4146E-03
519994.07	4258152.14	8111.30278	0.10504	2.05493	0.10842	1.87871	1.41E-03	2.47E-07	4.21E-06	2.55E-07	3.70E-06	1.4153E-03
519976.62	4258209.27	8109.26556	0.11432	1.60981	0.11753	1.49711	1.41E-03	2.68E-07	3.30E-06	2.76E-07	2.95E-06	1.4133E-03
519956.71	4258337.34	8106.90069	0.15126	1.25289	0.15565	1.18009	1.41E-03	3.55E-07	2.57E-06	3.65E-07	2.32E-06	1.4117E-03
520049.88	4258023.79	8100.21619	0.09263	7.43587	0.09686	5.65535	1.40E-03	2.17E-07	1.53E-05	2.27E-07	1.11E-05	1.4318E-03
519909.73	4258580.08	8098.02581	0.24457	0.68274	0.26295	0.6581	1.40E-03	5.74E-07	1.40E-06	6.17E-07	1.30E-06	1.4085E-03
520059.73	4258003.82	8083.33495	0.09108	11.7036	0.09459	7.74149	1.40E-03	2.14E-07	2.40E-05	2.22E-07	1.52E-05	1.4417E-03
519844.57	4258701.11	8064.82291	0.20482	0.38622	0.21513	0.37741	1.40E-03	4.81E-07	7.92E-07	5.05E-07	7.43E-07	1.4013E-03
520070.34	4259649.84	8063.69044	12.27416	0.08458	12.35062	0.08228	1.40E-03	2.88E-05	1.73E-07	2.90E-05	1.62E-07	1.4568E-03
520030.71	4259629.91	8048.6814	5.86285	0.08356	9.18232	0.08212	1.40E-03	1.38E-05	1.71E-07	2.16E-05	1.62E-07	1.4317E-03
520098.45	4257934.85	8048.01104	0.08615	16.94831	0.08716	17.92595	1.40E-03	2.02E-07	3.48E-05	2.05E-07	3.53E-05	1.4663E-03
519954.95	4258372.2	8045.71418	0.167	1.22088	0.17221	1.14975	1.40E-03	3.92E-07	2.50E-06	4.04E-07	2.26E-06	1.4011E-03
519919.65	4258560.64	8038.41786	0.24843	0.75874	0.26635	0.72786	1.39E-03	5.83E-07	1.56E-06	6.25E-07	1.43E-06	1.3984E-03
519796.51	4258797.17	8034.27281	0.18239	0.27282	0.18885	0.2673	1.39E-03	4.28E-07	5.60E-07	4.43E-07	5.26E-07	1.3955E-03
519954.84	4258396.74	8031.60228	0.18081	1.21359	0.18695	1.14104	1.39E-03	4.24E-07	2.49E-06	4.39E-07	2.25E-06	1.3986E-03
519929.57	4258541.21	8023.32854	0.25123	0.84654	0.26917	0.80842	1.39E-03	5.90E-07	1.74E-06	6.32E-07	1.59E-06	1.3962E-03
519949.32	4258482.94	8016.58202	0.23757	1.09177	0.25292	1.02821	1.39E-03	5.58E-07	2.24E-06	5.94E-07	2.02E-06	1.3959E-03
519977.44	4258198.95	8015.20808	0.11169	1.62338	0.11474	1.50909	1.39E-03	2.62E-07	3.33E-06	2.69E-07	2.97E-06	1.3970E-03
519983.82	4258176.34	8007.46689	0.10781	1.76759	0.11077	1.63371	1.39E-03	2.53E-07	3.63E-06	2.60E-07	3.22E-06	1.3962E-03
519953.95	4258447.43	8006.95622	0.21481	1.17847	0.22567	1.1053	1.39E-03	5.04E-07	2.42E-06	5.30E-07	2.18E-06	1.3944E-03
519877.12	4258636.77	8003.58857	0.22294	0.50246	0.23739	0.49075	1.39E-03	5.23E-07	1.03E-06	5.57E-07	9.66E-07	1.3913E-03
519867.12	4258655.32	7994.92981	0.21679	0.46177	0.22959	0.45188	1.39E-03	5.09E-07	9.47E-07	5.39E-07	8.90E-07	1.3896E-03
520060.44	4259649.86	7992.87876	13.05629	0.08373	21.94417	0.08174	1.39E-03	3.07E-05	1.72E-07	5.15E-05	1.61E-07	1.4688E-03
519954.52	4258421.77	7991.54412	0.19657	1.19975	0.20437	1.12622	1.39E-03	4.61E-07	2.46E-06	4.80E-07	2.22E-06	1.3917E-03
519857.12	4258673.87	7973.62767	0.21071	0.42632	0.22204	0.41739	1.38E-03	4.95E-07	8.74E-07	5.21E-07	8.22E-07	1.3857E-03
520020.81	4259629.93	7972.99576	4.24324	0.08281	5.71165	0.08149	1.38E-03	9.96E-06	1.70E-07	1.34E-05	1.60E-07	1.4066E-03
520108.3	4257914.88	7968.49903	0.08439	11.25308	0.08494	13.39592	1.38E-03	1.98E-07	2.31E-05	1.99E-07	2.64E-05	1.4319E-03
519838.21	4258709.89	7946.3763	0.2001	0.3696	0.20963	0.36135	1.38E-03	4.70E-07	7.58E-07	4.92E-07	7.11E-07	1.3807E-03
520049.91	4258013.79	7927.9075	0.09071	7.41896	0.09481	5.64438	1.38E-03	2.13E-07	1.52E-05	2.23E-07	1.11E-05	1.4018E-03
520070.36	4259659.84	7926.21375	11.86413	0.08345	11.62687	0.08121	1.37E-03	2.79E-05	1.71E-07	2.73E-05	1.60E-07	1.4302E-03
520059.76	4257993.82	7912.71333	0.08923	11.66949	0.09261	7.75046	1.37E-03	2.09E-07	2.39E-05	2.17E-07	1.53E-05	1.4120E-03
520030.72	4259639.91	7912.45533	5.9885	0.08245	9.58054	0.08104	1.37E-03	1.41E-05	1.69E-07	2.25E-05	1.60E-07	1.4093E-03
519964.79	4258244.12	7906.64665	0.1202	1.37871	0.12364	1.29528	1.37E-03	2.82E-07	2.83E-06	2.90E-07	2.55E-06	1.3773E-03
519984.59	4258166.04	7897.80866	0.10543	1.78349	0.10832	1.64656	1.37E-03	2.48E-07	3.66E-06	2.54E-07	3.24E-06	1.3772E-03
519939.44	4258512.07	7883.60014	0.24539	0.95867	0.26234	0.90951	1.37E-03	5.76E-07	1.97E-06	6.16E-07	1.79E-06	1.3723E-03
520098.48	4257924.85	7867.78037	0.08447	16.91475	0.08541	17.93534	1.36E-03	1.98E-07	3.47E-05	2.01E-07	3.53E-05	1.4350E-03
520060.46	4259659.86	7857.18692	13.14081	0.08261	20.70183	0.08066	1.36E-03	3.09E-05	1.69E-07	4.86E-05	1.59E-07	1.4426E-03
519965.9	4258233.67	7857.09264	0.11744	1.39963	0.12079	1.31331	1.36E-03	2.76E-07	2.87E-06	2.84E-07	2.59E-06	1.3688E-03
519889.85	4258609.26	7856.80545	0.2286	0.56521	0.24442	0.5503	1.36E-03	5.37E-07	1.16E-06	5.74E-07	1.08E-06	1.3661E-03
519956.86	4258287.34	7849.49494	0.13118	1.25864	0.1347	1.18681	1.36E-03	3.08E-07	2.58E-06	3.16E-07	2.34E-06	1.3670E-03
519958.16	4258276.81	7844.80856	0.12809	1.27695	0.13157	1.20384	1.36E-03	3.01E-07	2.62E-06	3.09E-07	2.37E-06	1.3662E-03
519789.75	4258804.91	7843.97199	0.1772	0.26261	0.18317	0.25743	1.36E-03	4.16E-07	5.39E-07	4.30E-07	5.07E-07	1.3624E-03
520020.82	4259639.93	7839.19433	4.29381	0.08172	5.83053	0.08042	1.36E-03	1.01E-05	1.68E-07	1.37E-05	1.58E-07	1.3838E-03
519810.93	4258760	7833.77852	0.18588	0.30467	0.19304	0.29829	1.36E-03	4.36E-07	6.25E-07	4.53E-07	5.87E-07	1.3608E-03
519959.35	4258266.34	7825.49647	0.12507	1.29399	0.12852	1.21943	1.36E-03	2.94E-07	2.65E-06	3.02E-07	2.40E-06	1.3629E-03
519831.79	4258718.53	7819.44011	0.19532	0.35394	0.20415	0.34619	1.36E-03	4.59E-07	7.26E-07	4.79E-07	6.81E-07	1.3586E-03
519951.44	4258380.73	7803.98326	0.16871	1.17077	0.1739	1.10426	1.35E-03	3.96E-07	2.40E-06	4.08E-07	2.17E-06	1.3589E-03
519951.42	4258356.51	7801.20926	0.1565	1.17549	0.16101	1.10988	1.35E-03	3.67E-07	2.41E-06	3.78E-07	2.18E-06	1.3584E-03
520061.08	4257984.72	7796.95998	0.08786	12.57583	0.09107	8.08682	1.35E-03	2.06E-07	2.58E-05	2.14E-07	1.59E-05	1.3945E-03
519966.93	4258223.26	7796.65888	0.11475	1.41792	0.11798	1.32869	1.35E-03	2.69E-07	2.91E-06	2.77E-07	2.62E-06	1.3584E-03
519899.77	4258589.82	7793.46269	0.23338	0.62311	0.25044	0.60332	1.35E-03	5.48E-07	1.28E-06	5.88E-07	1.19E-06	1.3553E-03
520070.38	4259669.84	7792.58681	11.1891	0.08236	10.84525	0.08016	1.35E-03	2.63E-05	1.69E-07	2.55E-05	1.58E-07	1.4036E-03
519960.43	4258255.9	7792.53952	0.12213	1.31109	0.12553	1.23445	1.35E-03	2.87E-07	2.69E-06	2.95E-07	2.43E-06	1.3573E-03
519950.29	4258456.32	7792.36118	0.21693	1.12379	0.22869	1.05701	1.35E-03	5.09E-07	2.30E-06	5.37E-07	2.08E-06	1.3570E-03
519825.99	4258728.64	7787.3185	0.1922	0.33975	0.20035	0.33249	1.35E-03	4.51E-07	6.97E-07	4.70E-07	6.55E-07	1.3529E-03
519985.31	4258155.76	7785.7848	0.10312	1.80024	0.10599	1.65983	1.35E-03	2.42E-07	3.69E-06	2.49E-07	3.27E-06	1.3579E-03
520108.33	4257904.88	7783.40837	0.08273	11.23977	0.08327	13.25046	1.35E-03	1.94E-07	2.31E-05	1.95E-07	2.61E-05	1.3995E-03
520030.74	4259649.91	7780.00179	6.03792	0.08137	9.934	0.07998	1.35E-03	1.42E-05	1.67E-07	2.33E-05	1.57E-07	1.3872E-03
519951.29	4258405.37	7766.60492	0.18267	1.16219	0.18898	1.09438	1.35E-03	4.29E-07	2.38E-06	4.44E-07	2.15E-06	1.3525E-03
520049.94	4258003.79	7761.59397	0.08887	7.40107	0.09284	5.63382	1.35E-03	2.09E-07	1.52E-05	2.18E-07	1.11E-05	1.3729E-03
519799.53	4258780.53	7748.2589	0.17989	0.28224	0.18631	0.27654	1.34E-03	4.22E-07	5.79E-07	4.37E-07	5.44E-07	1.3459E-03
519953.63	4258298.66	7737.57791	0.13366	1.21182	0.13712	1.14443	1.34E-03	3.14E-07	2.49E-06	3.22E-07	2.25E-06	1.3474E-03
519950.92	4258430.52	7734.64818	0.1986	1.14697	0.20704	1.07866	1.34E-03	4.66E-07	2.35E-06	4.86E-07	2.12E-06	1.3470E-03
519909.69	4258570.38	7731.21979	0.23749	0.68968	0.25443	0.66422	1.34E-03	5.58E-07	1.41E-06	5.97E-07	1.31E-06	1.3448E-03
519967.88	4258212.88	7727.58763	0.11213	1.43406	0.11522	1.3423	1.34E-03	2.63E-07	2.94E-06	2.70E-07	2.64E-06	1.3464E-03
520060.48	4259669.86	7725.79757	12.12741	0.08154	19.12624	0.07963	1.34E-03	2.85E-05	1.67E-07	4.49E-05	1.57E-07	1.4137E-03
519974.05	4258190.36	7722.25991	0.108	1.52912	0.11082	1.42444	1.34E-03	2.54E-07	3.14E-06	2.60E-07	2.80E-06	1.3458E-03
519952.4	4258309.15	7721.77481	0.13694	1.19316	0.14047	1.12766	1.34E-03	3.21E-07	2.45E-06	3.30E-07	2.22E-06	1.3446E-03
519929.52	4258531.51	7719.39321	0.24316	0.85345	0.25995	0.81488	1.34E-03	5.71E-07	1.75E-06	6.10E-07	1.60E-06	1.3434E-03
520020.84	4259649.93	7708.9769	4.31628	0.08065	5.93093	0.07937	1.34E-03	1.01E-05	1.65E-07	1.39E-05	1.56E-07	1.3615E-03
519919.61	4258550.94	7697.40646	0.24077	0.7652	0.25729	0.73418	1.34E-03	5.65E-07	1.57E-06	6.04E-07	1.45E-06	1.3393E-03
520098.51	4257914.85	7693.83434	0.08284	16.87668	0.08372	17.95734	1.33E-03	1.94E-07	3.46E-05	1.97E-07	3.53E-05	1.4048E-03
519951.04	4258319.7	7684.04633	0.14026	1.17342	0.1439	1.10967	1.33E-03	3.29E-07	2.41E-06	3.38E-07	2.18E-06	1.3380E-03
519939.4	4258502.37	7668.27757	0.23729	0.9656	0.25292	0.91605	1.33E-03	5.57E-07	1.98E-06	5.94E-07	1.80E-06	1.3350E-03
519819.59	4258737.33	7662.52603	0.18759	0.32592	0.19525	0.31905	1.33E-03	4.40E-07	6.68E-07	4.58E-07	6.28E-07	1.3312E-03
520070.39	4259679.84	7662.32317	10.52234	0.08129	10.00378	0.07913	1.33E-03	2.47E-05	1.67E-07	2.35E-05	1.56E-07	1.3775E-03
519867.12	4258646.05	7661.28698	0.2122	0.46582	0.22506	0.45598	1.33E-03	4.98E-07	9.55E-07	5.28E-07	8.98E-07	1.3317E-03
519804.21	4258767.85	7660.49919	0.18075	0.29259	0.18736	0.28665	1.33E-03	4.24E-07	6.00E-07	4.40E-07	5.64E-07	1.3307E-03
519974.94	4258180.01	7658.5557	0.1058	1.56121	0.10852	1.45342	1.33E-03	2.48E-07	3.20E-06	2.55E-07	2.86E-06	1.3349E-03
519968.76	4258202.53	7651.31122	0.1096	1.4482	0.11255	1.35428	1.33E-03	2.57E-07	2.97E-06	2.64E-07	2.67E-06	1.3332E-03
520030.76	4259659.91	7651.00781	6.06363	0.08031	10.24065	0.07895	1.33E-03	1.42E-05	1.65E-07	2.40E-05	1.55E-07	1.3656E-03
519857.12	4258664.6	7646.8962	0.20636	0.42983	0.21776	0.42125	1.33E-03	4.84E-07	8.82E-07	5.11E-07	8.29E-07	1.3290E-03
520061.11	4257974.72	7631.2623	0.08611	12.54583	0.0892	8.05195	1.32E-03	2.02E-07	2.57E-05	2.09E-07	1.59E-05	1.3656E-03
519949.53	4258330.31	7627.02844	0.14364	1.15244	0.14741	1.0905	1.32E-03	3.37E-07	2.36E-06	3.46E-07	2.15E-06	1.3281E-03
519847.12	4258683.15	7620.73307	0.20052	0.39828	0.21079	0.39019	1.32E-03	4.71E-07	8.17E-07	4.95E-07	7.68E-07	1.3243E-03
519946.63	4258465.21	7610.14057	0.2189	1.07228	0.23141	1.01154	1.32E-03	5.14E-07	2.20E-06	5.43E-07	1.99E-06	1.3252E-03
520108.36	4257894.88	7608.95571	0.08115	11.22094	0.08165	13.16284	1.32E-03	1.91E-07	2.30E-05	1.92E-07	2.59E-05	1.3690E-03
520049.97	4257993.79	7602.31309	0.0871	7.382	0.09093	5.62298	1.32E-03	2.04E-07	1.51E-05	2.13E-07	1.11E-05	1.3452E-03
520060.49	4259679.86	7597.18093	11.82832	0.08047	17.78204	0.0786	1.32E-03	2.78E-05	1.65E-07	4.17E-05	1.55E-07	1.3875E-03
520020.86	4259659.93	7582.09208	4.32531	0.07961	6.0043	0.07836	1.32E-03	1.02E-05	1.63E-07	1.41E-05	1.54E-07	1.3396E-03
519792.81	4258788.38	7576.41436	0.17495	0.27149	0.18087	0.26616	1.31E-03	4.11E-07	5.57E-07	4.25E-07	5.24E-07	1.3160E-03
519947.95	4258364.96	7575.64737	0.15798	1.12808	0.16243	1.0671	1.31E-03	3.71E-07	2.31E-06	3.81E-07	2.10E-06	1.3191E-03
519975.77	4258169.68	7565.19276	0.1035	1.57506	0.10611	1.4647	1.31E-03	2.43E-07	3.23E-06	2.49E-07	2.88E-06	1.3188E-03
519947.93	4258389.26	7557.3393	0.17037	1.12329	0.1756	1.06103	1.31E-03	4.00E-07	2.30E-06	4.12E-07	2.09E-06	1.3160E-03
519879.89	4258618.99	7547.71766	0.21791	0.52116	0.23232	0.50866	1.31E-03	5.12E-07	1.07E-06	5.45E-07	1.00E-06	1.3122E-03

520070.41	4259689.84	7535.60043	9.66126	0.08024	9.07552	0.07812	1.31E-03	2.27E-05	1.65E-07	2.13E-05	1.54E-07	1.3513E-03
520030.77	4259669.91	7525.25702	6.06188	0.07928	10.48165	0.07794	1.31E-03	1.42E-05	1.63E-07	2.46E-05	1.53E-07	1.3444E-03
520098.54	4257904.85	7523.51768	0.08125	16.84107	0.08209	17.7278	1.30E-03	1.91E-07	3.45E-05	1.93E-07	3.49E-05	1.3747E-03
519947.74	4258414	7506.52562	0.18441	1.11297	0.19106	1.04985	1.30E-03	4.33E-07	2.28E-06	4.49E-07	2.07E-06	1.3072E-03
519889.81	4258599.56	7504.24501	0.22283	0.57104	0.23829	0.55536	1.30E-03	5.23E-07	1.17E-06	5.59E-07	1.09E-06	1.3049E-03
520051.29	4257984.69	7500.62366	0.08581	7.75292	0.08947	5.82602	1.30E-03	2.01E-07	1.59E-05	2.10E-07	1.15E-05	1.3287E-03
519840.84	4258692.13	7500.25121	0.19542	0.38111	0.20537	0.37308	1.30E-03	4.59E-07	7.82E-07	4.82E-07	7.34E-07	1.3033E-03
519947.32	4258439.27	7498.61926	0.20054	1.09675	0.20978	1.03369	1.30E-03	4.71E-07	2.25E-06	4.92E-07	2.03E-06	1.3058E-03
519939.36	4258492.68	7490.50484	0.22961	0.97239	0.24409	0.92238	1.30E-03	5.39E-07	1.99E-06	5.73E-07	1.82E-06	1.3041E-03
519955.83	4258247.82	7488.45771	0.11769	1.23952	0.12078	1.17013	1.30E-03	2.76E-07	2.54E-06	2.84E-07	2.30E-06	1.3042E-03
520060.51	4259689.86	7472.35959	12.35362	0.07944	15.97227	0.07761	1.30E-03	2.90E-05	1.63E-07	3.75E-05	1.53E-07	1.3629E-03
519929.48	4258521.81	7472.04466	0.23573	0.86039	0.25149	0.82117	1.30E-03	5.53E-07	1.76E-06	5.90E-07	1.62E-06	1.3005E-03
519976.54	4258159.37	7468.49598	0.10127	1.59187	0.1038	1.47802	1.30E-03	2.38E-07	3.26E-06	2.44E-07	2.91E-06	1.3020E-03
520061.14	4257964.73	7465.92086	0.08439	12.53169	0.0874	7.96796	1.29E-03	1.98E-07	2.57E-05	2.05E-07	1.57E-05	1.3367E-03
519942.98	4258474.09	7460.44872	0.22066	1.02424	0.23374	0.96883	1.29E-03	5.18E-07	2.10E-06	5.49E-07	1.91E-06	1.2991E-03
520020.87	4259669.93	7458.42197	4.30148	0.0786	6.02906	0.07736	1.29E-03	1.01E-05	1.61E-07	1.42E-05	1.52E-07	1.3182E-03
519957.02	4258237.34	7455.10803	0.11505	1.25354	0.11809	1.18289	1.29E-03	2.70E-07	2.57E-06	2.77E-07	2.33E-06	1.2985E-03
520108.39	4257884.88	7452.15466	0.07968	11.1791	0.0801	13.45922	1.29E-03	1.87E-07	2.29E-05	1.88E-07	2.65E-05	1.3423E-03
519899.73	4258580.12	7447.23844	0.2271	0.62933	0.243	0.60876	1.29E-03	5.33E-07	1.29E-06	5.70E-07	1.20E-06	1.2953E-03
519958.12	4258226.9	7412.3993	0.11249	1.2724	0.11549	1.19867	1.29E-03	2.64E-07	2.61E-06	2.71E-07	2.36E-06	1.2912E-03
520070.43	4259699.84	7412.1206	8.76311	0.07921	8.11911	0.07714	1.29E-03	2.06E-05	1.62E-07	1.91E-05	1.52E-07	1.3255E-03
519786.08	4258796.19	7409.45156	0.17016	0.26143	0.17565	0.2564	1.29E-03	3.99E-07	5.36E-07	4.12E-07	5.05E-07	1.2870E-03
519834.51	4258700.97	7405.26362	0.1912	0.36503	0.20028	0.35754	1.28E-03	4.49E-07	7.49E-07	4.70E-07	7.04E-07	1.2868E-03
520030.79	4259679.91	7402.81775	6.02065	0.07827	10.63062	0.07696	1.28E-03	1.41E-05	1.61E-07	2.50E-05	1.51E-07	1.3234E-03
519909.65	4258560.68	7400.9787	0.23062	0.69562	0.24607	0.66997	1.28E-03	5.41E-07	1.43E-06	5.78E-07	1.32E-06	1.2875E-03
519949.36	4258280.45	7398.30495	0.1252	1.15315	0.12818	1.09189	1.28E-03	2.94E-07	2.37E-06	3.01E-07	2.15E-06	1.2883E-03
519919.57	4258541.25	7397.17552	0.2334	0.7713	0.24881	0.74008	1.28E-03	5.48E-07	1.58E-06	5.84E-07	1.46E-06	1.2872E-03
519950.63	4258269.94	7396.27518	0.12236	1.16845	0.12531	1.10609	1.28E-03	2.87E-07	2.40E-06	2.94E-07	2.18E-06	1.2880E-03
519965.1	4258194.05	7392.99394	0.10614	1.37479	0.10887	1.28937	1.28E-03	2.49E-07	2.82E-06	2.56E-07	2.54E-06	1.2881E-03
519947.98	4258291	7385.58057	0.12809	1.13611	0.13112	1.07611	1.28E-03	3.01E-07	2.33E-06	3.08E-07	2.12E-06	1.2861E-03
519951.78	4258259.47	7380.21868	0.11957	1.1828	0.12251	1.11917	1.28E-03	2.81E-07	2.43E-06	2.88E-07	2.20E-06	1.2853E-03
520098.57	4257894.85	7360.38047	0.07972	16.80408	0.08051	17.65778	1.28E-03	1.87E-07	3.45E-05	1.89E-07	3.48E-05	1.3462E-03
519959.13	4258216.49	7359.86411	0.10999	1.28683	0.11291	1.21096	1.28E-03	2.58E-07	2.64E-06	2.65E-07	2.38E-06	1.2821E-03
519944.48	4258373.4	7355.07039	0.1595	1.08467	0.16392	1.02734	1.28E-03	3.74E-07	2.22E-06	3.85E-07	2.02E-06	1.2807E-03
519807.29	4258751.35	7354.38277	0.1782	0.30238	0.18484	0.29631	1.28E-03	4.18E-07	6.20E-07	4.34E-07	5.83E-07	1.2776E-03
520060.53	4259699.86	7350.70615	11.03371	0.07844	13.78763	0.07663	1.27E-03	2.59E-05	1.61E-07	3.24E-05	1.51E-07	1.3335E-03
519867.12	4258636.77	7348.19059	0.20777	0.46984	0.22054	0.45997	1.27E-03	4.88E-07	9.64E-07	5.18E-07	9.05E-07	1.2774E-03
520051.32	4257974.69	7341.8536	0.08411	7.74161	0.08768	5.7963	1.27E-03	1.97E-07	1.59E-05	2.06E-07	1.14E-05	1.3011E-03
519944.17	4258349.89	7341.14922	0.14851	1.08414	0.15236	1.02808	1.27E-03	3.49E-07	2.22E-06	3.58E-07	2.02E-06	1.2782E-03
519939.32	4258482.98	7339.40504	0.22212	0.97896	0.23557	0.92837	1.27E-03	5.21E-07	2.01E-06	5.53E-07	1.83E-06	1.2779E-03
520020.89	4259679.93	7337.93586	4.26608	0.07761	6.00125	0.07639	1.27E-03	1.00E-05	1.59E-07	1.41E-05	1.50E-07	1.2971E-03
519857.12	4258655.32	7337.49849	0.20217	0.43335	0.21366	0.42495	1.27E-03	4.75E-07	8.89E-07	5.02E-07	8.37E-07	1.2754E-03
519966.06	4258183.67	7320.35955	0.10385	1.38871	0.10644	1.30093	1.27E-03	2.44E-07	2.85E-06	2.50E-07	2.56E-06	1.2756E-03
519847.12	4258673.87	7319.09416	0.19661	0.40136	0.20686	0.39375	1.27E-03	4.62E-07	8.23E-07	4.86E-07	7.75E-07	1.2720E-03
519944.42	4258397.79	7313.99113	0.17201	1.07845	0.17738	1.02	1.27E-03	4.04E-07	2.21E-06	4.16E-07	2.01E-06	1.2736E-03
520061.17	4257954.73	7310.8214	0.08276	12.51636	0.08567	7.92699	1.27E-03	1.94E-07	2.57E-05	2.01E-07	1.56E-05	1.3097E-03
519828.13	4258709.69	7300.58246	0.18686	0.34987	0.19522	0.34282	1.27E-03	4.39E-07	7.18E-07	4.58E-07	6.75E-07	1.2685E-03
519960.07	4258206.12	7299.85257	0.10757	1.29919	0.11038	1.22165	1.27E-03	2.53E-07	2.66E-06	2.59E-07	2.40E-06	1.2717E-03
519943.72	4258448.02	7295.5875	0.20244	1.04922	0.21248	0.99127	1.27E-03	4.75E-07	2.15E-06	4.99E-07	1.95E-06	1.2705E-03
520108.42	4257874.88	7294.95778	0.07823	11.14128	0.07859	13.46663	1.27E-03	1.84E-07	2.28E-05	1.85E-07	2.65E-05	1.3150E-03
520070.44	4259709.84	7291.81665	7.8666	0.07821	7.16082	0.07618	1.26E-03	1.85E-05	1.60E-07	1.68E-05	1.50E-07	1.3003E-03
519795.81	4258771.68	7286.06244	0.1725	0.28047	0.1784	0.275	1.26E-03	4.05E-07	5.75E-07	4.19E-07	5.41E-07	1.2657E-03
519945.11	4258302.18	7285.52685	0.13054	1.0999	0.13356	1.04325	1.26E-03	3.06E-07	2.26E-06	3.14E-07	2.05E-06	1.2686E-03
520030.81	4259689.91	7283.4377	5.95256	0.07728	10.62462	0.07599	1.26E-03	1.40E-05	1.58E-07	2.49E-05	1.50E-07	1.3025E-03
519944.18	4258422.63	7265.33986	0.18617	1.06677	0.19338	1.0079	1.26E-03	4.37E-07	2.19E-06	4.54E-07	1.98E-06	1.2652E-03
519822.21	4258719.55	7263.2403	0.18372	0.33605	0.19137	0.32941	1.26E-03	4.31E-07	6.89E-07	4.49E-07	6.48E-07	1.2620E-03
519929.44	4258512.11	7250.41231	0.22846	0.86679	0.24314	0.82706	1.26E-03	5.36E-07	1.78E-06	5.71E-07	1.63E-06	1.2621E-03
519943.8	4258312.7	7245.5484	0.13354	1.08136	0.13665	1.02675	1.26E-03	3.14E-07	2.22E-06	3.21E-07	2.02E-06	1.2616E-03
519966.95	4258173.32	7242.70025	0.10164	1.40442	0.10411	1.31378	1.26E-03	2.39E-07	2.88E-06	2.44E-07	2.59E-06	1.2622E-03
520060.54	4259709.86	7232.0975	9.57358	0.07745	11.39704	0.07568	1.25E-03	2.25E-05	1.59E-07	2.68E-05	1.49E-07	1.3039E-03
519879.85	4258609.3	7223.1348	0.21279	0.52594	0.22682	0.51317	1.25E-03	5.00E-07	1.08E-06	5.33E-07	1.01E-06	1.2559E-03
520020.91	4259689.93	7220.32485	4.23336	0.07662	5.89534	0.07543	1.25E-03	9.94E-06	1.57E-07	1.38E-05	1.48E-07	1.2764E-03
520098.6	4257884.85	7205.4782	0.07825	16.76329	0.07899	17.90194	1.25E-03	1.84E-07	3.44E-05	1.85E-07	3.52E-05	1.3197E-03
519800.59	4258759.26	7203.83546	0.17346	0.29053	0.17957	0.28486	1.25E-03	4.07E-07	5.96E-07	4.22E-07	5.61E-07	1.2515E-03
519942.36	4258323.29	7193.9934	0.13665	1.06376	0.13987	1.01069	1.25E-03	3.21E-07	2.18E-06	3.28E-07	1.99E-06	1.2526E-03
520051.35	4257964.69	7188.96235	0.08247	7.73221	0.08594	5.754	1.25E-03	1.94E-07	1.59E-05	2.02E-07	1.13E-05	1.2745E-03
519889.77	4258589.86	7179.15401	0.21716	0.57694	0.23205	0.56028	1.25E-03	5.10E-07	1.18E-06	5.45E-07	1.10E-06	1.2485E-03
520070.46	4259719.84	7174.61957	7.01039	0.07723	6.10521	0.07524	1.24E-03	1.65E-05	1.58E-07	1.43E-05	1.48E-07	1.2755E-03
520030.82	4259699.91	7167.03323	5.803	0.07632	10.28282	0.07505	1.24E-03	1.36E-05	1.57E-07	2.41E-05	1.48E-07	1.2812E-03
520061.2	4257944.73	7161.83804	0.08119	12.50865	0.08399	7.89996	1.24E-03	1.91E-07	2.57E-05	1.97E-07	1.56E-05	1.2838E-03
519967.78	4258162.99	7160.47962	0.09949	1.41739	0.10184	1.32414	1.24E-03	2.34E-07	2.91E-06	2.39E-07	2.61E-06	1.2479E-03
519815.84	4258728.3	7158.04355	0.17948	0.32266	0.18665	0.3163	1.24E-03	4.21E-07	6.62E-07	4.38E-07	6.23E-07	1.2437E-03
520108.45	4257864.88	7139.47084	0.0768	11.12303	0.07713	13.48321	1.24E-03	1.80E-07	2.28E-05	1.81E-07	2.65E-05	1.2880E-03
519789.12	4258779.6	7136.56743	0.16794	0.26993	0.1734	0.26478	1.24E-03	3.94E-07	5.54E-07	4.07E-07	5.21E-07	1.2397E-03
519899.69	4258570.42	7132.0117	0.2209	0.63516	0.2355	0.61399	1.24E-03	5.19E-07	1.30E-06	5.53E-07	1.21E-06	1.2406E-03
519941	4258381.84	7128.48	0.16095	1.04298	0.1654	0.98911	1.24E-03	3.78E-07	2.14E-06	3.88E-07	1.95E-06	1.2413E-03
519919.52	4258531.55	7128.30961	0.22634	0.77709	0.24082	0.74557	1.24E-03	5.31E-07	1.59E-06	5.65E-07	1.47E-06	1.2405E-03
519940.51	4258358.78	7126.60966	0.14992	1.04099	0.15371	0.98862	1.24E-03	3.52E-07	2.13E-06	3.61E-07	1.95E-06	1.2409E-03
519940.12	4258456.77	7117.77234	0.20417	1.00401	0.21488	0.95107	1.23E-03	4.79E-07	2.06E-06	5.04E-07	1.87E-06	1.2395E-03
520060.56	4259719.86	7116.51655	9.41125	0.07647	8.79644	0.07474	1.23E-03	2.21E-05	1.57E-07	2.07E-05	1.47E-07	1.2774E-03
519909.61	4258550.99	7106.01266	0.22393	0.70103	0.23817	0.67534	1.23E-03	5.26E-07	1.44E-06	5.59E-07	1.33E-06	1.2364E-03
520020.92	4259699.93	7105.73378	4.13191	0.07567	5.67516	0.07449	1.23E-03	9.70E-06	1.55E-07	1.33E-05	1.47E-07	1.2558E-03
519946.87	4258251.51	7089.2089	0.11519	1.11977	0.11782	1.06127	1.23E-03	2.70E-07	2.30E-06	2.77E-07	2.09E-06	1.2345E-03
519940.91	4258406.32	7078.23637	0.17362	1.03602	0.17933	0.98108	1.23E-03	4.08E-07	2.12E-06	4.21E-07	1.93E-06	1.2326E-03
519948.14	4258241	7071.80097	0.1127	1.13203	0.11533	1.07291	1.23E-03	2.65E-07	2.32E-06	2.71E-07	2.11E-06	1.2315E-03
520070.48	4259729.84	7060.3235	6.05315	0.07624	5.06903	0.0743	1.22E-03	1.42E-05	1.56E-07	1.19E-05	1.46E-07	1.2510E-03
519929.4	4258502.42	7057.31073	0.22143	0.87268	0.23503	0.8326	1.22E-03	5.20E-07	1.79E-06	5.52E-07	1.64E-06	1.2286E-03
520030.84	4259709.91	7053.6341	5.5637	0.07537	9.42302	0.07413	1.22E-03	1.31E-05	1.55E-07	2.21E-05	1.46E-07	1.2589E-03
520098.63	4257874.85	7052.88558	0.07682	16.73272	0.07751	17.80573	1.22E-03	1.80E-07	3.43E-05	1.82E-07	3.51E-05	1.2930E-03
519956.16	4258197.75	7052.29513	0.10416	1.23749	0.10677	1.16579	1.22E-03	2.45E-07	2.54E-06	2.51E-07	2.29E-06	1.2285E-03
519940.63	4258431.27	7049.6439	0.18794	1.02314	0.19587	0.96837	1.22E-03	4.41E-07	2.10E-06	4.60E-07	1.91E-06	1.2276E-03
519857.12	4258646.05	7047.08079	0.19814	0.43687	0.20964	0.42852	1.22E-03	4.65E-07	8.96E-07	4.92E-07	8.44E-07	1.2250E-03
520051.38	4257954.69	7044.25264	0.0809	7.72073	0.08427	5.72403	1.22E-03	1.90E-07	1.58E-05	1.98E-07	1.13E-05	1.2493E-03
519949.3	4258230.54	7043.99405	0.11027	1.14736	0.11291	1.08615	1.22E-03	2.59E-07	2.35E-06	2.65E-07	2.14E-06	1.2268E-03
519847.12	4258664.6	7031.70107	0.1928	0.40443	0.20313	0.39711	1.22E-03	4.53E-07	8.29E-07	4.77E-07	7.82E-07	1.2222E-03
520061.23	4257934.73	7022.27566	0.07969	12.49498	0.08238	7.88064	1.22E-03	1.87E-07	2.56E-05	1.93E-07	1.55E-05	1.2595E-03
519837.12	4258683.15	7011.43725	0.18749	0.37582	0.19676	0.36895	1.22E-03	4.40E-07	7.71E-07	4.62E-07	7.26E-07	1.2185E-03
519950.38	4258220.1	7007.04133	0.10788	1.16161	0.11052	1.09815	1.22E-03	2.53E-07	2.38E-06	2.59E-07	2.16E-06	1.2204E-03
520060.58	4259729.86	7003.96195	7.60776	0.07552	6.63057	0.07382	1.21E-03	1.79E-05	1.55E-07	1.56E-05	1.45E-07	1.2485E-03
520020.94	4259709.93	6994.13656	3.97908	0.07474	5.34059	0.07358	1.21E-03	9.34E-06	1.53E-07	1.25E-05	1.45E-07	1.2353E-03
519957.17	4258187.34	6993.89141	0.10196	1.24977	0.10446	1.17621	1.21E-03	2.39E-07	2.56E-06	2.45E-07	2.32E-06	1.2184E-03
519782.41	4258787.46	6989.80186	0.1635	0.25999	0.16855	0.25514	1.21E-03	3.84E-07	5.33E-07	3.96E-07	5.02E-07	1.2142E-03
519941.9	4258273.54	6989.53392	0.11966	1.06072	0.12216	1.00792	1.21E-03	2.81E-07	2.18E-06	2.87E-07	1.98E-06	1.2170E-03
519943.13	4258263.04	6988.77989	0.11703	1.07344	0.11951	1.01965	1.21E-03	2.75E-07	2.20E-06	2.81E-07	2.01E-06	1.2169E-03
520108.48	4257854.88	6988.40894	0.07542	11.11171	0.07571	13.5012	1.21E-03	1.77E-07	2.28E-05	1.78E-07	2.66E-05	1.2618E-03
519940.57	4258284.08	6977.16028	0.12234	1.04669	0.12489	0.9949	1.21E-03	2.87E-07	2.15E-06	2.93E-07	1.96E-06	1.2148E-03
519936.52	4258465.52	6968.46208	0.2057	0.96133	0.2169	0.91301	1.21E-03	4.83E-07	1.97E-06	5.09E-07	1.80E-06	1.2134E-03
519951.39	4258209.7	6962.04122	0.10556	1.17329	0.10816	1.10827	1.21E-03	2.48E-07	2.41E-06	2.54E-07	2.18E-06	1.2126E-03
519869.89	4258619.04	6955.69117	0.20335	0.48636	0.21606	0.47583	1.21E-03	4.77E-07	9.97E-07	5.07E-07	9.37E-07	1.2094E-03
519939.1	4258294.67	6949.12788	0.12504	1.03102	0.12766	0.98038	1.21E-03	2.94E-07	2.11E-06	3.00E-07	1.93E-06	1.2099E-03
520030.86	4259719.91	6943.07596	5.23477	0.07445	7.69295	0.07323	1.20E-03	1.23E-05	1.53E-07	1.81E-05	1.44E-07	1.2349E-03
519937.14	4258342.72	6933.04035	0.14107	1.00503	0.14433	0.9568	1.20E-03	3.31E-07	2.06E-06	3.39E-07	1.88E-06	1.2071E-03
519958.12	4258176.96	6930.01766	0.09983	1.26058	0.10221	1.18524	1.20E-03	2.34E-07	2.59E-06	2.40E-07	2.33E-06	1.2074E-03
519879.81	4258599.6	6920.93133	0.20772	0.53092	0.2214	0.51755	1.20E-03	4.88E-07	1.09E-06	5.20E-07	1.02E-06	1.2035E-03
519936.85	4258367.66	6908.22123	0.15133	1.00057	0.15508	0.95139	1.20E-03	3.55E-07	2.05E-06	3.64E-07	1.87E-06	1.2028E-03
520098.66	4257864.85	6906.06529	0.07543	16.70805	0.07608	17.80475	1.20E-03	1.77E-07	3.43E-05	1.79E-07	3.50E-05	1.2675E-03
520051.41	4257944.69	6904.34889	0.07938	7.71012	0.08265	5.69441	1.20E-03	1.86E-07	1.58E-05	1.94E-07	1.12E-05	1.2249E-03
519830.82	4258692.06	6903.48021	0.18282	0.36017	0.19176	0.35332	1.20E-03	4.29E-07	7.39E-07	4.50E-07	6.96E-07	1.1997E-03
519803.65	4258742.7	6902.42292	0.17102	0.2997	0.17717	0.29403	1.20E-03	4.02E-07	6.15E-07	4.16E-07	5.79E-07	1.1992E-03
519919.48	4258521.85	6896.436	0.21965	0.78275	0.23327	0.75082	1.20E-03	5.16E-07	1.61E-06	5.48E-07	1.48E-06	1.2003E-03
519929.36	4258492.72	6891.26245	0.21466	0.87826	0.22728	0.83788	1.20E-03	5.04E-07	1.80E-06	5.34E-07	1.65E-06	1.1997E-03
520020.96	4259719.93	6885.35314	3.77202	0.07384	4.8716	0.0727	1.19E-03	8.86E-06	1.51E-07	1.14E-05	1.43E-07	1.2148E-03
519889.73	4258580.16	6881.70142	0.21162	0.58216	0.22546	0.56492	1.19E-03	4.97E-07	1.19E-06	5.29E-07	1.11E-06	1.1969E-03
520061.27	4257924.73	6876.5578	0.07819	12.51659	0.08081	7.82316	1.19E-03	1.84E-07	2.57E-05	1.90E-07	1.54E-05	1.2342E-03
520109.07	4257845.4	6862.65779	0.07422	10.8825	0.07447	13.27905	1.19E-03	1.74E-07	2.23E-05	1.75E-07	2.61E-05	1.2391E-03
519959.01	4258166.61	6861.37852	0.09775	1.27097	0.10002	1.1937	1.19E-03	2.29E-07	2.61E-06	2.35E-07	2.35E-06	1.1955E-03
519936.58	4258305.7	6859.64722	0.12743	1.00253	0.13008	0.95456	1.19E-03	2.99E-07	2.06E-06	3.05E-07	1.88E-06	1.1943E-03
519937.4	4258414.86	6854.10334	0.17518	0.99536	0.1814	0.94396	1.19E-03	4.11E-07	2.04E-06	4.26E-07	1.86E-06	1.1935E-03
519937.08	4258439.9	6853.01603	0.18961	0.98139	0.19827	0.93084	1.19E-03	4.45E-07	2.01E-06	4.65E-07	1.83E-06	1.1934E-03
519932.92	4258474.27	6847.08039	0.20707	0.92151	0.21862	0.87712	1.19E-03	4.86E-07	1.89E-06	5.13E-07	1.73E-06	1.1922E-03
519899.65	4258560.73	6846.78683	0.21483	0.64028	0.22819	0.61891	1.19E-03	5.04E-07	1.31E-06	5.36E-07	1.22E-06	1.1911E-03
519792.08	4258762.84	6845.44117	0.16556	0.27833	0.17096	0.27316	1.19E-03	3.89E-07	5.71E-07	4.01E-07	5.38E-07	1.1892E-03
519909.57	4258541.29	6841.76415	0.21742	0.70612	0.23071	0.68036	1.19E-03	5.10E-07	1.45E-06	5.42E-07	1.34E-06	1.1905E-03
520030.87	4259729.91	6835.18141	4.69454	0.07355	5.81229	0.07234	1.19E-03	1.10E-05	1.51E-07	1.36E-05	1.42E-07	1.2105E-03
519824.46	4258700.84	6821.15903	0.17901	0.34547	0.18708	0.33912	1.18E-03	4.20E-07	7.09E-07	4.39E-07	6.68E-07	1.1853E-03
519935.2	4258316.25	6803.31048	0.13022	0.98557	0.13296	0.9395	1.18E-03	3.06E-07	2.02E-06	3.12E-07	1.85E-06	1.1845E-03
520020.97	4259729.93	6779.0976	3.50959	0.07296	4.24388	0.07183	1.18E-03	8.24E-06	1.50E-07	9.96E-06	1.41E-07	1.1943E-03
519818.44	4258710.45	6775.0508	0.17577	0.33203	0.18319	0.32595	1.18E-03	4.13E-07	6.81E-07	4.30E-07	6.42E-07	1.1773E-03
519857.12	4258636.77	6774.93955	0.19423	0.44035	0.2056	0.43199	1.18E-03	4.56E-07	9.03E-07	4.83E-07	8.50E-07	1.1778E-03
520051.45	4257934.69	6772.9714	0.07794	7.70002	0.08109	5.6744	1.17E-03	1.83E-07	1.58E-05	1.90E-07	1.12E-05	1.2021E-03
519796.98	4258750.66	6770.78106	0.16663	0.28816	0.1723	0.28281	1.17E-03	3.91E-07	5.91E-07	4.05E-07	5.57E-07	1.1763E-03
520098.69	4257854.85	6764.69323	0.0741	16.6903	0.0747	17.90184	1.17E-03	1.74E-07	3.42E-05	1.75E-07	3.52E-05	1.2431E-03
519847.12	4258655.32	6760.62979	0.18911	0.40751	0.19951	0.40034	1.17E-03	4.44E-07	8.36E-07	4.68E-07	7.88E-07	1.1751E-03
519929.32	4258483.02	6750.74658	0.20816	0.8837	0.21992	0.84298	1.17E-03	4.89E-07	1.81E-06	5.16E-07	1.66E-06	1.1754E-03
520061.3	4257914.73	6747.90029	0.0768	12.48265	0.07929	7.78197	1.17E-03	1.80E-07	2.56E-05	1.86E-07	1.53E-05	1.2117E-03
519837.12	4258673.87	6743.65715	0.18403	0.37851	0.19334	0.37204	1.17E-03	4.32E-07	7.76E-07	4.54E-07	7.32E-07	1.1721E-03
519933.52	4258351.5	6737.12968	0.14232	0.96742	0.14552	0.92209	1.17E-03	3.34E-07	1.98E-06	3.42E-07	1.82E-06	1.1730E-03
519947.21	4258201.44	6723.43418	0.1022	1.11549	0.10457	1.05584	1.17E-03	2.40E-07	2.29E-06	2.45E-07	2.08E-06	1.1710E-03
520109.1	4257835.4	6721.4025	0.07292	10.87196	0.07314	13.28876	1.17E-03	1.71E-07	2.23E-05	1.72E-07	2.62E-05	1.2146E-03
519785.42	4258770.81	6715.25508	0.16132	0.26806	0.16635	0.26314	1.16E-03	3.79E-07	5.50E-07	3.91E-07	5.18E-07	1.1666E-03
519937.91	4258255.21	6709.98283	0.11272	1.01511	0.11488	0.96592	1.16E-03	2.65E-07	2.08E-06	2.70E-07	1.90E-06	1.1683E-03
519939.25	4258244.67	6706.96273	0.11037	1.02959	0.11256	0.97872	1.16E-03	2.59E-07	2.11E-06	2.64E-07	1.93E-06	1.1679E-03
519919.44	4258512.15	6693.21181	0.21324	0.7881	0.22598	0.75577	1.16E-03	5.01E-07	1.62E-06	5.31E-07	1.49E-06	1.1650E-03
519940.49	4258234.17	6692.66358	0.10806	1.03976	0.11026	0.98841	1.16E-03	2.54E-07	2.13E-06	2.59E-07	1.95E-06	1.1654E-03
519812.1	4258719.27	6688.95029	0.17194	0.31902	0.17877	0.31322	1.16E-03	4.04E-07	6.54E-07	4.20E-07	6.17E-07	1.1623E-03
519933.2	4258376.55	6687.75553	0.15271	0.96224	0.15652	0.91596	1.16E-03	3.59E-07	1.97E-06	3.67E-07	1.80E-06	1.1645E-03
519934.06	4258398.72	6686.42221	0.16381	0.96627	0.16872	0.91838	1.16E-03	3.85E-07	1.98E-06	3.96E-07	1.81E-06	1.1643E-03
519933.53	4258448.53	6680.16481	0.19116	0.94164	0.20043	0.8952	1.16E-03	4.49E-07	1.93E-06	4.71E-07	1.76E-06	1.1633E-03
519948.29	4258191	6678.914	0.1001	1.12772	0.10243	1.06613	1.16E-03	2.35E-07	2.31E-06	2.40E-07	2.10E-06	1.1633E-03
519869.85	4258609.34	6674.73418	0.19879	0.49053	0.2112	0.47974	1.16E-03	4.67E-07	1.01E-06	4.96E-07	9.44E-07	1.1606E-03
519941.64	4258223.71	6669.51613	0.10581	1.05323	0.10804	0.99992	1.16E-03	2.48E-07	2.16E-06	2.54E-07	1.97E-06	1.1614E-03
520099.28	4257845.37	6646.00528	0.07294	16.23426	0.07348	17.62373	1.15E-03	1.71E-07	3.33E-05	1.73E-07	3.47E-05	1.2211E-03
519933.89	4258423.39	6645.81783	0.17671	0.95671	0.18356	0.90878	1.15E-03	4.15E-07	1.96E-06	4.31E-07	1.79E-06	1.1573E-03
519879.77	4258589.9	6642.26969	0.20271	0.53598	0.21586	0.52181	1.15E-03	4.76E-07	1.10E-06	5.07E-07	1.03E-06	1.1552E-03
519942.7	4258213.29	6637.47578	0.10359	1.06442	0.10585	1.00952	1.15E-03	2.43E-07	2.18E-06	2.49E-07	1.99E-06	1.1559E-03
520051.48	4257924.69	6636.62113	0.07649	7.69478	0.07957	5.62806	1.15E-03	1.80E-07	1.58E-05	1.87E-07	1.11E-05	1.1783E-03
519949.3	4258180.6	6628.14285	0.09805	1.13783	0.10031	1.07465	1.15E-03	2.30E-07	2.33E-06	2.35E-07	2.12E-06	1.1545E-03
519934.48	4258266.61	6617.77871	0.11452	0.97931	0.1166	0.93326	1.15E-03	2.69E-07	2.01E-06	2.74E-07	1.84E-06	1.1522E-03
519889.69	4258570.47	6609.55894	0.20615	0.58729	0.21891	0.56945	1.15E-03	4.84E-07	1.20E-06	5.14E-07	1.12E-06	1.1497E-03
519933.18	4258277.14	6605.23075	0.11699	0.96715	0.11912	0.9221	1.15E-03	2.75E-07	1.98E-06	2.80E-07	1.82E-06	1.1500E-03
519909.52	4258531.59	6602.4969	0.2112	0.71096	0.22372	0.68503	1.15E-03	4.96E-07	1.46E-06	5.25E-07	1.35E-06	1.1490E-03
520061.33	4257904.73	6601.00667	0.07534	12.51625	0.07781	7.62588	1.14E-03	1.77E-07	2.57E-05	1.83E-07	1.50E-05	1.1860E-03
519899.61	4258551.03	6589.06176	0.20886	0.64488	0.22116	0.62349	1.14E-03	4.90E-07	1.32E-06	5.19E-07	1.23E-06	1.1464E-03
519778.73	4258778.73	6586.79177	0.1572	0.2583	0.16186	0.25364	1.14E-03	3.69E-07	5.30E-07	3.80E-07	4.99E-07	1.1442E-03
520109.13	4257825.4	6582.3607	0.07164	10.87252	0.07184	13.30118	1.14E-03	1.68E-07	2.23E-05	1.69E-07	2.62E-05	1.1905E-03
519931.77	4258287.71	6579.66495	0.1195	0.95479	0.12171	0.91051	1.14E-03	2.81E-07	1.96E-06	2.86E-07	1.79E-06	1.1455E-03
519950.25	4258170.22	6572.20171	0.09606	1.14748	0.09824	1.08257	1.14E-03	2.26E-07	2.35E-06	2.31E-07	2.13E-06	1.1449E-03
519930.1	4258335.56	6563.31487	0.13424	0.93438	0.13699	0.89244	1.14E-03	3.15E-07	1.92E-06	3.22E-07	1.76E-06	1.1427E-03
519929.91	4258360.28	6540.61697	0.14359	0.93222	0.14676	0.88935	1.13E-03	3.37E-07	1.91E-06	3.45E-07	1.75E-06	1.1388E-03
519930.21	4258298.34	6538.21575	0.12202	0.93992	0.12431	0.89688	1.13E-03	2.86E-07	1.93E-06	2.92E-07	1.77E-06	1.1383E-03
519929.98	4258457.16	6532.58888	0.19252	0.90368	0.20221	0.86121	1.13E-03	4.52E-07	1.85E-06	4.75E-07	1.70E-06	1.1375E-03
519919.4	4258502.46	6514.75323	0.20706	0.79307	0.21892	0.76044	1.13E-03	4.86E-07	1.63E-06	5.14E-07	1.50E-06	1.1341E-03
520099.31	4257835.37	6513.06941	0.07168	16.2281	0.07218	17.73974	1.13E-03	1.68E-07	3.33E-05	1.69E-07	3.49E-05	1.1982E-03
520051.51	4257914.69	6512.71472	0.07514	7.68083	0.07811	5.60226	1.13E-03	1.76E-07	1.58E-05	1.83E-07	1.10E-05	1.1567E-03
519847.12	4258646.05	6506.27876	0.18553	0.4106	0.19592	0.40345	1.13E-03	4.36E-07	8.42E-07	4.60E-07	7.94E-07	1.1310E-03
519837.12	4258664.6	6489.78995	0.18065	0.38121	0.19006	0.37496	1.13E-03	4.24E-07	7.82E-07	4.46E-07	7.38E-07	1.1280E-03
519800.01	4258734.05	6477.41583	0.16428	0.2967	0.17009	0.29147	1.12E-03	3.86E-07	6.09E-07	3.99E-07	5.74E-07	1.1254E-03
519930.58	4258407.17	6476.73182	0.1652	0.93048	0.17058	0.88542	1.12E-03	3.88E-07	1.91E-06	4.00E-07	1.74E-06	1.1278E-03
519827.12	4258683.15	6472.73074	0.17581	0.35518	0.18421	0.34934	1.12E-03	4.13E-07	7.28E-07	4.32E-07	6.88E-07	1.1249E-03
520061.36	4257894.73	6468.81887	0.07398	12.4928	0.07638	7.51336	1.12E-03	1.74E-07	2.56E-05	1.79E-07	1.48E-05	1.1628E-03

519929.54	4258385.44	6468.69579	0.15406	0.92588	0.15807	0.88219	1.12E-03	3.62E-07	1.90E-06	3.71E-07	1.74E-06	1.1263E-03
519930.38	4258431.92	6456.49702	0.17815	0.91976	0.18567	0.87532	1.12E-03	4.18E-07	1.89E-06	4.36E-07	1.72E-06	1.1243E-03
519928.05	4258309.22	6456.39314	0.12435	0.91778	0.12669	0.8769	1.12E-03	2.92E-07	1.88E-06	2.97E-07	1.73E-06	1.1240E-03
520109.16	4257815.4	6446.81247	0.0704	10.87249	0.07059	13.21919	1.12E-03	1.65E-07	2.23E-05	1.66E-07	2.60E-05	1.1668E-03
519859.89	4258619.08	6437.83788	0.19035	0.45497	0.20162	0.4461	1.12E-03	4.47E-07	9.33E-07	4.73E-07	8.78E-07	1.1193E-03
519788.36	4258753.99	6427.32647	0.15901	0.27602	0.16407	0.27112	1.11E-03	3.73E-07	5.66E-07	3.85E-07	5.34E-07	1.1166E-03
519869.81	4258599.64	6413.80519	0.19428	0.49488	0.2064	0.48354	1.11E-03	4.56E-07	1.01E-06	4.85E-07	9.52E-07	1.1154E-03
519926.43	4258465.8	6410.55874	0.19373	0.86818	0.20373	0.82908	1.11E-03	4.55E-07	1.78E-06	4.78E-07	1.63E-06	1.1162E-03
519938.26	4258205.13	6408.20397	0.10027	1.01237	0.10229	0.96167	1.11E-03	2.35E-07	2.08E-06	2.40E-07	1.89E-06	1.1159E-03
519909.48	4258521.89	6392.2602	0.20527	0.7157	0.21709	0.68947	1.11E-03	4.82E-07	1.47E-06	5.10E-07	1.36E-06	1.1125E-03
519879.73	4258580.2	6386.59745	0.19782	0.54049	0.21004	0.52583	1.11E-03	4.64E-07	1.11E-06	4.93E-07	1.04E-06	1.1108E-03
519926.52	4258344.25	6385.20361	0.13537	0.90165	0.13807	0.86201	1.11E-03	3.18E-07	1.85E-06	3.24E-07	1.70E-06	1.1117E-03
520099.34	4257825.37	6383.98464	0.07045	16.22589	0.07092	17.80294	1.11E-03	1.65E-07	3.33E-05	1.66E-07	3.50E-05	1.1759E-03
519939.41	4258194.67	6376.04332	0.09827	1.02282	0.10031	0.97068	1.11E-03	2.31E-07	2.10E-06	2.35E-07	1.91E-06	1.1104E-03
520051.54	4257904.69	6375.94371	0.07374	7.67788	0.07667	5.49728	1.11E-03	1.73E-07	1.57E-05	1.80E-07	1.08E-05	1.1328E-03
519820.79	4258692	6374.99961	0.17151	0.34085	0.17958	0.33502	1.11E-03	4.03E-07	6.99E-07	4.22E-07	6.59E-07	1.1079E-03
519793.36	4258742.07	6363.03174	0.16022	0.28543	0.16552	0.28048	1.10E-03	3.76E-07	5.85E-07	3.89E-07	5.52E-07	1.1055E-03
519889.65	4258560.77	6360.81428	0.20075	0.59164	0.21241	0.57366	1.10E-03	4.71E-07	1.21E-06	4.99E-07	1.13E-06	1.1066E-03
519930.37	4258248.34	6360.26945	0.10806	0.93836	0.10984	0.8949	1.10E-03	2.54E-07	1.92E-06	2.58E-07	1.76E-06	1.1074E-03
519919.36	4258492.76	6359.25106	0.20109	0.79771	0.21211	0.76486	1.10E-03	4.72E-07	1.64E-06	4.98E-07	1.51E-06	1.1071E-03
519931.68	4258237.81	6358.54552	0.10588	0.95027	0.10767	0.90553	1.10E-03	2.49E-07	1.95E-06	2.53E-07	1.78E-06	1.1071E-03
519899.57	4258541.33	6351.19955	0.20312	0.64921	0.21464	0.6278	1.10E-03	4.77E-07	1.33E-06	5.04E-07	1.24E-06	1.1051E-03
519928.95	4258258.91	6350.60933	0.11025	0.92431	0.11204	0.88245	1.10E-03	2.59E-07	1.90E-06	2.63E-07	1.74E-06	1.1056E-03
520061.39	4257884.73	6348.45699	0.0727	12.51728	0.07501	7.53349	1.10E-03	1.71E-07	2.57E-05	1.76E-07	1.48E-05	1.1420E-03
519932.89	4258227.32	6346.47612	0.10373	0.95786	0.10553	0.91287	1.10E-03	2.44E-07	1.96E-06	2.48E-07	1.80E-06	1.1050E-03
519926.3	4258369.06	6339.5932	0.14481	0.89843	0.14803	0.8579	1.10E-03	3.40E-07	1.84E-06	3.48E-07	1.69E-06	1.1038E-03
519940.48	4258184.24	6337.14972	0.09631	1.03207	0.09834	0.97858	1.10E-03	2.26E-07	2.12E-06	2.31E-07	1.93E-06	1.1036E-03
519814.67	4258701.35	6331.80584	0.16853	0.32768	0.17574	0.32228	1.10E-03	3.96E-07	6.72E-07	4.13E-07	6.34E-07	1.1003E-03
519934.02	4258216.87	6326.86661	0.10164	0.96971	0.10349	0.92301	1.10E-03	2.39E-07	1.99E-06	2.43E-07	1.82E-06	1.1017E-03
520109.19	4257805.4	6320.84576	0.06922	10.86594	0.06937	13.30176	1.10E-03	1.63E-07	2.23E-05	1.63E-07	2.62E-05	1.1451E-03
519781.72	4258762.02	6314.98047	0.1551	0.26589	0.15975	0.26125	1.10E-03	3.64E-07	5.45E-07	3.75E-07	5.14E-07	1.0971E-03
519922.87	4258474.43	6312.0087	0.19472	0.83441	0.2049	0.79841	1.09E-03	4.57E-07	1.71E-06	4.81E-07	1.57E-06	1.0990E-03
519941.48	4258173.84	6292.4766	0.0944	1.04121	0.0964	0.98606	1.09E-03	2.22E-07	2.14E-06	2.26E-07	1.94E-06	1.0959E-03
519926.87	4258440.45	6288.57288	0.1795	0.88439	0.18757	0.84342	1.09E-03	4.21E-07	1.81E-06	4.40E-07	1.66E-06	1.0951E-03
519927.11	4258415.61	6280.25352	0.16654	0.89631	0.17251	0.85409	1.09E-03	3.91E-07	1.84E-06	4.05E-07	1.68E-06	1.0936E-03
519847.12	4258636.77	6268.8978	0.18204	0.41364	0.1923	0.40647	1.09E-03	4.27E-07	8.48E-07	4.51E-07	8.00E-07	1.0898E-03
519925.83	4258270.19	6259.78338	0.11198	0.895	0.11375	0.85575	1.09E-03	2.63E-07	1.84E-06	2.67E-07	1.68E-06	1.0898E-03
520099.37	4257815.37	6258.72695	0.06926	16.22535	0.06969	17.83727	1.09E-03	1.63E-07	3.33E-05	1.64E-07	3.51E-05	1.1543E-03
520051.57	4257894.69	6258.52668	0.07246	7.66659	0.0753	5.4807	1.09E-03	1.70E-07	1.57E-05	1.77E-07	1.08E-05	1.1124E-03
519808.35	4258710.24	6257.58902	0.16497	0.31504	0.17156	0.30987	1.09E-03	3.87E-07	6.46E-07	4.03E-07	6.10E-07	1.0874E-03
519925.89	4258394.32	6255.64156	0.15539	0.89121	0.15976	0.85005	1.09E-03	3.65E-07	1.83E-06	3.75E-07	1.67E-06	1.0893E-03
519837.12	4258655.32	6251.64521	0.17737	0.38393	0.18683	0.37777	1.08E-03	4.16E-07	7.87E-07	4.39E-07	7.44E-07	1.0867E-03
519924.46	4258280.74	6240.46558	0.11433	0.88497	0.11617	0.84639	1.08E-03	2.68E-07	1.82E-06	2.73E-07	1.67E-06	1.0864E-03
519827.12	4258673.87	6234.44855	0.17272	0.35755	0.18121	0.35202	1.08E-03	4.05E-07	7.33E-07	4.25E-07	6.93E-07	1.0836E-03
519923.06	4258328.41	6232.51941	0.12801	0.87227	0.13033	0.83513	1.08E-03	3.01E-07	1.79E-06	3.06E-07	1.64E-06	1.0850E-03
519919.32	4258483.06	6231.77005	0.19541	0.8023	0.2057	0.76917	1.08E-03	4.59E-07	1.65E-06	4.83E-07	1.51E-06	1.0850E-03
520061.42	4257874.73	6228.35784	0.07145	12.50541	0.07368	7.49474	1.08E-03	1.68E-07	2.56E-05	1.73E-07	1.48E-05	1.1210E-03
519909.44	4258512.2	6206.4964	0.19961	0.72021	0.21073	0.69366	1.08E-03	4.69E-07	1.48E-06	4.95E-07	1.37E-06	1.0803E-03
519922.97	4258291.34	6204.98188	0.11669	0.87439	0.11863	0.83638	1.08E-03	2.74E-07	1.79E-06	2.79E-07	1.65E-06	1.0802E-03
519775.06	4258770	6203.85644	0.15129	0.25632	0.15556	0.25191	1.08E-03	3.55E-07	5.26E-07	3.65E-07	4.96E-07	1.0778E-03
520109.23	4257795.4	6201.34808	0.0681	10.84914	0.0682	13.2989	1.08E-03	1.60E-07	2.23E-05	1.60E-07	2.62E-05	1.1243E-03
519922.95	4258352.94	6200.02403	0.13647	0.86999	0.13913	0.83257	1.08E-03	3.20E-07	1.78E-06	3.27E-07	1.64E-06	1.0794E-03
519859.85	4258609.38	6193.48644	0.18626	0.45865	0.19732	0.4495	1.07E-03	4.37E-07	9.41E-07	4.63E-07	8.85E-07	1.0770E-03
519802.96	4258717.25	6182.07643	0.16184	0.30497	0.16795	0.3	1.07E-03	3.80E-07	6.25E-07	3.94E-07	5.91E-07	1.0742E-03
519869.77	4258589.94	6172.34012	0.18982	0.4993	0.20148	0.48723	1.07E-03	4.46E-07	1.02E-06	4.73E-07	9.59E-07	1.0735E-03
519921.33	4258302	6152.27984	0.11904	0.86026	0.12103	0.82356	1.07E-03	2.79E-07	1.76E-06	2.84E-07	1.62E-06	1.0710E-03
519879.69	4258570.51	6149.92484	0.19295	0.54498	0.20426	0.52977	1.07E-03	4.53E-07	1.12E-06	4.80E-07	1.04E-06	1.0698E-03
519923.36	4258448.98	6143.09017	0.18072	0.85066	0.18919	0.81302	1.07E-03	4.24E-07	1.74E-06	4.44E-07	1.60E-06	1.0697E-03
520051.6	4257884.69	6140.59962	0.07121	7.65046	0.07397	5.4346	1.07E-03	1.67E-07	1.57E-05	1.74E-07	1.07E-05	1.0918E-03
519899.52	4258531.63	6140.45795	0.19765	0.65335	0.20856	0.63182	1.07E-03	4.64E-07	1.34E-06	4.90E-07	1.24E-06	1.0686E-03
520099.41	4257805.37	6137.702	0.06811	16.21707	0.0685	17.88632	1.06E-03	1.60E-07	3.33E-05	1.61E-07	3.52E-05	1.1333E-03
519922.68	4258377.85	6137.28598	0.14604	0.86655	0.14946	0.82809	1.06E-03	3.43E-07	1.78E-06	3.51E-07	1.63E-06	1.0686E-03
519889.61	4258551.07	6125.11874	0.19531	0.59543	0.20601	0.57751	1.06E-03	4.59E-07	1.22E-06	4.84E-07	1.14E-06	1.0657E-03
520061.45	4257864.73	6111.72111	0.07023	12.47987	0.07239	7.45351	1.06E-03	1.65E-07	2.56E-05	1.70E-07	1.47E-05	1.1007E-03
519929.31	4258208.83	6106.07691	0.09835	0.91936	0.09995	0.87662	1.06E-03	2.31E-07	1.89E-06	2.35E-07	1.73E-06	1.0631E-03
519923.64	4258424.05	6099.46161	0.16782	0.86341	0.17438	0.82414	1.06E-03	3.94E-07	1.77E-06	4.09E-07	1.62E-06	1.0621E-03
519930.53	4258198.34	6082.58285	0.09644	0.92771	0.09808	0.88392	1.05E-03	2.26E-07	1.90E-06	2.30E-07	1.74E-06	1.0591E-03
519796.37	4258725.4	6082.51532	0.15801	0.29338	0.16355	0.28867	1.05E-03	3.71E-07	6.02E-07	3.84E-07	5.68E-07	1.0569E-03
520109.26	4257785.4	6077.96375	0.06696	10.87062	0.06705	13.30878	1.05E-03	1.57E-07	2.23E-05	1.57E-07	2.62E-05	1.1030E-03
519919.52	4258337.01	6066.22065	0.12901	0.84283	0.13127	0.80772	1.05E-03	3.03E-07	1.73E-06	3.08E-07	1.59E-06	1.0561E-03
519931.66	4258187.88	6056.91333	0.09458	0.93733	0.09627	0.89218	1.05E-03	2.22E-07	1.92E-06	2.26E-07	1.76E-06	1.0547E-03
519922.23	4258403.21	6051.37079	0.15668	0.85799	0.16157	0.81936	1.05E-03	3.68E-07	1.76E-06	3.79E-07	1.61E-06	1.0537E-03
519922.87	4258241.44	6040.50316	0.1037	0.87068	0.10516	0.8317	1.05E-03	2.43E-07	1.79E-06	2.47E-07	1.64E-06	1.0516E-03
519924.15	4258230.93	6039.33421	0.10168	0.87755	0.10311	0.83848	1.05E-03	2.39E-07	1.80E-06	2.42E-07	1.65E-06	1.0514E-03
519909.4	4258502.5	6039.26254	0.1941	0.72435	0.20447	0.69756	1.05E-03	4.56E-07	1.49E-06	4.80E-07	1.37E-06	1.0513E-03
519784.64	4258745.14	6036.21288	0.15292	0.27329	0.15761	0.2688	1.05E-03	3.59E-07	5.60E-07	3.70E-07	5.29E-07	1.0488E-03
519921.49	4258252	6030.97077	0.10575	0.85773	0.10721	0.82055	1.05E-03	2.48E-07	1.76E-06	2.52E-07	1.62E-06	1.0499E-03
519925.33	4258220.45	6029.43099	0.09969	0.88582	0.10113	0.84588	1.05E-03	2.34E-07	1.82E-06	2.37E-07	1.67E-06	1.0497E-03
519837.12	4258646.05	6029.2572	0.17418	0.38664	0.18361	0.38049	1.05E-03	4.09E-07	7.93E-07	4.31E-07	7.49E-07	1.0481E-03
520051.63	4257874.69	6026.30812	0.06999	7.62966	0.07267	5.38786	1.05E-03	1.64E-07	1.56E-05	1.71E-07	1.06E-05	1.0718E-03
519919.85	4258457.51	6020.80372	0.18179	0.81863	0.19051	0.78405	1.04E-03	4.27E-07	1.68E-06	4.47E-07	1.54E-06	1.0484E-03
520099.44	4257795.37	6019.5978	0.06699	16.21919	0.06735	17.85708	1.04E-03	1.57E-07	3.33E-05	1.58E-07	3.52E-05	1.1128E-03
519932.72	4258177.46	6019.34744	0.09274	0.94332	0.09444	0.89709	1.04E-03	2.18E-07	1.93E-06	2.22E-07	1.77E-06	1.0482E-03
519919.37	4258361.63	6012.27523	0.13754	0.83982	0.14026	0.8044	1.04E-03	3.23E-07	1.72E-06	3.29E-07	1.58E-06	1.0468E-03
520172.84	4257692.52	6011.40844	0.06294	3.36277	0.06206	2.90458	1.04E-03	1.48E-07	6.90E-06	1.46E-07	5.72E-06	1.0556E-03
519827.12	4258664.6	6010.33995	0.1697	0.35994	0.1783	0.35456	1.04E-03	3.98E-07	7.38E-07	4.19E-07	6.98E-07	1.0447E-03
519919.99	4258262.61	5999.32658	0.10773	0.84301	0.10923	0.8075	1.04E-03	2.53E-07	1.73E-06	2.56E-07	1.59E-06	1.0444E-03
520061.48	4257854.73	5998.70329	0.06905	12.44024	0.07114	7.41443	1.04E-03	1.62E-07	2.55E-05	1.67E-07	1.46E-05	1.0809E-03
519817.12	4258683.15	5994.48074	0.16528	0.33617	0.17291	0.3312	1.04E-03	3.88E-07	6.89E-07	4.06E-07	6.52E-07	1.0419E-03
519789.75	4258733.47	5982.55073	0.15424	0.28242	0.15926	0.27794	1.04E-03	3.62E-07	5.79E-07	3.74E-07	5.47E-07	1.0395E-03
519849.89	4258619.12	5980.35301	0.17863	0.42661	0.18874	0.41908	1.04E-03	4.19E-07	8.75E-07	4.43E-07	8.25E-07	1.0398E-03
519859.81	4258599.68	5968.33217	0.18224	0.4624	0.19301	0.4528	1.04E-03	4.28E-07	9.48E-07	4.53E-07	8.91E-07	1.0379E-03
520109.29	4257775.4	5954.35152	0.06583	10.902	0.06592	12.95111	1.03E-03	1.55E-07	2.24E-05	1.55E-07	2.55E-05	1.0809E-03
519899.48	4258521.94	5950.21669	0.19241	0.65734	0.20274	0.63562	1.03E-03	4.52E-07	1.35E-06	4.76E-07	1.25E-06	1.0356E-03
519869.73	4258580.25	5950.03427	0.18542	0.50348	0.19638	0.49078	1.03E-03	4.35E-07	1.03E-06	4.61E-07	9.66E-07	1.0349E-03
519919.07	4258386.63	5938.90916	0.14722	0.83548	0.15097	0.79925	1.03E-03	3.46E-07	1.71E-06	3.54E-07	1.57E-06	1.0341E-03
519778.03	4258753.24	5938.20466	0.14928	0.26345	0.15359	0.25914	1.03E-03	3.50E-07	5.40E-07	3.61E-07	5.10E-07	1.0317E-03
519920.16	4258432.49	5936.40918	0.16902	0.8316	0.17605	0.79543	1.03E-03	3.97E-07	1.71E-06	4.13E-07	1.57E-06	1.0337E-03
519879.65	4258560.81	5932.04483	0.18818	0.5489	0.19858	0.53349	1.03E-03	4.42E-07	1.13E-06	4.66E-07	1.05E-06	1.0320E-03
519916.01	4258321.27	5926.95631	0.12223	0.81568	0.12418	0.78263	1.03E-03	2.87E-07	1.67E-06	2.92E-07	1.54E-06	1.0318E-03
519916.34	4258466.04	5921.05148	0.18271	0.78843	0.19159	0.7565	1.03E-03	4.29E-07	1.62E-06	4.50E-07	1.49E-06	1.0310E-03
520051.66	4257864.69	5918.74349	0.06883	7.60149	0.07143	5.36554	1.03E-03	1.62E-07	1.56E-05	1.68E-07	1.06E-05	1.0531E-03
519917.18	4258273.76	5917.48786	0.10942	0.8203	0.11094	0.7866	1.03E-03	2.57E-07	1.68E-06	2.60E-07	1.55E-06	1.0301E-03
519810.89	4258692.25	5916.15397	0.16147	0.32317	0.16882	0.31814	1.03E-03	3.79E-07	6.63E-07	3.96E-07	6.26E-07	1.0282E-03
519889.57	4258541.37	5913.69721	0.19017	0.59905	0.20018	0.58117	1.03E-03	4.46E-07	1.23E-06	4.70E-07	1.14E-06	1.0290E-03
520099.47	4257785.37	5904.31568	0.06589	16.22502	0.06622	17.71991	1.02E-03	1.55E-07	3.33E-05	1.55E-07	3.49E-05	1.0925E-03
519915.74	4258284.33	5898.93965	0.11172	0.81392	0.11333	0.78049	1.02E-03	2.62E-07	1.67E-06	2.66E-07	1.54E-06	1.0269E-03
519909.36	4258492.8	5894.34839	0.18884	0.72826	0.1985	0.70127	1.02E-03	4.43E-07	1.49E-06	4.66E-07	1.38E-06	1.0261E-03
519915.98	4258345.62	5892.75822	0.12996	0.81424	0.1322	0.78113	1.02E-03	3.05E-07	1.67E-06	3.10E-07	1.54E-06	1.0259E-03
520172.87	4257682.52	5888.27556	0.06192	3.40753	0.06109	2.736	1.02E-03	1.45E-07	6.99E-06	1.43E-07	5.39E-06	1.0340E-03
520060.13	4257845.25	5868.54183	0.06778	11.39669	0.06986	7.00797	1.02E-03	1.59E-07	2.34E-05	1.64E-07	1.38E-05	1.0554E-03
520163.05	4257692.49	5864.90075	0.06218	4.37655	0.06146	3.63197	1.02E-03	1.46E-07	8.98E-06	1.44E-07	7.15E-06	1.0337E-03
519804.61	4258701.21	5862.46581	0.15848	0.31091	0.165	0.30629	1.02E-03	3.72E-07	6.38E-07	3.87E-07	6.03E-07	1.0188E-03
519918.57	4258412.1	5859.73106	0.15793	0.82556	0.16334	0.78985	1.02E-03	3.71E-07	1.69E-06	3.83E-07	1.55E-06	1.0203E-03
519914.17	4258294.97	5851.67177	0.11392	0.80369	0.1156	0.77087	1.01E-03	2.67E-07	1.65E-06	2.71E-07	1.52E-06	1.0187E-03
520109.32	4257765.4	5846.53238	0.0648	10.93101	0.06485	13.28524	1.01E-03	1.52E-07	2.24E-05	1.52E-07	2.62E-05	1.0629E-03
519912.83	4258474.57	5841.56923	0.18339	0.75952	0.19234	0.73007	1.01E-03	4.31E-07	1.56E-06	4.52E-07	1.44E-06	1.0171E-03
519771.39	4258761.27	5841.19614	0.14573	0.25408	0.14966	0.24997	1.01E-03	3.42E-07	5.21E-07	3.51E-07	4.92E-07	1.0148E-03
519915.8	4258370.31	5826.47261	0.13862	0.8113	0.14152	0.77764	1.01E-03	3.25E-07	1.66E-06	3.32E-07	1.53E-06	1.0144E-03
519837.12	4258636.77	5822.66797	0.17106	0.38929	0.18035	0.38314	1.01E-03	4.02E-07	7.98E-07	4.23E-07	7.54E-07	1.0123E-03
519920.36	4258212.52	5816.32834	0.09644	0.8411	0.09766	0.80397	1.01E-03	2.26E-07	1.73E-06	2.29E-07	1.58E-06	1.0126E-03
520051.7	4257854.7	5813.08554	0.0677	7.57142	0.07021	5.33075	1.01E-03	1.59E-07	1.55E-05	1.65E-07	1.05E-05	1.0346E-03
519799.29	4258708.54	5806.0431	0.15573	0.30112	0.16171	0.29671	1.01E-03	3.66E-07	6.18E-07	3.80E-07	5.84E-07	1.0090E-03
519921.64	4258202	5804.22899	0.09463	0.84922	0.09589	0.81114	1.01E-03	2.22E-07	1.74E-06	2.25E-07	1.60E-06	1.0105E-03
519827.12	4258655.32	5801.31106	0.16677	0.36234	0.17541	0.35702	1.01E-03	3.92E-07	7.43E-07	4.12E-07	7.03E-07	1.0085E-03
519916.69	4258440.94	5793.48501	0.17013	0.80112	0.17749	0.768	1.00E-03	3.99E-07	1.64E-06	4.17E-07	1.51E-06	1.0088E-03
520099.5	4257775.37	5792.23342	0.06483	16.23586	0.06513	17.52899	1.00E-03	1.52E-07	3.33E-05	1.53E-07	3.45E-05	1.0727E-03
519922.84	4258191.52	5784.94191	0.09285	0.85652	0.09415	0.81746	1.00E-03	2.18E-07	1.76E-06	2.21E-07	1.61E-06	1.0072E-03
519817.12	4258673.87	5782.55004	0.16249	0.33827	0.17026	0.33353	1.00E-03	3.81E-07	6.94E-07	4.00E-07	6.57E-07	1.0051E-03
519899.44	4258512.24	5779.73895	0.18738	0.66117	0.19715	0.63919	1.00E-03	4.40E-07	1.36E-06	4.63E-07	1.26E-06	1.0060E-03
519909.32	4258483.1	5776.0431	0.18388	0.73229	0.19294	0.70502	1.00E-03	4.32E-07	1.50E-06	4.53E-07	1.39E-06	1.0056E-03
519912.5	4258329.8	5771.00602	0.12311	0.78905	0.125	0.75784	1.00E-03	2.89E-07	1.62E-06	2.93E-07	1.49E-06	1.0046E-03
519849.85	4258609.42	5769.93113	0.17499	0.42972	0.18487	0.42202	1.00E-03	4.11E-07	8.81E-07	4.34E-07	8.31E-07	1.0033E-03
519923.96	4258181.07	5763.12141	0.09112	0.86451	0.09248	0.82426	1.00E-03	2.14E-07	1.77E-06	2.17E-07	1.62E-06	1.0034E-03
520060.16	4257835.25	5762.08946	0.06667	11.34629	0.06868	6.9518	9.99E-04	1.57E-07	2.33E-05	1.61E-07	1.37E-05	1.0367E-03
519859.77	4258589.99	5758.54202	0.17824	0.46623	0.18863	0.456	9.99E-04	4.18E-07	9.56E-07	4.43E-07	8.98E-07	1.0015E-03
519915.46	4258395.41	5747.79105	0.14837	0.80575	0.15257	0.77174	9.97E-04	3.48E-07	1.65E-06	3.58E-07	1.52E-06	1.0008E-03
520163.08	4257682.49	5746.96348	0.06118	4.6188	0.0605	3.41863	9.97E-04	1.44E-07	9.47E-06	1.42E-07	6.73E-06	1.0133E-03
519915.4	4258234.54	5746.74097	0.09964	0.80835	0.1008	0.77367	9.97E-04	2.34E-07	1.66E-06	2.37E-07	1.52E-06	1.0004E-03
519916.65	4258224.04	5746.31655	0.09776	0.81421	0.09888	0.77919	9.97E-04	2.30E-07	1.67E-06	2.32E-07	1.53E-06	1.0003E-03
520109.35	4257755.4	5743.41427	0.06381	10.96995	0.06381	13.33335	9.96E-04	1.50E-07	2.25E-05	1.50E-07	2.62E-05	1.0452E-03
519869.69	4258570.55	5742.85232	0.18107	0.50732	0.19119	0.49418	9.96E-04	4.25E-07	1.04E-06	4.49E-07	9.73E-07	9.9896E-04
519914.06	4258245.08	5737.96596	0.10155	0.79924	0.10275	0.76557	9.95E-04	2.38E-07	1.64E-06	2.41E-07	1.51E-06	9.9885E-04
519879.61	4258551.11	5731.71636	0.18354	0.55239	0.19319	0.53697	9.94E-04	4.31E-07	1.13E-06	4.54E-07	1.06E-06	9.9721E-04
519889.52	4258531.68	5725.39543	0.18533	0.60255	0.19484	0.58462	9.93E-04	4.35E-07	1.24E-06	4.57E-07	1.15E-06	9.9632E-04
519912.44	4258354.23	5721.54258	0.13095	0.78775	0.13326	0.75618	9.92E-04	3.07E-07	1.62E-06	3.13E-07	1.49E-06	9.9610E-04
519792.73	4258716.75	5716.97495	0.15213	0.28986	0.15755	0.28564	9.92E-04	3.57E-07	5.94E-07	3.70E-07	5.62E-07	9.9347E-04
519912.61	4258255.67	5712.31185	0.10342	0.78621	0.10466	0.75424	9.91E-04	2.43E-07	1.61E-06	2.46E-07	1.48E-06	9.9436E-04
520150.97	4257693.59	5702.29378	0.06136	6.40139	0.06079	5.10373	9.89E-04	1.44E-07	1.31E-05	1.43E-07	1.00E-05	1.0125E-03
520050.34	4257845.22	5688.75422	0.06645	7.12149	0.06896	5.05945	9.87E-04	1.56E-07	1.46E-05	1.62E-07	9.96E-06	1.0116E-03
520099.53	4257765.37	5684.99866	0.0638	16.25375	0.06407	17.59112	9.86E-04	1.50E-07	3.33E-05	1.50E-07	3.46E-05	1.0543E-03
519914.92	4258420.98	5678.67584	0.15901	0.79413	0.16489	0.76147	9.85E-04	3.73E-07	1.63E-06	3.87E-07	1.50E-06	9.8883E-04
519913.22	4258449.38	5671.7849	0.17108	0.77236	0.17867	0.74187	9.84E-04	4.02E-07	1.58E-06	4.19E-07	1.46E-06	9.8761E-04
519780.92	4258736.29	5671.47397	0.14722	0.27029	0.15167	0.26626	9.84E-04	3.46E-07	5.54E-07	3.56E-07	5.24E-07	9.8547E-04
519911.03	4258266.31	5667.28984	0.10517	0.77174	0.10646	0.74111	9.83E-04	2.47E-07	1.58E-06	2.50E-07	1.46E-06	9.8650E-04
520060.19	4257825.25	5658.83994	0.06559	11.29114	0.06754	6.88869	9.82E-04	1.54E-07	2.32E-05	1.59E-07	1.36E-05	1.0185E-03
519908.79	4258314.55	5639.43114	0.11692	0.76318	0.11854	0.73364	9.78E-04	2.74E-07	1.57E-06	2.78E-07	1.44E-06	9.8170E-04
520109.38	4257745.4	5636.76328	0.06281	11.08177	0.06279	13.39505	9.78E-04	1.47E-07	2.27E-05	1.47E-07	2.64E-05	1.0271E-03
519912.22	4258379	5633.89166	0.13957	0.78259	0.14276	0.75108	9.77E-04	3.28E-07	1.61E-06	3.35E-07	1.48E-06	9.8092E-04
519786.13	4258724.88	5628.41917	0.14861	0.27919	0.15349	0.27516	9.76E-04	3.49E-07	5.73E-07	3.60E-07	5.42E-07	9.7805E-04
519899.4	4258502.54	5624.42767	0.18249	0.66468	0.19164	0.64247	9.76E-04	4.28E-07	1.36E-06	4.50E-07	1.26E-06	9.7904E-04
519908.99	4258338.33	5608.75925	0.12395	0.7632	0.12582	0.73375	9.73E-04	2.91E-07	1.57E-06	2.95E-07	1.44E-06	9.7641E-04
519827.12	4258646.05	5607.05421	0.16392	0.3647	0.1725	0.35941	9.73E-04	3.85E-07	7.48E-07	4.05E-07	7.07E-07	9.7476E-04
519908.53	4258277.33	5603.05568	0.10698	0.7568	0.1083	0.72747	9.72E-04	2.51E-07	1.55E-06	2.54E-07	1.43E-06	9.7531E-04
520151	4257683.59	5588.13825	0.06037	7.61393	0.05984	4.84238	9.69E-04	1.42E-07	1.56E-05	1.40E-07	9.53E-06	9.9467E-04
520050.37	4257835.22	5588.0365	0.06538	7.08363	0.06782	5.00782	9.69E-04	1.53E-07	1.45E-05	1.59E-07	9.86E-06	9.9392E-04
519774.33	4258744.45	5586.16736	0.14383	0.26068	0.14785	0.2568	9.69E-04	3.38E-07	5.35E-07	3.47E-07	5.06E-07	9.7062E-04
519817.12	4258664.6	5584.90083	0.1598	0.34039	0.16766	0.33575	9.69E-04	3.75E-07	6.98E-07	3.94E-07	6.61E-07	9.7080E-04
520099.56	4257755.37	5581.44768	0.0628	16.28456	0.06304	17.74561	9.68E-04	1.47E-07	3.34E-05	1.48E-07	3.49E-05	1.0367E-03
519839.89	4258619.16	5575.02784	0.16805	0.40085	0.17717	0.39443	9.67E-04	3.95E-07	8.22E-07	4.16E-07	7.76E-07	9.6937E-04
519907.02	4258287.93	5574.88912	0.10916	0.75171	0.11055	0.7224	9.67E-04	2.56E-07	1.54E-06	2.60E-07	1.42E-06	9.7042E-04
519849.81	4258599.73	5572.6712	0.17137	0.43301	0.18103	0.42488	9.67E-04	4.02E-07	8.88E-07	4.25E-07	8.36E-07	9.6911E-04
519909.74	4258457.82	5570.68945	0.17191	0.7452	0.17965	0.71697	9.66E-04	4.04E-07	1.53E-06	4.22E-07	1.41E-06	9.6998E-04
519807.12	4258683.15	5567.22548	0.15569	0.31864	0.16269	0.31437	9.66E-04	3.66E-07	6.54E-07	3.82E-07	6.19E-07	9.6763E-04
519859.73	4258580.29	5562.72329	0.1743	0.46976	0.18402	0.45902	9.65E-04	4.09E-07	9.63E-07	4.32E-07	9.04E-07	9.6754E-04
519889.48	4258521.98	5561.2212	0.18087	0.60621	0.19	0.58805	9.65E-04	4.25E-07	1.24E-06	4.46E-07	1.16E-06	9.6784E-04
520141.18	4257693.56	5560.61506	0.06057	8.72218	0.06012	7.15562	9.64E-04	1.42E-07	1.79E-05	1.41E-07	1.41E-05	9.9672E-04
520060.22	4257815.25	5557.80161	0.06454	11.23243	0.06643	6.81382	9.64E-04	1.52E-07	2.30E-05	1.56E-07	1.34E-05	1.0007E-03
519869.65	4258560.85	5550.2249	0.1768	0.51073	0.18613	0.4974	9.63E-04	4.15E-07	1.05E-06	4.37E-07	9.79E-07	9.6554E-04
519908.89	4258362.83	5550.11267	0.13193	0.76234	0.13442	0.73221	9.63E-04	3.10E-07	1.56E-06	3.16E-07	1.44E-06	9.6627E-04
519911.84	4258404.19	5548.20442	0.14921	0.77484	0.15384	0.74381	9.62E-04	3.50E-07	1.59E-06	3.61E-07	1.46E-06	9.6608E-04
519879.57	4258541.41	5547.00402	0.17906	0.55553	0.18811	0.54018	9.62E-04	4.20E-07	1.14E-06	4.42E-07	1.06E-06	9.6517E-04
519911.41	4258216.21	5541.49149	0.09454	0.77289	0.09547	0.74023	9.61E-04	2.22E-07	1.59E-06	2.24E-07	1.46E-06	9.6463E-04
519912.76	4258205.67	5538.22425	0.09283	0.78033	0.09376	0.7468	9.61E-04	2.18E-07	1.60E-06	2.20E-07	1.47E-06	9.6409E-04
520109.41	4257735.4	5532.5567	0.06183	11.26847	0.0618	13.5215	9.60E-04	1.45E-07	2.31E-05	1.45E-07	2.66E-05	1.0096E-03
519914.02	4258195.16	5527.28621	0.09114	0.78691	0.09209	0.75254	9.59E-04	2.14E-07	1.61E-06	2.16E-07	1.48E-06	9.6221E-04
519911.26	4258429.87	5523.32958	0.1601	0.76488	0.16639	0.73485	9.58E-04	3.76E-07	1.57E-06	3.91E-07	1.45E-06	9.6178E-04
519915.19	4258184.69	5511.52927	0.08949	0.79339	0.09048	0.75806	9.56E-04	2.10E-07	1.63E-06	2.12E-07	1.49E-06	9.5949E-04
519767.72	4258752.54	5500.15061	0.14049	0.25162	0.14418	0.24784	9.54E-04	3.30E-07	5.16E-07	3.38E-07	4.88E-07	9.5565E-04
519800.86	4258692.18	5493.30072	0.15213	0.30664	0.15884	0.30231	9.53E-04	3.57E-07	6.29E-07	3.73E-07	5.95E-07	9.5474E-04

520050.4	4257825.22	5490.44184	0.06434	7.04157	0.06671	4.95263	9.52E-04	1.51E-07	1.44E-05	1.57E-07	9.75E-06	9.7679E-04
519899.36	4258492.84	5488.95467	0.17782	0.66805	0.18639	0.64563	9.52E-04	4.17E-07	1.37E-06	4.38E-07	1.27E-06	9.5553E-04
519905.14	4258323.44	5486.45789	0.11775	0.73813	0.11932	0.71024	9.52E-04	2.76E-07	1.51E-06	2.80E-07	1.40E-06	9.5507E-04
520099.59	4257745.37	5479.06295	0.06182	16.34475	0.06204	17.56877	9.50E-04	1.45E-07	3.35E-05	1.46E-07	3.46E-05	1.0187E-03
519907.96	4258227.62	5476.53414	0.09583	0.75369	0.09676	0.72207	9.50E-04	2.25E-07	1.55E-06	2.27E-07	1.42E-06	9.5330E-04
519906.65	4258238.15	5467.9205	0.09761	0.74568	0.09859	0.71509	9.48E-04	2.29E-07	1.53E-06	2.31E-07	1.41E-06	9.5178E-04
519908.65	4258387.69	5460.97686	0.14068	0.75698	0.1443	0.72712	9.47E-04	3.30E-07	1.55E-06	3.39E-07	1.43E-06	9.5083E-04
520060.25	4257805.25	5459.3937	0.06352	11.16845	0.06534	6.73218	9.47E-04	1.49E-07	2.29E-05	1.53E-07	1.33E-05	9.8337E-04
519795.63	4258699.83	5459.23628	0.14995	0.29719	0.15596	0.2932	9.47E-04	3.52E-07	6.10E-07	3.66E-07	5.77E-07	9.4878E-04
520170.95	4257642.88	5453.89353	0.05827	2.89536	0.0575	2.31914	9.46E-04	1.37E-07	5.94E-06	1.35E-07	4.57E-06	9.5673E-04
520141.21	4257683.56	5452.50819	0.05962	11.84626	0.05918	6.82771	9.46E-04	1.40E-07	2.43E-05	1.39E-07	1.34E-05	9.8373E-04
519905.25	4258248.72	5448.6237	0.09939	0.73499	0.1004	0.70589	9.45E-04	2.33E-07	1.51E-06	2.36E-07	1.39E-06	9.4840E-04
519905.48	4258346.86	5444.62937	0.12478	0.73862	0.12671	0.71069	9.44E-04	2.93E-07	1.51E-06	2.97E-07	1.40E-06	9.4785E-04
520131.41	4257694.33	5431.5384	0.05987	10.61099	0.0595	10.11863	9.42E-04	1.41E-07	2.18E-05	1.40E-07	1.99E-05	9.8404E-04
520109.44	4257725.4	5430.28869	0.06087	11.5751	0.06083	13.75119	9.42E-04	1.43E-07	2.37E-05	1.43E-07	2.71E-05	9.9295E-04
519902.8	4258474.7	5428.78609	0.17317	0.6952	0.18115	0.67071	9.42E-04	4.07E-07	1.43E-06	4.25E-07	1.32E-06	9.4518E-04
519827.12	4258636.77	5427.08861	0.16113	0.36701	0.16955	0.36173	9.41E-04	3.78E-07	7.53E-07	3.98E-07	7.12E-07	9.4354E-04
519903.72	4258259.33	5407.32299	0.10106	0.72252	0.10212	0.69482	9.38E-04	2.37E-07	1.48E-06	2.40E-07	1.37E-06	9.4120E-04
519889.44	4258512.28	5406.55235	0.17644	0.60957	0.18513	0.59116	9.38E-04	4.14E-07	1.25E-06	4.35E-07	1.16E-06	9.4100E-04
519817.12	4258655.32	5401.68744	0.15719	0.34249	0.16506	0.33791	9.37E-04	3.69E-07	7.02E-07	3.88E-07	6.65E-07	9.3902E-04
520050.43	4257815.22	5394.57826	0.06332	6.99578	0.06563	4.88816	9.36E-04	1.49E-07	1.43E-05	1.54E-07	9.62E-06	9.5994E-04
519907.6	4258438.76	5393.22521	0.16112	0.73734	0.16772	0.70963	9.35E-04	3.78E-07	1.51E-06	3.94E-07	1.40E-06	9.3911E-04
519839.85	4258609.46	5391.60087	0.16478	0.40352	0.17369	0.39697	9.35E-04	3.87E-07	8.28E-07	4.08E-07	7.81E-07	9.3755E-04
519908.23	4258412.97	5389.24585	0.15039	0.74848	0.15552	0.71958	9.35E-04	3.53E-07	1.54E-06	3.65E-07	1.42E-06	9.3841E-04
519849.77	4258590.03	5388.73294	0.16776	0.43642	0.17709	0.42767	9.35E-04	3.94E-07	8.95E-07	4.16E-07	8.42E-07	9.3720E-04
519789.09	4258708.1	5382.79455	0.14668	0.28618	0.15204	0.28245	9.34E-04	3.44E-07	5.87E-07	3.57E-07	5.56E-07	9.3547E-04
520099.62	4257735.37	5381.43297	0.06088	16.44561	0.06107	17.75572	9.33E-04	1.43E-07	3.37E-05	1.43E-07	3.50E-05	1.0024E-03
519899.32	4258483.15	5380.60232	0.17351	0.6717	0.18158	0.64894	9.33E-04	4.07E-07	1.38E-06	4.26E-07	1.28E-06	9.3673E-04
519859.69	4258570.59	5380.39528	0.17038	0.47323	0.17942	0.46202	9.33E-04	4.00E-07	9.71E-07	4.21E-07	9.09E-07	9.3591E-04
519807.12	4258673.87	5380.0187	0.15322	0.32049	0.16032	0.31641	9.33E-04	3.60E-07	6.57E-07	3.76E-07	6.23E-07	9.3516E-04
519901.75	4258307.4	5379.89848	0.11194	0.71632	0.11327	0.6897	9.33E-04	2.63E-07	1.47E-06	2.66E-07	1.36E-06	9.3647E-04
519879.52	4258531.72	5376.33212	0.17473	0.55848	0.18332	0.54315	9.33E-04	4.10E-07	1.15E-06	4.30E-07	1.07E-06	9.3556E-04
519905.35	4258371.44	5376.26146	0.13286	0.73739	0.13564	0.70891	9.32E-04	3.12E-07	1.51E-06	3.18E-07	1.40E-06	9.3603E-04
519869.61	4258551.15	5372.27507	0.17265	0.51372	0.18131	0.50042	9.32E-04	4.05E-07	1.05E-06	4.26E-07	9.85E-07	9.3467E-04
520060.28	4257795.25	5364.17896	0.06253	11.09676	0.06429	6.64288	9.30E-04	1.47E-07	2.28E-05	1.51E-07	1.31E-05	9.6653E-04
519902.07	4258270	5357.1414	0.10269	0.7099	0.10377	0.68331	9.29E-04	2.41E-07	1.46E-06	2.44E-07	1.35E-06	9.3246E-04
520170.99	4257632.88	5354.13037	0.05741	2.76676	0.05666	2.19976	9.29E-04	1.35E-07	5.67E-06	1.33E-07	4.33E-06	9.3892E-04
519777.19	4258727.45	5333.2605	0.14186	0.26709	0.1462	0.2635	9.25E-04	3.33E-07	5.48E-07	3.43E-07	5.19E-07	9.2677E-04
520109.48	4257715.4	5328.55012	0.05992	12.08479	0.05987	13.99482	9.24E-04	1.41E-07	2.48E-05	1.41E-07	2.75E-05	9.7683E-04
520161.17	4257642.85	5327.99353	0.0576	3.98627	0.05694	2.83425	9.24E-04	1.35E-07	8.18E-06	1.34E-07	5.58E-06	9.3814E-04
520131.44	4257684.33	5327.58768	0.05893	14.70756	0.05858	10.42492	9.24E-04	1.38E-07	3.02E-05	1.38E-07	2.05E-05	9.7501E-04
519901.48	4258332.33	5325.45035	0.11852	0.71344	0.12008	0.68723	9.24E-04	2.78E-07	1.46E-06	2.82E-07	1.35E-06	9.2705E-04
519899.88	4258280.9	5316.40564	0.10469	0.70308	0.10582	0.67693	9.22E-04	2.46E-07	1.44E-06	2.48E-07	1.33E-06	9.2538E-04
519782.52	4258716.28	5302.61057	0.14336	0.2758	0.14819	0.27222	9.20E-04	3.37E-07	5.66E-07	3.48E-07	5.36E-07	9.2150E-04
520050.46	4257805.22	5300.87792	0.06233	6.94488	0.06457	4.81615	9.19E-04	1.46E-07	1.42E-05	1.52E-07	9.48E-06	9.4343E-04
520121.62	4257694.29	5295.39672	0.05906	12.38549	0.0588	13.06101	9.18E-04	1.39E-07	2.54E-05	1.38E-07	2.57E-05	9.6985E-04
519903.88	4258209.33	5287.07896	0.09106	0.72035	0.09176	0.69047	9.17E-04	2.14E-07	1.48E-06	2.15E-07	1.36E-06	9.2029E-04
519905.07	4258396.38	5286.99712	0.14164	0.73102	0.1457	0.70323	9.17E-04	3.33E-07	1.50E-06	3.42E-07	1.38E-06	9.2056E-04
520099.66	4257725.37	5285.43556	0.05995	16.61795	0.06012	17.73963	9.17E-04	1.41E-07	3.41E-05	1.41E-07	3.49E-05	9.8602E-04
519905.2	4258198.8	5282.65749	0.08945	0.72597	0.09013	0.69535	9.16E-04	2.10E-07	1.49E-06	2.12E-07	1.37E-06	9.1953E-04
519902.47	4258219.9	5281.51115	0.09268	0.71386	0.09342	0.68476	9.16E-04	2.18E-07	1.46E-06	2.19E-07	1.35E-06	9.1930E-04
519901.97	4258355.39	5281.40031	0.12562	0.71535	0.12772	0.68878	9.16E-04	2.95E-07	1.47E-06	3.00E-07	1.36E-06	9.1945E-04
519903.95	4258447.64	5279.8542	0.16198	0.71106	0.16875	0.68549	9.16E-04	3.80E-07	1.46E-06	3.96E-07	1.35E-06	9.1935E-04
519906.43	4258188.31	5272.35569	0.08787	0.73118	0.08856	0.6998	9.14E-04	2.06E-07	1.50E-06	2.08E-07	1.38E-06	9.1776E-04
520060.31	4257785.25	5271.55166	0.06156	11.01676	0.06327	6.54327	9.14E-04	1.45E-07	2.26E-05	1.49E-07	1.29E-05	9.5009E-04
519770.63	4258735.67	5258.43585	0.13871	0.25774	0.14259	0.25427	9.12E-04	3.26E-07	5.29E-07	3.35E-07	5.01E-07	9.1374E-04
519889.4	4258502.58	5257.38938	0.17198	0.6124	0.18014	0.59384	9.12E-04	4.04E-07	1.26E-06	4.23E-07	1.17E-06	9.1512E-04
519904.62	4258421.76	5247.38309	0.15149	0.723	0.15703	0.69608	9.10E-04	3.56E-07	1.48E-06	3.69E-07	1.37E-06	9.1371E-04
519898.13	4258316.2	5237.35146	0.11268	0.69375	0.11398	0.66857	9.08E-04	2.65E-07	1.42E-06	2.68E-07	1.32E-06	9.1167E-04
520109.51	4257705.4	5236.34251	0.05904	12.97293	0.05896	14.90548	9.08E-04	1.39E-07	2.66E-05	1.38E-07	2.93E-05	9.6444E-04
520161.2	4257632.85	5231.76963	0.05676	3.6372	0.05611	2.63495	9.07E-04	1.33E-07	7.46E-06	1.32E-07	5.19E-06	9.2034E-04
519817.12	4258646.05	5231.69251	0.15462	0.34456	0.16242	0.34	9.07E-04	3.63E-07	7.07E-07	3.81E-07	6.69E-07	9.0953E-04
519839.81	4258599.77	5219.38762	0.1615	0.40646	0.17025	0.39947	9.05E-04	3.79E-07	8.34E-07	4.00E-07	7.86E-07	9.0768E-04
519899.28	4258231.21	5219.25772	0.09392	0.69757	0.09472	0.6694	9.05E-04	2.20E-07	1.43E-06	2.22E-07	1.32E-06	9.0845E-04
519879.48	4258522.02	5218.84974	0.17053	0.56125	0.1787	0.54587	9.05E-04	4.00E-07	1.15E-06	4.20E-07	1.07E-06	9.0823E-04
519849.73	4258580.33	5216.80181	0.1642	0.43963	0.17298	0.43035	9.05E-04	3.85E-07	9.02E-07	4.06E-07	8.47E-07	9.0737E-04
519829.89	4258619.2	5214.18465	0.15845	0.37735	0.16672	0.37187	9.04E-04	3.72E-07	7.74E-07	3.91E-07	7.32E-07	9.0665E-04
520050.49	4257795.22	5210.6365	0.06137	6.8861	0.06355	4.73976	9.04E-04	1.44E-07	1.41E-05	1.49E-07	9.33E-06	9.2751E-04
519859.65	4258560.89	5209.82374	0.16655	0.47617	0.17487	0.46482	9.04E-04	3.91E-07	9.77E-07	4.11E-07	9.15E-07	9.0631E-04
519901.81	4258380.04	5206.66578	0.13377	0.71334	0.13692	0.68657	9.03E-04	3.14E-07	1.46E-06	3.21E-07	1.35E-06	9.0652E-04
519869.57	4258541.46	5206.19266	0.16864	0.51643	0.17679	0.50322	9.03E-04	3.96E-07	1.06E-06	4.15E-07	9.91E-07	9.0585E-04
519807.12	4258664.6	5205.83624	0.1508	0.32236	0.15799	0.31836	9.03E-04	3.54E-07	6.61E-07	3.71E-07	6.27E-07	9.0494E-04
519897.91	4258241.76	5202.42018	0.09559	0.68793	0.09642	0.66132	9.02E-04	2.24E-07	1.41E-06	2.26E-07	1.30E-06	9.0550E-04
520121.65	4257684.29	5196.98659	0.05816	16.62935	0.0579	13.67336	9.01E-04	1.37E-07	3.41E-05	1.36E-07	2.69E-05	9.6269E-04
520099.69	4257715.37	5192.78668	0.05906	16.93762	0.0592	17.94943	9.01E-04	1.39E-07	3.47E-05	1.39E-07	3.53E-05	9.7101E-04
520149.08	4257643.96	5186.7296	0.05686	6.74462	0.05631	3.82387	9.00E-04	1.33E-07	1.38E-05	1.32E-07	7.53E-06	9.2124E-04
519900.29	4258456.53	5186.21635	0.16266	0.68597	0.16953	0.66231	9.00E-04	3.82E-07	1.41E-06	3.98E-07	1.30E-06	9.0302E-04
519797.12	4258683.15	5185.51777	0.14698	0.30242	0.15338	0.29873	8.99E-04	3.45E-07	6.20E-07	3.60E-07	5.88E-07	9.0132E-04
519764.04	4258743.81	5183.19988	0.1356	0.24886	0.13908	0.2455	8.99E-04	3.18E-07	5.10E-07	3.27E-07	4.83E-07	9.0064E-04
520060.34	4257775.25	5181.43474	0.06062	10.92579	0.06228	6.43071	8.99E-04	1.42E-07	2.24E-05	1.46E-07	1.27E-05	9.3405E-04
519896.43	4258252.35	5172.4779	0.09725	0.67911	0.09812	0.65358	8.97E-04	2.28E-07	1.39E-06	2.30E-07	1.29E-06	9.0028E-04
519897.82	4258341.21	5163.5989	0.11928	0.69013	0.12093	0.66526	8.96E-04	2.80E-07	1.42E-06	2.84E-07	1.31E-06	8.9889E-04
520109.54	4257695.4	5143.64936	0.05816	14.65391	0.05807	15.99828	8.92E-04	1.37E-07	3.01E-05	1.36E-07	3.15E-05	9.5396E-04
519894.71	4258300.26	5141.5642	0.10732	0.67375	0.10841	0.64951	8.92E-04	2.52E-07	1.38E-06	2.55E-07	1.28E-06	8.9495E-04
519901.5	4258405.07	5132.13555	0.14265	0.70694	0.14716	0.68099	8.90E-04	3.35E-07	1.45E-06	3.45E-07	1.34E-06	8.9362E-04
519898.46	4258363.92	5131.93006	0.12661	0.69488	0.12901	0.66924	8.90E-04	2.97E-07	1.43E-06	3.03E-07	1.32E-06	8.9345E-04
519889.36	4258492.89	5126.46323	0.16774	0.61509	0.17537	0.59637	8.89E-04	3.94E-07	1.26E-06	4.12E-07	1.17E-06	8.9240E-04
519894.84	4258263	5124.80306	0.0988	0.66776	0.09969	0.64342	8.89E-04	2.32E-07	1.37E-06	2.34E-07	1.27E-06	8.9198E-04
520050.52	4257785.22	5123.30913	0.06044	6.81865	0.06256	4.65281	8.89E-04	1.42E-07	1.40E-05	1.47E-07	9.16E-06	9.1205E-04
519896.63	4258465.41	5116.01031	0.16327	0.66249	0.17027	0.64043	8.87E-04	3.83E-07	1.36E-06	4.00E-07	1.26E-06	8.9075E-04
519901	4258430.54	5112.65063	0.15235	0.69778	0.15815	0.67303	8.87E-04	3.58E-07	1.43E-06	3.71E-07	1.32E-06	8.9025E-04
520099.72	4257705.37	5101.71724	0.05818	17.5361	0.0583	18.04929	8.85E-04	1.37E-07	3.60E-05	1.37E-07	3.55E-05	9.5664E-04
520149.12	4257633.96	5095.83945	0.05604	5.26393	0.05549	3.38387	8.84E-04	1.32E-07	1.08E-05	1.30E-07	6.66E-06	9.0157E-04
520060.38	4257765.25	5093.01715	0.05971	10.83271	0.06131	6.30497	8.83E-04	1.40E-07	2.22E-05	1.44E-07	1.24E-05	9.1827E-04
519894.51	4258325.01	5090.75504	0.11341	0.67209	0.11472	0.64824	8.83E-04	2.66E-07	1.38E-06	2.69E-07	1.28E-06	8.8616E-04
519893.11	4258273.7	5082.02602	0.10055	0.65994	0.10145	0.63634	8.81E-04	2.36E-07	1.35E-06	2.38E-07	1.25E-06	8.8453E-04
519785.45	4258699.45	5075.2046	0.14149	0.28247	0.14693	0.27908	8.80E-04	3.32E-07	5.79E-07	3.45E-07	5.49E-07	8.8208E-04
519817.12	4258636.77	5073.6588	0.15208	0.34659	0.15976	0.34203	8.80E-04	3.57E-07	7.11E-07	3.75E-07	6.73E-07	8.8212E-04
519879.44	4258512.32	5073.0554	0.16648	0.56398	0.17427	0.54845	8.80E-04	3.91E-07	1.16E-06	4.09E-07	1.08E-06	8.8293E-04
520139.3	4257643.93	5066.13413	0.05617	9.17068	0.05569	4.83437	8.79E-04	1.32E-07	1.88E-05	1.31E-07	9.52E-06	9.0729E-04
519892.98	4258474.3	5061.46595	0.16365	0.63985	0.17074	0.61936	8.78E-04	3.84E-07	1.31E-06	4.01E-07	1.22E-06	8.8120E-04
519839.77	4258590.07	5058.01824	0.15824	0.40943	0.16669	0.4019	8.77E-04	3.71E-07	8.40E-07	3.91E-07	7.91E-07	8.7968E-04
519849.69	4258570.63	5055.58624	0.16067	0.44254	0.1688	0.43291	8.77E-04	3.77E-07	9.08E-07	3.96E-07	8.52E-07	8.7940E-04
519829.85	4258609.51	5053.87735	0.15548	0.37972	0.1636	0.37409	8.77E-04	3.65E-07	7.79E-07	3.84E-07	7.36E-07	8.7884E-04
520109.57	4257685.4	5051.24348	0.05729	18.11687	0.05719	16.14073	8.76E-04	1.34E-07	3.72E-05	1.34E-07	3.18E-05	9.4531E-04
519869.53	4258531.76	5050.98463	0.16477	0.51894	0.1725	0.5058	8.76E-04	3.87E-07	1.06E-06	4.05E-07	9.96E-07	8.7892E-04
519859.61	4258551.2	5050.06105	0.16282	0.47876	0.17055	0.46742	8.76E-04	3.82E-07	9.82E-07	4.00E-07	9.20E-07	8.7859E-04
519896.37	4258202.44	5046.52187	0.08775	0.67106	0.08826	0.64371	8.75E-04	2.06E-07	1.38E-06	2.07E-07	1.27E-06	8.7835E-04
519898.27	4258388.65	5045.23844	0.13467	0.69031	0.13824	0.66525	8.75E-04	3.16E-07	1.42E-06	3.25E-07	1.31E-06	8.7844E-04
519807.12	4258655.32	5045.12689	0.14845	0.32421	0.15563	0.32026	8.75E-04	3.49E-07	6.65E-07	3.65E-07	6.30E-07	8.7706E-04
519895	4258213	5044.96186	0.08929	0.66667	0.08985	0.63993	8.75E-04	2.10E-07	1.37E-06	2.11E-07	1.26E-06	8.7807E-04
519897.66	4258191.92	5041.85514	0.08623	0.67543	0.08671	0.64737	8.74E-04	2.02E-07	1.39E-06	2.04E-07	1.27E-06	8.7755E-04
520050.56	4257775.22	5038.20556	0.05953	6.7432	0.06159	4.55385	8.74E-04	1.40E-07	1.38E-05	1.45E-07	8.96E-06	8.9693E-04
519893.52	4258223.6	5032.12637	0.0908	0.66181	0.09144	0.63541	8.73E-04	2.13E-07	1.36E-06	2.15E-07	1.25E-06	8.7584E-04
519773.47	4258718.6	5023.96459	0.13689	0.26374	0.14118	0.26059	8.71E-04	3.21E-07	5.41E-07	3.31E-07	5.13E-07	8.7309E-04
519797.12	4258673.87	5020.42155	0.14477	0.30406	0.15126	0.30053	8.71E-04	3.40E-07	6.24E-07	3.55E-07	5.92E-07	8.7268E-04
519889.32	4258483.19	5015.82869	0.16376	0.6179	0.17093	0.599	8.70E-04	3.84E-07	1.27E-06	4.01E-07	1.18E-06	8.7320E-04
520099.75	4257695.37	5013.91724	0.05733	18.73064	0.05742	18.30026	8.70E-04	1.35E-07	3.84E-05	1.35E-07	3.60E-05	9.4435E-04
520060.41	4257755.25	5006.5467	0.05881	10.7165	0.06037	6.15462	8.68E-04	1.38E-07	2.20E-05	1.42E-07	1.21E-05	9.0274E-04
519778.9	4258707.69	5005.64155	0.13847	0.2723	0.14328	0.26914	8.68E-04	3.25E-07	5.58E-07	3.36E-07	5.30E-07	8.6996E-04
519891.12	4258308.98	5004.655	0.10795	0.65265	0.10901	0.62985	8.68E-04	2.53E-07	1.34E-06	2.56E-07	1.24E-06	8.7112E-04
519897.39	4258439.32	4999.58673	0.15313	0.67401	0.1591	0.65114	8.67E-04	3.60E-07	1.38E-06	3.74E-07	1.28E-06	8.7055E-04
519894.17	4258350.1	4998.92315	0.11998	0.66736	0.12181	0.64382	8.67E-04	2.82E-07	1.37E-06	2.86E-07	1.27E-06	8.7024E-04
519897.92	4258413.76	4989.16585	0.14357	0.68352	0.14845	0.65945	8.65E-04	3.37E-07	1.40E-06	3.49E-07	1.30E-06	8.6873E-04
520139.33	4257633.93	4978.67429	0.05537	6.42921	0.05489	4.0221	8.64E-04	1.30E-07	1.32E-05	1.29E-07	7.92E-06	8.8489E-04
519890.59	4258234.79	4973.43861	0.09203	0.646	0.09271	0.6212	8.63E-04	2.16E-07	1.32E-06	2.18E-07	1.22E-06	8.6560E-04
519894.95	4258372.45	4963.07302	0.1273	0.67179	0.13002	0.64796	8.61E-04	2.99E-07	1.38E-06	3.05E-07	1.28E-06	8.6408E-04
519766.94	4258726.88	4956.53647	0.13393	0.25464	0.13775	0.25159	8.60E-04	3.14E-07	5.22E-07	3.23E-07	4.95E-07	8.6134E-04
520129.53	4257644.69	4954.94196	0.05554	10.86743	0.05513	5.82343	8.59E-04	1.30E-07	2.23E-05	1.29E-07	1.15E-05	8.9342E-04
520050.59	4257765.22	4954.64642	0.05865	6.65111	0.06065	4.43773	8.59E-04	1.38E-07	1.36E-05	1.42E-07	8.74E-06	8.8202E-04
519889.16	4258245.37	4949.56427	0.0936	0.638	0.09431	0.61434	8.58E-04	2.20E-07	1.31E-06	2.21E-07	1.21E-06	8.6144E-04
519890.89	4258333.81	4939.75483	0.1141	0.651	0.1155	0.6284	8.57E-04	2.68E-07	1.34E-06	2.71E-07	1.24E-06	8.5989E-04
519879.4	4258502.62	4934.56208	0.16252	0.56645	0.16989	0.55077	8.56E-04	3.82E-07	1.16E-06	3.99E-07	1.08E-06	8.5890E-04
520099.78	4257685.37	4927.36788	0.05649	21.40745	0.05656	17.37709	8.55E-04	1.33E-07	4.39E-05	1.33E-07	3.42E-05	9.3301E-04
520060.44	4257745.25	4922.76009	0.05794	10.57235	0.05945	5.97246	8.54E-04	1.36E-07	2.17E-05	1.40E-07	1.18E-05	8.8755E-04
519887.66	4258293.12	4918.49098	0.103	0.63567	0.10391	0.61312	8.53E-04	2.42E-07	1.30E-06	2.44E-07	1.21E-06	8.5609E-04
519887.62	4258255.99	4909.9268	0.09513	0.62925	0.09586	0.60669	8.52E-04	2.23E-07	1.29E-06	2.25E-07	1.19E-06	8.5454E-04
519839.73	4258580.37	4906.36282	0.15502	0.41215	0.16294	0.40417	8.51E-04	3.64E-07	8.45E-07	3.83E-07	7.96E-07	8.5337E-04
519869.48	4258522.06	4905.52177	0.16099	0.52104	0.16832	0.50801	8.51E-04	3.78E-07	1.07E-06	3.95E-07	1.00E-06	8.5368E-04
519849.65	4258560.94	4903.46845	0.15722	0.44501	0.16469	0.43528	8.50E-04	3.69E-07	9.13E-07	3.87E-07	8.57E-07	8.5301E-04
519829.81	4258599.81	4902.88962	0.15252	0.38229	0.16048	0.37626	8.50E-04	3.58E-07	7.84E-07	3.77E-07	7.41E-07	8.5264E-04
519893.78	4258448.1	4900.70855	0.15371	0.65113	0.15978	0.63002	8.50E-04	3.61E-07	1.34E-06	3.75E-07	1.24E-06	8.5332E-04
519859.57	4258541.5	4899.50746	0.1592	0.4811	0.16648	0.46984	8.50E-04	3.74E-07	9.87E-07	3.91E-07	9.25E-07	8.5247E-04
519807.12	4258646.05	4896.2286	0.14614	0.32603	0.15323	0.32209	8.49E-04	3.43E-07	6.69E-07	3.60E-07	6.34E-07	8.5123E-04
519819.89	4258619.25	4891.11679	0.14969	0.35589	0.15724	0.35117	8.48E-04	3.51E-07	7.30E-07	3.69E-07	6.91E-07	8.5048E-04
519894.73	4258397.25	4889.82136	0.13548	0.66768	0.13944	0.64452	8.48E-04	3.18E-07	1.37E-06	3.27E-07	1.27E-06	8.5140E-04
519760.37	4258735.08	4888.82848	0.131	0.246	0.1344	0.24302	8.48E-04	3.08E-07	5.05E-07	3.16E-07	4.78E-07	8.4955E-04
520050.62	4257755.22	4872.35194	0.05778	6.53993	0.05973	4.30174	8.45E-04	1.36E-07	1.34E-05	1.40E-07	8.47E-06	8.6724E-04
520129.56	4257634.69	4870.14298	0.05475	7.36893	0.05434	4.6029	8.45E-04	1.29E-07	1.51E-05	1.28E-07	9.06E-06	8.6913E-04
519887.53	4258317.71	4867.63233	0.1086	0.63304	0.10968	0.61138	8.44E-04	2.55E-07	1.30E-06	2.57E-07	1.20E-06	8.4728E-04
519797.12	4258664.6	4867.08882	0.14259	0.30571	0.14915	0.30224	8.44E-04	3.35E-07	6.27E-07	3.50E-07	5.95E-07	8.4608E-04
519885.96	4258266.67	4863.96653	0.09668	0.62087	0.09741	0.59913	8.44E-04	2.27E-07	1.27E-06	2.29E-07	1.18E-06	8.4654E-04
519894.35	4258422.45	4854.41331	0.14431	0.66049	0.14943	0.63845	8.42E-04	3.39E-07	1.35E-06	3.51E-07	1.26E-06	8.4528E-04
519890.51	4258358.99	4850.08206	0.12094	0.64819	0.12309	0.62575	8.41E-04	2.84E-07	1.33E-06	2.89E-07	1.23E-06	8.4436E-04
520060.47	4257735.25	4838.22676	0.05707	10.40157	0.05855	5.73766	8.39E-04	1.34E-07	2.13E-05	1.37E-07	1.13E-05	8.7207E-04
520119.74	4257644.66	4837.318	0.05483	11.73883	0.0545	6.34923	8.39E-04	1.29E-07	2.41E-05	1.28E-07	1.25E-05	8.7584E-04
519890.16	4258456.88	4828.21624	0.15427	0.62981	0.16044	0.61008	8.37E-04	3.62E-07	1.29E-06	3.77E-07	1.20E-06	8.4066E-04
519888.9	4258195.54	4826.07505	0.08465	0.62701	0.08501	0.60165	8.37E-04	1.99E-07	1.29E-06	2.00E-07	1.18E-06	8.3993E-04
519887.55	4258206.08	4822.09345	0.08607	0.62231	0.08649	0.59771	8.36E-04	2.02E-07	1.28E-06	2.03E-07	1.18E-06	8.3923E-04
519891.44	4258380.98	4817.50796	0.12821	0.65203	0.13135	0.62951	8.36E-04	3.01E-07	1.34E-06	3.08E-07	1.24E-06	8.3876E-04
519886.11	4258216.67	4813.75052	0.08751	0.61989	0.08802	0.59545	8.35E-04	2.05E-07	1.27E-06	2.07E-07	1.17E-06	8.3778E-04
519879.36	4258492.93	4809.35629	0.15869	0.56872	0.16561	0.55291	8.34E-04	3.73E-07	1.17E-06	3.89E-07	1.09E-06	8.3718E-04
519781.81	4258690.8	4796.12534	0.13662	0.27872	0.14214	0.27557	8.32E-04	3.21E-07	5.72E-07	3.34E-07	5.42E-07	8.3363E-04
519884.57	4258227.29	4794.05464	0.08894	0.61325	0.0895	0.58974	8.32E-04	2.09E-07	1.26E-06	2.10E-07	1.16E-06	8.3434E-04
520050.65	4257745.22	4792.34865	0.05694	6.40236	0.05884	4.1387	8.31E-04	1.34E-07	1.31E-05	1.38E-07	8.15E-06	8.5276E-04
519884.1	4258301.78	4791.67599	0.10357	0.61544	0.10444	0.59445	8.31E-04	2.43E-07	1.26E-06	2.45E-07	1.17E-06	8.3402E-04
519887.27	4258342.61	4788.12954	0.11478	0.63082	0.11636	0.60933	8.30E-04	2.69E-07	1.29E-06	2.73E-07	1.20E-06	8.3352E-04
519869.44	4258512.36	4770.58189	0.15737	0.5234	0.1644	0.51024	8.27E-04	3.69E-07	1.07E-06	3.86E-07	1.00E-06	8.3027E-04
519886.55	4258465.67	4769.32688	0.15464	0.60926	0.16089	0.59089	8.27E-04	3.63E-07	1.25E-06	3.78E-07	1.16E-06	8.3037E-04
519839.69	4258570.67	4763.0889	0.15183	0.41483	0.1592	0.40647	8.26E-04	3.56E-07	8.51E-07	3.74E-07	8.00E-07	8.2852E-04
519829.77	4258590.11	4760.97176	0.14956	0.38493	0.15726	0.37839	8.26E-04	3.51E-07	7.89E-07	3.69E-07	7.45E-07	8.2802E-04
519849.61	4258551.24	4759.38889	0.15385	0.44722	0.16078	0.43752	8.25E-04	3.61E-07	9.17E-07	3.77E-07	8.61E-07	8.2801E-04
520060.5	4257725.25	4758.89458	0.05625	10.16386	0.05768	5.45139	8.25E-04	1.32E-07	2.08E-05	1.35E-07	1.07E-05	8.5725E-04
519807.12	4258636.77	4757.7101	0.14383	0.32781	0.15082	0.32387	8.25E-04	3.38E-07	6.72E-07	3.54E-07	6.38E-07	8.2720E-04
519859.53	4258531.8	4757.49235	0.1557	0.48323	0.16263	0.47204	8.25E-04	3.66E-07	9.91E-07	3.82E-07	9.29E-07	8.2783E-04
519891.19	4258405.86	4756.87477	0.13638	0.64709	0.14071	0.6254	8.25E-04	3.20E-07	1.33E-06	3.30E-07	1.23E-06	8.2827E-04
520119.77	4257634.66	4756.32202	0.05406	7.8718	0.05373	4.83563	8.25E-04	1.27E-07	1.61E-05	1.26E-07	9.52E-06	8.5088E-04
519819.85	4258609.55	4750.92249	0.14701	0.3579	0.1544	0.35307	8.24E-04	3.45E-07	7.34E-07	3.62E-07	6.95E-07	8.2616E-04
519769.75	4258709.75	4740.32326	0.1322	0.26034	0.13654	0.25753	8.22E-04	3.10E-07	5.34E-07	3.21E-07	5.07E-07	8.2386E-04
519890.77	4258431.14	4739.37474	0.14498	0.63875	0.15025	0.61843	8.22E-04	3.40E-07	1.31E-06	3.53E-07	1.22E-06	8.2524E-04
519881.91	4258238.38	4739.11882	0.09016	0.60043	0.09074	0.57827	8.22E-04	2.12E-07	1.23E-06	2.13E-07	1.14E-06	8.2477E-04
519775.28	4258699.1	4733.27977	0.13382	0.26878	0.13871	0.26591	8.21E-04	3.14E-07	5.51E-07	3.26E-07	5.23E-07	8.2268E-04
519883.94	4258326.43	4728.14673	0.10924	0.61421	0.11041	0.59356	8.20E-04	2.56E-07	1.26E-06	2.59E-07	1.17E-06	8.2302E-04
519882.94	4258474.45	4725.57925	0.15486	0.58956	0.1612	0.57247	8.20E-04	3.64E-07	1.21E-06	3.78E-07	1.13E-06	8.2271E-04
519797.12	4258655.32	4725.30273	0.14046	0.30735	0.147	0.3039	8.20E-04	3.30E-07	6.30E-07	3.45E-07	5.98E-07	8.2149E-04
520050.68	4257735.22	4713.08409	0.0561	6.23067	0.05796	3.94142	8.17E-04	1.32E-07	1.28E-05	1.36E-07	7.76E-06	8.3827E-04
519880.42	4258248.98	4707.72097	0.09163	0.59311	0.09222	0.57191	8.17E-04	2.15E-07	1.22E-06	2.17E-07	1.13E-06	8.1931E-04
519880.46	4258286.36	4706.08036	0.09898	0.59826	0.0997	0.57757	8.16E-04	2.32E-07	1.23E-06	2.34E-07	1.14E-06	8.1908E-04
520107.66	4257645.77	4704.74759	0.05401	13.21639	0.05385	6.53769	8.16E-04	1.27E-07	2.71E-05	1.26E-07	1.29E-05	8.5625E-04
519886.85	4258367.87	4704.42742	0.12184	0.6293	0.12438	0.60787	8.16E-04	2.86E-07	1.29E-06	2.92E-07	1.20E-06	8.1903E-04

519879.32	4258483.23	4700.47527	0.15505	0.57095	0.16153	0.555	8.15E-04	3.64E-07	1.17E-06	3.79E-07	1.09E-06	8.1828E-04
520060.53	4257715.25	4681.49453	0.05544	9.83815	0.05683	5.07588	8.12E-04	1.30E-07	2.02E-05	1.33E-07	9.99E-06	8.4242E-04
519763.24	4258718.09	4680.8441	0.12947	0.25142	0.13326	0.24877	8.12E-04	3.04E-07	5.16E-07	3.13E-07	4.90E-07	8.1349E-04
519887.93	4258389.51	4674.44912	0.12901	0.63214	0.13253	0.61108	8.11E-04	3.03E-07	1.30E-06	3.11E-07	1.20E-06	8.1388E-04
519880.54	4258310.43	4663.87262	0.10417	0.59771	0.10506	0.57773	8.09E-04	2.45E-07	1.23E-06	2.47E-07	1.14E-06	8.1178E-04
519878.81	4258259.63	4661.41098	0.09306	0.585	0.09364	0.56476	8.09E-04	2.18E-07	1.20E-06	2.20E-07	1.11E-06	8.1125E-04
519887.2	4258439.83	4647.24839	0.14564	0.61857	0.15103	0.59958	8.06E-04	3.42E-07	1.27E-06	3.55E-07	1.18E-06	8.0919E-04
519869.4	4258502.67	4645.89149	0.15392	0.52577	0.16065	0.51239	8.06E-04	3.61E-07	1.08E-06	3.77E-07	1.01E-06	8.0863E-04
520050.71	4257725.22	4637.13174	0.0553	6.00652	0.05711	3.69932	8.04E-04	1.30E-07	1.23E-05	1.34E-07	7.28E-06	8.2415E-04
519883.65	4258351.41	4634.06165	0.11536	0.61074	0.11722	0.59048	8.04E-04	2.71E-07	1.25E-06	2.75E-07	1.16E-06	8.0672E-04
519887.65	4258414.47	4630.07672	0.13712	0.62657	0.14169	0.60654	8.03E-04	3.22E-07	1.29E-06	3.33E-07	1.19E-06	8.0620E-04
520107.69	4257635.77	4628.28664	0.05327	8.4976	0.05309	4.77496	8.03E-04	1.25E-07	1.74E-05	1.25E-07	9.40E-06	8.2983E-04
519839.65	4258560.98	4626.83009	0.1487	0.41698	0.15548	0.40853	8.03E-04	3.49E-07	8.55E-07	3.65E-07	8.04E-07	8.0488E-04
519829.73	4258580.41	4626.54466	0.14664	0.38739	0.15388	0.3804	8.02E-04	3.44E-07	7.95E-07	3.61E-07	7.49E-07	8.0470E-04
519859.48	4258522.1	4623.23369	0.15231	0.48519	0.15894	0.47403	8.02E-04	3.58E-07	9.95E-07	3.73E-07	9.33E-07	8.0454E-04
519849.57	4258541.54	4622.45572	0.15057	0.44926	0.15711	0.43962	8.02E-04	3.53E-07	9.21E-07	3.69E-07	8.65E-07	8.0425E-04
519880.14	4258199.16	4622.21412	0.08309	0.58416	0.0834	0.56104	8.02E-04	1.95E-07	1.20E-06	1.96E-07	1.10E-06	8.0440E-04
519784.63	4258673.69	4620.12954	0.13519	0.28526	0.14098	0.28229	8.01E-04	3.17E-07	5.85E-07	3.31E-07	5.56E-07	8.0313E-04
519756.7	4258726.35	4618.30897	0.12668	0.24302	0.13009	0.2404	8.01E-04	2.97E-07	4.98E-07	3.05E-07	4.73E-07	8.0260E-04
519819.81	4258599.85	4618.19252	0.14431	0.3602	0.15158	0.35498	8.01E-04	3.39E-07	7.39E-07	3.56E-07	6.99E-07	8.0314E-04
519878.73	4258209.72	4610.99204	0.08443	0.58003	0.0848	0.55762	8.00E-04	1.98E-07	1.19E-06	1.99E-07	1.10E-06	8.0244E-04
520060.56	4257705.25	4606.37598	0.05466	9.36872	0.05601	4.59109	7.99E-04	1.28E-07	1.92E-05	1.31E-07	9.04E-06	8.2747E-04
519809.89	4258619.29	4600.10303	0.14167	0.33622	0.14859	0.33212	7.98E-04	3.33E-07	6.90E-07	3.49E-07	6.54E-07	7.9989E-04
519797.12	4258646.05	4594.75738	0.13836	0.30895	0.14482	0.30551	7.97E-04	3.25E-07	6.34E-07	3.40E-07	6.01E-07	7.9884E-04
519877.23	4258220.33	4590.66411	0.08574	0.57676	0.08621	0.55457	7.96E-04	2.01E-07	1.18E-06	2.02E-07	1.09E-06	7.9891E-04
520097.87	4257645.74	4589.17209	0.05325	13.38336	0.05328	5.66338	7.96E-04	1.25E-07	2.74E-05	1.25E-07	1.11E-05	8.3482E-04
519880.35	4258335.16	4589.13129	0.1099	0.59645	0.11126	0.57675	7.96E-04	2.58E-07	1.22E-06	2.61E-07	1.14E-06	7.9884E-04
519876.77	4258295.33	4587.11759	0.09958	0.5811	0.1003	0.56139	7.96E-04	2.34E-07	1.19E-06	2.35E-07	1.11E-06	7.9838E-04
519883.62	4258448.52	4571.37316	0.14615	0.59916	0.15164	0.58139	7.93E-04	3.43E-07	1.23E-06	3.56E-07	1.14E-06	7.9596E-04
519875.62	4258230.98	4566.52265	0.08711	0.56853	0.08757	0.54773	7.92E-04	2.05E-07	1.17E-06	2.06E-07	1.08E-06	7.9470E-04
520050.74	4257715.22	4563.54471	0.05452	5.70967	0.05628	3.40611	7.92E-04	1.28E-07	1.17E-05	1.32E-07	6.70E-06	8.1020E-04
519883.2	4258376.76	4556.71447	0.12262	0.60989	0.12555	0.58984	7.90E-04	2.88E-07	1.25E-06	2.95E-07	1.16E-06	7.9334E-04
519778.17	4258682.15	4554.94664	0.13235	0.27498	0.13769	0.27221	7.90E-04	3.11E-07	5.64E-07	3.23E-07	5.36E-07	7.9177E-04
520107.72	4257625.77	4552.71353	0.05254	5.96601	0.05234	3.61165	7.90E-04	1.23E-07	1.22E-05	1.23E-07	7.11E-06	8.0924E-04
519884.42	4258398.05	4538.06693	0.12973	0.6126	0.13356	0.59314	7.87E-04	3.05E-07	1.26E-06	3.14E-07	1.17E-06	7.9015E-04
519876.98	4258319.08	4532.69976	0.10474	0.58049	0.10573	0.56144	7.86E-04	2.46E-07	1.19E-06	2.48E-07	1.11E-06	7.8897E-04
520060.59	4257695.25	4532.40613	0.05389	8.67277	0.0552	3.99918	7.86E-04	1.27E-07	1.78E-05	1.30E-07	7.87E-06	8.1204E-04
519869.36	4258492.97	4529.30533	0.15048	0.52773	0.15683	0.5142	7.86E-04	3.53E-07	1.08E-06	3.68E-07	1.01E-06	7.8840E-04
519884.11	4258423.07	4515.20061	0.13773	0.60676	0.14246	0.58827	7.83E-04	3.23E-07	1.24E-06	3.34E-07	1.16E-06	7.8620E-04
519873.22	4258241.96	4514.93519	0.08831	0.55911	0.08877	0.5392	7.83E-04	2.07E-07	1.15E-06	2.08E-07	1.06E-06	7.8572E-04
520097.9	4257635.74	4514.80896	0.05251	8.15428	0.05253	4.11655	7.83E-04	1.23E-07	1.67E-05	1.23E-07	8.10E-06	8.0815E-04
519873.42	4258279.22	4512.69717	0.09517	0.5637	0.09573	0.54466	7.83E-04	2.23E-07	1.16E-06	2.25E-07	1.07E-06	7.8538E-04
519880.05	4258457.2	4512.1099	0.14655	0.58064	0.15213	0.56399	7.83E-04	3.44E-07	1.19E-06	3.57E-07	1.11E-06	7.8561E-04
519880.02	4258360.21	4501.27199	0.11631	0.59477	0.11853	0.57546	7.81E-04	2.73E-07	1.22E-06	2.78E-07	1.13E-06	7.8363E-04
519829.69	4258570.72	4498.74189	0.14374	0.38968	0.15047	0.38237	7.80E-04	3.37E-07	7.99E-07	3.53E-07	7.53E-07	7.8253E-04
519859.44	4258512.41	4497.46069	0.14904	0.48715	0.15543	0.47592	7.80E-04	3.50E-07	9.99E-07	3.65E-07	9.37E-07	7.8271E-04
519839.61	4258551.28	4496.30002	0.14564	0.41886	0.15193	0.41045	7.80E-04	3.42E-07	8.59E-07	3.57E-07	8.08E-07	7.8223E-04
519819.77	4258590.15	4492.7195	0.14163	0.36249	0.14864	0.35681	7.79E-04	3.33E-07	7.43E-07	3.49E-07	7.02E-07	7.8137E-04
519849.53	4258531.84	4492.01431	0.1474	0.45115	0.15366	0.44155	7.79E-04	3.46E-07	9.25E-07	3.61E-07	8.69E-07	7.8162E-04
520050.77	4257705.22	4490.79654	0.05376	5.31856	0.05547	3.06676	7.79E-04	1.26E-07	1.09E-05	1.30E-07	6.04E-06	7.9611E-04
519771.67	4258690.5	4487.7496	0.12948	0.26527	0.13442	0.26262	7.78E-04	3.04E-07	5.44E-07	3.16E-07	5.17E-07	7.8006E-04
519809.85	4258609.59	4477.82481	0.13923	0.33805	0.14603	0.33381	7.77E-04	3.27E-07	6.93E-07	3.43E-07	6.57E-07	7.7868E-04
519766.03	4258700.91	4476.51688	0.12758	0.25692	0.13216	0.25423	7.76E-04	3.00E-07	5.27E-07	3.10E-07	5.00E-07	7.7807E-04
519871.67	4258252.59	4475.38355	0.08969	0.5525	0.09014	0.53337	7.76E-04	2.11E-07	1.13E-06	2.12E-07	1.05E-06	7.7884E-04
519797.12	4258636.77	4473.7978	0.13627	0.3105	0.14263	0.30707	7.76E-04	3.20E-07	6.37E-07	3.35E-07	6.04E-07	7.7786E-04
519876.47	4258465.89	4464.86384	0.14677	0.56265	0.15244	0.54713	7.74E-04	3.45E-07	1.15E-06	3.58E-07	1.08E-06	7.7734E-04
519873.09	4258304.29	4459.83184	0.10011	0.56327	0.10087	0.54473	7.74E-04	2.35E-07	1.16E-06	2.37E-07	1.07E-06	7.7624E-04
520060.63	4257685.25	4459.24021	0.05314	7.6374	0.05441	3.37605	7.73E-04	1.25E-07	1.57E-05	1.28E-07	6.65E-06	7.9600E-04
519787.36	4258656.36	4457.9352	0.13352	0.29196	0.13949	0.28891	7.73E-04	3.13E-07	5.99E-07	3.27E-07	5.69E-07	7.7502E-04
519876.76	4258343.88	4448.17379	0.11051	0.5789	0.11214	0.56021	7.72E-04	2.59E-07	1.19E-06	2.63E-07	1.10E-06	7.7433E-04
520097.93	4257625.74	4442.50073	0.0518	5.53467	0.0518	3.12906	7.71E-04	1.22E-07	1.14E-05	1.22E-07	6.16E-06	7.8829E-04
519872.9	4258474.58	4435.41964	0.14696	0.54565	0.15276	0.53112	7.69E-04	3.45E-07	1.12E-06	3.59E-07	1.05E-06	7.7217E-04
519759.55	4258709.31	4426.40771	0.12517	0.24824	0.12912	0.2458	7.68E-04	2.94E-07	5.09E-07	3.03E-07	4.84E-07	7.6933E-04
519871.37	4258202.78	4422.60091	0.08152	0.5447	0.0818	0.52368	7.67E-04	1.91E-07	1.12E-06	1.92E-07	1.03E-06	7.6961E-04
519869.32	4258483.27	4420.58663	0.14711	0.52945	0.15306	0.51583	7.67E-04	3.45E-07	1.09E-06	3.59E-07	1.02E-06	7.6954E-04
520050.81	4257695.22	4420.5163	0.05301	4.81166	0.05468	2.70871	7.67E-04	1.24E-07	9.87E-06	1.28E-07	5.33E-06	7.8217E-04
519880.57	4258431.68	4420.07131	0.1383	0.58817	0.14314	0.57095	7.67E-04	3.25E-07	1.21E-06	3.36E-07	1.12E-06	7.6963E-04
519880.91	4258406.58	4420.04466	0.13047	0.59461	0.13457	0.57642	7.67E-04	3.06E-07	1.22E-06	3.16E-07	1.13E-06	7.6961E-04
519879.54	4258385.65	4416.96941	0.12338	0.59131	0.12668	0.57265	7.66E-04	2.90E-07	1.21E-06	2.97E-07	1.13E-06	7.6903E-04
519869.91	4258213.37	4405.85927	0.08277	0.54202	0.08312	0.52132	7.64E-04	1.94E-07	1.11E-06	1.95E-07	1.03E-06	7.6670E-04
519873.42	4258327.74	4402.23871	0.10533	0.56431	0.10651	0.54611	7.64E-04	2.47E-07	1.16E-06	2.50E-07	1.08E-06	7.6628E-04
519869.76	4258288.1	4402.16979	0.09573	0.54947	0.09632	0.53099	7.64E-04	2.25E-07	1.13E-06	2.26E-07	1.05E-06	7.6616E-04
519780.97	4258664.98	4395.85791	0.13084	0.28134	0.13647	0.27853	7.62E-04	3.07E-07	5.77E-07	3.20E-07	5.48E-07	7.6419E-04
519868.35	4258224	4381.77522	0.08404	0.53669	0.08441	0.51678	7.60E-04	1.97E-07	1.10E-06	1.98E-07	1.02E-06	7.6251E-04
519859.4	4258502.71	4379.62971	0.14586	0.48898	0.15197	0.47762	7.60E-04	3.42E-07	1.00E-06	3.57E-07	9.40E-07	7.6227E-04
519829.65	4258561.02	4375.67471	0.1409	0.39145	0.14706	0.3841	7.59E-04	3.31E-07	8.03E-07	3.45E-07	7.56E-07	7.6118E-04
519819.73	4258580.46	4373.37667	0.13896	0.36472	0.14559	0.35859	7.59E-04	3.26E-07	7.48E-07	3.42E-07	7.06E-07	7.6066E-04
519753.03	4258717.62	4372.10832	0.12265	0.23995	0.12608	0.23767	7.58E-04	2.88E-07	4.92E-07	2.96E-07	4.68E-07	7.5987E-04
519839.57	4258541.58	4371.23129	0.14266	0.42059	0.1486	0.41223	7.58E-04	3.35E-07	8.63E-07	3.49E-07	8.11E-07	7.6053E-04
519849.48	4258522.15	4367.81373	0.14433	0.4529	0.15036	0.4433	7.58E-04	3.39E-07	9.29E-07	3.53E-07	8.73E-07	7.6007E-04
519876.4	4258369.02	4366.61948	0.11709	0.57792	0.11969	0.55963	7.57E-04	2.75E-07	1.19E-06	2.81E-07	1.10E-06	7.6021E-04
519809.81	4258599.89	4360.87578	0.13678	0.34007	0.14346	0.33547	7.56E-04	3.21E-07	6.97E-07	3.37E-07	6.60E-07	7.5839E-04
520050.84	4257685.22	4349.84048	0.05227	4.20248	0.05391	2.36895	7.54E-04	1.23E-07	8.62E-06	1.27E-07	4.66E-06	7.6799E-04
519866.67	4258234.68	4349.36172	0.08531	0.52975	0.08567	0.51086	7.54E-04	2.00E-07	1.09E-06	2.01E-07	1.01E-06	7.5687E-04
519877.03	4258440.28	4339.01346	0.13874	0.57027	0.14365	0.55422	7.53E-04	3.26E-07	1.17E-06	3.37E-07	1.09E-06	7.5551E-04
519799.89	4258619.33	4337.55388	0.13431	0.31813	0.14066	0.31453	7.52E-04	3.15E-07	6.52E-07	3.30E-07	6.19E-07	7.5425E-04
519774.53	4258673.49	4333.35922	0.12817	0.27128	0.13341	0.26869	7.52E-04	3.01E-07	5.56E-07	3.13E-07	5.29E-07	7.5330E-04
519869.4	4258313.25	4330.59221	0.10065	0.54689	0.10153	0.52929	7.51E-04	2.36E-07	1.12E-06	2.38E-07	1.04E-06	7.5376E-04
519866.37	4258272.08	4327.69683	0.09158	0.53172	0.092	0.51401	7.51E-04	2.15E-07	1.09E-06	2.16E-07	1.01E-06	7.5315E-04
519873.17	4258352.61	4310.33549	0.11113	0.56216	0.11308	0.54454	7.48E-04	2.61E-07	1.15E-06	2.65E-07	1.07E-06	7.5036E-04
519877.4	4258415.11	4309.45263	0.13108	0.57689	0.13535	0.55999	7.47E-04	3.08E-07	1.18E-06	3.18E-07	1.10E-06	7.5037E-04
519864.54	4258245.55	4299.24466	0.08649	0.52182	0.08683	0.5037	7.46E-04	2.03E-07	1.07E-06	2.04E-07	9.92E-07	7.4815E-04
519866.11	4258296.99	4287.76717	0.09628	0.53466	0.09693	0.51695	7.44E-04	2.26E-07	1.10E-06	2.28E-07	1.02E-06	7.4626E-04
519875.89	4258394.53	4285.18656	0.12404	0.57291	0.12761	0.55571	7.43E-04	2.91E-07	1.17E-06	3.00E-07	1.09E-06	7.4611E-04
519873.49	4258448.89	4273.04409	0.13905	0.55309	0.14403	0.53811	7.41E-04	3.26E-07	1.13E-06	3.38E-07	1.06E-06	7.4400E-04
519869.86	4258336.39	4272.47501	0.10594	0.54882	0.10737	0.5315	7.41E-04	2.49E-07	1.13E-06	2.52E-07	1.05E-06	7.4371E-04
519768.05	4258681.91	4270.88926	0.12551	0.26176	0.13036	0.25934	7.41E-04	2.95E-07	5.37E-07	3.06E-07	5.11E-07	7.4241E-04
519859.36	4258493.01	4265.19398	0.1427	0.49053	0.14849	0.47906	7.40E-04	3.35E-07	1.01E-06	3.49E-07	9.43E-07	7.4241E-04
519819.69	4258570.76	4258.494	0.13632	0.36675	0.14248	0.36031	7.39E-04	3.20E-07	7.52E-07	3.34E-07	7.09E-07	7.4073E-04
519829.61	4258551.32	4257.12037	0.13811	0.39315	0.14385	0.38579	7.38E-04	3.24E-07	8.06E-07	3.38E-07	7.59E-07	7.4061E-04
519783.67	4258647.59	4253.65179	0.1292	0.28776	0.1349	0.28486	7.38E-04	3.03E-07	5.90E-07	3.17E-07	5.61E-07	7.3955E-04
519762.31	4258692.06	4252.44885	0.12366	0.25348	0.12814	0.25112	7.38E-04	2.90E-07	5.20E-07	3.01E-07	4.94E-07	7.3917E-04
519839.53	4258531.88	4250.95863	0.13978	0.42221	0.14547	0.41389	7.37E-04	3.28E-07	8.66E-07	3.42E-07	8.15E-07	7.3966E-04
519849.44	4258512.45	4249.97586	0.14137	0.45458	0.1472	0.44492	7.37E-04	3.32E-07	9.32E-07	3.46E-07	8.76E-07	7.3962E-04
519809.77	4258590.2	4249.80862	0.13433	0.34211	0.14079	0.33707	7.37E-04	3.15E-07	7.02E-07	3.31E-07	6.64E-07	7.3912E-04
519872.78	4258377.82	4232.6129	0.11776	0.5608	0.12069	0.5438	7.34E-04	2.76E-07	1.15E-06	2.83E-07	1.07E-06	7.3691E-04
519862.61	4258206.39	4231.48306	0.07995	0.51019	0.08022	0.49069	7.34E-04	1.88E-07	1.05E-06	1.88E-07	9.66E-07	7.3632E-04
519799.85	4258609.63	4229.7244	0.13208	0.3198	0.13834	0.31603	7.34E-04	3.10E-07	6.56E-07	3.25E-07	6.22E-07	7.3554E-04
519862.75	4258280.89	4229.12653	0.09212	0.51891	0.09258	0.50173	7.34E-04	2.16E-07	1.06E-06	2.17E-07	9.88E-07	7.3601E-04
519869.94	4258457.5	4226.96904	0.13935	0.53696	0.14443	0.52284	7.33E-04	3.27E-07	1.10E-06	3.39E-07	1.03E-06	7.3595E-04
519873.89	4258423.64	4213.08971	0.13157	0.55964	0.13594	0.54395	7.31E-04	3.09E-07	1.15E-06	3.19E-07	1.07E-06	7.3359E-04
519861.09	4258217.01	4209.08557	0.08114	0.50604	0.08143	0.48719	7.30E-04	1.90E-07	1.04E-06	1.91E-07	9.59E-07	7.3243E-04
519865.71	4258322.22	4204.03236	0.10124	0.53186	0.10233	0.51505	7.29E-04	2.38E-07	1.09E-06	2.40E-07	1.01E-06	7.3175E-04
519789.93	4258629.07	4201.72767	0.1296	0.30002	0.13547	0.29691	7.29E-04	3.04E-07	6.15E-07	3.18E-07	5.84E-07	7.3059E-04
519777.3	4258656.27	4194.4603	0.12671	0.27741	0.13211	0.27473	7.28E-04	2.97E-07	5.69E-07	3.10E-07	5.41E-07	7.2923E-04
519866.4	4258466.1	4192.84573	0.13952	0.52133	0.14471	0.50811	7.27E-04	3.28E-07	1.07E-06	3.40E-07	1.00E-06	7.2997E-04
519755.85	4258700.52	4192.53086	0.12102	0.245	0.12517	0.24264	7.27E-04	2.84E-07	5.02E-07	2.94E-07	4.78E-07	7.2873E-04
519869.58	4258361.33	4185.12565	0.11191	0.54745	0.11421	0.53081	7.26E-04	2.63E-07	1.12E-06	2.68E-07	1.04E-06	7.2859E-04
519859.47	4258227.66	4179.35828	0.08234	0.50015	0.08262	0.4822	7.25E-04	1.93E-07	1.03E-06	1.94E-07	9.49E-07	7.2725E-04
519862.86	4258474.71	4172.75118	0.13964	0.50641	0.14497	0.49401	7.24E-04	3.28E-07	1.04E-06	3.40E-07	9.72E-07	7.2642E-04
519862.45	4258305.88	4170.11171	0.09681	0.51964	0.09758	0.50283	7.23E-04	2.27E-07	1.07E-06	2.29E-07	9.90E-07	7.2580E-04
520058.71	4257645.62	4167.69053	0.05016	2.92811	0.05137	1.74632	7.23E-04	1.18E-07	6.01E-06	1.21E-07	3.44E-06	7.3255E-04
519872.23	4258403.42	4165.24308	0.12465	0.55552	0.12843	0.53963	7.22E-04	2.93E-07	1.14E-06	3.02E-07	1.06E-06	7.2524E-04
519859.32	4258483.31	4162.74439	0.13967	0.49201	0.14512	0.48042	7.22E-04	3.28E-07	1.01E-06	3.41E-07	9.46E-07	7.2463E-04
519859.32	4258264.95	4156.97802	0.08821	0.50238	0.08853	0.48569	7.21E-04	2.07E-07	1.03E-06	2.08E-07	9.56E-07	7.2341E-04
519819.65	4258561.06	4147.169	0.13373	0.36836	0.13939	0.36184	7.19E-04	3.14E-07	7.55E-07	3.27E-07	7.12E-07	7.2142E-04
519749.35	4258708.89	4144.56978	0.11874	0.23692	0.12233	0.23479	7.19E-04	2.79E-07	4.86E-07	2.87E-07	4.62E-07	7.2037E-04
519866.3	4258345.05	4143.27527	0.10653	0.53369	0.10827	0.51733	7.19E-04	2.50E-07	1.09E-06	2.54E-07	1.02E-06	7.2125E-04
519809.73	4258580.5	4142.8893	0.1319	0.34406	0.138	0.33862	7.19E-04	3.10E-07	7.06E-07	3.24E-07	6.67E-07	7.2057E-04
519857.72	4258238.37	4141.53687	0.08353	0.49453	0.08379	0.47723	7.18E-04	1.96E-07	1.01E-06	1.97E-07	9.39E-07	7.2068E-04
519849.4	4258502.75	4138.78267	0.1385	0.45616	0.14412	0.44639	7.18E-04	3.25E-07	9.36E-07	3.38E-07	8.79E-07	7.2033E-04
519829.57	4258541.62	4136.67272	0.13523	0.3943	0.14058	0.38708	7.17E-04	3.17E-07	8.09E-07	3.30E-07	7.62E-07	7.1971E-04
519839.48	4258522.19	4135.42047	0.13699	0.4237	0.14249	0.41539	7.17E-04	3.22E-07	8.69E-07	3.35E-07	8.18E-07	7.1961E-04
519770.89	4258664.84	4134.97597	0.12421	0.2676	0.12929	0.26512	7.17E-04	2.92E-07	5.49E-07	3.04E-07	5.22E-07	7.1886E-04
519870.38	4258432.17	4130.97221	0.13198	0.54322	0.13642	0.52858	7.16E-04	3.10E-07	1.11E-06	3.20E-07	1.04E-06	7.1928E-04
519799.81	4258599.93	4127.00352	0.12984	0.32158	0.136	0.31748	7.16E-04	3.05E-07	6.60E-07	3.19E-07	6.25E-07	7.1772E-04
519859.12	4258289.71	4121.93993	0.09263	0.50647	0.09318	0.48976	7.15E-04	2.17E-07	1.04E-06	2.19E-07	9.64E-07	7.1737E-04
519869.16	4258386.62	4107.64485	0.1184	0.54456	0.12163	0.52876	7.12E-04	2.78E-07	1.12E-06	2.86E-07	1.04E-06	7.1517E-04
520058.74	4257635.62	4104.91196	0.0495	2.4012	0.05067	1.52317	7.12E-04	1.16E-07	4.92E-06	1.19E-07	3.00E-06	7.2014E-04
519789.89	4258619.37	4100.41114	0.12755	0.30143	0.13335	0.29826	7.11E-04	2.99E-07	6.18E-07	3.13E-07	5.87E-07	7.1302E-04
519862.02	4258331.18	4074.81257	0.10179	0.51689	0.10314	0.50095	7.07E-04	2.39E-07	1.06E-06	2.42E-07	9.86E-07	7.0929E-04
519764.44	4258673.31	4074.7917	0.12171	0.2583	0.12646	0.256	7.07E-04	2.86E-07	5.30E-07	2.97E-07	5.04E-07	7.0837E-04
520048.92	4257645.58	4070.74567	0.04937	2.12672	0.05093	1.39333	7.06E-04	1.16E-07	4.36E-06	1.20E-07	2.74E-06	7.1339E-04
519779.97	4258638.81	4070.21172	0.12509	0.28353	0.13049	0.28079	7.06E-04	2.94E-07	5.81E-07	3.06E-07	5.53E-07	7.0769E-04
519866.87	4258440.7	4063.36958	0.1323	0.52755	0.13681	0.51384	7.05E-04	3.11E-07	1.08E-06	3.21E-07	1.01E-06	7.0750E-04
519865.99	4258370.06	4060.51281	0.11256	0.53234	0.1152	0.51674	7.04E-04	2.64E-07	1.09E-06	2.70E-07	1.02E-06	7.0692E-04
519855.72	4258273.7	4059.13764	0.08866	0.48982	0.08901	0.47377	7.04E-04	2.08E-07	1.00E-06	2.09E-07	9.33E-07	7.0639E-04
519868.57	4258412.31	4058.66696	0.12517	0.53875	0.12909	0.52404	7.04E-04	2.94E-07	1.10E-06	3.03E-07	1.03E-06	7.0669E-04
519758.58	4258683.21	4047.56971	0.11984	0.25006	0.12426	0.24786	7.02E-04	2.81E-07	5.13E-07	2.92E-07	4.88E-07	7.0361E-04
519858.79	4258314.76	4044.36817	0.09727	0.50463	0.09822	0.48881	7.01E-04	2.28E-07	1.03E-06	2.31E-07	9.62E-07	7.0393E-04
519853.84	4258210.01	4044.09141	0.07838	0.47786	0.07863	0.4598	7.01E-04	1.84E-07	9.80E-07	1.85E-07	9.05E-07	7.0368E-04
520058.78	4257625.62	4043.93085	0.04886	1.99942	0.05	1.33716	7.01E-04	1.15E-07	4.10E-06	1.17E-07	2.63E-06	7.0837E-04
519809.69	4258570.8	4039.39043	0.12949	0.3458	0.13515	0.34008	7.01E-04	3.04E-07	7.09E-07	3.17E-07	6.69E-07	7.0261E-04
519819.61	4258551.36	4038.94735	0.13119	0.36981	0.13646	0.36329	7.01E-04	3.08E-07	7.58E-07	3.20E-07	7.15E-07	7.0264E-04
519849.36	4258493.05	4035.05445	0.13571	0.45764	0.14109	0.44771	7.00E-04	3.19E-07	9.39E-07	3.31E-07	8.81E-07	7.0233E-04
519829.53	4258531.93	4031.16769	0.13276	0.39597	0.13796	0.38871	6.99E-04	3.12E-07	8.12E-07	3.24E-07	7.65E-07	7.0140E-04
519799.77	4258590.24	4028.17992	0.1276	0.32341	0.13356	0.31889	6.99E-04	3.00E-07	6.63E-07	3.14E-07	6.28E-07	7.0057E-04
519839.44	4258512.49	4024.93863	0.1343	0.42518	0.13965	0.41681	6.98E-04	3.15E-07	8.72E-07	3.28E-07	8.20E-07	7.0044E-04
519852.27	4258220.65	4020.19017	0.07954	0.47282	0.07976	0.45565	6.97E-04	1.87E-07	9.70E-07	1.87E-07	8.97E-07	6.9952E-04
519862.74	4258353.7	4017.37248	0.10711	0.5191	0.10916	0.50374	6.97E-04	2.51E-07	1.06E-06	2.56E-07	9.92E-07	6.9936E-04
519773.64	4258647.56	4014.06255	0.12277	0.27349	0.12792	0.27092	6.96E-04	2.88E-07	5.61E-07	3.00E-07	5.33E-07	6.9790E-04
519855.49	4258298.53	4011.79595	0.09312	0.49361	0.09381	0.47753	6.96E-04	2.19E-07	1.01E-06	2.20E-07	9.40E-07	6.9822E-04
519863.36	4258449.23	4010.32567	0.13252	0.51253	0.13711	0.49967	6.96E-04	3.11E-07	1.05E-06	3.22E-07	9.84E-07	6.9824E-04
520048.96	4257635.58	4010.23818	0.04873	1.8269	0.05025	1.24384	6.96E-04	1.14E-07	3.75E-06	1.18E-07	2.45E-06	7.0199E-04
519789.85	4258609.67	4005.19333	0.12551	0.30291	0.13124	0.29957	6.95E-04	2.95E-07	6.21E-07	3.08E-07	5.90E-07	6.9650E-04
519852.28	4258257.82	3994.80436	0.08499	0.47449	0.08523	0.45865	6.93E-04	2.00E-07	9.73E-07	2.00E-07	9.03E-07	6.9516E-04
519752.15	4258691.73	3993.62169	0.11745	0.24175	0.12151	0.23966	6.93E-04	2.76E-07	4.96E-07	2.85E-07	4.72E-07	6.9420E-04
519865.54	4258395.42	3990.59922	0.11894	0.52837	0.12235	0.51381	6.92E-04	2.79E-07	1.08E-06	2.87E-07	1.01E-06	6.9481E-04
519850.58	4258231.33	3984.27299	0.08066	0.46723	0.08085	0.4508	6.91E-04	1.89E-07	9.58E-07	1.90E-07	8.87E-07	6.9328E-04
519779.93	4258629.11	3974.28089	0.1232	0.28474	0.12853	0.282	6.89E-04	2.89E-07	5.84E-07	3.02E-07	5.55E-07	6.9105E-04
519859.85	4258457.76	3974.11909	0.13272	0.49832	0.13742	0.4862	6.89E-04	3.12E-07	1.02E-06	3.23E-07	9.57E-07	6.9191E-04
519864.92	4258421.19	3965.35485	0.12559	0.52264	0.12959	0.50898	6.88E-04	2.95E-07	1.07E-06	3.04E-07	1.00E-06	6.9045E-04
519852.12	4258282.45	3962.84296	0.08917	0.47859	0.0896	0.46302	6.87E-04	2.09E-07	9.82E-07	2.10E-07	9.11E-07	6.8965E-04
519767.25	4258656.19	3956.80263	0.12044	0.26392	0.12531	0.26153	6.86E-04	2.83E-07	5.41E-07	2.94E-07	5.15E-07	6.8792E-04
520048.99	4257625.58	3951.69879	0.04811	1.57968	0.04959	1.11508	6.85E-04	1.13E-07	3.24E-06	1.16E-07	2.20E-06	6.9107E-04
519856.34	4258466.29	3946.86408	0.13277	0.48439	0.13757	0.47305	6.85E-04	3.12E-07	9.93E-07	3.23E-07	9.31E-07	6.8712E-04
519858.33	4258340.14	3945.93776	0.10231	0.50222	0.10396	0.48723	6.84E-04	2.40E-07	1.03E-06	2.44E-07	9.59E-07	6.8688E-04
519862.4	4258378.78	3942.90861	0.11317	0.51772	0.11609	0.50315	6.84E-04	2.66E-07	1.06E-06	2.73E-07	9.90E-07	6.8647E-04
519809.65	4258561.1	3938.37828	0.12712	0.34726	0.13234	0.34143	6.83E-04	2.98E-07	7.12E-07	3.11E-07	6.72E-07	6.8509E-04
519745.68	4258700.16	3937.86506	0.11501	0.23388	0.11876	0.2318	6.83E-04	2.70E-07	4.80E-07	2.79E-07	4.56E-07	6.8449E-04
519849.32	4258483.36	3935.90557	0.13294	0.45881	0.13802	0.44877	6.83E-04	3.12E-07	9.41E-07	3.24E-07	8.83E-07	6.8513E-04
519852.83	4258474.82	3934.20221	0.13282	0.47121	0.13775	0.46057	6.82E-04	3.12E-07	9.66E-07	3.23E-07	9.07E-07	6.8488E-04
519799.73	4258580.54	3932.62656	0.12538	0.32511	0.131	0.32021	6.82E-04	2.94E-07	6.67E-07	3.08E-07	6.30E-07	6.8400E-04
519819.57	4258541.67	3931.90811	0.12864	0.37085	0.13358	0.36443	6.82E-04	3.02E-07	7.61E-07	3.14E-07	7.17E-07	6.8407E-04
519829.48	4258522.23	3923.37976	0.13024	0.39736	0.13529	0.39007	6.80E-04	3.06E-07	8.15E-07	3.18E-07	7.68E-07	6.8270E-04
519855.14	4258323.65	3923.01739	0.09778	0.49099	0.09899	0.47599	6.80E-04	2.30E-07	1.01E-06	2.32E-07	9.37E-07	6.8284E-04
519839.4	4258502.79	3919.92276	0.1317	0.42658	0.13689	0.41809	6.80E-04	3.09E-07	8.75E-07	3.21E-07	8.23E-07	6.8222E-04
519789.81	4258599.98	3914.20615	0.12346	0.30449	0.1291	0.30083	6.79E-04	2.90E-07	6.24E-07	3.03E-07	5.92E-07	6.8071E-04
519851.86	4258307.34	3899.53159	0.09362	0.48046	0.09449	0.46522	6.76E-04	2.20E-07	9.85E-07	2.22E-07	9.16E-07	6.7870E-04
519760.82	4258664.72	3899.1662	0.1181	0.25484	0.12268	0.25262	6.76E-04	2.77E-07	5.23E-07	2.88E-07	4.97E-07	6.7788E-04

519859.18	4258362.36	3898.80145	0.10772	0.50542	0.11009	0.49105	6.76E-04	2.53E-07	1.04E-06	2.58E-07	9.67E-07	6.7874E-04
519848.7	4258266.51	3890.18915	0.08516	0.46024	0.08542	0.44511	6.75E-04	2.00E-07	9.44E-07	2.01E-07	8.76E-07	6.7696E-04
519861.26	4258430.08	3889.53006	0.12596	0.50749	0.13004	0.49469	6.75E-04	2.96E-07	1.04E-06	3.05E-07	9.74E-07	6.7724E-04
519779.89	4258619.41	3884.80268	0.12132	0.28599	0.1266	0.28318	6.74E-04	2.85E-07	5.87E-07	2.97E-07	5.57E-07	6.7553E-04
519861.92	4258404.22	3881.35452	0.11937	0.51269	0.1229	0.4993	6.73E-04	2.80E-07	1.05E-06	2.89E-07	9.83E-07	6.7581E-04
519845.08	4258213.63	3871.03495	0.07689	0.44749	0.07706	0.43102	6.71E-04	1.81E-07	9.18E-07	1.81E-07	8.48E-07	6.7354E-04
519754.86	4258674.36	3864.59018	0.11622	0.24668	0.12054	0.24458	6.70E-04	2.73E-07	5.06E-07	2.83E-07	4.81E-07	6.7184E-04
519848.52	4258291.2	3862.82987	0.08966	0.46781	0.09025	0.45269	6.70E-04	2.10E-07	9.59E-07	2.12E-07	8.91E-07	6.7226E-04
519845.09	4258251.01	3852.12449	0.08216	0.45081	0.08235	0.43556	6.68E-04	1.93E-07	9.25E-07	1.93E-07	8.57E-07	6.7030E-04
519769.97	4258638.85	3851.2079	0.119	0.26954	0.1239	0.26708	6.68E-04	2.79E-07	5.53E-07	2.91E-07	5.26E-07	6.6962E-04
519809.61	4258551.41	3839.34812	0.1248	0.34855	0.12966	0.34269	6.66E-04	2.93E-07	7.15E-07	3.04E-07	6.75E-07	6.6790E-04
519799.69	4258570.84	3838.98827	0.12318	0.32661	0.12838	0.32147	6.66E-04	2.89E-07	6.70E-07	3.01E-07	6.33E-07	6.6775E-04
519843.45	4258224.29	3838.50622	0.07796	0.44222	0.0781	0.42652	6.66E-04	1.83E-07	9.07E-07	1.83E-07	8.40E-07	6.6788E-04
519819.53	4258531.97	3830.04031	0.12632	0.37224	0.1311	0.36581	6.64E-04	2.97E-07	7.63E-07	3.08E-07	7.20E-07	6.6639E-04
519858.81	4258387.51	3829.87012	0.11368	0.50306	0.11679	0.48958	6.64E-04	2.67E-07	1.03E-06	2.74E-07	9.64E-07	6.6681E-04
519857.6	4258438.96	3827.62517	0.12622	0.49288	0.13038	0.48089	6.64E-04	2.96E-07	1.01E-06	3.06E-07	9.47E-07	6.6644E-04
519789.77	4258590.28	3825.58183	0.1214	0.30613	0.12687	0.30205	6.64E-04	2.85E-07	6.28E-07	2.98E-07	5.95E-07	6.6534E-04
519854.64	4258349.11	3824.37037	0.1029	0.48877	0.10487	0.47473	6.63E-04	2.42E-07	1.00E-06	2.46E-07	9.35E-07	6.6574E-04
519839.36	4258493.09	3821.08391	0.12917	0.4278	0.13416	0.41918	6.63E-04	3.03E-07	8.77E-07	3.15E-07	8.25E-07	6.6507E-04
519829.44	4258512.53	3819.53858	0.12778	0.39855	0.1327	0.39123	6.62E-04	3.00E-07	8.17E-07	3.12E-07	7.70E-07	6.6468E-04
519748.46	4258682.95	3811.68278	0.11396	0.23856	0.11798	0.23657	6.61E-04	2.68E-07	4.89E-07	2.77E-07	4.66E-07	6.6262E-04
519845.12	4258275.2	3806.93919	0.0858	0.45191	0.08615	0.43724	6.60E-04	2.01E-07	9.27E-07	2.02E-07	8.61E-07	6.6249E-04
519851.48	4258332.54	3806.91152	0.09834	0.47848	0.09985	0.46424	6.60E-04	2.31E-07	9.81E-07	2.34E-07	9.14E-07	6.6265E-04
519779.85	4258609.72	3801.37457	0.11945	0.28726	0.12468	0.2843	6.59E-04	2.80E-07	5.89E-07	2.93E-07	5.60E-07	6.6105E-04
519763.61	4258647.54	3796.03309	0.11682	0.26024	0.12148	0.25792	6.58E-04	2.74E-07	5.34E-07	2.85E-07	5.08E-07	6.6001E-04
519858.29	4258413.02	3794.19963	0.11984	0.49854	0.12349	0.48594	6.58E-04	2.81E-07	1.02E-06	2.90E-07	9.57E-07	6.6064E-04
519855.61	4258371.01	3789.78736	0.10834	0.49268	0.11099	0.47911	6.57E-04	2.54E-07	1.01E-06	2.61E-07	9.43E-07	6.5979E-04
519848.24	4258316.16	3786.64588	0.0941	0.46777	0.09521	0.45333	6.57E-04	2.21E-07	9.59E-07	2.24E-07	8.92E-07	6.5907E-04
519853.95	4258447.85	3779.39162	0.12638	0.47881	0.13062	0.46759	6.56E-04	2.97E-07	9.82E-07	3.07E-07	9.20E-07	6.5802E-04
519769.93	4258629.15	3766.65337	0.11727	0.27061	0.12212	0.26814	6.53E-04	2.75E-07	5.55E-07	2.87E-07	5.28E-07	6.5495E-04
519841.41	4258259.97	3763.11288	0.08257	0.44022	0.08281	0.42551	6.53E-04	1.94E-07	9.03E-07	1.94E-07	8.38E-07	6.5482E-04
519742.01	4258691.44	3761.35006	0.11177	0.23081	0.11542	0.22895	6.52E-04	2.62E-07	4.73E-07	2.71E-07	4.51E-07	6.5385E-04
519844.92	4258299.95	3757.41441	0.09012	0.45649	0.0909	0.44196	6.52E-04	2.12E-07	9.36E-07	2.13E-07	8.70E-07	6.5394E-04
519850.29	4258456.74	3748.82258	0.12653	0.46556	0.13089	0.45498	6.50E-04	2.97E-07	9.55E-07	3.07E-07	8.96E-07	6.5267E-04
519799.65	4258561.14	3746.78149	0.12101	0.32787	0.12581	0.32262	6.50E-04	2.84E-07	6.72E-07	2.95E-07	6.35E-07	6.5175E-04
519809.57	4258541.71	3741.65627	0.12253	0.34964	0.12714	0.34382	6.49E-04	2.88E-07	7.17E-07	2.98E-07	6.77E-07	6.5095E-04
519757.2	4258656.12	3740.99133	0.11464	0.25137	0.11903	0.24921	6.49E-04	2.69E-07	5.16E-07	2.79E-07	4.91E-07	6.5041E-04
519789.73	4258580.58	3739.59975	0.11936	0.30764	0.12452	0.30321	6.49E-04	2.80E-07	6.31E-07	2.92E-07	5.97E-07	6.5042E-04
519819.48	4258522.27	3729.36377	0.12398	0.37345	0.12866	0.36697	6.47E-04	2.91E-07	7.66E-07	3.02E-07	7.22E-07	6.4892E-04
519839.32	4258483.4	3727.95584	0.12666	0.42878	0.1314	0.42003	6.47E-04	2.97E-07	8.79E-07	3.08E-07	8.27E-07	6.4891E-04
519855.22	4258396.23	3727.12778	0.11412	0.48904	0.11737	0.47653	6.46E-04	2.68E-07	1.00E-06	2.76E-07	9.38E-07	6.4894E-04
519846.63	4258465.62	3723.7055	0.12643	0.45224	0.13088	0.44239	6.46E-04	2.97E-07	9.28E-07	3.07E-07	8.71E-07	6.4826E-04
519829.4	4258502.83	3720.18332	0.1254	0.39972	0.13019	0.3923	6.45E-04	2.94E-07	8.20E-07	3.06E-07	7.72E-07	6.4744E-04
519779.81	4258600.02	3720.16493	0.11758	0.28857	0.1227	0.28533	6.45E-04	2.76E-07	5.92E-07	2.88E-07	5.62E-07	6.4696E-04
519841.55	4258283.89	3720.13908	0.08638	0.44329	0.08688	0.42899	6.45E-04	2.03E-07	9.09E-07	2.04E-07	8.44E-07	6.4740E-04
519842.98	4258474.51	3719.36844	0.12653	0.4402	0.13113	0.43095	6.45E-04	2.97E-07	9.03E-07	3.08E-07	8.48E-07	6.4746E-04
519854.67	4258421.83	3716.57041	0.12019	0.4847	0.12393	0.47288	6.45E-04	2.82E-07	9.94E-07	2.91E-07	9.31E-07	6.4712E-04
519850.96	4258358.07	3712.37918	0.10352	0.4764	0.1058	0.46317	6.44E-04	2.43E-07	9.77E-07	2.48E-07	9.12E-07	6.4628E-04
519838.04	4258243.88	3711.70273	0.07935	0.42694	0.07949	0.41239	6.44E-04	1.86E-07	8.76E-07	1.87E-07	8.12E-07	6.4584E-04
519751.14	4258665.52	3701.77493	0.1128	0.2433	0.11694	0.24128	6.42E-04	2.65E-07	4.99E-07	2.75E-07	4.75E-07	6.4357E-04
519836.31	4258217.24	3700.71905	0.07541	0.4192	0.07552	0.40413	6.42E-04	1.77E-07	8.60E-07	1.77E-07	7.96E-07	6.4388E-04
519847.82	4258341.42	3689.02888	0.09884	0.46571	0.10064	0.45238	6.40E-04	2.32E-07	9.55E-07	2.36E-07	8.91E-07	6.4216E-04
519769.89	4258619.46	3688.05895	0.11554	0.2717	0.12036	0.26916	6.40E-04	2.71E-07	5.57E-07	2.83E-07	5.30E-07	6.4132E-04
519852.05	4258379.67	3680.66653	0.10882	0.47956	0.11168	0.46692	6.38E-04	2.55E-07	9.84E-07	2.62E-07	9.19E-07	6.4082E-04
519844.61	4258324.97	3669.95039	0.09453	0.45517	0.09591	0.44164	6.37E-04	2.22E-07	9.34E-07	2.25E-07	8.69E-07	6.3879E-04
519837.73	4258268.92	3669.40876	0.08297	0.42964	0.08329	0.41551	6.36E-04	1.95E-07	8.81E-07	1.96E-07	8.18E-07	6.3853E-04
519799.61	4258551.45	3655.68616	0.11888	0.32897	0.12335	0.32369	6.34E-04	2.79E-07	6.75E-07	2.90E-07	6.37E-07	6.3594E-04
519789.69	4258570.88	3654.88025	0.11734	0.30895	0.12212	0.30429	6.34E-04	2.75E-07	6.34E-07	2.87E-07	5.99E-07	6.3572E-04
519841.32	4258308.7	3650.60525	0.09056	0.44469	0.09157	0.43095	6.33E-04	2.13E-07	9.12E-07	2.15E-07	8.48E-07	6.3537E-04
519759.97	4258638.89	3650.49082	0.11334	0.25657	0.11781	0.2543	6.33E-04	2.66E-07	5.26E-07	2.77E-07	5.01E-07	6.3473E-04
519744.76	4258674.16	3649.80706	0.11067	0.23536	0.11456	0.23345	6.33E-04	2.60E-07	4.83E-07	2.69E-07	4.60E-07	6.3451E-04
519851.05	4258430.63	3649.64506	0.1204	0.47103	0.1242	0.45999	6.33E-04	2.83E-07	9.66E-07	2.92E-07	9.05E-07	6.3546E-04
519809.53	4258532.01	3645.58448	0.12033	0.35064	0.12476	0.34484	6.32E-04	2.82E-07	7.19E-07	2.93E-07	6.79E-07	6.3428E-04
519779.77	4258590.32	3640.62353	0.11567	0.29014	0.12067	0.28646	6.31E-04	2.72E-07	5.95E-07	2.83E-07	5.64E-07	6.3316E-04
519851.63	4258404.96	3634.02745	0.11449	0.47551	0.11783	0.46387	6.30E-04	2.69E-07	9.75E-07	2.77E-07	9.13E-07	6.3274E-04
519819.44	4258512.57	3631.58891	0.12173	0.37447	0.12629	0.36796	6.30E-04	2.86E-07	7.68E-07	2.96E-07	7.24E-07	6.3196E-04
519834.39	4258252.77	3627.41814	0.07972	0.41724	0.07991	0.40321	6.29E-04	1.87E-07	8.56E-07	1.88E-07	7.94E-07	6.3118E-04
519829.36	4258493.14	3626.07207	0.1231	0.40083	0.12775	0.39326	6.29E-04	2.89E-07	8.22E-07	3.00E-07	7.74E-07	6.3111E-04
519837.97	4258292.57	3623.46539	0.08682	0.4333	0.08752	0.41952	6.28E-04	2.04E-07	8.89E-07	2.05E-07	8.26E-07	6.3060E-04
519769.85	4258609.76	3613.77736	0.11382	0.27284	0.1186	0.27014	6.27E-04	2.67E-07	5.60E-07	2.78E-07	5.32E-07	6.2843E-04
519847.27	4258367.04	3600.47184	0.10403	0.46369	0.10656	0.45138	6.24E-04	2.44E-07	9.51E-07	2.50E-07	8.89E-07	6.2682E-04
519753.59	4258647.53	3598.12457	0.11131	0.24792	0.11552	0.2458	6.24E-04	2.61E-07	5.08E-07	2.71E-07	4.84E-07	6.2560E-04
519738.34	4258682.71	3598.09712	0.10853	0.22781	0.11217	0.22597	6.24E-04	2.55E-07	4.67E-07	2.63E-07	4.45E-07	6.2550E-04
519847.43	4258439.43	3596.37869	0.12052	0.45791	0.12438	0.4476	6.24E-04	2.83E-07	9.39E-07	2.92E-07	8.81E-07	6.2617E-04
519830.99	4258236.75	3580.65147	0.0767	0.40473	0.0768	0.39081	6.21E-04	1.80E-07	8.30E-07	1.80E-07	7.69E-07	6.2301E-04
519848.49	4258388.32	3580.44337	0.10923	0.4669	0.11225	0.45509	6.21E-04	2.56E-07	9.58E-07	2.64E-07	8.96E-07	6.2338E-04
519759.93	4258629.19	3576.90525	0.11176	0.25748	0.11618	0.25523	6.20E-04	2.62E-07	5.28E-07	2.73E-07	5.02E-07	6.2196E-04
519844.17	4258350.31	3574.7567	0.09931	0.45334	0.10139	0.44093	6.20E-04	2.33E-07	9.30E-07	2.38E-07	8.68E-07	6.2229E-04
519834.04	4258277.87	3574.40273	0.08337	0.41959	0.08385	0.406	6.20E-04	1.96E-07	8.61E-07	1.97E-07	7.99E-07	6.2202E-04
519789.65	4258561.19	3570.58477	0.11535	0.31005	0.11976	0.30527	6.19E-04	2.71E-07	6.36E-07	2.81E-07	6.01E-07	6.2109E-04
519799.57	4258541.75	3565.28315	0.1168	0.32988	0.12103	0.32463	6.18E-04	2.74E-07	6.77E-07	2.84E-07	6.39E-07	6.2026E-04
519779.73	4258580.62	3562.53845	0.11379	0.2915	0.11851	0.28746	6.18E-04	2.67E-07	5.98E-07	2.78E-07	5.66E-07	6.1962E-04
519843.81	4258448.23	3557.67199	0.12056	0.44538	0.1245	0.43567	6.17E-04	2.83E-07	9.13E-07	2.92E-07	8.58E-07	6.1941E-04
519848.04	4258413.68	3557.28045	0.11485	0.46308	0.11829	0.45208	6.17E-04	2.70E-07	9.50E-07	2.78E-07	8.90E-07	6.1938E-04
519747.42	4258656.67	3554.09694	0.10948	0.23993	0.11346	0.23793	6.16E-04	2.57E-07	4.92E-07	2.66E-07	4.68E-07	6.1793E-04
519840.98	4258333.79	3554.01108	0.09493	0.4428	0.09657	0.43022	6.16E-04	2.23E-07	9.08E-07	2.27E-07	8.47E-07	6.1863E-04
519809.48	4258522.31	3551.03593	0.11819	0.35156	0.1225	0.34576	6.16E-04	2.77E-07	7.21E-07	2.88E-07	6.81E-07	6.1788E-04
519830.73	4258261.65	3543.45299	0.08013	0.40843	0.08042	0.3948	6.15E-04	1.88E-07	8.38E-07	1.89E-07	7.77E-07	6.1659E-04
519769.81	4258600.06	3541.73759	0.11209	0.27406	0.11679	0.27107	6.14E-04	2.63E-07	5.62E-07	2.74E-07	5.34E-07	6.1593E-04
519837.72	4258317.45	3540.66997	0.09096	0.43318	0.09223	0.42028	6.14E-04	2.14E-07	8.88E-07	2.17E-07	8.27E-07	6.1626E-04
519829.32	4258483.44	3538.18745	0.12084	0.40169	0.1253	0.39399	6.14E-04	2.84E-07	8.24E-07	2.94E-07	7.76E-07	6.1586E-04
519819.4	4258502.88	3537.47111	0.11956	0.37541	0.12401	0.36883	6.14E-04	2.81E-07	7.70E-07	2.91E-07	7.26E-07	6.1563E-04
519840.19	4258457.03	3532.41746	0.12055	0.4334	0.1246	0.42425	6.13E-04	2.83E-07	8.89E-07	2.93E-07	8.35E-07	6.1498E-04
519832.94	4258474.64	3525.45211	0.12073	0.41172	0.12505	0.40362	6.11E-04	2.83E-07	8.44E-07	2.94E-07	7.95E-07	6.1369E-04
519834.4	4258301.26	3523.02316	0.08725	0.42351	0.08819	0.41029	6.11E-04	2.05E-07	8.69E-07	2.07E-07	8.08E-07	6.1314E-04
519836.57	4258465.84	3522.38442	0.12062	0.42225	0.12479	0.41364	6.11E-04	2.83E-07	8.66E-07	2.93E-07	8.14E-07	6.1320E-04
519759.89	4258619.5	3507.90104	0.11018	0.25843	0.11457	0.25611	6.08E-04	2.59E-07	5.30E-07	2.69E-07	5.04E-07	6.0999E-04
519741.06	4258665.38	3503.66993	0.10748	0.23219	0.11125	0.23028	6.08E-04	2.52E-07	4.76E-07	2.61E-07	4.53E-07	6.0914E-04
519827.36	4258245.58	3502.41414	0.07706	0.39617	0.07722	0.38271	6.07E-04	1.81E-07	8.13E-07	1.81E-07	7.53E-07	6.0941E-04
519843.58	4258376	3494.04002	0.10446	0.45113	0.10716	0.43972	6.06E-04	2.45E-07	9.25E-07	2.52E-07	8.66E-07	6.0831E-04
519844.45	4258422.41	3490.61464	0.11507	0.45054	0.11857	0.44023	6.05E-04	2.70E-07	9.24E-07	2.78E-07	8.67E-07	6.0777E-04
519844.93	4258396.98	3490.15044	0.1096	0.45435	0.1127	0.44338	6.05E-04	2.57E-07	9.32E-07	2.65E-07	8.73E-07	6.0768E-04
519789.61	4258551.49	3486.42193	0.11339	0.31099	0.1175	0.30618	6.05E-04	2.66E-07	6.38E-07	2.76E-07	6.03E-07	6.0649E-04
519779.69	4258570.93	3485.47186	0.11193	0.29264	0.11631	0.28838	6.05E-04	2.63E-07	6.00E-07	2.73E-07	5.68E-07	6.0624E-04
519830.36	4258286.82	3479.73459	0.0838	0.41014	0.08448	0.39706	6.04E-04	1.97E-07	8.41E-07	1.98E-07	7.82E-07	6.0556E-04
519799.53	4258532.05	3475.42276	0.11478	0.33057	0.11881	0.32539	6.03E-04	2.69E-07	6.78E-07	2.79E-07	6.41E-07	6.0466E-04
519769.77	4258590.36	3469.75195	0.11034	0.2754	0.11491	0.272	6.02E-04	2.59E-07	5.65E-07	2.70E-07	5.35E-07	6.0344E-04
519749.97	4258638.93	3468.59106	0.10812	0.24446	0.11215	0.24238	6.02E-04	2.54E-07	5.01E-07	2.63E-07	4.77E-07	6.0311E-04
519840.51	4258359.2	3467.07227	0.09977	0.44159	0.10208	0.43003	6.01E-04	2.34E-07	9.06E-07	2.40E-07	8.47E-07	6.0357E-04
519823.94	4258229.63	3461.66712	0.07425	0.38475	0.07434	0.37136	6.00E-04	1.74E-07	7.89E-07	1.75E-07	7.31E-07	6.0228E-04
519809.44	4258512.62	3458.90112	0.11613	0.35242	0.12034	0.34658	6.00E-04	2.73E-07	7.23E-07	2.83E-07	6.82E-07	6.0189E-04
519734.66	4258673.98	3454.06173	0.1055	0.22479	0.10903	0.22299	5.99E-04	2.48E-07	4.61E-07	2.56E-07	4.39E-07	6.0049E-04
519827.08	4258270.54	3453.61868	0.0805	0.39918	0.08094	0.38608	5.99E-04	1.89E-07	8.19E-07	1.90E-07	7.60E-07	6.0097E-04
519819.36	4258493.18	3447.56711	0.11745	0.37631	0.12179	0.36959	5.98E-04	2.76E-07	7.72E-07	2.86E-07	7.28E-07	6.0003E-04
519759.85	4258609.8	3442.80668	0.10863	0.25923	0.11291	0.25684	5.97E-04	2.55E-07	5.32E-07	2.65E-07	5.06E-07	5.9870E-04
519837.36	4258342.6	3442.74205	0.0953	0.43106	0.09721	0.41934	5.97E-04	2.24E-07	8.84E-07	2.28E-07	8.25E-07	5.9929E-04
519834.12	4258326.19	3434.25465	0.09137	0.42237	0.09291	0.41027	5.96E-04	2.15E-07	8.66E-07	2.18E-07	8.08E-07	5.9776E-04
519840.86	4258431.13	3433.35948	0.11517	0.43835	0.11873	0.42872	5.96E-04	2.70E-07	8.99E-07	2.79E-07	8.44E-07	5.9779E-04
519823.73	4258254.4	3422.75229	0.07744	0.38807	0.0777	0.375	5.94E-04	1.82E-07	7.96E-07	1.82E-07	7.38E-07	5.9556E-04
519830.82	4258309.95	3421.84187	0.08765	0.41314	0.08884	0.40068	5.94E-04	2.06E-07	8.47E-07	2.09E-07	7.89E-07	5.9555E-04
519743.7	4258647.82	3421.21408	0.1063	0.23656	0.11011	0.23458	5.93E-04	2.50E-07	4.85E-07	2.59E-07	4.62E-07	5.9485E-04
519779.65	4258561.23	3407.97734	0.11009	0.29362	0.11413	0.28922	5.91E-04	2.58E-07	6.02E-07	2.68E-07	5.69E-07	5.9280E-04
519841.37	4258405.63	3407.63991	0.10982	0.44195	0.11298	0.43177	5.91E-04	2.58E-07	9.06E-07	2.65E-07	8.50E-07	5.9332E-04
519749.93	4258629.24	3403.365	0.10665	0.24526	0.11066	0.24317	5.90E-04	2.50E-07	5.03E-07	2.60E-07	4.79E-07	5.9179E-04
519789.57	4258541.79	3402.40903	0.11148	0.31178	0.11536	0.30698	5.90E-04	2.62E-07	6.39E-07	2.71E-07	6.04E-07	5.9191E-04
519769.73	4258580.67	3399.34654	0.10861	0.27659	0.11293	0.27286	5.90E-04	2.55E-07	5.67E-07	2.65E-07	5.37E-07	5.9123E-04
519839.89	4258384.96	3393.95008	0.10479	0.43865	0.10761	0.42811	5.89E-04	2.46E-07	9.00E-07	2.53E-07	8.43E-07	5.9091E-04
519837.27	4258439.86	3389.57149	0.11519	0.42663	0.11881	0.41758	5.88E-04	2.70E-07	8.75E-07	2.79E-07	8.22E-07	5.9015E-04
519799.49	4258522.35	3386.87476	0.11282	0.33144	0.11677	0.32622	5.87E-04	2.65E-07	6.80E-07	2.74E-07	6.42E-07	5.8930E-04
519820.34	4258238.4	3385.43821	0.07456	0.37645	0.0747	0.36354	5.87E-04	1.75E-07	7.72E-07	1.75E-07	7.16E-07	5.8903E-04
519826.67	4258295.78	3381.11355	0.08421	0.40101	0.08514	0.38847	5.86E-04	1.98E-07	8.22E-07	2.00E-07	7.65E-07	5.8842E-04
519759.81	4258600.1	3376.9489	0.10699	0.26057	0.1113	0.25777	5.86E-04	2.51E-07	5.34E-07	2.61E-07	5.07E-07	5.8727E-04
519737.37	4258656.59	3372.5475	0.10444	0.22902	0.10805	0.22711	5.85E-04	2.45E-07	4.70E-07	2.54E-07	4.47E-07	5.8637E-04
519809.4	4258502.92	3369.51521	0.11413	0.3532	0.11826	0.3473	5.84E-04	2.68E-07	7.24E-07	2.78E-07	6.84E-07	5.8638E-04
519836.86	4258368.08	3367.5497	0.1002	0.43044	0.1027	0.41964	5.84E-04	2.35E-07	8.83E-07	2.41E-07	8.26E-07	5.8627E-04
519819.32	4258483.48	3363.12117	0.11539	0.37697	0.11957	0.37015	5.83E-04	2.71E-07	7.73E-07	2.81E-07	7.29E-07	5.8537E-04
519823.42	4258279.43	3362.48989	0.08088	0.39026	0.08152	0.37769	5.83E-04	1.90E-07	8.00E-07	1.91E-07	7.43E-07	5.8513E-04
519833.68	4258448.58	3360.26963	0.11518	0.41556	0.11889	0.40701	5.83E-04	2.70E-07	8.52E-07	2.79E-07	8.01E-07	5.8503E-04
519822.91	4258474.76	3348.99263	0.11534	0.38596	0.11942	0.37878	5.81E-04	2.71E-07	7.92E-07	2.80E-07	7.46E-07	5.8296E-04
519830.09	4258457.31	3344.92387	0.11521	0.40518	0.11904	0.39709	5.80E-04	2.70E-07	8.31E-07	2.79E-07	7.82E-07	5.8232E-04
519833.73	4258351.42	3344.58825	0.09582	0.42109	0.09797	0.41011	5.80E-04	2.25E-07	8.64E-07	2.30E-07	8.07E-07	5.8223E-04
519837.81	4258414.29	3343.93242	0.11011	0.43103	0.11336	0.42135	5.80E-04	2.59E-07	8.84E-07	2.66E-07	8.29E-07	5.8223E-04
519826.5	4258466.03	3342.9893	0.11531	0.39546	0.11927	0.38785	5.80E-04	2.71E-07	8.11E-07	2.80E-07	7.63E-07	5.8195E-04
519749.89	4258619.54	3342.37489	0.1052	0.24609	0.10919	0.24394	5.80E-04	2.47E-07	5.05E-07	2.56E-07	4.80E-07	5.8121E-04
519820.1	4258263.23	3338.1905	0.07779	0.37967	0.0782	0.36709	5.79E-04	1.83E-07	7.79E-07	1.84E-07	7.23E-07	5.8086E-04
519830.52	4258334.94	3331.32794	0.09178	0.41205	0.09358	0.40072	5.78E-04	2.15E-07	8.45E-07	2.20E-07	7.89E-07	5.7987E-04
519779.61	4258551.53	3330.14848	0.10829	0.29444	0.11205	0.29	5.78E-04	2.54E-07	6.04E-07	2.63E-07	5.71E-07	5.7929E-04
519769.69	4258570.97	3328.89253	0.1069	0.27757	0.11089	0.27363	5.77E-04	2.51E-07	5.69E-07	2.60E-07	5.39E-07	5.7900E-04
519730.99	4258665.25	3324.08192	0.10257	0.2218	0.10599	0.21999	5.77E-04	2.41E-07	4.55E-07	2.49E-07	4.33E-07	5.7792E-04
519827.25	4258318.64	3321.60976	0.08804	0.40331	0.08949	0.39158	5.76E-04	2.07E-07	8.27E-07	2.10E-07	7.71E-07	5.7813E-04
519789.53	4258532.09	3318.5155	0.10962	0.31247	0.11335	0.30768	5.76E-04	2.57E-07	6.41E-07	2.66E-07	6.06E-07	5.7735E-04
519759.77	4258590.4	3312.14888	0.10537	0.26173	0.10956	0.25856	5.74E-04	2.47E-07	5.37E-07	2.57E-07	5.09E-07	5.7603E-04
519816.73	4258247.16	3309.76065	0.0749	0.36899	0.07515	0.35646	5.74E-04	1.76E-07	7.57E-07	1.76E-07	7.02E-07	5.7587E-04
519836.2	4258393.93	3309.54537	0.10517	0.42772	0.1081	0.41775	5.74E-04	2.47E-07	8.77E-07	2.54E-07	8.22E-07	5.7623E-04
519739.97	4258638.98	3301.68056	0.10326	0.23316	0.1069	0.23122	5.73E-04	2.42E-07	4.78E-07	2.51E-07	4.55E-07	5.7409E-04
519799.44	4258512.66	3299.75993	0.11091	0.33222	0.1148	0.32694	5.72E-04	2.60E-07	6.81E-07	2.70E-07	6.44E-07	5.7418E-04
519834.25	4258422.94	3285.72557	0.11024	0.41986	0.11355	0.41077	5.70E-04	2.59E-07	8.61E-07	2.67E-07	8.09E-07	5.7209E-04
519809.36	4258493.22	3283.75118	0.11219	0.35389	0.11623	0.34789	5.70E-04	2.63E-07	7.26E-07	2.73E-07	6.85E-07	5.7150E-04
519749.85	4258609.84	3283.32016	0.10373	0.24701	0.10771	0.24467	5.69E-04	2.44E-07	5.07E-07	2.53E-07	4.82E-07	5.7096E-04
519822.99	4258304.73	3281.99145	0.08459	0.39165	0.08579	0.37976	5.69E-04	1.99E-07	8.03E-07	2.01E-07	7.48E-07	5.7120E-04
519833.2	4258376.97	3272.87904	0.10056	0.41939	0.10319	0.40933	5.68E-04	2.36E-07	8.60E-07	2.42E-07	8.06E-07	5.6981E-04
519819.76	4258288.31	3269.17207	0.08126	0.38171	0.08213	0.36971	5.67E-04	1.91E-07	7.83E-07	1.93E-07	7.28E-07	5.6892E-04
519769.65	4258561.27	3257.51774	0.1052	0.27844	0.10888	0.27436	5.65E-04	2.47E-07	5.71E-07	2.56E-07	5.40E-07	5.6662E-04
519733.67	4258647.8	3254.71167	0.10152	0.22581	0.10497	0.22394	5.65E-04	2.38E-07	4.63E-07	2.46E-07	4.41E-07	5.6590E-04
519816.47	4258272.05	3251.94584	0.07814	0.37175	0.07875	0.35966	5.64E-04	1.83E-07	7.62E-07	1.85E-07	7.08E-07	5.6587E-04
519779.57	4258541.83	3251.8307	0.10652	0.29509	0.11008	0.29066	5.64E-04	2.50E-07	6.05E-07	2.58E-07	5.72E-07	5.6570E-04
519830.1	4258360.23	3248.91577	0.09623	0.41092	0.09856	0.40063	5.64E-04	2.26E-07	8.43E-07	2.31E-07	7.89E-07	5.6560E-04
519759.73	4258580.71	3248.27166	0.10378	0.26277	0.10772	0.25928	5.63E-04	2.44E-07	5.39E-07	2.53E-07	5.10E-07	5.6494E-04
519739.93	4258629.28	3244.14896	0.10191	0.23386	0.10553	0.23191	5.63E-04	2.39E-07	4.80E-07	2.48E-07	4.57E-07	5.6411E-04
519830.69	4258431.6	3239.26099	0.11028	0.40906	0.11365	0.40054	5.62E-04	2.59E-07	8.39E-07	2.67E-07	7.88E-07	5.6399E-04
519789.49	4258522.4	3235.24141	0.10781	0.31316	0.11146	0.30834	5.61E-04	2.53E-07	6.42E-07	2.62E-07	6.07E-07	5.6290E-04
519832.52	4258402.89	3233.77683	0.1054	0.41638	0.1084	0.40705	5.61E-04	2.47E-07	8.54E-07	2.54E-07	8.01E-07	5.6304E-04
519826.92	4258343.69	3230.44832	0.09215	0.40183	0.09415	0.39131	5.60E-04	2.16E-07	8.24E-07	2.21E-07	7.70E-07	5.6234E-04
519813.12	4258255.93	3227.64487	0.0752	0.36096	0.07559	0.34893	5.60E-04	1.77E-07	7.40E-07	1.77E-07	6.87E-07	5.6160E-04
519749.81	4258600.14	3225.51257	0.10225	0.24797	0.10617	0.24536	5.59E-04	2.40E-07	5.09E-07	2.49E-07	4.83E-07	5.6093E-04
519823.67	4258327.33	3222.8321	0.08841	0.39363	0.09011	0.38266	5.59E-04	2.08E-07	8.07E-07	2.12E-07	7.53E-07	5.6097E-04
519799.4	4258502.96	3214.80733	0.10907	0.33286	0.11289	0.32751	5.58E-04	2.56E-07	6.83E-07	2.65E-07	6.45E-07	5.5944E-04
519727.32	4258656.52	3207.21888	0.09976	0.21878	0.10303	0.21698	5.56E-04	2.34E-07	4.49E-07	2.42E-07	4.27E-07	5.5763E-04
519827.13	4258440.25	3205.23115	0.11026	0.39873	0.1137	0.39066	5.56E-04	2.59E-07	8.18E-07	2.67E-07	7.69E-07	5.5805E-04
519809.32	4258483.52	3202.65533	0.1103	0.35443	0.11421	0.34831	5.55E-04	2.59E-07	7.27E-07	2.68E-07	6.86E-07	5.5743E-04
519739.89	4258619.58	3190.35147	0.10056	0.23457	0.10418	0.23256	5.53E-04	2.36E-07	4.81E-07	2.45E-07	4.58E-07	5.5477E-04
519812.88	4258474.87	3187.99184	0.11032	0.36257	0.11417	0.35612	5.53E-04	2.59E-07	7.44E-07	2.68E-07	7.01E-07	5.5491E-04
519829.54	4258385.86	3186.84736	0.10086	0.40885	0.10359	0.39942	5.53E-04	2.37E-07	8.39E-07	2.43E-07	7.86E-07	5.5485E-04
519769.61	4258551.57	3185.36684	0.10353	0.27915	0.10696	0.27501	5.52E-04	2.43E-07	5.73E-07	2.51E-07	5.41E-07	5.5410E-04
519759.69	4258571.01	3184.0193	0.1022	0.26364	0.10584	0.25994	5.52E-04	2.40E-07	5.41E-07	2.48E-07	5.12E-07	5.5379E-04
519819.31	4258313.68	3183.33079	0.08497	0.38184	0.0864	0.37077	5.52E-04	1.99E-07	7.83E-07	2.03E-07	7.30E-07	5.5405E-04
519823.57	4258448.9	3183.2995	0.11021	0.38886	0.11374	0.38123	5.52E-04	2.59E-07	7.98E-07	2.67E-07	7.50E-07	5.5420E-04
519816.44	4258466.21	3177.10636	0.11029	0.37097	0.11404	0.36417	5.51E-04	2.59E-07	7.61E-07	2.68E-07	7.17E-07	5.5306E-04
519816.11	4258297.2	3175.19198	0.08162	0.37299	0.08274	0.36163	5.51E-04	1.92E-07	7.65E-07	1.94E-07	7.12E-07	5.5259E-04
519820.01	4258457.56	3174.50747	0.11022	0.37965	0.11386	0.37243	5.51E-04	2.59E-07	7.79E-07	2.67E-07	7.33E-07	5.5264E-04

519779.53	4258532.14	3173.33058	0.10481	0.29567	0.10823	0.29124	5.50E-04	2.46E-07	6.06E-07	2.54E-07	5.73E-07	5.5208E-04
519828.83	4258411.85	3169.94453	0.1056	0.40579	0.10867	0.39698	5.50E-04	2.48E-07	8.32E-07	2.55E-07	7.81E-07	5.5193E-04
519749.77	4258590.45	3167.13969	0.10076	0.24899	0.10456	0.24602	5.49E-04	2.37E-07	5.11E-07	2.45E-07	4.84E-07	5.5080E-04
519812.84	4258280.88	3162.95795	0.07847	0.36325	0.07929	0.35176	5.49E-04	1.84E-07	7.45E-07	1.86E-07	6.92E-07	5.5041E-04
519826.47	4258369.05	3157.39343	0.09657	0.40087	0.09904	0.39125	5.48E-04	2.27E-07	8.22E-07	2.33E-07	7.70E-07	5.4969E-04
519789.44	4258512.7	3152.68636	0.10605	0.31375	0.10964	0.30889	5.47E-04	2.49E-07	6.43E-07	2.57E-07	6.08E-07	5.4858E-04
519729.97	4258639.02	3147.82864	0.09872	0.2226	0.10202	0.22077	5.46E-04	2.32E-07	4.57E-07	2.40E-07	4.35E-07	5.4734E-04
519809.51	4258264.7	3143.23386	0.0755	0.35301	0.07606	0.34153	5.45E-04	1.77E-07	7.24E-07	1.79E-07	6.72E-07	5.4693E-04
519823.32	4258352.44	3137.75841	0.09252	0.39243	0.09471	0.38256	5.44E-04	2.17E-07	8.05E-07	2.22E-07	7.53E-07	5.4623E-04
519739.85	4258609.88	3137.15306	0.09919	0.23539	0.10281	0.23319	5.44E-04	2.33E-07	4.83E-07	2.41E-07	4.59E-07	5.4554E-04
519799.36	4258493.26	3132.87642	0.10729	0.33341	0.11104	0.32798	5.43E-04	2.52E-07	6.84E-07	2.61E-07	6.46E-07	5.4523E-04
519820.1	4258336.02	3123.69275	0.08871	0.38369	0.0906	0.37355	5.42E-04	2.08E-07	7.87E-07	2.13E-07	7.35E-07	5.4373E-04
519759.65	4258561.31	3118.09684	0.10063	0.26437	0.10398	0.26054	5.41E-04	2.36E-07	5.42E-07	2.44E-07	5.13E-07	5.4236E-04
519825.14	4258420.82	3115.79065	0.1057	0.39532	0.10883	0.38703	5.40E-04	2.48E-07	8.11E-07	2.55E-07	7.62E-07	5.4250E-04
519769.57	4258541.88	3112.33325	0.1019	0.27971	0.10515	0.27556	5.40E-04	2.39E-07	5.74E-07	2.47E-07	5.42E-07	5.4142E-04
519825.89	4258394.74	3111.14301	0.10112	0.39892	0.10393	0.38998	5.40E-04	2.37E-07	8.18E-07	2.44E-07	7.68E-07	5.4168E-04
519749.73	4258580.75	3108.54853	0.09928	0.24991	0.10286	0.24664	5.39E-04	2.33E-07	5.13E-07	2.41E-07	4.86E-07	5.4064E-04
519723.65	4258647.79	3102.68024	0.09709	0.21574	0.1002	0.21398	5.38E-04	2.28E-07	4.42E-07	2.35E-07	4.21E-07	5.3947E-04
519729.93	4258629.32	3096.78987	0.09746	0.22321	0.10076	0.22135	5.37E-04	2.29E-07	4.58E-07	2.37E-07	4.36E-07	5.3848E-04
519779.49	4258522.44	3094.79419	0.10313	0.29623	0.10648	0.29177	5.37E-04	2.42E-07	6.08E-07	2.50E-07	5.74E-07	5.3845E-04
519739.81	4258600.19	3084.94291	0.09782	0.23626	0.10139	0.23377	5.35E-04	2.30E-07	4.85E-07	2.38E-07	4.60E-07	5.3648E-04
519815.62	4258322.63	3083.06096	0.08527	0.37205	0.08692	0.36181	5.35E-04	2.00E-07	7.63E-07	2.04E-07	7.12E-07	5.3662E-04
519812.45	4258306.09	3081.34338	0.08196	0.3642	0.08331	0.35355	5.34E-04	1.92E-07	7.47E-07	1.96E-07	6.96E-07	5.3628E-04
519809.21	4258289.7	3074.06559	0.07881	0.35552	0.07987	0.34461	5.33E-04	1.85E-07	7.29E-07	1.88E-07	6.78E-07	5.3496E-04
519822.85	4258377.86	3073.02504	0.09686	0.39122	0.09943	0.38219	5.33E-04	2.27E-07	8.02E-07	2.33E-07	7.52E-07	5.3502E-04
519789.4	4258503	3071.90012	0.10435	0.31423	0.10789	0.30933	5.33E-04	2.45E-07	6.44E-07	2.53E-07	6.09E-07	5.3456E-04
519821.45	4258429.78	3071.88207	0.10568	0.38505	0.10886	0.37729	5.33E-04	2.48E-07	7.90E-07	2.56E-07	7.43E-07	5.3484E-04
519805.91	4258273.47	3058.4204	0.0758	0.34539	0.07657	0.33446	5.30E-04	1.78E-07	7.08E-07	1.80E-07	6.58E-07	5.3219E-04
519799.32	4258483.56	3054.96761	0.10555	0.33383	0.10921	0.32829	5.30E-04	2.48E-07	6.85E-07	2.56E-07	6.46E-07	5.3171E-04
519759.61	4258551.61	3050.95794	0.09908	0.26497	0.10221	0.26108	5.29E-04	2.33E-07	5.43E-07	2.40E-07	5.14E-07	5.3070E-04
519819.72	4258361.19	3049.52275	0.09284	0.38324	0.09516	0.374	5.29E-04	2.18E-07	7.86E-07	2.23E-07	7.36E-07	5.3089E-04
519749.69	4258571.05	3049.34233	0.09781	0.25068	0.10112	0.24719	5.29E-04	2.30E-07	5.14E-07	2.37E-07	4.87E-07	5.3036E-04
519729.89	4258619.62	3048.95626	0.09622	0.22384	0.09951	0.22191	5.29E-04	2.26E-07	4.59E-07	2.34E-07	4.37E-07	5.3018E-04
519822.23	4258403.63	3045.84909	0.1013	0.38899	0.10418	0.38057	5.28E-04	2.38E-07	7.98E-07	2.45E-07	7.49E-07	5.3032E-04
519817.76	4258438.75	3041.44003	0.10562	0.3753	0.10888	0.36796	5.28E-04	2.48E-07	7.70E-07	2.56E-07	7.24E-07	5.2952E-04
519769.53	4258532.18	3038.49978	0.10031	0.28018	0.10344	0.27602	5.27E-04	2.35E-07	5.75E-07	2.43E-07	5.43E-07	5.2861E-04
519803.01	4258474.6	3038.30511	0.10561	0.34146	0.10922	0.33562	5.27E-04	2.48E-07	7.00E-07	2.56E-07	6.61E-07	5.2885E-04
519739.77	4258590.49	3032.6857	0.09645	0.23711	0.09989	0.23432	5.26E-04	2.26E-07	4.86E-07	2.35E-07	4.61E-07	5.2741E-04
519816.52	4258344.71	3029.49519	0.08899	0.37435	0.09103	0.36494	5.25E-04	2.09E-07	7.68E-07	2.14E-07	7.18E-07	5.2736E-04
519814.08	4258447.71	3024.75443	0.10559	0.3662	0.10894	0.35925	5.25E-04	2.48E-07	7.51E-07	2.56E-07	7.07E-07	5.2659E-04
519806.7	4258465.64	3024.00925	0.10558	0.3493	0.10912	0.34313	5.25E-04	2.48E-07	7.16E-07	2.56E-07	6.75E-07	5.2640E-04
519810.39	4258456.67	3018.51572	0.10555	0.35747	0.10899	0.35091	5.24E-04	2.48E-07	7.33E-07	2.56E-07	6.91E-07	5.2548E-04
519779.44	4258512.74	3016.54848	0.10151	0.29669	0.1048	0.29219	5.23E-04	2.38E-07	6.08E-07	2.46E-07	5.75E-07	5.2487E-04
519719.97	4258639.06	3007.03079	0.0945	0.21269	0.09748	0.21097	5.22E-04	2.22E-07	4.36E-07	2.29E-07	4.15E-07	5.2286E-04
519729.85	4258609.93	3001.78637	0.09495	0.22455	0.09825	0.22244	5.21E-04	2.23E-07	4.61E-07	2.31E-07	4.38E-07	5.2200E-04
519819.22	4258386.68	2997.44564	0.09709	0.38198	0.09974	0.37341	5.20E-04	2.28E-07	7.83E-07	2.34E-07	7.35E-07	5.2187E-04
519789.36	4258493.3	2993.61313	0.1027	0.31466	0.10619	0.30967	5.19E-04	2.41E-07	6.45E-07	2.49E-07	6.10E-07	5.2097E-04
519818.57	4258412.51	2991.91503	0.10142	0.37941	0.10437	0.37145	5.19E-04	2.38E-07	7.78E-07	2.45E-07	7.31E-07	5.2093E-04
519808.79	4258314.97	2988.9146	0.08227	0.35568	0.08385	0.34573	5.18E-04	1.93E-07	7.29E-07	1.97E-07	6.81E-07	5.2021E-04
519749.65	4258561.35	2988.21505	0.09636	0.25132	0.0994	0.24769	5.18E-04	2.26E-07	5.15E-07	2.33E-07	4.88E-07	5.1975E-04
519811.94	4258331.59	2987.52236	0.08557	0.36302	0.08741	0.35352	5.18E-04	2.01E-07	7.45E-07	2.05E-07	6.96E-07	5.2002E-04
519805.58	4258298.53	2984.91734	0.07913	0.34756	0.08042	0.3373	5.18E-04	1.86E-07	7.13E-07	1.89E-07	6.64E-07	5.1947E-04
519759.57	4258541.92	2982.55918	0.09757	0.26544	0.10053	0.26153	5.17E-04	2.29E-07	5.44E-07	2.36E-07	5.15E-07	5.1884E-04
519739.73	4258580.79	2978.40776	0.09507	0.23796	0.09832	0.23485	5.17E-04	2.23E-07	4.88E-07	2.31E-07	4.62E-07	5.1800E-04
519802.3	4258282.24	2973.82093	0.07611	0.33807	0.0771	0.32771	5.16E-04	1.79E-07	6.93E-07	1.81E-07	6.45E-07	5.1749E-04
519816.12	4258369.94	2966.7726	0.0931	0.37415	0.09551	0.36548	5.15E-04	2.19E-07	7.67E-07	2.24E-07	7.19E-07	5.1650E-04
519769.49	4258522.48	2964.2809	0.09876	0.28059	0.10182	0.27642	5.14E-04	2.32E-07	5.75E-07	2.39E-07	5.44E-07	5.1573E-04
519719.93	4258629.36	2961.32865	0.09332	0.21322	0.09632	0.21146	5.14E-04	2.19E-07	4.37E-07	2.26E-07	4.16E-07	5.1493E-04
519729.81	4258600.23	2954.48878	0.09368	0.22532	0.09693	0.22294	5.12E-04	2.20E-07	4.62E-07	2.28E-07	4.39E-07	5.1379E-04
519812.95	4258353.4	2948.39118	0.08935	0.36643	0.09154	0.35753	5.11E-04	2.10E-07	7.52E-07	2.15E-07	7.04E-07	5.1327E-04
519814.92	4258421.4	2945.97962	0.10144	0.36994	0.10443	0.36246	5.11E-04	2.38E-07	7.59E-07	2.45E-07	7.13E-07	5.1292E-04
519779.4	4258503.04	2939.60021	0.09994	0.29705	0.10319	0.29251	5.10E-04	2.35E-07	6.09E-07	2.42E-07	5.76E-07	5.1152E-04
519815.59	4258395.49	2931.53107	0.09727	0.37282	0.09998	0.36473	5.08E-04	2.28E-07	7.65E-07	2.35E-07	7.18E-07	5.1041E-04
519749.61	4258551.66	2925.80423	0.09493	0.25181	0.09775	0.24812	5.07E-04	2.23E-07	5.16E-07	2.29E-07	4.88E-07	5.0892E-04
519739.69	4258571.09	2923.81192	0.09371	0.23862	0.0967	0.2353	5.07E-04	2.20E-07	4.89E-07	2.27E-07	4.63E-07	5.0852E-04
519789.32	4258483.61	2918.87987	0.10111	0.31498	0.10452	0.30989	5.06E-04	2.37E-07	6.46E-07	2.45E-07	6.10E-07	5.0801E-04
519719.89	4258619.66	2917.92442	0.09215	0.21379	0.09517	0.21192	5.06E-04	2.16E-07	4.38E-07	2.23E-07	4.17E-07	5.0740E-04
519759.53	4258532.22	2913.08694	0.0961	0.26583	0.09895	0.2619	5.05E-04	2.26E-07	5.45E-07	2.32E-07	5.16E-07	5.0678E-04
519811.26	4258430.29	2910.74808	0.10137	0.36078	0.10442	0.35373	5.05E-04	2.38E-07	7.40E-07	2.45E-07	6.96E-07	5.0678E-04
519729.77	4258590.53	2906.49996	0.0924	0.22609	0.09554	0.2234	5.04E-04	2.17E-07	4.64E-07	2.24E-07	4.40E-07	5.0546E-04
519792.98	4258474.72	2902.46025	0.10121	0.32189	0.10462	0.31655	5.03E-04	2.38E-07	6.60E-07	2.46E-07	6.23E-07	5.0519E-04
519808.26	4258340.54	2900.87464	0.0859	0.35497	0.08791	0.34605	5.03E-04	2.02E-07	7.28E-07	2.06E-07	6.81E-07	5.0496E-04
519801.95	4258307.35	2896.45383	0.07942	0.33963	0.08092	0.33004	5.02E-04	1.86E-07	6.97E-07	1.90E-07	6.50E-07	5.0410E-04
519805.14	4258323.86	2895.43434	0.08253	0.34707	0.08429	0.33786	5.02E-04	1.94E-07	7.12E-07	1.98E-07	6.65E-07	5.0397E-04
519798.69	4258291	2893.4263	0.07646	0.33175	0.0777	0.32187	5.02E-04	1.80E-07	6.80E-07	1.82E-07	6.34E-07	5.0353E-04
519812.52	4258378.69	2891.97589	0.09332	0.36556	0.09581	0.35737	5.02E-04	2.19E-07	7.50E-07	2.25E-07	7.03E-07	5.0350E-04
519769.44	4258512.78	2890.08566	0.09726	0.28092	0.10027	0.27672	5.01E-04	2.28E-07	5.76E-07	2.35E-07	5.45E-07	5.0286E-04
519807.6	4258439.17	2889.96733	0.10136	0.35234	0.10448	0.34565	5.01E-04	2.38E-07	7.23E-07	2.45E-07	6.80E-07	5.0314E-04
519796.64	4258465.83	2886.48232	0.10124	0.32901	0.1046	0.32337	5.01E-04	2.38E-07	6.75E-07	2.46E-07	6.37E-07	5.0244E-04
519803.95	4258448.06	2879.66366	0.10133	0.34425	0.10454	0.33792	4.99E-04	2.38E-07	7.06E-07	2.45E-07	6.65E-07	5.0132E-04
519800.29	4258456.95	2879.60006	0.10131	0.33653	0.1046	0.33055	4.99E-04	2.38E-07	6.90E-07	2.46E-07	6.51E-07	5.0128E-04
519811.97	4258404.31	2875.9916	0.0974	0.36403	0.10017	0.35637	4.99E-04	2.29E-07	7.47E-07	2.35E-07	7.02E-07	5.0074E-04
519719.85	4258609.97	2875.95867	0.09098	0.2144	0.09399	0.21237	4.99E-04	2.14E-07	4.40E-07	2.21E-07	4.18E-07	5.0011E-04
519739.65	4258561.4	2867.32588	0.09236	0.23915	0.09511	0.2357	4.97E-04	2.17E-07	4.90E-07	2.23E-07	4.64E-07	4.9872E-04
519779.36	4258493.35	2864.76398	0.09842	0.29738	0.10163	0.29276	4.97E-04	2.31E-07	6.10E-07	2.39E-07	5.76E-07	4.9854E-04
519809.37	4258362.09	2864.31754	0.08955	0.35764	0.09181	0.34934	4.97E-04	2.10E-07	7.33E-07	2.16E-07	6.88E-07	4.9865E-04
519749.57	4258541.96	2861.71573	0.09352	0.25219	0.0962	0.24848	4.96E-04	2.20E-07	5.17E-07	2.26E-07	4.89E-07	4.9780E-04
519729.73	4258580.83	2857.42892	0.09112	0.22679	0.09407	0.22382	4.96E-04	2.14E-07	4.65E-07	2.21E-07	4.41E-07	4.9695E-04
519759.49	4258522.52	2842.90424	0.09467	0.26611	0.09745	0.26218	4.93E-04	2.22E-07	5.46E-07	2.29E-07	5.16E-07	4.9460E-04
519719.81	4258600.27	2832.99718	0.0898	0.21508	0.09277	0.21278	4.91E-04	2.11E-07	4.41E-07	2.18E-07	4.19E-07	4.9266E-04
519808.34	4258413.13	2830.53639	0.09745	0.35539	0.10028	0.34814	4.91E-04	2.29E-07	7.29E-07	2.35E-07	6.85E-07	4.9282E-04
519808.92	4258387.44	2825.80695	0.09349	0.35732	0.09605	0.34953	4.90E-04	2.19E-07	7.33E-07	2.25E-07	6.88E-07	4.9199E-04
519804.57	4258349.49	2817.66144	0.08617	0.34695	0.0883	0.33858	4.89E-04	2.02E-07	7.12E-07	2.07E-07	6.66E-07	4.9050E-04
519769.4	4258503.09	2816.88657	0.09581	0.2812	0.09878	0.27696	4.89E-04	2.25E-07	5.77E-07	2.32E-07	5.45E-07	4.9015E-04
519795.08	4258299.77	2809.28941	0.07674	0.32457	0.07818	0.31531	4.87E-04	1.80E-07	6.66E-07	1.84E-07	6.21E-07	4.8891E-04
519798.31	4258316.18	2809.10817	0.07968	0.33198	0.08136	0.32303	4.87E-04	1.87E-07	6.81E-07	1.91E-07	6.36E-07	4.8892E-04
519739.61	4258551.7	2808.96413	0.09103	0.23955	0.09358	0.23604	4.87E-04	2.14E-07	4.91E-07	2.20E-07	4.65E-07	4.8859E-04
519801.48	4258332.75	2808.41602	0.08279	0.33915	0.08469	0.33057	4.87E-04	1.94E-07	6.96E-07	1.99E-07	6.51E-07	4.8885E-04
519729.69	4258571.14	2806.97181	0.08986	0.22736	0.09257	0.22419	4.87E-04	2.11E-07	4.66E-07	2.17E-07	4.41E-07	4.8819E-04
519749.53	4258532.26	2796.19653	0.09216	0.25249	0.09473	0.24877	4.85E-04	2.16E-07	5.18E-07	2.22E-07	4.90E-07	4.8643E-04
519805.8	4258370.78	2792.89069	0.08978	0.34987	0.09212	0.34199	4.84E-04	2.11E-07	7.18E-07	2.16E-07	6.73E-07	4.8623E-04
519779.32	4258483.65	2792.8555	0.09694	0.29762	0.10011	0.2929	4.84E-04	2.28E-07	6.10E-07	2.35E-07	5.77E-07	4.8606E-04
519804.71	4258421.94	2792.19074	0.09742	0.34691	0.10029	0.34009	4.84E-04	2.29E-07	7.11E-07	2.35E-07	6.69E-07	4.8614E-04
519719.77	4258590.57	2789.38747	0.08861	0.21575	0.09147	0.21316	4.84E-04	2.08E-07	4.42E-07	2.15E-07	4.20E-07	4.8509E-04
519782.95	4258474.83	2775.18149	0.09708	0.30388	0.10026	0.29895	4.81E-04	2.28E-07	6.23E-07	2.35E-07	5.88E-07	4.8302E-04
519759.44	4258512.82	2772.40317	0.09328	0.26633	0.09601	0.26239	4.81E-04	2.19E-07	5.46E-07	2.25E-07	5.17E-07	4.8237E-04
519805.32	4258396.19	2768.95893	0.09362	0.34922	0.09623	0.34182	4.80E-04	2.20E-07	7.16E-07	2.26E-07	6.73E-07	4.8210E-04
519801.09	4258430.76	2767.76415	0.09741	0.33909	0.10035	0.3326	4.80E-04	2.29E-07	6.95E-07	2.36E-07	6.55E-07	4.8187E-04
519786.58	4258466.02	2759.76419	0.09716	0.31037	0.10033	0.30516	4.79E-04	2.28E-07	6.37E-07	2.36E-07	6.01E-07	4.8037E-04
519729.65	4258561.44	2754.63201	0.08861	0.22779	0.09108	0.2245	4.78E-04	2.08E-07	4.67E-07	2.14E-07	4.42E-07	4.7911E-04
519797.46	4258439.57	2751.9701	0.09735	0.33142	0.10035	0.32528	4.77E-04	2.29E-07	6.80E-07	2.36E-07	6.40E-07	4.7910E-04
519739.57	4258542	2748.93208	0.08973	0.23984	0.09213	0.23631	4.77E-04	2.11E-07	4.92E-07	2.16E-07	4.65E-07	4.7817E-04
519790.2	4258457.2	2748.34177	0.0972	0.31702	0.10032	0.31153	4.77E-04	2.28E-07	6.50E-07	2.36E-07	6.13E-07	4.7841E-04
519769.36	4258493.39	2745.20507	0.09439	0.28143	0.09735	0.27712	4.76E-04	2.22E-07	5.77E-07	2.29E-07	5.46E-07	4.7772E-04
519793.83	4258448.39	2744.8329	0.09725	0.32397	0.10031	0.31816	4.76E-04	2.28E-07	6.64E-07	2.35E-07	6.26E-07	4.7783E-04
519719.73	4258580.87	2743.75184	0.08741	0.21637	0.0901	0.2135	4.76E-04	2.05E-07	4.44E-07	2.12E-07	4.20E-07	4.7717E-04
519800.89	4258358.44	2738.78764	0.08639	0.33904	0.08859	0.33117	4.75E-04	2.03E-07	6.95E-07	2.08E-07	6.52E-07	4.7679E-04
519749.49	4258522.56	2729.76505	0.09083	0.25268	0.09334	0.24896	4.73E-04	2.13E-07	5.18E-07	2.19E-07	4.90E-07	4.7491E-04
519797.82	4258341.63	2728.42498	0.08306	0.33186	0.08507	0.32378	4.73E-04	1.95E-07	6.81E-07	2.00E-07	6.37E-07	4.7495E-04
519802.22	4258379.46	2727.82757	0.08996	0.34239	0.09237	0.33488	4.73E-04	2.11E-07	7.02E-07	2.17E-07	6.59E-07	4.7492E-04
519791.47	4258308.54	2726.87924	0.07699	0.31763	0.07861	0.30897	4.73E-04	1.81E-07	6.51E-07	1.85E-07	6.08E-07	4.7459E-04
519794.68	4258325	2724.28544	0.07991	0.32449	0.08173	0.31617	4.73E-04	1.88E-07	6.66E-07	1.92E-07	6.22E-07	4.7418E-04
519801.72	4258404.94	2721.73848	0.09368	0.34127	0.09635	0.33425	4.72E-04	2.20E-07	7.00E-07	2.26E-07	6.58E-07	4.7388E-04
519759.4	4258503.13	2702.59159	0.09192	0.26656	0.09464	0.26256	4.69E-04	2.16E-07	5.47E-07	2.22E-07	5.17E-07	4.7025E-04
519729.61	4258551.74	2700.05906	0.08737	0.2281	0.08965	0.22476	4.68E-04	2.05E-07	4.68E-07	2.10E-07	4.42E-07	4.6964E-04
519719.69	4258571.18	2696.82986	0.08623	0.21687	0.0887	0.2138	4.68E-04	2.02E-07	4.45E-07	2.08E-07	4.21E-07	4.6903E-04
519739.53	4258532.3	2687.08403	0.08845	0.24006	0.09077	0.23652	4.66E-04	2.08E-07	4.92E-07	2.13E-07	4.66E-07	4.6744E-04
519798.12	4258413.69	2682.66609	0.09369	0.33349	0.09639	0.32684	4.65E-04	2.20E-07	6.84E-07	2.26E-07	6.43E-07	4.6707E-04
519769.32	4258483.69	2676.02857	0.09302	0.28159	0.09595	0.27719	4.64E-04	2.18E-07	5.78E-07	2.25E-07	5.46E-07	4.6571E-04
519798.65	4258388.15	2670.26624	0.09007	0.33493	0.09254	0.32778	4.63E-04	2.11E-07	6.87E-07	2.17E-07	6.45E-07	4.6491E-04
519797.21	4258367.39	2667.46098	0.08657	0.33157	0.08884	0.32413	4.63E-04	2.03E-07	6.80E-07	2.09E-07	6.38E-07	4.6439E-04
519749.44	4258512.87	2662.79248	0.08953	0.25281	0.09201	0.24907	4.62E-04	2.10E-07	5.18E-07	2.16E-07	4.90E-07	4.6328E-04
519772.92	4258474.94	2657.33289	0.09317	0.28722	0.09613	0.28265	4.61E-04	2.19E-07	5.89E-07	2.26E-07	5.56E-07	4.6249E-04
519794.17	4258350.52	2653.82894	0.08329	0.32487	0.08539	0.31723	4.60E-04	1.96E-07	6.66E-07	2.00E-07	6.24E-07	4.6198E-04
519794.52	4258422.44	2652.1601	0.09363	0.32594	0.09637	0.31966	4.60E-04	2.20E-07	6.68E-07	2.26E-07	6.29E-07	4.6175E-04
519719.65	4258561.48	2648.29639	0.08507	0.21721	0.08731	0.21404	4.59E-04	2.00E-07	4.45E-07	2.05E-07	4.21E-07	4.6061E-04
519787.87	4258317.31	2647.03964	0.07723	0.31086	0.07898	0.30276	4.59E-04	1.81E-07	6.38E-07	1.85E-07	5.96E-07	4.6072E-04
519791.05	4258333.83	2645.42798	0.08014	0.31756	0.08206	0.30976	4.59E-04	1.88E-07	6.51E-07	1.93E-07	6.10E-07	4.6048E-04
519729.57	4258542.04	2643.51711	0.08616	0.22831	0.0883	0.22495	4.59E-04	2.02E-07	4.68E-07	2.07E-07	4.43E-07	4.5983E-04
519776.52	4258466.19	2638.99566	0.09323	0.29295	0.09619	0.28815	4.58E-04	2.19E-07	6.01E-07	2.26E-07	5.67E-07	4.5933E-04
519759.36	4258493.43	2633.91542	0.09061	0.26674	0.09332	0.26267	4.57E-04	2.13E-07	5.47E-07	2.19E-07	5.17E-07	4.5834E-04
519790.92	4258431.19	2632.59872	0.09356	0.3188	0.09636	0.31283	4.57E-04	2.20E-07	6.54E-07	2.26E-07	6.16E-07	4.5833E-04
519780.12	4258457.44	2627.22227	0.09334	0.29909	0.09627	0.29402	4.56E-04	2.19E-07	6.13E-07	2.26E-07	5.79E-07	4.5732E-04
519739.49	4258522.61	2624.15856	0.08722	0.2402	0.08948	0.23664	4.55E-04	2.05E-07	4.93E-07	2.10E-07	4.66E-07	4.5652E-04
519787.32	4258439.94	2623.05705	0.0935	0.31202	0.09636	0.30635	4.55E-04	2.20E-07	6.40E-07	2.26E-07	6.03E-07	4.5665E-04
519783.72	4258448.69	2622.52095	0.09345	0.30554	0.09636	0.30016	4.55E-04	2.19E-07	6.27E-07	2.26E-07	5.91E-07	4.5653E-04
519795.07	4258396.84	2621.38852	0.09014	0.32763	0.09266	0.32083	4.55E-04	2.12E-07	6.72E-07	2.18E-07	6.32E-07	4.5640E-04
519793.52	4258376.35	2603.58669	0.08671	0.32449	0.08904	0.31737	4.52E-04	2.04E-07	6.66E-07	2.09E-07	6.25E-07	4.5328E-04
519719.61	4258551.78	2597.32998	0.08393	0.21745	0.08598	0.21422	4.50E-04	1.97E-07	4.46E-07	2.02E-07	4.22E-07	4.5176E-04
519749.4	4258503.17	2596.10117	0.08828	0.25295	0.09074	0.24917	4.50E-04	2.07E-07	5.19E-07	2.13E-07	4.90E-07	4.5171E-04
519729.53	4258532.35	2585.10238	0.08498	0.22843	0.08704	0.22506	4.48E-04	2.00E-07	4.68E-07	2.04E-07	4.43E-07	4.4969E-04
519790.51	4258359.41	2583.28654	0.08345	0.31789	0.08561	0.31066	4.48E-04	1.96E-07	6.52E-07	2.01E-07	6.12E-07	4.4972E-04
519791.5	4258405.53	2579.86089	0.09014	0.32036	0.09269	0.31391	4.47E-04	2.12E-07	6.57E-07	2.18E-07	6.18E-07	4.4917E-04
519787.42	4258342.66	2573.31031	0.08036	0.31114	0.08236	0.30374	4.46E-04	1.89E-07	6.38E-07	1.93E-07	5.98E-07	4.4795E-04
519784.26	4258326.08	2570.38637	0.07743	0.30439	0.07928	0.2968	4.46E-04	1.82E-07	6.24E-07	1.86E-07	5.84E-07	4.4740E-04
519759.32	4258483.73	2567.38439	0.08933	0.26685	0.09204	0.26268	4.45E-04	2.10E-07	5.47E-07	2.16E-07	5.17E-07	4.4679E-04
519739.44	4258512.91	2560.32911	0.08601	0.24026	0.08824	0.23669	4.44E-04	2.02E-07	4.93E-07	2.07E-07	4.66E-07	4.4545E-04
519762.9	4258475.04	2548.20231	0.08951	0.27203	0.09225	0.26772	4.42E-04	2.10E-07	5.58E-07	2.17E-07	5.27E-07	4.4349E-04
519789.84	4258385.3	2548.17805	0.0868	0.31728	0.08916	0.31054	4.42E-04	2.04E-07	6.51E-07	2.09E-07	6.11E-07	4.4364E-04
519787.92	4258414.22	2546.47371	0.09008	0.31332	0.09266	0.30722	4.42E-04	2.11E-07	6.43E-07	2.18E-07	6.05E-07	4.4335E-04
519719.57	4258542.08	2543.85403	0.08279	0.2176	0.08472	0.21435	4.41E-04	1.94E-07	4.46E-07	1.99E-07	4.22E-07	4.4248E-04
519766.47	4258466.35	2530.37646	0.08961	0.27713	0.09237	0.27264	4.39E-04	2.10E-07	5.68E-07	2.17E-07	5.37E-07	4.4041E-04
519749.36	4258493.47	2529.99234	0.08705	0.25306	0.08952	0.24921	4.39E-04	2.04E-07	5.19E-07	2.10E-07	4.91E-07	4.4024E-04
519729.49	4258522.65	2525.34666	0.08383	0.2285	0.08583	0.22512	4.38E-04	1.97E-07	4.69E-07	2.02E-07	4.43E-07	4.3932E-04
519784.35	4258422.91	2524.13649	0.09004	0.30673	0.09265	0.30092	4.38E-04	2.11E-07	6.29E-07	2.18E-07	5.92E-07	4.3945E-04
519786.86	4258368.29	2519.84952	0.08358	0.31117	0.08579	0.30429	4.37E-04	1.96E-07	6.38E-07	2.01E-07	5.99E-07	4.3869E-04
519770.05	4258457.67	2514.57164	0.08967	0.28251	0.09242	0.2778	4.36E-04	2.11E-07	5.79E-07	2.17E-07	5.47E-07	4.3769E-04
519780.77	4258431.6	2510.47683	0.08997	0.30038	0.09263	0.29484	4.35E-04	2.11E-07	6.16E-07	2.17E-07	5.80E-07	4.3706E-04
519773.62	4258448.98	2504.43037	0.08972	0.28807	0.09244	0.28308	4.34E-04	2.11E-07	5.91E-07	2.17E-07	5.57E-07	4.3596E-04
519783.79	4258351.48	2504.38108	0.08052	0.3047	0.08257	0.29769	4.34E-04	1.89E-07	6.25E-07	1.94E-07	5.86E-07	4.3597E-04
519777.2	4258440.29	2503.86965	0.08985	0.29413	0.09255	0.28887	4.34E-04	2.11E-07	6.03E-07	2.17E-07	5.69E-07	4.3588E-04
519786.16	4258394.25	2501.61541	0.08684	0.31041	0.08925	0.30399	4.34E-04	2.04E-07	6.37E-07	2.10E-07	5.98E-07	4.3554E-04
519780.65	4258334.84	2497.902	0.07762	0.29836	0.07954	0.29117	4.33E-04	1.82E-07	6.12E-07	1.87E-07	5.73E-07	4.3480E-04
519739.4	4258503.21	2496.61173	0.08484	0.2403	0.08706	0.2367	4.33E-04	1.99E-07	4.93E-07	2.04E-07	4.66E-07	4.3439E-04
519719.53	4258532.39	2488.75978	0.08169	0.21767	0.08353	0.21442	4.32E-04	1.92E-07	4.46E-07	1.96E-07	4.22E-07	4.3292E-04
519749.32	4258483.77	2465.6966	0.08586	0.2531	0.08834	0.24916	4.28E-04	2.02E-07	5.19E-07	2.07E-07	4.90E-07	4.2908E-04
519729.45	4258512.95	2464.59666	0.0827	0.22851	0.08469	0.22512	4.27E-04	1.94E-07	4.69E-07	1.99E-07	4.43E-07	4.2878E-04
519783.2	4258377.18	2463.79622	0.08366	0.30456	0.0859	0.29801	4.27E-04	1.96E-07	6.25E-07	2.02E-07	5.87E-07	4.2894E-04
519782.47	4258403.2	2461.82593	0.08681	0.3035	0.08924	0.29742	4.27E-04	2.04E-07	6.22E-07	2.10E-07	5.85E-07	4.2861E-04
519753.01	4258474.82	2445.89051	0.08605	0.25805	0.08858	0.25396	4.24E-04	2.02E-07	5.29E-07	2.08E-07	5.00E-07	4.2567E-04
519780.16	4258360.31	2440.81364	0.08062	0.29831	0.08271	0.29165	4.23E-04	1.89E-07	6.12E-07	1.94E-07	5.74E-07	4.2492E-04
519739.36	4258493.51	2433.20432	0.0837	0.24032	0.08593	0.23667	4.22E-04	1.97E-07	4.93E-07	2.02E-07	4.66E-07	4.2339E-04
519719.49	4258522.69	2432.0626	0.08061	0.21767	0.08241	0.21442	4.22E-04	1.89E-07	4.46E-07	1.93E-07	4.22E-07	4.2308E-04
519778.79	4258412.16	2431.35582	0.08675	0.29692	0.08919	0.29116	4.22E-04	2.04E-07	6.09E-07	2.09E-07	5.73E-07	4.2330E-04
519777.04	4258343.61	2430.21622	0.07776	0.29237	0.07974	0.28555	4.22E-04	1.83E-07	6.00E-07	1.87E-07	5.62E-07	4.2304E-04
519756.69	4258465.87	2427.93142	0.08622	0.26306	0.08879	0.2588	4.21E-04	2.02E-07	5.40E-07	2.08E-07	5.09E-07	4.2257E-04
519779.54	4258386.06	2414.27571	0.08368	0.298	0.08594	0.29178	4.19E-04	1.96E-07	6.11E-07	2.02E-07	5.74E-07	4.2033E-04
519760.37	4258456.92	2413.74048	0.08635	0.26818	0.08894	0.26371	4.19E-04	2.03E-07	5.50E-07	2.09E-07	5.19E-07	4.2013E-04
519775.11	4258421.11	2411.17304	0.08668	0.2907	0.08916	0.28521	4.18E-04	2.03E-07	5.96E-07	2.09E-07	5.61E-07	4.1978E-04
519729.4	4258503.25	2403.52773	0.08161	0.22845	0.08359	0.22504	4.17E-04	1.92E-07	4.69E-07	1.96E-07	4.43E-07	4.1818E-04

519771.42	4258430.06	2399.8724	0.0866	0.28472	0.08911	0.2795	4.16E-04	2.03E-07	5.84E-07	2.09E-07	5.50E-07	4.1779E-04
519764.06	4258447.97	2399.81748	0.08638	0.27328	0.08894	0.26859	4.16E-04	2.03E-07	5.60E-07	2.09E-07	5.29E-07	4.1774E-04
519767.74	4258439.01	2395.58991	0.08648	0.27884	0.08901	0.27388	4.16E-04	2.03E-07	5.72E-07	2.09E-07	5.39E-07	4.1703E-04
519776.53	4258369.13	2382.50395	0.08067	0.292	0.08278	0.28569	4.13E-04	1.89E-07	5.99E-07	1.94E-07	5.62E-07	4.1478E-04
519719.45	4258512.99	2374.25395	0.07957	0.21762	0.08134	0.21436	4.12E-04	1.87E-07	4.46E-07	1.91E-07	4.22E-07	4.1305E-04
519775.89	4258394.95	2372.55906	0.08365	0.29165	0.08593	0.28575	4.12E-04	1.96E-07	5.98E-07	2.02E-07	5.62E-07	4.1307E-04
519739.32	4258483.82	2371.17797	0.08259	0.2403	0.08484	0.23657	4.11E-04	1.94E-07	4.93E-07	1.99E-07	4.66E-07	4.126E-04
519773.44	4258352.38	2368.06425	0.07786	0.28625	0.07985	0.27979	4.11E-04	1.83E-07	5.87E-07	1.87E-07	5.51E-07	4.1224E-04
519742.98	4258474.93	2350.48331	0.08277	0.24486	0.0851	0.24098	4.08E-04	1.94E-07	5.02E-07	2.00E-07	4.74E-07	4.0905E-04
519729.36	4258493.56	2343.09279	0.08055	0.22837	0.08253	0.22493	4.06E-04	1.89E-07	4.68E-07	1.94E-07	4.43E-07	4.0769E-04
519772.23	4258403.84	2342.16965	0.08365	0.28582	0.08596	0.28018	4.06E-04	1.96E-07	5.86E-07	2.02E-07	5.52E-07	4.0777E-04
519772.9	4258377.96	2333.6632	0.08071	0.28615	0.08285	0.28012	4.05E-04	1.89E-07	5.87E-07	1.95E-07	5.51E-07	4.0629E-04
519746.64	4258466.04	2332.51522	0.08295	0.24945	0.08533	0.24542	4.05E-04	1.95E-07	5.12E-07	2.00E-07	4.83E-07	4.0595E-04
519768.57	4258412.72	2319.96276	0.08361	0.28014	0.08595	0.27474	4.02E-04	1.96E-07	5.75E-07	2.02E-07	5.41E-07	4.0390E-04
519750.29	4258457.16	2317.139	0.08311	0.25415	0.08552	0.24994	4.02E-04	1.95E-07	5.21E-07	2.01E-07	4.92E-07	4.0331E-04
519719.4	4258503.29	2316.07056	0.07855	0.21749	0.08032	0.21422	4.02E-04	1.84E-07	4.46E-07	1.89E-07	4.22E-07	4.0295E-04
519769.83	4258361.15	2309.39887	0.07789	0.2803	0.0799	0.27417	4.01E-04	1.83E-07	5.75E-07	1.88E-07	5.40E-07	4.0204E-04
519753.95	4258448.27	2305.51174	0.08323	0.2589	0.08564	0.25448	4.00E-04	1.95E-07	5.31E-07	2.01E-07	5.01E-07	4.0131E-04
519764.92	4258421.61	2303.79627	0.08351	0.27442	0.08586	0.2693	4.00E-04	1.96E-07	5.63E-07	2.02E-07	5.30E-07	4.0107E-04
519757.6	4258439.38	2297.40502	0.08332	0.26385	0.08572	0.2592	3.98E-04	1.96E-07	5.41E-07	2.01E-07	5.10E-07	3.9992E-04
519761.26	4258430.5	2296.18568	0.0834	0.26897	0.08577	0.26409	3.98E-04	1.96E-07	5.52E-07	2.01E-07	5.20E-07	3.9973E-04
519769.27	4258386.78	2293.43835	0.08074	0.28058	0.08291	0.2748	3.98E-04	1.90E-07	5.75E-07	1.95E-07	5.41E-07	3.9929E-04
519729.32	4258483.86	2283.80703	0.07952	0.22826	0.08152	0.22477	3.96E-04	1.87E-07	4.68E-07	1.91E-07	4.42E-07	3.9740E-04
519732.95	4258475.03	2262.28749	0.07969	0.23247	0.08178	0.22882	3.92E-04	1.87E-07	4.77E-07	1.92E-07	4.50E-07	3.9369E-04
519765.63	4258395.61	2260.89422	0.08074	0.27516	0.08292	0.26962	3.92E-04	1.90E-07	5.64E-07	1.95E-07	5.31E-07	3.9362E-04
519766.22	4258369.92	2260.71855	0.07795	0.27495	0.07998	0.26907	3.92E-04	1.83E-07	5.64E-07	1.88E-07	5.30E-07	3.935BE-04
519719.36	4258493.6	2258.25475	0.07756	0.21731	0.07933	0.21403	3.92E-04	1.82E-07	4.46E-07	1.86E-07	4.21E-07	3.9292E-04
519736.59	4258466.21	2243.60563	0.07987	0.23672	0.08203	0.23292	3.89E-04	1.88E-07	4.85E-07	1.93E-07	4.59E-07	3.9047E-04
519762	4258404.43	2234.38784	0.08068	0.26972	0.08287	0.26444	3.88E-04	1.89E-07	5.53E-07	1.95E-07	5.21E-07	3.8900E-04
519740.22	4258457.38	2227.21575	0.08004	0.24107	0.08226	0.23709	3.86E-04	1.88E-07	4.94E-07	1.93E-07	4.67E-07	3.8764E-04
519762.61	4258378.68	2220.06425	0.07799	0.26988	0.08004	0.26423	3.85E-04	1.83E-07	5.54E-07	1.88E-07	5.20E-07	3.8650E-04
519758.37	4258413.26	2214.66665	0.08057	0.26434	0.08277	0.25933	3.84E-04	1.89E-07	5.42E-07	1.94E-07	5.10E-07	3.8556E-04
519743.85	4258448.56	2214.54633	0.08019	0.24554	0.08244	0.24136	3.84E-04	1.88E-07	5.04E-07	1.94E-07	4.75E-07	3.8546E-04
519747.48	4258439.73	2206.4442	0.08033	0.25001	0.08258	0.24564	3.83E-04	1.89E-07	5.13E-07	1.94E-07	4.84E-07	3.840BE-04
519754.74	4258422.08	2205.28914	0.08051	0.25942	0.08272	0.25462	3.82E-04	1.89E-07	5.32E-07	1.94E-07	5.01E-07	3.8391E-04
519751.11	4258430.91	2203.2458	0.08043	0.25467	0.08267	0.25007	3.82E-04	1.89E-07	5.22E-07	1.94E-07	4.92E-07	3.8354E-04
519719.32	4258483.9	2201.16208	0.0766	0.21711	0.07838	0.2138	3.82E-04	1.80E-07	4.45E-07	1.84E-07	4.21E-07	3.8301E-04
519759.01	4258387.45	2184.93117	0.07798	0.26481	0.08005	0.25941	3.79E-04	1.83E-07	5.43E-07	1.88E-07	5.11E-07	3.8039E-04
519722.93	4258475.13	2180.00946	0.07678	0.2209	0.07865	0.21748	3.78E-04	1.80E-07	4.53E-07	1.85E-07	4.28E-07	3.7936E-04
519726.54	4258466.36	2160.15815	0.07695	0.22484	0.07891	0.22126	3.75E-04	1.81E-07	4.61E-07	1.85E-07	4.36E-07	3.7593E-04
519755.4	4258396.22	2156.92051	0.07794	0.25985	0.08001	0.25468	3.74E-04	1.83E-07	5.33E-07	1.88E-07	5.01E-07	3.7551E-04
519730.15	4258457.6	2143.41654	0.07712	0.22883	0.07915	0.22509	3.72E-04	1.81E-07	4.69E-07	1.86E-07	4.43E-07	3.7305E-04
519751.79	4258404.99	2136.22348	0.07787	0.25498	0.07995	0.25003	3.71E-04	1.83E-07	5.23E-07	1.88E-07	4.92E-07	3.7190E-04
519733.75	4258448.83	2129.43933	0.07729	0.23288	0.07935	0.22896	3.69E-04	1.81E-07	4.78E-07	1.86E-07	4.51E-07	3.7064E-04
519748.18	4258413.76	2122.55666	0.07778	0.25023	0.07986	0.2455	3.68E-04	1.83E-07	5.13E-07	1.87E-07	4.83E-07	3.6951E-04
519737.36	4258440.06	2119.6705	0.07744	0.23708	0.07953	0.23296	3.68E-04	1.82E-07	4.86E-07	1.87E-07	4.59E-07	3.6896E-04
519744.58	4258422.52	2115.61456	0.07769	0.24571	0.07977	0.24119	3.67E-04	1.82E-07	5.04E-07	1.87E-07	4.75E-07	3.6829E-04
519740.97	4258431.29	2114.83994	0.07757	0.24131	0.07966	0.237	3.67E-04	1.82E-07	4.95E-07	1.87E-07	4.67E-07	3.6814E-04
CONCUNIT ug/	m^3											
DEPUNIT g/m^	2											

City of Santa Rosa—Stonebridge Subdivision Project

Project Site
Construction Annual Total PM2.5 Emissions (PM2.5 Total)

Unmitigated Concentrations

Annual Average Onsite Total PM2.5 Emission Rate (grams/m2/sec):	2.00E-07
Annual Average Offsite Total PM2.5 Emission Rate - Road Segment 1 (grams/sec):	4.09E-05
Annual Average Offsite Total PM2.5 Emission Rate - Road Segment 2 (grams/sec):	3.58E-05
Annual Average Offsite Total PM2.5 Emission Rate - Road Segment 3 (grams/sec):	4.09E-05
Annual Average Offsite Total PM2.5 Emission Rate - Road Segment 4 (grams/sec):	3.43E-05

Unmitigated PM2.5 Total Concentrations		
Maximum DPM (ug/m3)	**MIR UTM** X	Y
1.3267E-01	520285.95	4258692.95

X	Y	Onsite Project Site Unit Emissions VALUES AVERAGED AVERAGE CONC	Offsite-Road Segment 1 Unit Emissions VALUES AVERAGED AVERAGE CONC	Offsite-Road Segment 2 Unit Emissions VALUES AVERAGED AVERAGE CONC	Offsite-Road Segment 3 Unit Emissions VALUES AVERAGED AVERAGE CONC	Offsite-Road Segment 4 Unit Emissions VALUES AVERAGED AVERAGE CONC	Onsite Project Site Annual PM2.5 Total w/Actual Emissions (ug/m3)	Offsite-Road Segment 1 Annual PM2.5 Total w/Actual Emissions (ug/m3)	Offsite-Road Segment 2 Annual PM2.5 Total w/Actual Emissions (ug/m3)	Offsite-Road Segment 3 Annual PM2.5 Total w/Actual Emissions (ug/m3)	Offsite-Road Segment 4 Annual PM2.5 Total w/Actual Emissions (ug/m3)	**Total DPM (ug/m3)**
520285.95	4258692.95	662010.4627	0.70541	0.47948	0.67924	0.51632	1.33E-01	2.89E-05	1.72E-05	2.78E-05	1.77E-05	1.3267E-01
520276.05	4258692.97	661730.7007	0.7558	0.50671	0.7262	0.54656	1.33E-01	3.09E-05	1.81E-05	2.97E-05	1.88E-05	1.3262E-01
520266.15	4258692.98	661237.0252	0.81334	0.53678	0.77956	0.57991	1.32E-01	3.33E-05	1.92E-05	3.19E-05	1.99E-05	1.3253E-01
520295.85	4258692.94	660914.3292	0.66038	0.45448	0.63708	0.4886	1.32E-01	2.70E-05	1.63E-05	2.61E-05	1.68E-05	1.3244E-01
520256.24	4258693	658495.184	0.87811	0.56962	0.83922	0.61631	1.32E-01	3.60E-05	2.04E-05	3.44E-05	2.12E-05	1.3198E-01
520305.75	4258692.92	656765.0041	0.61928	0.43121	0.59835	0.46286	1.32E-01	2.54E-05	1.54E-05	2.45E-05	1.59E-05	1.3161E-01
520246.34	4258693.02	654632.1663	0.95238	0.60592	0.90721	0.65636	1.31E-01	3.90E-05	2.17E-05	3.71E-05	2.25E-05	1.3122E-01
520315.65	4258692.9	650173.4768	0.58193	0.40963	0.56299	0.43904	1.30E-01	2.38E-05	1.47E-05	2.31E-05	1.51E-05	1.3028E-01
520236.44	4258693.03	647446.2042	1.03669	0.64581	0.9838	0.70018	1.30E-01	4.24E-05	2.31E-05	4.03E-05	2.40E-05	1.2979E-01
520325.55	4258692.89	642068.381	0.54847	0.38984	0.53118	0.41722	1.29E-01	2.25E-05	1.39E-05	2.17E-05	1.43E-05	1.2866E-01
520226.54	4258693.05	639146.7769	1.1371	0.69147	1.07491	0.74946	1.28E-01	4.66E-05	2.47E-05	4.40E-05	2.57E-05	1.2814E-01
520285.96	4258702.95	630959.6637	0.71756	0.46523	0.69024	0.50115	1.26E-01	2.94E-05	1.66E-05	2.83E-05	1.72E-05	1.2645E-01
520276.06	4258702.97	630957.2012	0.7694	0.49114	0.73836	0.52988	1.26E-01	3.15E-05	1.76E-05	3.02E-05	1.82E-05	1.2646E-01
520335.45	4258692.87	630938.432	0.51801	0.37153	0.50211	0.39707	1.26E-01	2.12E-05	1.33E-05	2.06E-05	1.36E-05	1.2642E-01
520266.16	4258702.98	630036.8694	0.82794	0.51957	0.79239	0.56129	1.26E-01	3.39E-05	1.86E-05	3.24E-05	1.93E-05	1.2628E-01
520295.86	4258702.94	629016.2959	0.6711	0.44135	0.64686	0.47468	1.26E-01	2.75E-05	1.58E-05	2.65E-05	1.63E-05	1.2606E-01
520256.26	4258703	627344.6224	0.89421	0.55071	0.85319	0.59556	1.26E-01	3.66E-05	1.97E-05	3.49E-05	2.04E-05	1.2575E-01
520216.64	4258693.07	626935.9391	1.2529	0.74154	1.17902	0.80314	1.26E-01	5.13E-05	2.65E-05	4.83E-05	2.76E-05	1.2571E-01
520305.77	4258702.92	624933.273	0.62914	0.41927	0.60745	0.45023	1.25E-01	2.58E-05	1.50E-05	2.49E-05	1.55E-05	1.2523E-01
520246.36	4258703.02	622952.3412	0.96996	0.58507	0.92233	0.63309	1.25E-01	3.97E-05	2.09E-05	3.78E-05	2.17E-05	1.2487E-01
520315.67	4258702.9	618385.3726	0.59112	0.39882	0.57155	0.42761	1.24E-01	2.42E-05	1.43E-05	2.34E-05	1.47E-05	1.2392E-01
520236.46	4258703.03	616231.652	1.05663	0.62291	1.00088	0.67408	1.23E-01	4.33E-05	2.23E-05	4.10E-05	2.31E-05	1.2354E-01
520345.35	4258692.85	615114.5187	0.48991	0.35441	0.47519	0.37827	1.23E-01	2.01E-05	1.27E-05	1.95E-05	1.30E-05	1.2325E-01
520206.74	4258693.08	611044.6617	1.39025	0.79675	1.30102	0.86205	1.22E-01	5.69E-05	2.85E-05	5.33E-05	2.96E-05	1.2254E-01
520325.57	4258702.89	610001.1955	0.5568	0.37996	0.53899	0.40674	1.22E-01	2.28E-05	1.36E-05	2.21E-05	1.40E-05	1.2223E-01
520226.56	4258703.05	607387.9481	1.15843	0.6654	1.09288	0.71947	1.22E-01	4.74E-05	2.38E-05	4.47E-05	2.47E-05	1.2178E-01
520335.47	4258702.87	599219.393	0.52565	0.36253	0.50934	0.3875	1.20E-01	2.15E-05	1.30E-05	2.09E-05	1.33E-05	1.2007E-01
520216.66	4258703.07	595412.1692	1.27692	0.71237	1.19948	0.76912	1.19E-01	5.23E-05	2.55E-05	4.91E-05	2.64E-05	1.1939E-01
520355.25	4258692.84	594099.7587	0.46433	0.33858	0.45059	0.36092	1.19E-01	1.90E-05	1.21E-05	1.84E-05	1.24E-05	1.1904E-01
520196.84	4258693.1	589909.9555	1.55429	0.85851	1.44609	0.92722	1.18E-01	6.36E-05	3.07E-05	5.92E-05	3.18E-05	1.1832E-01
520345.37	4258702.85	583195.2902	0.49683	0.34617	0.48175	0.36946	1.17E-01	2.03E-05	1.24E-05	1.97E-05	1.27E-05	1.1686E-01
520206.76	4258703.08	579527.2475	1.4173	0.76346	1.32431	0.82309	1.16E-01	5.80E-05	2.73E-05	5.42E-05	2.83E-05	1.1623E-01
520157.12	4258646.05	572750.5551	2.41391	1.62136	2.20438	1.77451	1.15E-01	9.88E-05	5.80E-05	9.03E-05	6.09E-05	1.1501E-01
520365.15	4258692.82	564099.0537	0.44038	0.32363	0.42748	0.34458	1.13E-01	1.80E-05	1.16E-05	1.75E-05	1.18E-05	1.1303E-01
520355.27	4258702.84	562308.3214	0.4705	0.33099	0.45646	0.35275	1.13E-01	1.93E-05	1.18E-05	1.87E-05	1.21E-05	1.1267E-01
520186.94	4258693.12	561775.8411	1.75507	0.92751	1.62237	0.99969	1.13E-01	7.19E-05	3.32E-05	6.64E-05	3.43E-05	1.1271E-01
520157.12	4258655.32	561759.9611	2.48739	1.52577	2.26179	1.65906	1.13E-01	1.02E-04	5.46E-05	9.26E-05	5.70E-05	1.1281E-01
520196.86	4258703.1	558250.8976	1.58571	0.81999	1.47332	0.88255	1.12E-01	6.49E-05	2.93E-05	6.03E-05	3.03E-05	1.1198E-01
520147.12	4258646.05	551368.5226	2.90149	1.83714	2.61828	2.00195	1.10E-01	1.19E-04	6.57E-05	1.07E-04	6.87E-05	1.1078E-01
520147.12	4258655.32	539010.2038	2.98985	1.71437	2.6866	1.85484	1.08E-01	1.22E-04	6.13E-05	1.10E-04	6.37E-05	1.0830E-01
520365.17	4258702.82	534151.4274	0.44628	0.31685	0.4331	0.33721	1.07E-01	1.83E-05	1.13E-05	1.77E-05	1.16E-05	1.0703E-01
520157.12	4258664.6	531634.1877	2.55475	1.43574	2.31624	1.55154	1.06E-01	1.05E-04	5.14E-05	9.48E-05	5.33E-05	1.0677E-01
520186.96	4258703.12	529735.306	1.79066	0.88188	1.65298	0.94795	1.06E-01	7.33E-05	3.15E-05	6.77E-05	3.25E-05	1.0629E-01
520177.04	4258693.13	525404.7531	2.00342	1.00358	1.83797	1.07998	1.05E-01	8.20E-05	3.59E-05	7.53E-05	3.71E-05	1.0545E-01
520137.12	4258646.05	525153.9319	3.57866	2.09768	3.18247	2.27288	1.05E-01	1.47E-04	7.50E-05	1.30E-04	7.80E-05	1.0560E-01
520375.05	4258692.8	523276.3796	0.41865	0.30989	0.40644	0.32958	1.05E-01	1.71E-05	1.11E-05	1.66E-05	1.13E-05	1.0485E-01
520137.12	4258655.32	512025.5326	3.6851	1.93506	3.26165	2.08215	1.03E-01	1.51E-04	6.92E-05	1.34E-04	7.15E-05	1.0297E-01
520276.1	4258722.97	505674.2331	0.79371	0.46183	0.75976	0.49782	1.01E-01	3.25E-05	1.65E-05	3.11E-05	1.71E-05	1.0137E-01
520286	4258722.95	505256.639	0.73952	0.43808	0.70971	0.47189	1.01E-01	3.03E-05	1.57E-05	2.91E-05	1.62E-05	1.0128E-01
520266.2	4258722.98	504669.1133	0.85464	0.48778	0.8158	0.52592	1.01E-01	3.50E-05	1.74E-05	3.34E-05	1.81E-05	1.0117E-01
520295.9	4258722.94	503301.2402	0.69121	0.41641	0.66492	0.44806	1.01E-01	2.83E-05	1.49E-05	2.72E-05	1.54E-05	1.0088E-01
520147.12	4258664.6	502477.166	3.06715	1.599	2.74954	1.72011	1.01E-01	1.26E-04	5.72E-05	1.13E-04	5.91E-05	1.0098E-01
520256.29	4258723	502068.1672	0.92375	0.51606	0.87902	0.55632	1.01E-01	3.78E-05	1.85E-05	3.60E-05	1.91E-05	1.0066E-01
520305.8	4258722.92	499711.4967	0.64774	0.39649	0.6244	0.42605	1.00E-01	2.65E-05	1.42E-05	2.56E-05	1.46E-05	1.0015E-01
520246.39	4258723.02	497859.4119	1.00257	0.54684	0.95073	0.58917	9.97E-02	4.10E-05	1.96E-05	3.89E-05	2.02E-05	9.9823E-02
520375.07	4258702.8	495316.0666	0.42383	0.30359	0.41136	0.32267	9.92E-02	1.74E-05	1.09E-05	1.68E-05	1.11E-05	9.9250E-02
520315.7	4258722.9	493976.8157	0.60825	0.37772	0.58724	0.40533	9.89E-02	2.49E-05	1.35E-05	2.40E-05	1.39E-05	9.9002E-02
520157.12	4258673.87	493534.2778	2.61469	1.34986	2.36669	1.45215	9.88E-02	1.07E-04	4.83E-05	9.69E-05	4.99E-05	9.9139E-02
520127.12	4258646.05	492895.6744	4.55641	2.41345	3.98368	2.59237	9.87E-02	1.87E-04	8.63E-05	1.63E-04	8.90E-05	9.9234E-02
520236.49	4258723.03	491916.287	1.09317	0.58035	1.03274	0.62471	9.85E-02	4.48E-05	2.08E-05	4.23E-05	2.14E-05	9.8642E-02
520177.05	4258703.13	491915.5288	2.04404	0.94969	1.87246	1.02006	9.85E-02	8.37E-05	3.40E-05	7.67E-05	3.50E-05	9.8742E-02
520325.6	4258722.89	485086.5142	0.57235	0.36042	0.55332	0.38619	9.71E-02	2.34E-05	1.29E-05	2.27E-05	1.33E-05	9.7217E-02
520226.59	4258723.05	483881.6868	1.19826	0.61692	1.12752	0.66328	9.69E-02	4.91E-05	2.21E-05	4.62E-05	2.28E-05	9.7044E-02
520127.12	4258655.32	480354.9216	4.68376	2.19799	4.07203	2.34136	9.62E-02	1.92E-04	7.86E-05	1.67E-04	8.04E-05	9.6715E-02
520167.14	4258693.15	479970.9033	2.31789	1.08767	2.10702	1.16908	9.61E-02	9.49E-05	3.89E-05	8.63E-05	4.01E-05	9.6381E-02
520335.5	4258722.87	473811.8752	0.53964	0.34439	0.52227	0.36844	9.49E-02	2.21E-05	1.23E-05	2.14E-05	1.26E-05	9.4956E-02
520137.12	4258664.6	473513.4601	3.77541	1.78691	3.33266	1.91154	9.48E-02	1.55E-04	6.39E-05	1.36E-04	6.56E-05	9.5248E-02
520216.69	4258723.07	473418.3444	1.32151	0.65686	1.23821	0.70529	9.48E-02	5.41E-05	2.35E-05	5.07E-05	2.42E-05	9.4961E-02
520384.96	4258692.79	467816.7544	0.39843	0.29701	0.38682	0.31554	9.37E-02	1.63E-05	1.06E-05	1.58E-05	1.08E-05	9.3740E-02
520157.12	4258683.15	461931.6033	2.67282	1.26628	2.40997	1.36004	9.25E-02	1.09E-04	4.53E-05	9.87E-05	4.67E-05	9.2808E-02
520206.79	4258723.08	459749.9231	1.46709	0.69966	1.36788	0.75072	9.21E-02	6.01E-05	2.50E-05	5.60E-05	2.58E-05	9.2238E-02
520345.4	4258722.85	459676.8086	0.50982	0.32951	0.49383	0.35197	9.21E-02	2.09E-05	1.18E-05	2.02E-05	1.21E-05	9.2122E-02
520147.12	4258673.87	458448.1957	3.13449	1.49094	2.80621	1.59781	9.18E-02	1.28E-04	5.33E-05	1.15E-04	5.49E-05	9.2162E-02
520117.12	4258646.05	453337.2361	6.02456	2.80275	5.18464	2.95182	9.08E-02	2.47E-04	1.00E-04	2.12E-04	1.01E-04	9.1448E-02
520384.97	4258702.79	444201.6386	0.40308	0.2912	0.39121	0.30911	8.90E-02	1.65E-05	1.04E-05	1.60E-05	1.06E-05	8.9011E-02
520286.01	4258732.95	443470.6967	0.74861	0.42495	0.71744	0.45747	8.88E-02	3.07E-05	1.52E-05	2.94E-05	1.57E-05	8.8902E-02
520276.11	4258732.97	443321.6464	0.80306	0.44739	0.76758	0.48176	8.88E-02	3.29E-05	1.60E-05	3.14E-05	1.65E-05	8.8878E-02
520295.91	4258732.94	443194.7901	0.70049	0.40463	0.67307	0.43525	8.88E-02	2.87E-05	1.45E-05	2.76E-05	1.49E-05	8.8841E-02
520117.12	4258655.32	442679.2421	6.17731	2.51752	5.27774	2.61964	8.87E-02	2.53E-04	9.00E-05	2.16E-04	8.99E-05	8.9302E-02
520196.89	4258723.1	441936.3227	1.64127	0.74603	1.52191	0.80023	8.85E-02	6.72E-05	2.67E-05	6.23E-05	2.75E-05	8.8687E-02
520266.21	4258732.98	441922.7961	0.8643	0.47181	0.82376	0.50799	8.85E-02	3.54E-05	1.69E-05	3.37E-05	1.74E-05	8.8605E-02
520355.3	4258722.84	441578.9503	0.48248	0.31564	0.46764	0.33663	8.84E-02	1.98E-05	1.13E-05	1.91E-05	1.16E-05	8.8494E-02
520127.12	4258664.6	441242.8549	4.78308	2.01127	4.15275	2.12313	8.84E-02	1.96E-04	7.19E-05	1.70E-04	7.29E-05	8.8876E-02
520256.31	4258733	440473.4092	0.93504	0.49867	0.88843	0.53664	8.82E-02	3.83E-05	1.78E-05	3.64E-05	1.84E-05	8.8322E-02
520305.82	4258732.92	439595.7048	0.65618	0.3856	0.63191	0.41433	8.80E-02	2.69E-05	1.38E-05	2.59E-05	1.42E-05	8.8116E-02
520246.41	4258733.02	436140.439	1.01423	0.52751	0.96051	0.56717	8.73E-02	4.15E-05	1.89E-05	3.93E-05	1.95E-05	8.7462E-02
520236.51	4258733.03	430262.5705	1.10508	0.55874	1.04291	0.60012	8.62E-02	4.52E-05	2.00E-05	4.27E-05	2.06E-05	8.6294E-02
520315.72	4258732.9	430094.4625	0.61423	0.36682	0.59234	0.39379	8.61E-02	2.51E-05	1.31E-05	2.43E-05	1.35E-05	8.6208E-02
520226.61	4258733.05	425077.4163	1.2144	0.59309	1.14168	0.63637	8.51E-02	4.97E-05	2.12E-05	4.67E-05	2.18E-05	8.5267E-02
520137.12	4258673.87	425012.9196	3.84051	1.65525	3.3984	1.75984	8.51E-02	1.57E-04	5.92E-05	1.39E-04	6.04E-05	8.5531E-02
520325.62	4258732.89	422924.2617	0.57832	0.35049	0.55854	0.37573	8.47E-02	2.37E-05	1.25E-05	2.29E-05	1.29E-05	8.4768E-02
520147.12	4258683.15	422825.3067	3.20665	1.38833	2.8509	1.48633	8.47E-02	1.31E-04	4.97E-05	1.17E-04	5.10E-05	8.5025E-02
520160.07	4258700.23	421059.4477	2.63003	1.10318	2.36922	1.18257	8.43E-02	1.08E-04	3.95E-05	9.70E-05	4.06E-05	8.4608E-02
520365.2	4258722.82	419786.6962	0.45753	0.30285	0.44368	0.32246	8.41E-02	1.87E-05	1.08E-05	1.82E-05	1.11E-05	8.4127E-02
520186.99	4258723.12	418859.9409	1.85237	0.79609	1.70623	0.85397	8.39E-02	7.58E-05	2.85E-05	6.99E-05	2.93E-05	8.4086E-02
520216.71	4258733.07	416895.7376	1.34162	0.6299	1.25594	0.67537	8.35E-02	5.49E-05	2.25E-05	5.14E-05	2.32E-05	8.3641E-02
520335.52	4258732.87	412508.9499	0.5451	0.33513	0.5271	0.35875	8.26E-02	2.23E-05	1.20E-05	2.16E-05	1.23E-05	8.2679E-02
520117.12	4258664.6	405962.6887	6.2821	2.2804	5.36663	2.34026	8.13E-02	2.57E-04	8.16E-05	2.20E-04	8.03E-05	8.1938E-02
520107.12	4258646.05	405286.502	8.29137	3.27618	7.12267	3.30505	8.12E-02	3.39E-04	1.17E-04	2.92E-04	1.13E-04	8.2026E-02
520206.81	4258733.08	403304.9696	1.48556	0.66809	1.38397	0.71652	8.08E-02	6.08E-05	2.39E-05	5.67E-05	2.46E-05	8.0933E-02
520394.86	4258692.77	402093.9677	0.37942	0.28482	0.36831	0.30228	8.05E-02	1.55E-05	1.02E-05	1.51E-05	1.04E-05	8.0576E-02
520345.42	4258732.85	398873.3084	0.51451	0.32073	0.498	0.34282	7.99E-02	2.11E-05	1.15E-05	2.04E-05	1.18E-05	7.9945E-02
520107.12	4258655.32	396695.3815	8.46977	2.89289	7.213	2.87536	7.94E-02	3.47E-04	1.03E-04	2.95E-04	9.87E-05	8.0288E-02
520276.13	4258742.97	393455.3145	0.81425	0.43442	0.77748	0.46701	7.88E-02	3.33E-05	1.55E-05	3.18E-05	1.60E-05	7.8892E-02
520286.03	4258742.95	393424.8123	0.75885	0.41304	0.72651	0.44405	7.88E-02	3.11E-05	1.48E-05	2.97E-05	1.52E-05	7.8880E-02
520295.93	4258742.94	392026.7775	0.70941	0.3935	0.68093	0.42289	7.85E-02	2.90E-05	1.41E-05	2.79E-05	1.45E-05	7.8594E-02
520127.12	4258673.87	392001.7998	4.82933	1.85072	4.22761	1.93337	7.85E-02	1.98E-04	6.62E-05	1.73E-04	6.64E-05	7.9007E-02
520266.23	4258742.98	391799.814	0.87593	0.45746	0.83403	0.49154	7.85E-02	3.59E-05	1.64E-05	3.41E-05	1.69E-05	7.8567E-02
520375.11	4258722.8	390522.566	0.43414	0.29067	0.42107	0.30901	7.82E-02	1.78E-05	1.04E-05	1.72E-05	1.06E-05	7.8263E-02
520256.33	4258743	390273.9548	0.94759	0.48275	0.89956	0.51832	7.82E-02	3.88E-05	1.73E-05	3.68E-05	1.78E-05	7.8268E-02
520177.09	4258723.13	390188.0308	2.11218	0.85123	1.93009	0.91256	7.81E-02	8.65E-05	3.04E-05	7.90E-05	3.13E-05	7.8368E-02
520305.83	4258742.92	388393.5673	0.66434	0.37519	0.6391	0.40297	7.78E-02	2.72E-05	1.34E-05	2.62E-05	1.38E-05	7.7862E-02
520137.12	4258683.15	388111.7385	3.93849	1.53176	3.44433	1.62481	7.77E-02	1.61E-04	5.48E-05	1.41E-04	5.58E-05	7.8138E-02
520246.43	4258743.02	386888.3886	1.02862	0.50985	0.9734	0.54694	7.75E-02	4.21E-05	1.82E-05	3.99E-05	1.88E-05	7.7599E-02
520196.91	4258733.1	386868.8806	1.65823	0.70949	1.53631	0.76131	7.75E-02	6.79E-05	2.54E-05	6.29E-05	2.61E-05	7.7658E-02
520394.87	4258702.77	383280.803	0.38378	0.27957	0.37241	0.29641	7.68E-02	1.57E-05	1.00E-05	1.52E-05	1.02E-05	7.6808E-02
520355.32	4258732.84	382917.3022	0.48694	0.30754	0.47163	0.32819	7.67E-02	1.99E-05	1.10E-05	1.93E-05	1.13E-05	7.6746E-02
520236.53	4258743.03	382285.2374	1.12206	0.539	1.05818	0.57776	7.66E-02	4.59E-05	1.93E-05	4.33E-05	1.98E-05	7.6686E-02
520315.73	4258742.9	379516.2051	0.6214	0.357	0.59862	0.38323	7.60E-02	2.54E-05	1.28E-05	2.45E-05	1.32E-05	7.6079E-02
520226.63	4258743.05	377159.099	1.23258	0.57048	1.15802	0.61121	7.55E-02	5.05E-05	2.04E-05	4.74E-05	2.10E-05	7.5671E-02
520325.63	4258742.89	372767.896	0.58501	0.34135	0.56444	0.36601	7.47E-02	2.40E-05	1.22E-05	2.31E-05	1.26E-05	7.4724E-02
520216.72	4258743.07	369290.478	1.36068	0.60388	1.2729	0.64707	7.40E-02	5.57E-05	2.16E-05	5.21E-05	2.22E-05	7.4107E-02
520187.01	4258733.12	367383.6721	1.86951	0.75494	1.7206	0.81017	7.36E-02	7.65E-05	2.70E-05	7.04E-05	2.78E-05	7.3775E-02
520107.12	4258664.6	364666.488	8.58552	2.58252	7.30115	2.52874	7.30E-02	3.52E-04	9.24E-05	2.99E-04	8.68E-05	7.3859E-02
520365.22	4258732.82	364491.551	0.46206	0.29545	0.44773	0.31478	7.30E-02	1.89E-05	1.06E-05	1.83E-05	1.08E-05	7.3053E-02
520335.53	4258742.87	363255.4372	0.55134	0.32663	0.53264	0.34978	7.27E-02	2.26E-05	1.17E-05	2.18E-05	1.20E-05	7.2815E-02
520117.12	4258673.87	358682.5779	6.27831	2.08017	5.44927	2.10424	7.18E-02	2.57E-04	7.44E-05	2.23E-04	7.22E-05	7.2458E-02
520206.82	4258743.08	357457.2179	1.50677	0.63879	1.40259	0.68501	7.16E-02	6.17E-05	2.28E-05	5.74E-05	2.35E-05	7.1751E-02
520142.99	4258697.3	357304.0426	3.5693	1.30295	3.14066	1.38187	7.16E-02	1.46E-04	4.66E-05	1.29E-04	4.74E-05	7.1924E-02
520127.12	4258683.15	356214.8165	4.97931	1.70276	4.27691	1.76981	7.13E-02	2.04E-04	6.09E-05	1.75E-04	6.08E-05	7.1838E-02
520385.01	4258722.79	354960.1158	0.41245	0.27924	0.40003	0.2964	7.11E-02	1.69E-05	9.99E-06	1.64E-05	1.02E-05	7.1139E-02
520345.44	4258742.85	351174.4886	0.52041	0.31286	0.50328	0.33457	7.03E-02	2.13E-05	1.12E-05	2.06E-05	1.15E-05	7.0392E-02
520276.15	4258752.97	350226.7969	0.82382	0.42162	0.78592	0.45238	7.01E-02	3.37E-05	1.51E-05	3.22E-05	1.55E-05	7.0234E-02
520286.05	4258752.95	349840.2368	0.76761	0.40127	0.73414	0.43073	7.01E-02	3.14E-05	1.44E-05	3.01E-05	1.48E-05	7.0151E-02
520266.25	4258752.98	349714.4292	0.8874	0.44361	0.84432	0.47567	7.00E-02	3.63E-05	1.59E-05	3.46E-05	1.63E-05	7.0138E-02
520295.95	4258752.94	348899.204	0.71784	0.38263	0.68827	0.41072	6.99E-02	2.94E-05	1.37E-05	2.82E-05	1.41E-05	6.9957E-02
520256.34	4258753	348163.1831	0.95986	0.46728	0.91064	0.50068	6.97E-02	3.93E-05	1.67E-05	3.73E-05	1.72E-05	6.9835E-02
520097.12	4258646.05	347956.3173	11.65187	3.77005	10.63734	3.54717	6.97E-02	4.77E-04	1.35E-04	4.36E-04	1.22E-04	7.0852E-02
520305.85	4258752.92	345341.9954	0.67218	0.36519	0.64593	0.39188	6.92E-02	2.75E-05	1.31E-05	2.64E-05	1.35E-05	6.9240E-02
520246.44	4258753.02	345010.8408	1.04171	0.49242	0.98527	0.52729	6.91E-02	4.27E-05	1.76E-05	4.03E-05	1.81E-05	6.9212E-02
520177.1	4258733.13	344232.1051	2.13034	0.80545	1.94512	0.86335	6.89E-02	8.72E-05	2.88E-05	7.96E-05	2.96E-05	6.9162E-02
520196.92	4258743.1	343214.1268	1.68112	0.67672	1.5561	0.72611	6.87E-02	6.88E-05	2.42E-05	6.37E-05	2.49E-05	6.8915E-02
520097.12	4258655.32	340656.94	11.84468	3.25763	10.70451	3.03674	6.82E-02	4.85E-04	1.17E-04	4.38E-04	1.04E-04	6.9365E-02
520236.54	4258753.03	340539.5144	1.13551	0.51913	1.07039	0.55578	6.82E-02	4.65E-05	1.86E-05	4.38E-05	1.91E-05	6.8326E-02
520375.12	4258732.8	338741.735	0.43783	0.28355	0.42435	0.30163	6.78E-02	1.79E-05	1.01E-05	1.74E-05	1.04E-05	6.7893E-02
520315.75	4258752.9	337567.1678	0.62872	0.34781	0.60503	0.37316	6.76E-02	2.57E-05	1.24E-05	2.48E-05	1.28E-05	6.7678E-02
520355.34	4258742.84	336783.4346	0.49229	0.30014	0.47644	0.32047	6.74E-02	2.02E-05	1.07E-05	1.95E-05	1.10E-05	6.7507E-02
520226.64	4258753.05	335861.3664	1.24752	0.54802	1.1714	0.58689	6.73E-02	5.11E-05	1.96E-05	4.80E-05	2.01E-05	6.7400E-02
520325.65	4258752.89	330900.4631	0.5915	0.33265	0.5701	0.35662	6.63E-02	2.42E-05	1.19E-05	2.33E-05	1.22E-05	6.6339E-02
520216.74	4258753.07	329414.4198	1.37801	0.57874	1.28823	0.62015	6.60E-02	5.64E-05	2.07E-05	5.27E-05	2.13E-05	6.6121E-02
520187.02	4258743.12	326444.1806	1.89284	0.71852	1.74055	0.7707	6.54E-02	7.75E-05	2.57E-05	7.13E-05	2.65E-05	6.5576E-02
520117.12	4258683.15	324716.8062	6.51238	1.89936	5.5032	1.90713	6.50E-02	2.67E-04	6.79E-05	2.25E-04	6.55E-05	6.5654E-02
520335.55	4258752.87	322074.6451	0.55725	0.31843	0.53781	0.34105	6.45E-02	2.28E-05	1.14E-05	2.20E-05	1.17E-05	6.4568E-02
520107.12	4258673.87	321083.8887	8.40645	2.32693	7.38238	2.24471	6.43E-02	3.44E-04	8.32E-05	3.02E-04	7.71E-05	6.5108E-02
520365.24	4258742.82	320208.0844	0.46676	0.28843	0.45197	0.30747	6.41E-02	1.91E-05	1.03E-05	1.85E-05	1.06E-05	6.4185E-02
520206.84	4258753.08	318642.7183	1.52406	0.61073	1.41773	0.65507	6.38E-02	6.24E-05	2.18E-05	5.80E-05	2.25E-05	6.3977E-02
520167.2	4258733.15	318486.6464	2.45598	0.86208	2.22171	0.92062	6.38E-02	1.01E-04	3.08E-05	9.10E-05	3.16E-05	6.4035E-02
520276.16	4258762.97	313868.4802	0.83324	0.40924	0.79438	0.43826	6.29E-02	3.41E-05	1.46E-05	3.25E-05	1.50E-05	6.2953E-02
520266.26	4258762.98	313520.6912	0.89759	0.42988	0.85357	0.46009	6.28E-02	3.68E-05	1.54E-05	3.49E-05	1.58E-05	6.2890E-02
520286.06	4258762.95	313078.043	0.77594	0.38991	0.74151	0.41779	6.27E-02	3.18E-05	1.39E-05	3.04E-05	1.43E-05	6.2789E-02
520097.12	4258664.6	312508.3724	11.80095	2.85555	10.77015	2.63932	6.26E-02	4.83E-04	1.02E-04	4.41E-04	9.06E-05	6.3701E-02
520295.96	4258762.94	312494.4961	0.72614	0.37234	0.69561	0.39906	6.26E-02	2.97E-05	1.33E-05	2.85E-05	1.37E-05	6.2667E-02
520256.36	4258763	311613.6424	0.96948	0.45157	0.91945	0.48313	6.24E-02	3.97E-05	1.62E-05	3.76E-05	1.66E-05	6.2515E-02
520135.92	4258704.38	311567.5546	4.18531	1.32404	3.635	1.38081	6.24E-02	1.71E-04	4.74E-05	1.49E-04	4.74E-05	6.2811E-02
520345.45	4258752.85	311480.473	0.5261	0.30528	0.50829	0.32656	6.24E-02	2.15E-05	1.09E-05	2.08E-05	1.12E-05	6.2443E-02
520314.49	4258473.05	309388.376	0.4091	0.59145	0.40726	0.64915	6.20E-02	1.68E-05	2.12E-05	1.67E-05	2.23E-05	6.2036E-02
520324.28	4258473.08	309380.531	0.3929	0.55447	0.39097	0.60731	6.20E-02	1.61E-05	1.98E-05	1.60E-05	2.08E-05	6.2030E-02
520385.02	4258732.79	309128.6763	0.41544	0.27236	0.40266	0.2893	6.19E-02	1.70E-05	9.74E-06	1.65E-05	9.93E-06	6.1960E-02
520305.87	4258762.92	309021.4444	0.67971	0.35555	0.65248	0.3811	6.19E-02	2.78E-05	1.27E-05	2.67E-05	1.31E-05	6.1966E-02
520246.46	4258763.02	308951.7955	1.05222	0.47477	0.99494	0.50793	6.19E-02	4.31E-05	1.70E-05	4.07E-05	1.74E-05	6.1990E-02
520334.07	4258473.11	308859.1791	0.37762	0.52078	0.37559	0.56927	6.19E-02	1.55E-05	1.86E-05	1.54E-05	1.95E-05	6.1922E-02
520304.7	4258473.02	308781.8041	0.42627	0.63235	0.4245	0.69548	6.18E-02	1.75E-05	2.26E-05	1.74E-05	2.39E-05	6.1919E-02
520158.35	4258729.5	307585.4136	2.82364	0.93886	2.52774	0.9971	6.16E-02	1.16E-04	3.36E-05	1.03E-04	3.42E-05	6.1885E-02
520294.91	4258472.99	307507.9439	0.44459	0.67825	0.44285	0.74746	6.16E-02	1.82E-05	2.43E-05	1.81E-05	2.57E-05	6.1669E-02

520177.12	4258743.13	307433.964	2.15529	0.76532	1.96619	0.81915	6.16E-02	8.82E-05	2.74E-05	8.05E-05	2.81E-05	6.1792E-02
520343.86	4258473.14	307369.3703	0.36323	0.49071	0.36119	0.53516	6.16E-02	1.49E-05	1.76E-05	1.48E-05	1.84E-05	6.1620E-02
520196.94	4258753.1	306508.537	1.7	0.64589	1.57248	0.69295	6.14E-02	6.96E-05	2.31E-05	6.44E-05	2.38E-05	6.1563E-02
520285.12	4258472.96	305923.0394	0.46418	0.72976	0.46237	0.80594	6.13E-02	1.90E-05	2.61E-05	1.89E-05	2.77E-05	6.1357E-02
520236.56	4258763.03	305242.9034	1.14743	0.49943	1.08134	0.53454	6.11E-02	4.70E-05	1.79E-05	4.43E-05	1.84E-05	6.1257E-02
520353.64	4258473.18	304906.1484	0.34956	0.46374	0.34766	0.50442	6.11E-02	1.43E-05	1.66E-05	1.42E-05	1.73E-05	6.1124E-02
520120.79	4258692	304057.1432	5.94848	1.6873	5.04001	1.70436	6.09E-02	2.44E-04	6.04E-05	2.06E-04	5.85E-05	6.1460E-02
520275.33	4258472.93	303845.8375	0.48512	0.7875	0.48306	0.87185	6.08E-02	1.99E-05	2.82E-05	1.98E-05	2.99E-05	6.0947E-02
520315.77	4258762.9	302711.3836	0.6364	0.33922	0.61179	0.3636	6.06E-02	2.61E-05	1.21E-05	2.50E-05	1.25E-05	6.0698E-02
520265.55	4258472.9	301433.2026	0.50759	0.85278	0.50514	0.94681	6.04E-02	2.08E-05	3.05E-05	2.07E-05	3.25E-05	6.0471E-02
520226.66	4258763.05	301251.3709	1.2613	0.52631	1.18384	0.5637	6.03E-02	5.16E-05	1.88E-05	4.85E-05	1.94E-05	6.0468E-02
520411.9	4258689.91	301035.6197	0.34861	0.26683	0.33828	0.28283	6.03E-02	1.43E-05	9.54E-06	1.39E-05	9.71E-06	6.0334E-02
520363.43	4258473.21	300053.3675	0.33664	0.43866	0.3348	0.47603	6.01E-02	1.38E-05	1.57E-05	1.37E-05	1.63E-05	6.0149E-02
520375.14	4258742.8	298699.69	0.4422	0.277	0.42831	0.29484	5.98E-02	1.81E-05	9.91E-06	1.75E-05	1.01E-05	5.9874E-02
520355.35	4258752.84	298671.9701	0.49749	0.293	0.48105	0.313	5.98E-02	2.04E-05	1.05E-05	1.97E-05	1.07E-05	5.9874E-02
520255.76	4258472.87	298393.792	0.53165	0.92636	0.52869	1.03215	5.98E-02	2.18E-05	3.31E-05	2.16E-05	3.54E-05	5.9869E-02
520325.67	4258762.89	296118.0267	0.59816	0.32449	0.57593	0.34765	5.93E-02	2.45E-05	1.16E-05	2.36E-05	1.19E-05	5.9373E-02
520216.76	4258763.07	295750.1791	1.39413	0.55483	1.30253	0.59474	5.92E-02	5.71E-05	1.98E-05	5.33E-05	2.04E-05	5.9379E-02
520245.97	4258472.84	294852.677	0.55746	1.01014	0.55415	1.13019	5.90E-02	2.28E-05	3.61E-05	2.27E-05	3.88E-05	5.9169E-02
520373.22	4258473.24	294038.7965	0.32441	0.41565	0.32263	0.45004	5.89E-02	1.33E-05	1.49E-05	1.32E-05	1.55E-05	5.8942E-02
520149.5	4258725.84	293506.6039	3.28357	1.02766	2.90592	1.08172	5.88E-02	1.34E-04	3.68E-05	1.19E-04	3.71E-05	5.9106E-02
520324.31	4258463.08	292757.9722	0.38593	0.5623	0.38497	0.61518	5.86E-02	1.58E-05	2.01E-05	1.58E-05	2.11E-05	5.8702E-02
520314.52	4258463.05	292651.8782	0.40143	0.60011	0.40051	0.65781	5.86E-02	1.64E-05	2.15E-05	1.64E-05	2.26E-05	5.8684E-02
520187.04	4258753.12	292520.9451	1.91434	0.68489	1.75888	0.73404	5.86E-02	7.84E-05	2.45E-05	7.20E-05	2.52E-05	5.8781E-02
520334.1	4258463.11	292254.7825	0.37132	0.52792	0.37021	0.57656	5.85E-02	1.52E-05	1.89E-05	1.52E-05	1.98E-05	5.8597E-02
520304.73	4258463.02	292020.5697	0.41787	0.64196	0.41688	0.70515	5.85E-02	1.71E-05	2.30E-05	1.71E-05	2.42E-05	5.8562E-02
520343.89	4258463.14	291048.6843	0.35748	0.4969	0.35625	0.54166	5.83E-02	1.46E-05	1.78E-05	1.46E-05	1.86E-05	5.8352E-02
520294.94	4258462.99	290883.374	0.43532	0.68855	0.43413	0.75807	5.83E-02	1.78E-05	2.46E-05	1.78E-05	2.60E-05	5.8340E-02
520107.12	4258683.15	290861.2075	8.83842	2.10028	7.43733	2.01516	5.82E-02	3.62E-04	7.51E-05	3.05E-04	6.92E-05	5.9060E-02
520236.18	4258472.81	290657.2599	0.58527	1.1071	0.58213	1.24422	5.82E-02	2.40E-05	3.96E-05	2.38E-05	4.27E-05	5.8338E-02
520408.97	4258706.94	290326.3214	0.36	0.26211	0.34908	0.27735	5.81E-02	1.47E-05	9.38E-06	1.43E-05	9.52E-06	5.8190E-02
520383.01	4258473.27	289318.9019	0.31291	0.39405	0.31103	0.42588	5.79E-02	1.28E-05	1.41E-05	1.27E-05	1.46E-05	5.7994E-02
520285.15	4258462.96	289266.1503	0.45389	0.74076	0.45236	0.81766	5.79E-02	1.86E-05	2.65E-05	1.85E-05	2.81E-05	5.8021E-02
520353.67	4258463.18	288080.5409	0.34433	0.46911	0.34309	0.51022	5.77E-02	1.41E-05	1.68E-05	1.40E-05	1.75E-05	5.7755E-02
520124.46	4258700.84	287791.9041	5.46281	1.5151	4.65242	1.53607	5.76E-02	2.24E-04	5.42E-05	1.90E-04	5.27E-05	5.8155E-02
520335.57	4258762.87	287744.711	0.56307	0.31067	0.54287	0.33264	5.76E-02	2.31E-05	1.11E-05	2.22E-05	1.14E-05	5.7693E-02
520275.37	4258462.93	287212.9599	0.47366	0.79909	0.47168	0.88478	5.75E-02	1.94E-05	2.86E-05	1.93E-05	3.04E-05	5.7616E-02
520167.22	4258743.15	286402.3925	2.48069	0.81779	2.2428	0.87084	5.74E-02	1.02E-04	2.93E-05	9.18E-05	2.99E-05	5.7609E-02
520206.86	4258763.08	286348.8114	1.54078	0.58452	1.43237	0.62704	5.73E-02	6.31E-05	2.09E-05	5.86E-05	2.15E-05	5.7509E-02
520226.39	4258472.78	286111.8106	0.61498	1.21923	0.61294	1.37703	5.73E-02	2.52E-05	4.36E-05	2.51E-05	4.73E-05	5.7439E-02
520265.58	4258462.9	284685.1689	0.49476	0.86524	0.49241	0.96126	5.70E-02	2.03E-05	3.09E-05	2.02E-05	3.30E-05	5.7116E-02
520365.25	4258752.82	284157.1373	0.47148	0.28169	0.45617	0.30045	5.69E-02	1.93E-05	1.01E-05	1.87E-05	1.03E-05	5.6965E-02
520276.18	4258772.97	283031.5062	0.84253	0.39716	0.80285	0.42461	5.67E-02	3.45E-05	1.42E-05	3.29E-05	1.46E-05	5.6777E-02
520087.12	4258646.05	283013.5226	12.31595	4.06718	18.58445	3.57844	5.67E-02	5.04E-04	1.45E-04	7.61E-04	1.23E-04	5.8211E-02
520266.28	4258772.98	282825.0237	0.90763	0.41643	0.8628	0.44508	5.66E-02	3.72E-05	1.49E-05	3.53E-05	1.53E-05	5.6742E-02
520363.46	4258463.21	282783.7456	0.33183	0.44359	0.3306	0.48138	5.66E-02	1.36E-05	1.59E-05	1.35E-05	1.65E-05	5.6691E-02
520286.08	4258772.95	282097.4704	0.78437	0.37894	0.74909	0.40532	5.65E-02	3.21E-05	1.36E-05	3.07E-05	1.39E-05	5.6584E-02
520255.79	4258462.87	281707.685	0.51729	0.93988	0.51479	1.04838	5.64E-02	2.12E-05	3.36E-05	2.11E-05	3.60E-05	5.6528E-02
520295.98	4258772.94	281385.0976	0.73397	0.36229	0.70254	0.38765	5.64E-02	3.01E-05	1.30E-05	2.88E-05	1.33E-05	5.6436E-02
520256.38	4258773	281346.1068	0.98064	0.43661	0.92975	0.46668	5.63E-02	4.02E-05	1.56E-05	3.81E-05	1.60E-05	5.6453E-02
520216.6	4258472.75	280661.851	0.64685	1.35315	0.64745	1.53474	5.62E-02	2.65E-05	4.84E-05	2.65E-05	5.27E-05	5.6360E-02
520097.12	4258673.87	279503.5641	11.5555	2.53205	10.81178	2.32385	5.60E-02	4.73E-04	9.06E-05	4.43E-04	7.98E-05	5.7061E-02
520246.48	4258773.02	279058.8694	1.06435	0.45804	1.00612	0.48985	5.59E-02	4.36E-05	1.64E-05	4.12E-05	1.68E-05	5.6003E-02
520087.12	4258636.77	278780.6896	12.06758	4.90768	18.62203	4.29346	5.58E-02	4.94E-04	1.76E-04	7.62E-04	1.47E-04	5.7409E-02
520392.8	4258473.3	278682.2932	0.30146	0.37277	0.29946	0.40235	5.58E-02	1.23E-05	1.33E-05	1.23E-05	1.38E-05	5.5862E-02
520345.47	4258762.85	278260.8142	0.53149	0.29799	0.51299	0.31876	5.57E-02	2.18E-05	1.07E-05	2.10E-05	1.09E-05	5.5790E-02
520246	4258462.84	278246.16	0.54133	1.02533	0.53925	1.14862	5.57E-02	2.22E-05	3.67E-05	2.21E-05	3.94E-05	5.5843E-02
520305.88	4258772.92	278160.5985	0.68702	0.34635	0.65894	0.37069	5.57E-02	2.81E-05	1.24E-05	2.70E-05	1.27E-05	5.5786E-02
520373.25	4258463.24	277646.9467	0.32002	0.42011	0.31875	0.45492	5.56E-02	1.31E-05	1.50E-05	1.31E-05	1.56E-05	5.5659E-02
520158.72	4258739.64	277462.8778	2.82169	0.88491	2.52898	0.9364	5.56E-02	1.16E-04	3.17E-05	1.04E-04	3.21E-05	5.5849E-02
520394.92	4258732.77	277030.9398	0.39498	0.26204	0.38276	0.2779	5.55E-02	1.62E-05	9.37E-06	1.57E-05	9.54E-06	5.5530E-02
520087.12	4258655.32	276702.3044	12.56411	3.45081	18.52842	3.04927	5.54E-02	5.14E-04	1.23E-04	7.59E-04	1.05E-04	5.6915E-02
520177.14	4258753.13	276595.2914	2.17715	0.72846	1.98474	0.77824	5.54E-02	8.91E-05	2.61E-05	8.13E-05	2.67E-05	5.5615E-02
520196.96	4258763.1	275708.4444	1.71663	0.61707	1.58692	0.66189	5.52E-02	7.03E-05	2.21E-05	6.50E-05	2.27E-05	5.5394E-02
520236.58	4258773.03	275511.2312	1.15945	0.48051	1.09237	0.51441	5.52E-02	4.75E-05	1.72E-05	4.47E-05	1.77E-05	5.5302E-02
520383.04	4258463.27	275426.5107	0.30893	0.39812	0.30743	0.43041	5.52E-02	1.26E-05	1.42E-05	1.26E-05	1.48E-05	5.5212E-02
520110.64	4258691.64	274769.7589	7.983	1.86847	6.69281	1.80934	5.50E-02	3.27E-04	6.68E-05	2.74E-04	6.21E-05	5.5756E-02
520206.81	4258472.72	274695.927	0.68054	1.51192	0.68543	1.72239	5.50E-02	2.79E-05	5.41E-05	2.81E-05	5.91E-05	5.5181E-02
520236.21	4258462.81	274259.0701	0.56692	1.1244	0.56619	1.26495	5.49E-02	2.32E-05	4.02E-05	2.32E-05	4.34E-05	5.5054E-02
520385.04	4258742.79	274102.0419	0.41932	0.26616	0.40616	0.28287	5.49E-02	1.72E-05	9.52E-06	1.66E-05	9.71E-06	5.4946E-02
520315.78	4258772.9	273086.3503	0.64383	0.33096	0.61843	0.35429	5.47E-02	2.64E-05	1.18E-05	2.53E-05	1.22E-05	5.4765E-02
520226.68	4258773.05	272257.0151	1.27559	0.50576	1.19673	0.54191	5.45E-02	5.22E-05	1.81E-05	4.90E-05	1.86E-05	5.4661E-02
520226.42	4258462.78	269761.4276	0.5941	1.23954	0.59577	1.40085	5.40E-02	2.43E-05	4.43E-05	2.44E-05	4.81E-05	5.4165E-02
520197.03	4258472.69	268126.0373	0.71572	1.70184	0.72647	1.94878	5.37E-02	2.93E-05	6.09E-05	2.97E-05	6.69E-05	5.3883E-02
520216.77	4258773.07	267204.2347	1.40914	0.53231	1.3158	0.57082	5.35E-02	5.77E-05	1.90E-05	5.39E-05	1.96E-05	5.3662E-02
520150.22	4258736.13	266751.1142	3.24743	0.96146	2.88296	1.00781	5.34E-02	1.33E-04	3.44E-05	1.18E-04	3.46E-05	5.3741E-02
520355.37	4258762.84	266747.0139	0.50227	0.28605	0.48521	0.30565	5.34E-02	2.06E-05	1.02E-05	1.99E-05	1.05E-05	5.3481E-02
520325.68	4258772.89	266699.392	0.6047	0.31669	0.58166	0.33898	5.34E-02	2.48E-05	1.13E-05	2.38E-05	1.16E-05	5.3482E-02
520343.92	4258453.14	266266.6656	0.35164	0.50334	0.35122	0.54809	5.33E-02	1.44E-05	1.80E-05	1.44E-05	1.88E-05	5.3389E-02
520402.59	4258473.33	266153.5945	0.2911	0.35503	0.28913	0.38244	5.33E-02	1.19E-05	1.27E-05	1.18E-05	1.31E-05	5.3350E-02
520375.16	4258752.8	265915.2296	0.44653	0.27068	0.43217	0.28827	5.33E-02	1.83E-05	9.68E-06	1.77E-05	9.90E-06	5.3309E-02
520392.83	4258463.3	265844.8651	0.29798	0.37658	0.29628	0.40661	5.32E-02	1.22E-05	1.35E-05	1.21E-05	1.40E-05	5.3291E-02
520216.63	4258462.75	264630.2358	0.62262	1.37672	0.62815	1.56159	5.30E-02	2.55E-05	4.92E-05	2.57E-05	5.36E-05	5.3150E-02
520187.06	4258763.12	263888.1242	1.93265	0.65366	1.77452	0.69983	5.28E-02	7.91E-05	2.34E-05	7.27E-05	2.40E-05	5.3046E-02
520353.71	4258453.18	262862.6688	0.33899	0.47476	0.33853	0.51597	5.26E-02	1.39E-05	1.70E-05	1.39E-05	1.77E-05	5.2704E-02
520114.16	4258700.13	261162.3457	7.24378	1.67766	6.08165	1.63611	5.23E-02	2.97E-04	6.00E-05	2.49E-04	5.62E-05	5.2963E-02
520187.24	4258472.66	260427.5878	0.75188	1.93561	0.76986	2.22636	5.22E-02	3.08E-05	6.92E-05	3.15E-05	7.64E-05	5.2362E-02
520335.58	4258772.87	259144.4665	0.56913	0.30342	0.54817	0.32464	5.19E-02	2.33E-05	1.09E-05	2.24E-05	1.11E-05	5.1965E-02
520206.87	4258773.08	259050.9688	1.55684	0.56011	1.44638	0.60083	5.19E-02	6.37E-05	2.00E-05	5.92E-05	2.06E-05	5.2042E-02
520363.49	4258453.21	258977.3742	0.32698	0.44862	0.32645	0.48664	5.19E-02	1.34E-05	1.60E-05	1.34E-05	1.67E-05	5.1923E-02
520206.85	4258462.72	258866.4044	0.65224	1.53977	0.6628	1.75299	5.18E-02	2.67E-05	5.51E-05	2.71E-05	6.02E-05	5.2011E-02
520087.12	4258664.6	258363.6032	12.74651	2.981	18.45586	2.64286	5.17E-02	5.22E-04	1.07E-04	7.56E-04	9.07E-05	5.3216E-02
520276.2	4258782.97	256676.296	0.85189	0.38539	0.81148	0.41149	5.14E-02	3.49E-05	1.38E-05	3.32E-05	1.41E-05	5.1499E-02
520141.73	4258732.63	256623.9795	3.83162	1.05025	3.35374	1.08578	5.14E-02	1.57E-04	3.76E-05	1.37E-04	3.73E-05	5.1761E-02
520266.3	4258782.98	256470.7656	0.91741	0.40324	0.87187	0.43061	5.14E-02	3.76E-05	1.44E-05	3.57E-05	1.48E-05	5.1464E-02
520286.1	4258782.95	255805.192	0.79317	0.36835	0.75714	0.39339	5.12E-02	3.25E-05	1.32E-05	3.10E-05	1.35E-05	5.1319E-02
520402.62	4258463.33	255598.8879	0.2879	0.35852	0.28618	0.38632	5.12E-02	1.18E-05	1.28E-05	1.17E-05	1.33E-05	5.1237E-02
520256.39	4258783	255383.1981	0.99169	0.42204	0.94	0.45097	5.11E-02	4.06E-05	1.51E-05	3.85E-05	1.55E-05	5.1254E-02
520296	4258782.94	254762.9701	0.74166	0.35254	0.70949	0.37661	5.10E-02	3.04E-05	1.26E-05	2.90E-05	1.29E-05	5.1105E-02
520373.28	4258453.24	254623.1671	0.31558	0.42463	0.31492	0.45975	5.10E-02	1.29E-05	1.52E-05	1.29E-05	1.58E-05	5.1049E-02
520246.49	4258783.02	253428.8549	1.07633	0.44189	1.01717	0.47267	5.08E-02	4.41E-05	1.58E-05	4.16E-05	1.62E-05	5.0870E-02
520097.12	4258683.15	253416.173	12.10931	2.26049	10.86067	2.07137	5.08E-02	4.96E-04	8.09E-05	4.45E-04	7.11E-05	5.1842E-02
520365.27	4258762.82	253285.2267	0.47519	0.27482	0.45935	0.29328	5.07E-02	1.95E-05	9.83E-06	1.88E-05	1.01E-05	5.0782E-02
520158.97	4258749.74	252598.3106	2.83966	0.83794	2.54412	0.88279	5.06E-02	1.16E-04	3.00E-05	1.04E-04	3.03E-05	5.0867E-02
520197.06	4258462.69	252291.6997	0.68262	1.73545	0.69883	1.98428	5.05E-02	2.79E-05	6.21E-05	2.86E-05	6.81E-05	5.0712E-02
520168.27	4258756.76	252093.1011	2.47285	0.75827	2.23646	0.8046	5.05E-02	1.01E-04	2.71E-05	9.16E-05	2.76E-05	5.0733E-02
520421.9	4258689.97	251744.1056	0.33274	0.25629	0.32273	0.27138	5.04E-02	1.36E-05	9.17E-06	1.32E-05	9.32E-06	5.0461E-02
520305.9	4258782.92	251702.0506	0.69403	0.3374	0.6652	0.36056	5.04E-02	2.84E-05	1.21E-05	2.72E-05	1.24E-05	5.0487E-02
520177.45	4258472.63	251409.8641	0.78793	2.22526	0.81346	2.56992	5.03E-02	3.23E-05	7.96E-05	3.33E-05	8.82E-05	5.0582E-02
520412.38	4258473.36	250663.1889	0.2812	0.33854	0.27923	0.36398	5.02E-02	1.15E-05	1.21E-05	1.14E-05	1.25E-05	5.0246E-02
520177.15	4258763.13	250529.6518	2.19726	0.69461	2.0017	0.74042	5.02E-02	9.00E-05	2.48E-05	8.20E-05	2.54E-05	5.0394E-02
520345.49	4258772.85	250493.5783	0.53688	0.2911	0.51768	0.31126	5.02E-02	2.20E-05	1.04E-05	2.12E-05	1.07E-05	5.0229E-02
520236.59	4258783.03	250375.0473	1.17258	0.46282	1.10432	0.4957	5.01E-02	4.80E-05	1.66E-05	4.52E-05	1.70E-05	5.0268E-02
520196.97	4258773.1	249691.0664	1.73257	0.59042	1.60063	0.63293	5.00E-02	7.09E-05	2.11E-05	6.55E-05	2.17E-05	5.0183E-02
520394.94	4258742.77	248131.206	0.39856	0.25623	0.38599	0.27189	4.97E-02	1.63E-05	9.16E-06	1.58E-05	9.33E-06	4.9742E-02
520226.69	4258783.05	247488.3872	1.2898	0.48642	1.20948	0.52142	4.96E-02	5.28E-05	1.74E-05	4.95E-05	1.79E-05	4.9701E-02
520315.8	4258782.9	247326.6836	0.6505	0.32281	0.62439	0.34507	4.95E-02	2.66E-05	1.15E-05	2.56E-05	1.18E-05	4.9606E-02
520416.03	4258714.03	245546.9875	0.35091	0.2519	0.34006	0.26619	4.92E-02	1.44E-05	9.01E-06	1.39E-05	9.14E-06	4.9221E-02
520409	4258726.94	245313.165	0.36732	0.25203	0.35587	0.2666	4.91E-02	1.50E-05	9.01E-06	1.46E-05	9.15E-06	4.9175E-02
520385.06	4258752.79	245159.6552	0.42313	0.26012	0.40956	0.27664	4.91E-02	1.73E-05	9.30E-06	1.68E-05	9.50E-06	4.9149E-02
520187.27	4258462.66	244788.8737	0.71282	1.97383	0.73481	2.26647	4.90E-02	2.92E-05	7.06E-05	3.01E-05	7.78E-05	4.9230E-02
520412.41	4258463.36	242978.2668	0.27828	0.34184	0.27654	0.36759	4.87E-02	1.14E-05	1.22E-05	1.13E-05	1.26E-05	4.8707E-02
520216.79	4258783.07	242787.2272	1.42308	0.51119	1.32805	0.54828	4.86E-02	5.83E-05	1.83E-05	5.44E-05	1.88E-05	4.8771E-02
520325.7	4258782.89	241450.8261	0.61084	0.30912	0.58709	0.33048	4.84E-02	2.50E-05	1.11E-05	2.40E-05	1.13E-05	4.8425E-02
520324.37	4258443.08	241223.2356	0.37195	0.57686	0.37164	0.62995	4.83E-02	1.52E-05	2.06E-05	1.52E-05	2.16E-05	4.8381E-02
520167.66	4258472.59	241140.7983	0.82249	2.58344	0.85457	3.00397	4.83E-02	3.37E-05	9.24E-05	3.50E-05	1.03E-04	4.8556E-02
520314.58	4258443.05	241009.1733	0.38607	0.61572	0.38544	0.67405	4.83E-02	1.58E-05	2.20E-05	1.58E-05	2.31E-05	4.8342E-02
520334.16	4258443.11	240904.8753	0.35857	0.54146	0.35845	0.59009	4.82E-02	1.47E-05	1.94E-05	1.47E-05	2.03E-05	4.8313E-02
520355.39	4258772.84	240272.4157	0.5072	0.27954	0.48948	0.29865	4.81E-02	2.08E-05	1.00E-05	2.00E-05	1.03E-05	4.8179E-02
520343.95	4258443.14	240008.861	0.34581	0.50959	0.34585	0.55425	4.81E-02	1.42E-05	1.82E-05	1.42E-05	1.90E-05	4.8131E-02
520187.07	4258773.12	239428.0909	1.94813	0.62463	1.78773	0.66779	4.79E-02	7.98E-05	2.23E-05	7.32E-05	2.29E-05	4.8147E-02
520295.01	4258442.99	239152.214	0.41672	0.70592	0.41535	0.77776	4.79E-02	1.71E-05	2.52E-05	1.70E-05	2.67E-05	4.7980E-02
520375.17	4258762.8	238062.0925	0.45019	0.26429	0.43534	0.28165	4.77E-02	1.84E-05	9.45E-06	1.78E-05	9.67E-06	4.7731E-02
520285.22	4258442.96	237575.2974	0.43336	0.75904	0.43185	0.83938	4.76E-02	1.77E-05	2.71E-05	1.77E-05	2.88E-05	4.7669E-02
520087.12	4258673.87	236446.3864	12.85658	2.6129	18.37158	2.32301	4.74E-02	5.26E-04	9.35E-05	7.52E-04	7.98E-05	4.8803E-02
520353.74	4258443.18	236268.6616	0.33357	0.4807	0.3338	0.5217	4.73E-02	1.37E-05	1.72E-05	1.37E-05	1.79E-05	4.7378E-02
520142.45	4258742.92	236238.9639	3.81046	0.98381	3.33999	1.01135	4.73E-02	1.56E-04	3.52E-05	1.37E-04	3.47E-05	4.7673E-02
520177.48	4258462.63	236179.818	0.74183	2.26684	0.76908	2.61455	4.73E-02	3.04E-05	8.11E-05	3.15E-05	8.98E-05	4.7531E-02
520206.89	4258783.08	235761.4634	1.5723	0.53741	1.45975	0.57633	4.72E-02	6.44E-05	1.92E-05	5.98E-05	1.98E-05	4.7378E-02
520275.43	4258442.93	235583.6796	0.45095	0.81889	0.44968	0.90908	4.72E-02	1.85E-05	2.93E-05	1.84E-05	3.12E-05	4.7276E-02
520335.6	4258782.87	234839.5472	0.57503	0.29643	0.55335	0.31687	4.70E-02	2.35E-05	1.06E-05	2.27E-05	1.09E-05	4.7098E-02
520103.97	4258699.66	233834.4791	9.93242	1.8214	8.39205	1.70369	4.68E-02	4.07E-04	6.51E-05	3.44E-04	5.85E-05	4.7702E-02
520266.31	4258792.98	233803.0397	0.92743	0.39044	0.88119	0.41683	4.68E-02	3.80E-05	1.40E-05	3.61E-05	1.43E-05	4.6925E-02
520363.53	4258443.21	233771.3798	0.32207	0.45387	0.32219	0.49182	4.68E-02	1.32E-05	1.62E-05	1.32E-05	1.69E-05	4.6875E-02
520276.21	4258792.97	233694.8542	0.86063	0.37373	0.81961	0.39873	4.68E-02	3.52E-05	1.34E-05	3.36E-05	1.37E-05	4.6896E-02
520265.64	4258442.9	233179.6908	0.46951	0.88695	0.46905	0.98842	4.67E-02	1.92E-05	3.17E-05	1.92E-05	3.39E-05	4.6802E-02
520286.11	4258792.95	232953.0811	0.80159	0.35789	0.76493	0.38178	4.67E-02	3.28E-05	1.28E-05	3.13E-05	1.31E-05	4.6742E-02
520403.39	4258739.27	232943.7265	0.38078	0.25008	0.36874	0.26497	4.67E-02	1.56E-05	8.95E-06	1.51E-05	9.10E-06	4.6699E-02
520422.16	4258473.39	232829.0632	0.27168	0.32303	0.26967	0.34671	4.66E-02	1.11E-05	1.16E-05	1.10E-05	1.19E-05	4.6673E-02
520256.41	4258793	232768.9396	1.00186	0.40774	0.94943	0.4358	4.66E-02	4.10E-05	1.46E-05	3.89E-05	1.50E-05	4.6725E-02
520296.01	4258792.94	231797.9577	0.7492	0.34303	0.71644	0.36593	4.64E-02	3.07E-05	1.23E-05	2.93E-05	1.26E-05	4.6506E-02
520246.51	4258793.02	230914.2593	1.08642	0.42603	1.02646	0.45598	4.62E-02	4.45E-05	1.52E-05	4.20E-05	1.57E-05	4.6361E-02
520159.16	4258759.81	230587.4727	2.85039	0.79497	2.55429	0.83382	4.62E-02	1.17E-04	2.84E-05	1.05E-04	2.86E-05	4.6457E-02
520255.85	4258442.87	230341.5274	0.48905	0.96474	0.49007	1.07913	4.61E-02	2.00E-05	3.45E-05	2.01E-05	3.70E-05	4.6241E-02
520373.31	4258443.24	230013.8374	0.31109	0.42939	0.31108	0.46455	4.61E-02	1.27E-05	1.54E-05	1.27E-05	1.59E-05	4.6120E-02
520157.87	4258472.56	229140.277	0.85374	3.03701	0.8927	3.56187	4.59E-02	3.50E-05	1.09E-04	3.66E-05	1.22E-04	4.6191E-02
520305.92	4258792.92	228842.1676	0.70076	0.32862	0.67128	0.35066	4.58E-02	2.87E-05	1.18E-05	2.75E-05	1.20E-05	4.5909E-02
520236.61	4258793.03	228491.5316	1.18452	0.44589	1.11517	0.47783	4.58E-02	4.85E-05	1.59E-05	4.57E-05	1.64E-05	4.5885E-02
520365.29	4258772.82	228327.6826	0.47952	0.26858	0.46309	0.28666	4.57E-02	1.96E-05	9.61E-06	1.90E-05	9.84E-06	4.5784E-02
520177.17	4258773.13	228256.5295	2.21527	0.66344	2.01675	0.70527	4.57E-02	9.07E-05	2.37E-05	8.26E-05	2.42E-05	4.5933E-02
520196.99	4258783.1	227712.5389	1.75002	0.56616	1.61535	0.6063	4.56E-02	7.17E-05	2.03E-05	6.61E-05	2.08E-05	4.5781E-02
520422.2	4258463.39	227705.8089	0.269	0.32608	0.26722	0.35	4.56E-02	1.10E-05	1.17E-05	1.09E-05	1.20E-05	4.5647E-02
520246.06	4258442.84	227052.7191	0.50951	1.05432	0.51275	1.18354	4.55E-02	2.09E-05	3.77E-05	2.10E-05	4.06E-05	4.5591E-02
520345.5	4258782.85	226910.6315	0.54213	0.28449	0.52224	0.304	4.54E-02	2.22E-05	1.02E-05	2.14E-05	1.04E-05	4.5506E-02
520167.69	4258462.59	226238.5309	0.76877	2.62853	0.80065	3.0537	4.53E-02	3.15E-05	9.40E-05	3.28E-05	1.05E-04	4.5570E-02
520226.71	4258793.05	225764.1542	1.30163	0.46798	1.22008	0.50184	4.52E-02	5.33E-05	1.67E-05	5.00E-05	1.72E-05	4.5350E-02
520315.82	4258792.9	224130.7746	0.65586	0.31449	0.62901	0.33572	4.49E-02	2.69E-05	1.12E-05	2.58E-05	1.15E-05	4.4961E-02
520394.96	4258752.77	223767.045	0.40208	0.25056	0.38913	0.26605	4.48E-02	1.65E-05	8.96E-06	1.59E-05	9.13E-06	4.4863E-02
520236.27	4258442.81	223291.0252	0.53079	1.15843	0.53698	1.30468	4.47E-02	2.17E-05	4.14E-05	2.20E-05	4.48E-05	4.4847E-02
520392.89	4258443.3	221798.9432	0.2908	0.38462	0.29005	0.41532	4.44E-02	1.19E-05	1.38E-05	1.19E-05	1.43E-05	4.4470E-02
520216.81	4258793.07	221662.4421	1.436	0.49141	1.33936	0.52708	4.44E-02	5.88E-05	1.76E-05	5.48E-05	1.81E-05	4.4540E-02
520385.07	4258762.79	221118.3891	0.42697	0.25436	0.41294	0.27067	4.43E-02	1.75E-05	9.10E-06	1.69E-05	9.29E-06	4.4335E-02
520426.01	4258704.08	220862.7594	0.3315	0.24669	0.32114	0.26063	4.42E-02	1.36E-05	8.82E-06	1.31E-05	8.95E-06	4.4275E-02
520226.49	4258442.78	219018.0638	0.55269	1.27989	0.56239	1.44609	4.39E-02	2.26E-05	4.58E-05	2.30E-05	4.96E-05	4.4002E-02
520325.72	4258792.89	218891.2945	0.61568	0.30145	0.59127	0.32185	4.38E-02	2.52E-05	1.08E-05	2.42E-05	1.10E-05	4.3907E-02
520187.09	4258783.12	218757.3466	1.96588	0.59838	1.80244	0.63844	4.38E-02	8.05E-05	2.14E-05	7.38E-05	2.19E-05	4.4007E-02
520355.4	4258782.84	217930.9565	0.5121	0.27335	0.49373	0.29192	4.36E-02	2.10E-05	9.78E-06	2.02E-05	1.00E-05	4.3705E-02
520142.97	4258753.13	217463.9697	3.79356	0.9257	3.33086	0.94615	4.36E-02	1.55E-04	3.31E-05	1.36E-04	3.25E-05	4.3907E-02
520324.4	4258433.08	217204.7836	0.36503	0.58297	0.36442	0.63679	4.35E-02	1.49E-05	2.09E-05	1.49E-05	2.19E-05	4.3571E-02
520334.19	4258433.11	216985.9437	0.35223	0.54727	0.35193	0.5963	4.35E-02	1.44E-05	1.96E-05	1.44E-05	2.05E-05	4.3523E-02
520314.61	4258433.05	216942.0134	0.37848	0.62238	0.37759	0.68177	4.34E-02	1.55E-05	2.23E-05	1.55E-05	2.34E-05	4.3522E-02
520411.84	4258735.77	216446.8957	0.36466	0.24449	0.35306	0.25863	4.33E-02	1.49E-05	8.75E-06	1.45E-05	8.88E-06	4.3393E-02
520343.98	4258433.14	216272.2938	0.33999	0.51552	0.34005	0.56023	4.33E-02	1.39E-05	1.84E-05	1.39E-05	1.92E-05	4.3377E-02
520167.27	4258773.15	216191.532	2.5482	0.70685	2.29926	0.74437	4.33E-02	1.04E-04	2.53E-05	9.41E-05	2.56E-05	4.3545E-02
520087.12	4258683.15	216011.222	14.7983	2.31685	18.28647	2.06507	4.33E-02	6.06E-04	8.29E-05	7.49E-04	7.09E-05	4.4768E-02
520206.91	4258793.08	215451.7602	1.5854	0.51609	1.4711	0.5532	4.31E-02	6.49E-05	1.85E-05	6.02E-05	1.90E-05	4.3310E-02
520295.04	4258432.99	215024.443	0.40759	0.71318	0.40645	0.78698	4.31E-02	1.67E-05	2.55E-05	1.66E-05	2.70E-05	4.3147E-02
520375.19	4258772.8	214824.5348	0.45377	0.25819	0.4384	0.27526	4.30E-02	1.86E-05	9.24E-06	1.79E-05	9.45E-06	4.3077E-02
520157.9	4258462.56	214683.9316	0.79189	3.08685	0.8307	3.61551	4.30E-02	3.24E-05	1.10E-04	3.40E-05	1.24E-04	4.3294E-02
520216.7	4258442.75	214173.0169	0.57494	1.42304	0.58844	1.61302	4.29E-02	2.35E-05	5.09E-05	2.41E-05	5.54E-05	4.3045E-02

520148.08	4258472.53	214158.7477	0.87805	3.61933	0.92759	4.29585	4.29E-02	3.60E-05	1.29E-04	3.80E-05	1.47E-04	4.3239E-02
520431.9	4258690.02	214080.6618	0.31853	0.24697	0.30884	0.26121	4.29E-02	1.30E-05	8.83E-06	1.26E-05	8.97E-06	4.2916E-02
520402.68	4258443.33	214077.0715	0.28121	0.36553	0.2803	0.39405	4.29E-02	1.15E-05	1.31E-05	1.15E-05	1.35E-05	4.2921E-02
520266.33	4258802.98	213740.7791	0.93603	0.3777	0.88919	0.40336	4.28E-02	3.83E-05	1.35E-05	3.64E-05	1.38E-05	4.2907E-02
520431.95	4258473.42	213557.8253	0.26262	0.30869	0.26057	0.33076	4.28E-02	1.08E-05	1.10E-05	1.07E-05	1.14E-05	4.2812E-02
520276.23	4258802.97	213446.4269	0.86832	0.36209	0.82678	0.38626	4.27E-02	3.56E-05	1.30E-05	3.39E-05	1.33E-05	4.2841E-02
520285.25	4258432.96	213441.1795	0.42328	0.7668	0.42252	0.84945	4.27E-02	1.73E-05	2.74E-05	1.73E-05	2.92E-05	4.2836E-02
520335.62	4258792.87	213154.6843	0.57976	0.28938	0.55742	0.30897	4.27E-02	2.37E-05	1.04E-05	2.28E-05	1.06E-05	4.2755E-02
520353.77	4258433.18	212840.5526	0.32816	0.4865	0.32868	0.5273	4.26E-02	1.34E-05	1.74E-05	1.35E-05	1.81E-05	4.2687E-02
520256.43	4258803	212799.6083	1.01055	0.39372	0.95747	0.42108	4.26E-02	4.14E-05	1.41E-05	3.92E-05	1.45E-05	4.2725E-02
520286.13	4258802.95	212483.1326	0.80825	0.34726	0.77113	0.37019	4.26E-02	3.31E-05	1.24E-05	3.16E-05	1.27E-05	4.2642E-02
520296.03	4258802.94	211715.2387	0.75628	0.33358	0.72299	0.35547	4.24E-02	3.10E-05	1.19E-05	2.96E-05	1.22E-05	4.2484E-02
520275.46	4258432.93	211392.3176	0.43976	0.82738	0.43986	0.92014	4.23E-02	1.80E-05	2.96E-05	1.80E-05	3.16E-05	4.2431E-02
520246.53	4258803.02	211116.0914	1.09511	0.4107	1.03444	0.43987	4.23E-02	4.48E-05	1.47E-05	4.24E-05	1.51E-05	4.2396E-02
520158.16	4258769.39	210946.5181	2.9192	0.76407	2.61193	0.79631	4.22E-02	1.20E-04	2.73E-05	1.07E-04	2.73E-05	4.2526E-02
520363.56	4258433.21	210907.3024	0.31713	0.45922	0.31765	0.49697	4.22E-02	1.30E-05	1.64E-05	1.30E-05	1.71E-05	4.2297E-02
520114.24	4258724.43	210876.955	7.37375	1.3774	6.20592	1.31766	4.22E-02	3.02E-04	4.93E-05	2.54E-04	4.52E-05	4.2881E-02
520431.98	4258463.42	210554.9306	0.26019	0.31163	0.25838	0.33387	4.22E-02	1.07E-05	1.11E-05	1.06E-05	1.15E-05	4.2210E-02
520265.67	4258432.9	209118.5107	0.45712	0.8971	0.4587	1.00122	4.19E-02	1.87E-05	3.21E-05	1.88E-05	3.44E-05	4.1983E-02
520236.63	4258803.03	209053.606	1.1939	0.42946	1.12368	0.46047	4.19E-02	4.89E-05	1.54E-05	4.60E-05	1.58E-05	4.1992E-02
520177.19	4258783.13	209003.0659	2.23167	0.6347	2.03036	0.67263	4.19E-02	9.14E-05	2.27E-05	8.31E-05	2.31E-05	4.2076E-02
520305.93	4258802.92	208960.6583	0.70728	0.32002	0.67727	0.34104	4.18E-02	2.90E-05	1.14E-05	2.77E-05	1.17E-05	4.1927E-02
520423.08	4258721.11	208727.7454	0.34177	0.24207	0.33093	0.25552	4.18E-02	1.40E-05	8.66E-06	1.35E-05	8.77E-06	4.1846E-02
520206.91	4258442.72	208708.8656	0.59705	1.59306	0.61427	1.81164	4.18E-02	2.44E-05	5.70E-05	2.52E-05	6.22E-05	4.1966E-02
520197.01	4258793.1	208512.9188	1.76477	0.54344	1.62783	0.58119	4.18E-02	7.23E-05	1.94E-05	6.67E-05	2.00E-05	4.1936E-02
520373.35	4258433.24	207710.5792	0.30655	0.43428	0.30705	0.46927	4.16E-02	1.26E-05	1.55E-05	1.26E-05	1.61E-05	4.1654E-02
520365.3	4258782.82	207489.7631	0.48412	0.26279	0.46705	0.28042	4.16E-02	1.98E-05	9.40E-06	1.91E-05	9.63E-06	4.1611E-02
520226.73	4258803.05	206564.5714	1.31089	0.45032	1.22841	0.48309	4.14E-02	5.37E-05	1.61E-05	5.03E-05	1.66E-05	4.1504E-02
520255.88	4258432.87	206349.1248	0.47518	0.97679	0.4788	1.09379	4.13E-02	1.95E-05	3.49E-05	1.96E-05	3.76E-05	4.1436E-02
520345.52	4258792.85	206066.8463	0.54641	0.27788	0.52589	0.29664	4.13E-02	2.24E-05	9.94E-06	2.15E-05	1.02E-05	4.1332E-02
520093.83	4258699.33	205898.5203	13.79158	1.91017	12.67456	1.72941	4.12E-02	5.65E-04	6.83E-05	5.19E-04	5.94E-05	4.2445E-02
520412.47	4258443.36	204975.2615	0.2721	0.3481	0.27103	0.37458	4.10E-02	1.11E-05	1.25E-05	1.11E-05	1.29E-05	4.1097E-02
520149.06	4258765.63	204575.5117	3.3925	0.82859	3.00749	0.85155	4.10E-02	1.39E-04	2.96E-05	1.23E-04	2.92E-05	4.1290E-02
520315.83	4258802.9	203792.3235	0.66007	0.30613	0.63274	0.32637	4.08E-02	2.70E-05	1.09E-05	2.59E-05	1.12E-05	4.0887E-02
520216.82	4258803.07	203255.2472	1.44832	0.47297	1.35013	0.50718	4.07E-02	5.93E-05	1.69E-05	5.53E-05	1.74E-05	4.0854E-02
520394.97	4258762.77	203214.8005	0.40563	0.24514	0.39227	0.26045	4.07E-02	1.66E-05	8.77E-06	1.61E-05	8.94E-06	4.0747E-02
520246.09	4258432.84	203127.0727	0.49386	1.06829	0.50005	1.20013	4.07E-02	2.02E-05	3.82E-05	2.05E-05	4.12E-05	4.0799E-02
520197.12	4258442.69	202538.6745	0.61856	1.79595	0.63886	2.05024	4.06E-02	2.53E-05	6.42E-05	2.62E-05	7.04E-05	4.0747E-02
520148.11	4258462.53	200932.1458	0.80881	3.67784	0.8592	4.35665	4.02E-02	3.31E-05	1.32E-04	3.52E-05	1.50E-04	4.0589E-02
520187.11	4258793.12	200787.8364	1.98234	0.57412	1.81606	0.61108	4.02E-02	8.12E-05	2.05E-05	7.44E-05	2.10E-05	4.0408E-02
520385.09	4258772.79	200559.1487	0.43046	0.24868	0.41595	0.26476	4.02E-02	1.76E-05	8.89E-06	1.70E-05	9.09E-06	4.0217E-02
520392.92	4258433.3	200428.8146	0.287	0.3886	0.28681	0.41934	4.01E-02	1.18E-05	1.39E-05	1.17E-05	1.44E-05	4.0190E-02
520236.31	4258432.81	199462.4937	0.51298	1.17466	0.52217	1.32345	3.99E-02	2.10E-05	4.20E-05	2.14E-05	4.54E-05	4.0075E-02
520325.73	4258802.89	199273.7708	0.61991	0.29381	0.59498	0.31331	3.99E-02	2.54E-05	1.05E-05	2.44E-05	1.08E-05	3.9978E-02
520167.29	4258783.15	198863.2449	2.5697	0.67594	2.31665	0.70867	3.98E-02	1.05E-04	2.42E-05	9.49E-05	2.43E-05	4.0074E-02
520139.95	4258761.88	198290.2813	4.05938	0.9026	3.54853	0.91046	3.97E-02	1.66E-04	3.23E-05	1.45E-04	3.13E-05	4.0085E-02
520355.42	4258792.84	198013.5413	0.51587	0.26707	0.4969	0.28501	3.97E-02	2.11E-05	9.55E-06	2.03E-05	9.78E-06	3.9716E-02
520206.92	4258803.08	197749.7573	1.59789	0.49629	1.4819	0.53155	3.96E-02	6.54E-05	1.78E-05	6.07E-05	1.82E-05	3.9764E-02
520138.29	4258472.5	197255.1718	0.8949	4.40995	0.96146	5.28675	3.95E-02	3.66E-05	1.58E-04	3.94E-05	1.81E-04	3.9918E-02
520324.43	4258423.08	196417.2477	0.35814	0.58896	0.35734	0.6438	3.93E-02	1.47E-05	2.11E-05	1.46E-05	2.21E-05	3.9408E-02
520334.22	4258423.11	196290.9018	0.3459	0.5531	0.34533	0.60277	3.93E-02	1.42E-05	1.98E-05	1.41E-05	2.07E-05	3.9379E-02
520266.35	4258812.98	196118.2727	0.94412	0.36537	0.8967	0.39043	3.93E-02	3.87E-05	1.31E-05	3.67E-05	1.34E-05	3.9377E-02
520314.65	4258423.05	196098.8963	0.37096	0.62869	0.3701	0.68944	3.93E-02	1.52E-05	2.25E-05	1.52E-05	2.37E-05	3.9348E-02
520276.25	4258812.97	196025.8747	0.87684	0.35098	0.83472	0.3745	3.93E-02	3.59E-05	1.26E-05	3.42E-05	1.29E-05	3.9352E-02
520344.01	4258423.14	195698.1136	0.33417	0.5211	0.334	0.56615	3.92E-02	1.37E-05	1.86E-05	1.37E-05	1.94E-05	3.9257E-02
520375.21	4258782.8	195572.2458	0.45779	0.25264	0.44185	0.26935	3.92E-02	1.87E-05	9.04E-06	1.81E-05	9.25E-06	3.9221E-02
520187.33	4258442.66	195557.629	0.63883	2.04026	0.66172	2.33996	3.92E-02	2.62E-05	7.30E-05	2.71E-05	8.03E-05	3.9370E-02
520256.44	4258813	195392.1453	1.01941	0.38046	0.96562	0.40718	3.91E-02	4.17E-05	1.36E-05	3.95E-05	1.40E-05	3.9239E-02
520226.52	4258432.78	195301.4102	0.53233	1.29889	0.54473	1.46757	3.91E-02	2.18E-05	4.65E-05	2.23E-05	5.04E-05	3.9253E-02
520286.15	4258812.95	195224.8841	0.81657	0.33721	0.7789	0.35942	3.91E-02	3.34E-05	1.21E-05	3.19E-05	1.23E-05	3.9186E-02
520158.43	4258779.5	194741.8635	2.93539	0.72792	2.6243	0.75473	3.90E-02	1.20E-04	2.60E-05	1.07E-04	2.59E-05	3.9279E-02
520422.26	4258443.39	194401.6065	0.2634	0.33214	0.26221	0.3567	3.89E-02	1.08E-05	1.19E-05	1.07E-05	1.22E-05	3.8977E-02
520295.07	4258422.99	194161.071	0.39858	0.72086	0.39837	0.7965	3.89E-02	1.63E-05	2.58E-05	1.63E-05	2.73E-05	3.8969E-02
520296.05	4258812.94	194111.846	0.76305	0.32425	0.72932	0.34532	3.89E-02	3.12E-05	1.16E-05	2.99E-05	1.19E-05	3.8958E-02
520246.54	4258813.02	194066.3475	1.10517	0.39663	1.04359	0.42505	3.89E-02	4.53E-05	1.42E-05	4.27E-05	1.46E-05	3.8981E-02
520335.64	4258802.87	193919.9266	0.58328	0.28217	0.56043	0.30093	3.88E-02	2.39E-05	1.01E-05	2.29E-05	1.03E-05	3.8902E-02
520402.71	4258433.33	193422.1501	0.27762	0.36874	0.27722	0.39741	3.87E-02	1.14E-05	1.32E-05	1.14E-05	1.36E-05	3.8785E-02
520353.8	4258423.18	192785.843	0.32278	0.49193	0.32321	0.53277	3.86E-02	1.32E-05	1.76E-05	1.32E-05	1.83E-05	3.8670E-02
520285.28	4258422.96	192546.662	0.41332	0.77507	0.41402	0.85974	3.86E-02	1.69E-05	2.77E-05	1.70E-05	2.95E-05	3.8651E-02
520441.74	4258473.45	192412.8908	0.25395	0.29529	0.25184	0.31591	3.85E-02	1.04E-05	1.06E-05	1.03E-05	1.08E-05	3.8575E-02
520236.64	4258813.03	192406.3744	1.20554	0.41461	1.13412	0.4447	3.85E-02	4.94E-05	1.48E-05	4.64E-05	1.53E-05	3.8658E-02
520177.2	4258793.13	192359.1079	2.25003	0.60857	2.04536	0.64265	3.85E-02	9.21E-05	2.18E-05	8.37E-05	2.21E-05	3.8742E-02
520197.02	4258803.1	191554.9598	1.77648	0.52204	1.63785	0.55739	3.84E-02	7.27E-05	1.87E-05	6.71E-05	1.91E-05	3.8539E-02
520305.95	4258812.92	191547.2	0.71344	0.31148	0.68294	0.33162	3.84E-02	2.92E-05	1.11E-05	2.80E-05	1.14E-05	3.8440E-02
520363.59	4258423.21	191338.3338	0.31222	0.46434	0.31276	0.50201	3.83E-02	1.28E-05	1.66E-05	1.28E-05	1.72E-05	3.8378E-02
520216.73	4258432.75	190597.7787	0.55157	1.44442	0.56698	1.63709	3.82E-02	2.26E-05	5.17E-05	2.32E-05	5.62E-05	3.8323E-02
520275.49	4258422.93	190546.8685	0.42873	0.83705	0.43084	0.9318	3.82E-02	1.76E-05	2.99E-05	1.76E-05	3.20E-05	3.8257E-02
520226.74	4258813.05	190151.7661	1.32287	0.43432	1.23901	0.46592	3.81E-02	5.42E-05	1.55E-05	5.07E-05	1.60E-05	3.8217E-02
520149.58	4258775.84	189356.0931	3.38696	0.78499	3.00326	0.80261	3.79E-02	1.39E-04	2.81E-05	1.23E-04	2.76E-05	3.8238E-02
520436.01	4258704.14	189056.4673	0.31698	0.23785	0.30691	0.251	3.79E-02	1.30E-05	8.51E-06	1.26E-05	8.62E-06	3.7904E-02
520365.32	4258792.82	188808.2097	0.48746	0.2568	0.46983	0.27391	3.78E-02	2.00E-05	9.19E-06	1.92E-05	9.40E-06	3.7869E-02
520373.38	4258423.24	188580.9163	0.30203	0.43911	0.3027	0.47394	3.78E-02	1.24E-05	1.57E-05	1.24E-05	1.63E-05	3.7823E-02
520265.7	4258422.9	188322.7336	0.44481	0.90838	0.44882	1.01438	3.77E-02	1.82E-05	3.25E-05	1.84E-05	3.48E-05	3.7818E-02
520177.54	4258442.63	187623.7884	0.65717	2.33796	0.68318	2.69635	3.76E-02	2.69E-05	8.36E-05	2.80E-05	9.26E-05	3.7805E-02
520345.54	4258802.85	187559.4304	0.54951	0.27108	0.52846	0.28911	3.76E-02	2.25E-05	9.70E-06	2.16E-05	9.93E-06	3.7625E-02
520216.84	4258813.07	187056.5774	1.4594	0.45568	1.35981	0.48841	3.75E-02	5.98E-05	1.63E-05	5.57E-05	1.68E-05	3.7609E-02
520315.85	4258812.9	186296.7234	0.66429	0.2979	0.63655	0.31725	3.73E-02	2.72E-05	1.07E-05	2.61E-05	1.09E-05	3.7383E-02
520255.91	4258422.87	185610.8294	0.46134	0.98995	0.46765	1.10865	3.72E-02	1.89E-05	3.54E-05	1.91E-05	3.81E-05	3.7283E-02
520412.5	4258433.36	185599.7911	0.26877	0.3509	0.26818	0.37761	3.72E-02	1.10E-05	1.26E-05	1.10E-05	1.30E-05	3.7216E-02
520107.24	4258731.68	185526.4428	9.09798	1.35343	7.68892	1.26197	3.72E-02	3.73E-04	4.84E-05	3.15E-04	4.33E-05	3.7933E-02
520394.99	4258772.77	185488.7999	0.40896	0.23983	0.39515	0.25495	3.71E-02	1.67E-05	8.58E-06	1.62E-05	8.75E-06	3.7197E-02
520206.94	4258432.72	185320.941	0.57034	1.61671	0.58823	1.83868	3.71E-02	2.34E-05	5.78E-05	2.41E-05	6.31E-05	3.7281E-02
520138.33	4258462.5	184931.8488	0.81745	4.47154	0.88319	5.34522	3.70E-02	3.35E-05	1.60E-04	3.62E-05	1.84E-04	3.7448E-02
520187.12	4258803.12	184864.8822	1.99526	0.55126	1.82697	0.5852	3.70E-02	8.17E-05	1.97E-05	7.48E-05	2.01E-05	3.7218E-02
520140.73	4258772.19	184062.2678	4.01535	0.85006	3.51661	0.85345	3.69E-02	1.64E-04	3.04E-05	1.44E-04	2.93E-05	3.7229E-02
520167.3	4258793.15	183624.4795	2.59056	0.64743	2.3335	0.67564	3.68E-02	1.06E-04	2.32E-05	9.55E-05	2.32E-05	3.7021E-02
520411.07	4258756.11	183390.5332	0.37236	0.23475	0.36004	0.24865	3.67E-02	1.52E-05	8.40E-06	1.47E-05	8.54E-06	3.6773E-02
520385.11	4258782.79	183112.6465	0.43397	0.24332	0.41893	0.25912	3.67E-02	1.78E-05	8.70E-06	1.72E-05	8.90E-06	3.6723E-02
520428.73	4258728.78	183090.0379	0.33535	0.23381	0.32447	0.2466	3.67E-02	1.37E-05	8.36E-06	1.33E-05	8.47E-06	3.6710E-02
520246.13	4258422.84	182472.2597	0.47819	1.08341	0.48707	1.21672	3.65E-02	1.96E-05	3.88E-05	1.99E-05	4.18E-05	3.6663E-02
520206.94	4258813.08	182365.2289	1.61136	0.47811	1.49342	0.51146	3.65E-02	6.60E-05	1.71E-05	6.11E-05	1.76E-05	3.6683E-02
520325.75	4258812.89	182321.7009	0.62409	0.28635	0.59869	0.30498	3.65E-02	2.56E-05	1.02E-05	2.45E-05	1.05E-05	3.6583E-02
520392.95	4258423.3	182104.9377	0.2832	0.39288	0.28343	0.42344	3.65E-02	1.16E-05	1.41E-05	1.16E-05	1.45E-05	3.6521E-02
520441.9	4258690.08	182084.2742	0.30469	0.23783	0.29524	0.25126	3.65E-02	1.25E-05	8.51E-06	1.21E-05	8.63E-06	3.6507E-02
520432.05	4258443.42	181597.4737	0.25502	0.31715	0.25371	0.33999	3.64E-02	1.04E-05	1.13E-05	1.04E-05	1.17E-05	3.6411E-02
520121.74	4258754.36	180686.7276	6.0718	1.06469	5.19645	1.02563	3.62E-02	2.49E-04	3.81E-05	2.13E-04	3.52E-05	3.6720E-02
520266.36	4258822.98	180554.3231	0.95179	0.35353	0.90379	0.37807	3.62E-02	3.90E-05	1.26E-05	3.70E-05	1.30E-05	3.6260E-02
520276.26	4258822.97	180362.9385	0.88393	0.33997	0.84131	0.36299	3.61E-02	3.62E-05	1.22E-05	3.44E-05	1.25E-05	3.6215E-02
520355.44	4258802.84	180360.7595	0.51855	0.26062	0.49906	0.27791	3.61E-02	2.12E-05	9.32E-06	2.04E-05	9.54E-06	3.6180E-02
520158.65	4258789.58	180244.5667	2.9486	0.69461	2.63478	0.71656	3.61E-02	1.21E-04	2.48E-05	1.08E-04	2.46E-05	3.6374E-02
520256.46	4258823	180052.9254	1.02791	0.36787	0.9734	0.39397	3.61E-02	4.21E-05	1.32E-05	3.99E-05	1.35E-05	3.6167E-02
520286.16	4258822.95	179581.7543	0.82329	0.32711	0.78517	0.34875	3.60E-02	3.37E-05	1.17E-05	3.21E-05	1.20E-05	3.6053E-02
520197.15	4258432.69	179375.9124	0.58818	1.82128	0.60795	2.08036	3.59E-02	2.41E-05	6.51E-05	2.49E-05	7.14E-05	3.6108E-02
520246.56	4258823.02	178911.4446	1.11408	0.38319	1.05167	0.41085	3.58E-02	4.56E-05	1.37E-05	4.31E-05	1.41E-05	3.5946E-02
520236.34	4258422.81	178899.4429	0.49521	1.19195	0.50678	1.34212	3.58E-02	2.03E-05	4.26E-05	2.07E-05	4.61E-05	3.5957E-02
520375.22	4258792.8	178707.6055	0.46125	0.24713	0.44474	0.26342	3.58E-02	1.89E-05	8.84E-06	1.82E-05	9.04E-06	3.5844E-02
520324.47	4258413.08	178558.975	0.35132	0.59455	0.35068	0.65067	3.58E-02	1.44E-05	2.13E-05	1.44E-05	2.23E-05	3.5831E-02
520167.75	4258442.59	178540.1828	0.67267	2.70649	0.70409	3.14241	3.58E-02	2.75E-05	9.68E-05	2.88E-05	1.08E-04	3.6016E-02
520334.25	4258413.11	178513.645	0.33964	0.55841	0.33896	0.60909	3.57E-02	1.39E-05	2.00E-05	1.39E-05	2.09E-05	3.5818E-02
520296.06	4258822.94	178423.8032	0.76924	0.31493	0.73501	0.33537	3.57E-02	3.15E-05	1.13E-05	3.01E-05	1.15E-05	3.5816E-02
520314.68	4258413.05	178189.4228	0.36353	0.6349	0.36323	0.69712	3.57E-02	1.49E-05	2.27E-05	1.49E-05	2.39E-05	3.5761E-02
520344.04	4258413.14	178031.8951	0.32842	0.52604	0.32797	0.57184	3.57E-02	1.34E-05	1.88E-05	1.34E-05	1.96E-05	3.5719E-02
520177.22	4258803.13	177491.675	2.26229	0.58368	2.05577	0.61415	3.55E-02	9.26E-05	2.09E-05	8.42E-05	2.11E-05	3.5764E-02
520335.65	4258812.87	177422.0426	0.58695	0.2752	0.56361	0.29315	3.55E-02	2.40E-05	9.84E-06	2.31E-05	1.01E-05	3.5598E-02
520236.66	4258823.03	177393.4506	1.21438	0.40017	1.14205	0.42932	3.55E-02	4.97E-05	1.43E-05	4.68E-05	1.47E-05	3.5651E-02
520128.51	4258472.47	177073.1248	0.89933	5.50615	0.98413	6.65546	3.55E-02	3.68E-05	1.97E-04	4.03E-05	2.28E-04	3.5964E-02
520197.04	4258813.1	177018.7617	1.79251	0.50297	1.65129	0.53586	3.55E-02	7.34E-05	1.80E-05	6.76E-05	1.84E-05	3.5628E-02
520422.29	4258433.39	176898.9115	0.26043	0.3349	0.25967	0.35974	3.54E-02	1.07E-05	1.20E-05	1.06E-05	1.24E-05	3.5472E-02
520295.1	4258412.99	176221.1654	0.38967	0.72871	0.39092	0.80597	3.53E-02	1.60E-05	2.61E-05	1.60E-05	2.77E-05	3.5376E-02
520305.97	4258822.92	176139.1127	0.71918	0.30297	0.6882	0.32239	3.53E-02	2.94E-05	1.08E-05	2.82E-05	1.11E-05	3.5354E-02
520402.74	4258423.33	176057.6708	0.27412	0.37259	0.2742	0.40118	3.53E-02	1.12E-05	1.33E-05	1.12E-05	1.38E-05	3.5308E-02
520149.99	4258786	175979.8141	3.3971	0.74655	3.00982	0.75915	3.52E-02	1.39E-04	2.67E-05	1.23E-04	2.61E-05	3.5557E-02
520353.83	4258413.18	175928.4883	0.31752	0.49677	0.31759	0.5381	3.52E-02	1.30E-05	1.78E-05	1.30E-05	1.85E-05	3.5294E-02
520226.76	4258823.05	175469.4524	1.33266	0.41906	1.24767	0.44949	3.51E-02	5.46E-05	1.50E-05	5.11E-05	1.54E-05	3.5276E-02
520226.55	4258422.78	174863.0099	0.51212	1.31832	0.5262	1.48842	3.50E-02	2.10E-05	4.72E-05	2.15E-05	5.11E-05	3.5159E-02
520448.95	4258466.52	174759.6949	0.24639	0.28787	0.2444	0.30754	3.50E-02	1.01E-05	1.03E-05	1.00E-05	1.06E-05	3.5039E-02
520285.31	4258412.96	174654.1498	0.4035	0.78409	0.40608	0.87038	3.50E-02	1.65E-05	2.80E-05	1.66E-05	2.99E-05	3.5068E-02
520363.62	4258413.21	174273.3874	0.30729	0.46916	0.30762	0.50697	3.49E-02	1.26E-05	1.68E-05	1.26E-05	1.74E-05	3.4960E-02
520216.86	4258823.07	172748.7269	1.46987	0.43952	1.36893	0.47074	3.46E-02	6.02E-05	1.57E-05	5.60E-05	1.62E-05	3.4743E-02
520275.52	4258412.93	172748.4598	0.41784	0.84773	0.42215	0.94393	3.46E-02	1.71E-05	3.03E-05	1.73E-05	3.24E-05	3.4692E-02
520187.36	4258432.66	172682.1728	0.60461	2.0672	0.62643	2.3736	3.46E-02	2.48E-05	7.39E-05	2.56E-05	8.15E-05	3.4788E-02
520365.34	4258802.82	172275.3653	0.48991	0.25067	0.47175	0.26722	3.45E-02	2.01E-05	8.97E-06	1.93E-05	9.17E-06	3.4558E-02
520373.41	4258413.24	172051.1507	0.29751	0.44371	0.29805	0.47851	3.45E-02	1.22E-05	1.59E-05	1.22E-05	1.64E-05	3.4512E-02
520345.55	4258812.85	171701.9901	0.55278	0.26454	0.53123	0.28181	3.44E-02	2.26E-05	9.46E-06	2.18E-05	9.67E-06	3.4449E-02
520141.34	4258782.43	171316.7144	3.99191	0.80372	3.499	0.80306	3.43E-02	1.63E-04	2.87E-05	1.43E-04	2.76E-05	3.4672E-02
520315.87	4258822.9	171206.8967	0.66902	0.29001	0.64089	0.30857	3.43E-02	2.74E-05	1.04E-05	2.62E-05	1.06E-05	3.4361E-02
520187.14	4258813.12	171038.6619	2.0109	0.53058	1.83994	0.5615	3.43E-02	8.23E-05	1.90E-05	7.53E-05	1.93E-05	3.4449E-02
520112.64	4258750.6	170812.8866	7.73874	1.14697	6.58766	1.0782	3.42E-02	3.17E-04	4.10E-05	2.70E-04	3.70E-05	3.4872E-02
520265.73	4258412.9	170470.5302	0.43256	0.92029	0.43891	1.02762	3.41E-02	1.77E-05	3.29E-05	1.80E-05	3.53E-05	3.4243E-02
520216.76	4258422.75	170324.4876	0.52863	1.46615	0.54474	1.6604	3.41E-02	2.16E-05	5.24E-05	2.23E-05	5.70E-05	3.4263E-02
520395.01	4258782.77	170101.21	0.4121	0.23468	0.39781	0.24959	3.41E-02	1.69E-05	8.39E-06	1.63E-05	8.57E-06	3.4115E-02
520167.32	4258803.15	170085.5932	2.60848	0.62079	2.34812	0.64485	3.41E-02	1.07E-04	2.22E-05	9.61E-05	2.21E-05	3.4309E-02
520123.03	4258764.88	169650.1673	5.91506	0.99028	5.07327	0.95204	3.40E-02	2.42E-04	3.54E-05	2.08E-04	3.27E-05	3.4493E-02
520412.53	4258423.36	169270.4521	0.26552	0.35428	0.26542	0.38099	3.39E-02	1.09E-05	1.27E-05	1.09E-05	1.31E-05	3.3946E-02
520206.96	4258823.08	168588.3456	1.62215	0.46092	1.50271	0.49234	3.38E-02	6.64E-05	1.65E-05	6.15E-05	1.69E-05	3.3923E-02
520448.99	4258456.52	168176.5417	0.24425	0.29059	0.24248	0.31039	3.37E-02	1.00E-05	1.04E-05	9.93E-06	1.07E-05	3.3721E-02
520157.97	4258442.56	168175.3924	0.68413	3.17201	0.72439	3.71008	3.37E-02	2.80E-05	1.13E-04	2.97E-05	1.27E-04	3.3978E-02
520095.99	4258728.64	167844.6442	13.01932	1.43916	11.69057	1.308	3.36E-02	5.33E-04	5.15E-05	4.79E-04	4.49E-05	3.4721E-02
520255.94	4258412.87	167810.0799	0.44755	1.00335	0.45614	1.12326	3.36E-02	1.83E-05	3.59E-05	1.87E-05	3.86E-05	3.3718E-02
520385.12	4258792.79	167801.9582	0.43703	0.23802	0.42147	0.25348	3.36E-02	1.79E-05	8.51E-06	1.73E-05	8.70E-06	3.3657E-02
520325.77	4258822.89	167592.0061	0.62843	0.27911	0.60261	0.29695	3.36E-02	2.57E-05	9.98E-06	2.47E-05	1.02E-05	3.3633E-02
520158.82	4258799.64	167248.0655	2.96039	0.66389	2.64439	0.68145	3.35E-02	1.21E-04	2.37E-05	1.08E-04	2.34E-05	3.3770E-02
520266.38	4258832.98	167014.778	0.96043	0.34253	0.91171	0.36654	3.34E-02	3.93E-05	1.23E-05	3.73E-05	1.26E-05	3.3548E-02
520256.48	4258833	166650.4863	1.03734	0.35623	0.98198	0.3817	3.34E-02	4.25E-05	1.27E-05	4.02E-05	1.31E-05	3.3483E-02
520276.28	4258832.97	166579.6272	0.89102	0.32946	0.84787	0.35203	3.34E-02	3.65E-05	1.18E-05	3.47E-05	1.21E-05	3.3455E-02
520392.99	4258413.3	166319.7852	0.27935	0.39712	0.27976	0.42746	3.33E-02	1.14E-05	1.42E-05	1.15E-05	1.47E-05	3.3360E-02
520432.08	4258433.42	166042.6971	0.25226	0.31954	0.25132	0.34269	3.33E-02	1.03E-05	1.14E-05	1.03E-05	1.18E-05	3.3296E-02
520128.54	4258462.47	166017.3467	0.81489	5.56852	0.89267	6.7114	3.32E-02	3.34E-05	1.99E-04	3.65E-05	2.30E-04	3.3747E-02
520440.71	4258716.85	165790.251	0.31395	0.22879	0.30358	0.24104	3.32E-02	1.29E-05	8.18E-06	1.24E-05	8.28E-06	3.3244E-02
520246.58	4258833.02	165601.0368	1.12363	0.37077	1.06028	0.39766	3.32E-02	4.60E-05	1.33E-05	4.34E-05	1.37E-05	3.3280E-02
520286.18	4258832.95	165523.6448	0.82878	0.31709	0.79028	0.3383	3.31E-02	3.39E-05	1.13E-05	3.24E-05	1.16E-05	3.3238E-02
520355.45	4258812.84	165244.8812	0.52143	0.25445	0.50143	0.27103	3.31E-02	2.13E-05	9.10E-06	2.05E-05	9.30E-06	3.3153E-02
520206.97	4258422.72	165243.8241	0.54445	1.64045	0.56203	1.86453	3.31E-02	2.23E-05	5.87E-05	2.30E-05	6.40E-05	3.3260E-02
520452.1	4258479.64	165136.3289	0.24649	0.28079	0.24413	0.29995	3.31E-02	1.01E-05	1.00E-05	1.00E-05	1.03E-05	3.3111E-02
520177.57	4258432.63	165120.2584	0.61897	2.36679	0.64439	2.73397	3.31E-02	2.53E-05	8.47E-05	2.64E-05	9.39E-05	3.3298E-02
520246.16	4258412.84	164755.4324	0.46261	1.09873	0.4735	1.23306	3.30E-02	1.89E-05	3.93E-05	1.94E-05	4.23E-05	3.3114E-02
520177.24	4258813.13	164454.3171	2.27649	0.56091	2.06759	0.5879	3.29E-02	9.32E-05	2.01E-05	8.47E-05	2.02E-05	3.3152E-02
520296.08	4258832.94	164409.6044	0.7747	0.30571	0.73998	0.32568	3.29E-02	3.17E-05	1.09E-05	3.03E-05	1.12E-05	3.3009E-02
520138.36	4258452.5	164374.3073	0.74903	4.52758	0.81237	5.38973	3.29E-02	3.07E-05	1.62E-04	3.33E-05	1.85E-04	3.3329E-02
520444.24	4258708.41	164095.5656	0.30669	0.22924	0.29667	0.24158	3.29E-02	1.26E-05	8.20E-06	1.21E-05	8.29E-06	3.2904E-02
520099.76	4258737.74	164077.586	11.48798	1.32281	10.0204	1.21026	3.29E-02	4.70E-04	4.73E-05	4.10E-04	4.15E-05	3.3828E-02
520236.68	4258833.03	164049.9859	1.22257	0.38655	1.14938	0.41475	3.29E-02	5.01E-05	1.38E-05	4.71E-05	1.42E-05	3.2978E-02
520197.06	4258823.1	163855.5012	1.80361	0.48461	1.66075	0.51509	3.28E-02	7.38E-05	1.73E-05	6.80E-05	1.77E-05	3.2991E-02
520375.24	4258802.8	163729.2594	0.46398	0.24155	0.44694	0.25735	3.28E-02	1.90E-05	8.64E-06	1.83E-05	8.84E-06	3.2844E-02
520150.32	4258796.13	163574.4795	3.39472	0.71058	3.00881	0.71903	3.28E-02	1.39E-04	2.54E-05	1.23E-04	2.47E-05	3.3070E-02
520335.67	4258822.87	163213.9116	0.59103	0.26856	0.56723	0.28574	3.27E-02	2.42E-05	9.61E-06	2.32E-05	9.81E-06	3.2753E-02
520334.28	4258403.11	163172.4698	0.33345	0.56347	0.33306	0.61533	3.27E-02	1.37E-05	2.02E-05	1.36E-05	2.11E-05	3.2746E-02
520324.5	4258403.08	163133.9297	0.3446	0.59997	0.34459	0.65744	3.27E-02	1.41E-05	2.15E-05	1.41E-05	2.26E-05	3.2742E-02
520344.07	4258403.14	162790.5604	0.32274	0.53044	0.32223	0.5773	3.26E-02	1.32E-05	1.90E-05	1.32E-05	1.98E-05	3.2666E-02
520314.71	4258403.05	162714.8931	0.3562	0.64098	0.35693	0.70462	3.26E-02	1.46E-05	2.29E-05	1.46E-05	2.42E-05	3.2662E-02

520226.78	4258833.05	162372.7783	1.34136	0.40467	1.25535	0.43391	3.25E-02	5.49E-05	1.45E-05	5.14E-05	1.49E-05	3.2653E-02
520305.98	4258832.92	162337.9309	0.72446	0.29454	0.69304	0.31342	3.25E-02	2.97E-05	1.05E-05	2.84E-05	1.08E-05	3.2590E-02
520427.16	4258749.44	162079.8507	0.34395	0.22567	0.3324	0.23827	3.25E-02	1.41E-05	8.07E-06	1.36E-05	8.18E-06	3.2503E-02
520422.32	4258423.39	161721.2167	0.2574	0.33785	0.25712	0.36279	3.24E-02	1.05E-05	1.21E-05	1.05E-05	1.25E-05	3.2432E-02
520353.86	4258403.18	161425.883	0.31233	0.50109	0.31211	0.54328	3.23E-02	1.28E-05	1.79E-05	1.28E-05	1.87E-05	3.2390E-02
520236.37	4258412.81	161287.0097	0.4776	1.20912	0.49059	1.36027	3.23E-02	1.96E-05	4.32E-05	2.01E-05	4.67E-05	3.2430E-02
520447.78	4258699.98	161212.7576	0.2996	0.22936	0.28994	0.24187	3.23E-02	1.23E-05	8.20E-06	1.19E-05	8.30E-06	3.2326E-02
520114.17	4258761.23	161131.605	7.43267	1.06019	6.346	0.99672	3.23E-02	3.04E-04	3.79E-05	2.60E-04	3.42E-05	3.2905E-02
520402.77	4258413.33	161116.7456	0.2706	0.37655	0.27097	0.40492	3.23E-02	1.11E-05	1.35E-05	1.11E-05	1.39E-05	3.2315E-02
520295.13	4258402.99	160729.2521	0.3808	0.73683	0.38381	0.8154	3.22E-02	1.56E-05	2.64E-05	1.57E-05	2.80E-05	3.2274E-02
520216.87	4258833.07	160163.0211	1.48145	0.4246	1.37893	0.45427	3.21E-02	6.07E-05	1.52E-05	5.65E-05	1.56E-05	3.2223E-02
520141.83	4258792.63	159775.9844	3.97828	0.7621	3.48837	0.75788	3.20E-02	1.63E-04	2.73E-05	1.43E-04	2.60E-05	3.2356E-02
520197.18	4258422.69	159541.8069	0.55917	1.84696	0.57814	2.10875	3.20E-02	2.29E-05	6.61E-05	2.37E-05	7.24E-05	3.2135E-02
520363.65	4258403.21	159531.3285	0.30239	0.47358	0.30246	0.51182	3.19E-02	1.24E-05	1.69E-05	1.24E-05	1.76E-05	3.2008E-02
520285.34	4258402.96	159193.7486	0.39371	0.79378	0.39828	0.88119	3.19E-02	1.61E-05	2.84E-05	1.63E-05	3.03E-05	3.1972E-02
520124.03	4258775.29	159146.0857	5.7937	0.92604	4.98121	0.88817	3.19E-02	2.37E-04	3.31E-05	2.04E-04	3.05E-05	3.2376E-02
520436.03	4258735.77	158942.7222	0.32625	0.22491	0.31536	0.23699	3.18E-02	1.34E-05	8.04E-06	1.29E-05	8.14E-06	3.1873E-02
520187.16	4258823.12	158731.8014	2.02555	0.51127	1.85211	0.53929	3.18E-02	8.29E-05	1.83E-05	7.58E-05	1.85E-05	3.1984E-02
520365.35	4258812.82	158366.3472	0.49307	0.24513	0.47438	0.26106	3.17E-02	2.02E-05	8.77E-06	1.94E-05	8.96E-06	3.1772E-02
520315.88	4258832.9	158232.7206	0.67475	0.28265	0.64622	0.3006	3.17E-02	2.76E-05	1.01E-05	2.65E-05	1.03E-05	3.1763E-02
520167.34	4258813.15	158102.953	2.62789	0.59619	2.36368	0.61634	3.17E-02	1.08E-04	2.13E-05	9.68E-05	2.12E-05	3.1909E-02
520345.57	4258822.85	157987.8639	0.55628	0.25831	0.53427	0.27483	3.16E-02	2.28E-05	9.24E-06	2.19E-05	9.44E-06	3.1703E-02
520373.44	4258403.24	157685.0845	0.29299	0.44797	0.29326	0.483	3.16E-02	1.20E-05	1.60E-05	1.20E-05	1.66E-05	3.1635E-02
520226.58	4258412.78	157379.4303	0.49225	1.33715	0.50691	1.50844	3.15E-02	2.02E-05	4.78E-05	2.08E-05	5.18E-05	3.1658E-02
520275.55	4258402.93	157313.0647	0.40691	0.85871	0.4133	0.95587	3.15E-02	1.67E-05	3.07E-05	1.69E-05	3.28E-05	3.1601E-02
520451.31	4258691.54	157296.8495	0.29278	0.22925	0.28349	0.24191	3.15E-02	1.20E-05	8.20E-06	1.16E-05	8.30E-06	3.1541E-02
520410.65	4258776.29	156891.8701	0.37934	0.22539	0.36622	0.23904	3.14E-02	1.55E-05	8.06E-06	1.50E-05	8.21E-06	3.1467E-02
520395.02	4258792.77	156600.8931	0.41499	0.22968	0.4002	0.24431	3.14E-02	1.70E-05	8.22E-06	1.64E-05	8.39E-06	3.1411E-02
520167.78	4258432.59	156542.6314	0.63036	2.73836	0.66219	3.1838	3.13E-02	2.58E-05	9.79E-05	2.71E-05	1.09E-04	3.1610E-02
520206.97	4258833.08	156386.236	1.63337	0.44502	1.51231	0.47449	3.13E-02	6.69E-05	1.59E-05	6.19E-05	1.63E-05	3.1479E-02
520158.97	4258809.7	155740.5579	2.97708	0.63577	2.65712	0.64928	3.12E-02	1.22E-04	2.27E-05	1.09E-04	2.23E-05	3.1465E-02
520412.56	4258413.36	155285.7442	0.26227	0.35794	0.26255	0.38448	3.11E-02	1.07E-05	1.28E-05	1.07E-05	1.32E-05	3.1146E-02
520266.4	4258842.98	155169.1058	0.96982	0.33221	0.92032	0.3557	3.11E-02	3.97E-05	1.19E-05	3.77E-05	1.22E-05	3.1176E-02
520265.76	4258402.9	155076.7948	0.42032	0.93265	0.42866	1.04078	3.11E-02	1.72E-05	3.34E-05	1.76E-05	3.57E-05	3.1160E-02
520256.49	4258843	155005.8279	1.0485	0.34551	0.99208	0.37032	3.10E-02	4.29E-05	1.24E-05	4.06E-05	1.27E-05	3.1151E-02
520325.78	4258832.89	154878.9495	0.6335	0.2723	0.60727	0.28947	3.10E-02	2.59E-05	9.74E-06	2.49E-05	9.94E-06	3.1087E-02
520276.3	4258842.97	154621.7359	0.89926	0.31966	0.85547	0.34181	3.10E-02	3.68E-05	1.14E-05	3.50E-05	1.17E-05	3.1060E-02
520385.14	4258802.79	154372.2649	0.4398	0.23287	0.42371	0.24791	3.09E-02	1.80E-05	8.33E-06	1.73E-05	8.51E-06	3.0967E-02
520246.59	4258843.02	154194.1161	1.13672	0.35969	1.07197	0.38576	3.09E-02	4.65E-05	1.29E-05	4.39E-05	1.32E-05	3.0996E-02
520286.2	4258842.95	153511.0574	0.83603	0.30785	0.797	0.32868	3.07E-02	3.42E-05	1.10E-05	3.26E-05	1.13E-05	3.0832E-02
520187.39	4258422.66	153131.1284	0.57229	2.09389	0.59361	2.40414	3.07E-02	2.34E-05	7.49E-05	2.43E-05	8.25E-05	3.0872E-02
520216.79	4258412.75	153005.3456	0.50633	1.48665	0.52215	1.68252	3.06E-02	2.07E-05	5.32E-05	2.14E-05	5.78E-05	3.0794E-02
520177.25	4258823.13	152950.1348	2.2935	0.54014	2.08145	0.56381	3.06E-02	9.39E-05	1.93E-05	8.52E-05	1.94E-05	3.0848E-02
520432.11	4258423.42	152715.0051	0.24953	0.32239	0.24904	0.34568	3.06E-02	1.02E-05	1.15E-05	1.02E-05	1.19E-05	3.0627E-02
520393.02	4258403.3	152650.5683	0.27549	0.40122	0.27581	0.43145	3.06E-02	1.13E-05	1.44E-05	1.13E-05	1.48E-05	3.0622E-02
520150.6	4258806.24	152594.4842	3.40298	0.67815	3.01447	0.68275	3.06E-02	1.39E-04	2.43E-05	1.23E-04	2.34E-05	3.0870E-02
520118.72	4258472.44	152517.7663	0.88627	7.08298	0.98015	8.6398	3.05E-02	3.63E-05	2.53E-04	4.01E-05	2.97E-04	3.1170E-02
520255.98	4258402.87	152479.5048	0.43378	1.01708	0.44409	1.13767	3.05E-02	1.78E-05	3.64E-05	1.82E-05	3.91E-05	3.0647E-02
520105.32	4258757.57	152319.2289	9.64774	1.12318	8.28691	1.03584	3.05E-02	3.95E-04	4.02E-05	3.39E-04	3.56E-05	3.1314E-02
520355.47	4258822.84	152261.0484	0.5247	0.24869	0.50422	0.26459	3.05E-02	2.15E-05	8.90E-06	2.06E-05	9.08E-06	3.0552E-02
520296.1	4258842.93	152128.5715	0.78016	0.29684	0.74504	0.31643	3.05E-02	3.19E-05	1.06E-05	3.05E-05	1.09E-05	3.0550E-02
520197.07	4258833.1	152076.1735	1.81341	0.46736	1.66914	0.49548	3.05E-02	7.42E-05	1.67E-05	6.83E-05	1.70E-05	3.0632E-02
520115.37	4258771.71	151797.9818	7.19456	0.98609	6.16503	0.92653	3.04E-02	2.95E-04	3.53E-05	2.52E-04	3.18E-05	3.1014E-02
520335.69	4258832.87	150912.5228	0.59563	0.2623	0.5714	0.2788	3.02E-02	2.44E-05	9.38E-06	2.34E-05	9.57E-06	3.0289E-02
520375.26	4258812.8	150745.3246	0.46671	0.23626	0.44915	0.25151	3.02E-02	1.91E-05	8.45E-06	1.84E-05	8.63E-06	3.0243E-02
520403.63	4258789.21	150703.0679	0.39625	0.22455	0.38219	0.23857	3.02E-02	1.62E-05	8.03E-06	1.56E-05	8.19E-06	3.0228E-02
520306	4258842.92	150059.4357	0.7292	0.28624	0.69737	0.30469	3.01E-02	2.99E-05	1.02E-05	2.86E-05	1.05E-05	3.0131E-02
520334.32	4258393.11	149836.3786	0.32734	0.56833	0.32764	0.6214	3.00E-02	1.34E-05	2.03E-05	1.34E-05	2.13E-05	3.0075E-02
520324.53	4258393.08	149731.3687	0.33795	0.60557	0.33899	0.66426	3.00E-02	1.38E-05	2.17E-05	1.39E-05	2.28E-05	3.0058E-02
520344.1	4258393.14	149561.6051	0.3171	0.53508	0.31699	0.583	3.00E-02	1.30E-05	1.91E-05	1.30E-05	2.00E-05	3.0017E-02
520246.19	4258402.84	149510.9677	0.44716	1.11435	0.45927	1.24924	2.99E-02	1.83E-05	3.99E-05	1.88E-05	4.29E-05	3.0061E-02
520124.83	4258785.61	149407.023	5.70462	0.86974	4.91249	0.83206	2.99E-02	2.34E-04	3.11E-05	2.01E-04	2.86E-05	3.0415E-02
520314.74	4258393.05	149259.6493	0.34894	0.64708	0.351	0.71199	2.99E-02	1.43E-05	2.31E-05	1.44E-05	2.44E-05	2.9968E-02
520422.35	4258413.39	148739.318	0.25437	0.34109	0.25452	0.36593	2.98E-02	1.04E-05	1.22E-05	1.04E-05	1.26E-05	2.9833E-02
520353.89	4258393.18	148320.4757	0.3071	0.50536	0.307	0.54844	2.97E-02	1.26E-05	1.81E-05	1.26E-05	1.88E-05	2.9765E-02
520402.81	4258403.33	148209.2501	0.26704	0.38042	0.26744	0.40858	2.97E-02	1.09E-05	1.36E-05	1.10E-05	1.40E-05	2.9730E-02
520207	4258412.72	148124.6982	0.51959	1.66261	0.53638	1.88887	2.97E-02	2.13E-05	5.95E-05	2.20E-05	6.48E-05	2.9832E-02
520089.13	4258736.23	147759.5812	14.58609	1.353	16.51823	1.22199	2.96E-02	5.97E-04	4.84E-05	6.76E-04	4.20E-05	3.0955E-02
520187.17	4258833.12	147742.7018	2.04028	0.49331	1.86429	0.51852	2.96E-02	8.35E-05	1.76E-05	7.63E-05	1.78E-05	2.9783E-02
520295.16	4258392.99	147251.6963	0.37198	0.74494	0.37672	0.82458	2.95E-02	1.52E-05	2.66E-05	1.54E-05	2.83E-05	2.9575E-02
520167.35	4258823.15	147232.621	2.64254	0.57292	2.37578	0.58956	2.95E-02	1.08E-04	2.05E-05	9.73E-05	2.02E-05	2.9732E-02
520363.68	4258393.21	146970.5411	0.29761	0.47749	0.29752	0.51653	2.94E-02	1.22E-05	1.71E-05	1.22E-05	1.77E-05	2.9492E-02
520158	4258432.56	146868.2895	0.63772	3.208	0.67847	3.75427	2.94E-02	2.61E-05	1.15E-04	2.78E-05	1.29E-04	2.9710E-02
520128.57	4258452.47	146806.0032	0.74182	5.61888	0.81118	6.77607	2.94E-02	3.04E-05	2.01E-04	3.32E-05	2.33E-04	2.9897E-02
520365.37	4258822.82	146433.9009	0.49672	0.24002	0.47749	0.25536	2.93E-02	2.03E-05	8.59E-06	1.96E-05	8.77E-06	2.9383E-02
520236.4	4258402.81	146149.1926	0.46027	1.22624	0.47378	1.37808	2.93E-02	1.88E-05	4.39E-05	1.94E-05	4.73E-05	2.9398E-02
520345.59	4258832.85	146123.3206	0.56026	0.25245	0.5378	0.2683	2.93E-02	2.29E-05	9.03E-06	2.20E-05	9.21E-06	2.9326E-02
520177.6	4258422.63	145965.4693	0.58334	2.3962	0.60919	2.7671	2.92E-02	2.39E-05	8.57E-05	2.49E-05	9.50E-05	2.9461E-02
520285.37	4258392.96	145733.2519	0.3839	0.80313	0.39026	0.89145	2.92E-02	1.57E-05	2.87E-05	1.60E-05	3.06E-05	2.9276E-02
520092.8	4258745.07	145700.3488	14.41568	1.25954	13.64284	1.1415	2.92E-02	5.90E-04	4.51E-05	5.59E-04	3.92E-05	3.0412E-02
520447.67	4258724.17	145607.6892	0.30628	0.22066	0.29593	0.23215	2.92E-02	1.25E-05	7.89E-06	1.21E-05	7.97E-06	2.9200E-02
520133.86	4258799.33	145336.9438	4.70309	0.77217	4.08184	0.7506	2.91E-02	1.93E-04	2.76E-05	1.67E-04	2.58E-05	2.9519E-02
520373.47	4258393.24	145177.8448	0.28851	0.45185	0.28854	0.48738	2.91E-02	1.18E-05	1.62E-05	1.18E-05	1.67E-05	2.9130E-02
520158.34	4258819.43	145164.6811	3.02864	0.61309	2.69901	0.62224	2.91E-02	1.24E-04	2.19E-05	1.11E-04	2.14E-05	2.9349E-02
520395.04	4258802.77	144655.2246	0.41761	0.22481	0.40231	0.23911	2.90E-02	1.71E-05	8.04E-06	1.65E-05	8.21E-06	2.9019E-02
520106.71	4258768.14	144267.2424	9.24548	1.04026	7.94914	0.96037	2.89E-02	3.79E-04	3.72E-05	3.25E-04	3.30E-05	2.9666E-02
520412.23	4258785.64	144109.9565	0.37892	0.2198	0.36547	0.23318	2.89E-02	1.55E-05	7.86E-06	1.50E-05	8.01E-06	2.8906E-02
520256.51	4258853	143994.6232	1.05529	0.33473	0.99821	0.3589	2.88E-02	4.32E-05	1.20E-05	4.09E-05	1.23E-05	2.8945E-02
520275.58	4258392.93	143886.9739	0.39597	0.86949	0.40407	0.96736	2.88E-02	1.62E-05	3.11E-05	1.65E-05	3.32E-05	2.8912E-02
520266.41	4258852.98	143881.1911	0.9751	0.32184	0.92508	0.34479	2.88E-02	3.99E-05	1.15E-05	3.79E-05	1.18E-05	2.8915E-02
520246.61	4258853.02	143460.7105	1.14511	0.34847	1.07948	0.37376	2.87E-02	4.69E-05	1.25E-05	4.42E-05	1.28E-05	2.8846E-02
520276.31	4258852.97	143365.0733	0.90441	0.30987	0.86017	0.33157	2.87E-02	3.70E-05	1.11E-05	3.52E-05	1.14E-05	2.8806E-02
520412.59	4258403.36	143282.624	0.25903	0.36178	0.25948	0.38806	2.87E-02	1.06E-05	1.29E-05	1.06E-05	1.33E-05	2.8742E-02
520118.75	4258462.44	143271.7126	0.79869	7.14588	0.87893	8.69378	2.87E-02	3.27E-05	2.56E-04	3.60E-05	2.98E-04	2.9315E-02
520116.33	4258782.1	143012.7395	7.01585	0.92162	6.0282	0.86517	2.86E-02	2.87E-04	3.30E-05	2.47E-04	2.97E-05	2.9237E-02
520385.16	4258812.79	142821.9101	0.44286	0.22812	0.42623	0.24273	2.86E-02	1.81E-05	8.16E-06	1.75E-05	8.33E-06	2.8654E-02
520177.27	4258833.13	142729.3566	2.31241	0.52096	2.09661	0.54146	2.86E-02	9.47E-05	1.86E-05	8.58E-05	1.86E-05	2.8801E-02
520197.21	4258412.69	142672.4125	0.53165	1.87099	0.55001	2.13525	2.86E-02	2.18E-05	6.69E-05	2.25E-05	7.33E-05	2.8757E-02
520138.39	4258442.5	142657.91	0.68865	4.57433	0.74783	5.43922	2.86E-02	2.82E-05	1.64E-04	3.06E-05	1.87E-04	2.8978E-02
520454.54	4258707.77	142606.7493	0.29284	0.22125	0.28307	0.23294	2.86E-02	1.20E-05	7.91E-06	1.16E-05	8.00E-06	2.8598E-02
520286.21	4258852.95	142430.0322	0.84145	0.29869	0.80198	0.31916	2.85E-02	3.45E-05	1.07E-05	3.28E-05	1.10E-05	2.8612E-02
520434.59	4258756.37	142410.519	0.33416	0.21726	0.32269	0.22918	2.85E-02	1.37E-05	7.77E-06	1.32E-05	7.87E-06	2.8562E-02
520149.33	4258815.71	142385.9726	3.51531	0.6561	3.10369	0.65532	2.85E-02	1.44E-04	2.35E-05	1.27E-04	2.25E-05	2.8832E-02
520226.61	4258402.78	142367.2333	0.47287	1.35524	0.48729	1.52767	2.85E-02	1.94E-05	4.85E-05	2.00E-05	5.24E-05	2.8651E-02
520236.71	4258853.03	142269.1917	1.24608	0.36321	1.17011	0.3894	2.85E-02	5.10E-05	1.30E-05	4.79E-05	1.34E-05	2.8617E-02
520426.3	4258769.81	142267.4914	0.35103	0.21718	0.33877	0.22961	2.85E-02	1.44E-05	7.77E-06	1.39E-05	7.88E-06	2.8535E-02
520265.8	4258392.9	141700.6337	0.40808	0.94469	0.41788	1.05338	2.84E-02	1.67E-05	3.38E-05	1.71E-05	3.62E-05	2.8481E-02
520432.14	4258413.42	141174.8786	0.24675	0.32547	0.24673	0.34871	2.83E-02	1.01E-05	1.16E-05	1.01E-05	1.20E-05	2.8316E-02
520462.09	4258480.02	141035.9007	0.23838	0.2691	0.23593	0.28703	2.82E-02	9.76E-06	9.63E-06	9.66E-06	9.85E-06	2.8283E-02
520355.49	4258832.84	141023.7697	0.52843	0.2433	0.50747	0.25856	2.82E-02	2.16E-05	8.70E-06	2.08E-05	8.88E-06	2.8302E-02
520296.11	4258852.93	140917.674	0.78436	0.28806	0.74891	0.30732	2.82E-02	3.21E-05	1.03E-05	3.07E-05	1.06E-05	2.8304E-02
520393.05	4258393.3	140791.5988	0.27164	0.40505	0.27171	0.43536	2.82E-02	1.11E-05	1.45E-05	1.11E-05	1.49E-05	2.8247E-02
520226.81	4258853.05	140481.4378	1.36095	0.37912	1.27246	0.40583	2.81E-02	5.57E-05	1.36E-05	5.21E-05	1.39E-05	2.8269E-02
520403.49	4258799.27	139665.9496	0.39905	0.21989	0.38449	0.23366	2.80E-02	1.63E-05	7.87E-06	1.57E-05	8.02E-06	2.8018E-02
520443.25	4258742.78	139587.5631	0.31748	0.21657	0.30657	0.228	2.80E-02	1.30E-05	7.75E-06	1.26E-05	7.83E-06	2.7995E-02
520375.27	4258822.8	139465.0613	0.46963	0.23127	0.45156	0.24598	2.79E-02	1.92E-05	8.27E-06	1.85E-05	8.44E-06	2.7984E-02
520256.01	4258392.87	139166.3522	0.4201	1.03052	0.43144	1.15162	2.79E-02	1.72E-05	3.69E-05	1.77E-05	3.95E-05	2.7981E-02
520140.31	4258811.99	139122.2474	4.15809	0.7018	3.6317	0.68838	2.79E-02	1.70E-04	2.51E-05	1.49E-04	2.36E-05	2.8229E-02
520306.02	4258852.92	138843.0467	0.73238	0.27785	0.70031	0.29598	2.78E-02	3.00E-05	9.94E-06	2.87E-05	1.02E-05	2.7884E-02
520216.91	4258853.07	138400.9526	1.49709	0.39695	1.39255	0.42351	2.77E-02	6.13E-05	1.42E-05	5.70E-05	1.45E-05	2.7864E-02
520334.35	4258383.11	138164.5991	0.32128	0.57345	0.32263	0.62756	2.77E-02	1.32E-05	2.05E-05	1.32E-05	2.15E-05	2.7738E-02
520216.82	4258402.75	138153.5114	0.48481	1.50581	0.49989	1.7034	2.77E-02	1.99E-05	5.39E-05	2.05E-05	5.85E-05	2.7820E-02
520324.56	4258383.08	137987.982	0.33135	0.61116	0.33366	0.67092	2.76E-02	1.36E-05	2.19E-05	1.37E-05	2.30E-05	2.7706E-02
520344.14	4258383.14	137982.1753	0.31152	0.53962	0.31216	0.58858	2.76E-02	1.28E-05	1.93E-05	1.28E-05	2.02E-05	2.7698E-02
520167.82	4258422.59	137901.49	0.59132	2.76904	0.62407	3.21885	2.76E-02	2.42E-05	9.90E-05	2.56E-05	1.11E-04	2.7876E-02
520422.38	4258403.39	137622.618	0.25136	0.34464	0.25177	0.36922	2.76E-02	1.03E-05	1.23E-05	1.03E-05	1.27E-05	2.7606E-02
520167.37	4258833.15	137565.2154	2.66022	0.55139	2.38977	0.56474	2.75E-02	1.09E-04	1.97E-05	9.78E-05	1.94E-05	2.7795E-02
520314.77	4258383.05	137473.7618	0.34171	0.65347	0.34521	0.71938	2.75E-02	1.40E-05	2.34E-05	1.41E-05	2.47E-05	2.7607E-02
520402.84	4258393.33	137050.4745	0.26351	0.3842	0.26374	0.41228	2.74E-02	1.08E-05	1.37E-05	1.08E-05	1.42E-05	2.7496E-02
520353.92	4258383.18	136894.2414	0.30194	0.50946	0.30231	0.5535	2.74E-02	1.24E-05	1.82E-05	1.24E-05	1.90E-05	2.7477E-02
520187.42	4258412.66	136565.0515	0.54202	2.11907	0.56347	2.43245	2.73E-02	2.22E-05	7.58E-05	2.31E-05	8.35E-05	2.7554E-02
520098.06	4258764.57	136488.3389	12.19537	1.08323	10.84106	0.98809	2.73E-02	4.99E-04	3.87E-05	4.44E-04	3.39E-05	2.8350E-02
520461.41	4258691.37	136482.9838	0.2803	0.22107	0.27118	0.23304	2.73E-02	1.15E-05	7.91E-06	1.11E-05	8.00E-06	2.7371E-02
520315.92	4258852.9	136399.7536	0.68563	0.26819	0.65635	0.28528	2.73E-02	2.81E-05	9.59E-06	2.69E-05	9.79E-06	2.7390E-02
520107.83	4258778.6	136345.7679	8.89636	0.96813	7.67971	0.89436	2.73E-02	3.64E-04	3.46E-05	3.14E-04	3.07E-05	2.8049E-02
520246.22	4258392.84	136285.3693	0.43189	1.1292	0.44444	1.26464	2.73E-02	1.77E-05	4.04E-05	1.82E-05	4.34E-05	2.7413E-02
520345.6	4258842.85	136031.8228	0.56551	0.24719	0.54258	0.26248	2.72E-02	2.32E-05	8.84E-06	2.22E-05	9.01E-06	2.7305E-02
520207.01	4258853.08	135947.9031	1.65914	0.41677	1.53403	0.44227	2.72E-02	6.79E-05	1.49E-05	6.28E-05	1.52E-05	2.7386E-02
520148.21	4258432.53	135940.7685	0.63945	3.8176	0.68936	4.48555	2.72E-02	2.62E-05	1.37E-04	2.82E-05	1.54E-04	2.7569E-02
520363.71	4258383.21	135914.2793	0.29288	0.48118	0.29293	0.52116	2.72E-02	1.20E-05	1.72E-05	1.20E-05	1.79E-05	2.7278E-02
520365.39	4258832.82	135910.9158	0.50037	0.23508	0.48063	0.24985	2.72E-02	2.05E-05	8.41E-06	1.97E-05	8.58E-06	2.7275E-02
520158.52	4258829.5	135605.914	3.03022	0.58761	2.70086	0.59377	2.72E-02	1.24E-04	2.10E-05	1.11E-04	2.04E-05	2.7433E-02
520295.19	4258382.99	135448.0817	0.36313	0.75356	0.36947	0.83387	2.71E-02	1.49E-05	2.70E-05	1.51E-05	2.86E-05	2.7211E-02
520117.12	4258792.42	134902.8232	6.89148	0.86492	5.92645	0.81104	2.70E-02	2.82E-04	3.09E-05	2.43E-04	2.78E-05	2.7600E-02
520395.06	4258812.77	134428.9506	0.42068	0.22043	0.40485	0.23438	2.69E-02	1.72E-05	7.88E-06	1.66E-05	8.05E-06	2.6971E-02
520373.5	4258383.24	134317.1297	0.28411	0.45537	0.28408	0.49166	2.69E-02	1.16E-05	1.63E-05	1.16E-05	1.69E-05	2.6955E-02
520411.94	4258795.77	134241.0409	0.38205	0.21543	0.36813	0.22865	2.69E-02	1.56E-05	7.71E-06	1.51E-05	7.85E-06	2.6930E-02
520285.4	4258382.96	133948.8798	0.37407	0.81303	0.38194	0.90182	2.68E-02	1.53E-05	2.91E-05	1.56E-05	3.10E-05	2.6916E-02
520325.82	4258852.89	133574.651	0.64338	0.25898	0.61643	0.27516	2.68E-02	2.63E-05	9.26E-06	2.52E-05	9.45E-06	2.6820E-02
520256.53	4258863	133566.2145	1.05717	0.3238	0.99989	0.34734	2.67E-02	4.33E-05	1.16E-05	4.09E-05	1.19E-05	2.6856E-02
520207.03	4258402.72	133480.2583	0.49588	1.68355	0.51198	1.91182	2.67E-02	2.03E-05	6.02E-05	2.10E-05	6.56E-05	2.6898E-02
520266.43	4258862.98	133441.2596	0.97719	0.31142	0.92697	0.33385	2.67E-02	4.00E-05	1.11E-05	3.80E-05	1.15E-05	2.6824E-02
520459.82	4258441.13	133383.6994	0.23253	0.28047	0.23097	0.29917	2.67E-02	9.52E-06	1.00E-05	9.46E-06	1.03E-05	2.6751E-02
520149.67	4258825.84	133257.7514	3.50448	0.62675	3.0957	0.62338	2.67E-02	1.43E-04	2.24E-05	1.27E-04	2.14E-05	2.7001E-02
520246.63	4258863.02	133137.1734	1.14678	0.33697	1.08098	0.3615	2.67E-02	4.70E-05	1.21E-05	4.43E-05	1.24E-05	2.6778E-02
520236.43	4258392.81	133035.7203	0.44329	1.24248	0.4566	1.39504	2.66E-02	1.82E-05	4.44E-05	1.87E-05	4.79E-05	2.6771E-02
520276.33	4258862.97	132905.4437	0.90642	0.29993	0.86198	0.3212	2.66E-02	3.71E-05	1.07E-05	3.53E-05	1.10E-05	2.6710E-02
520197.11	4258853.1	132828.7304	1.84852	0.43809	1.69795	0.46146	2.66E-02	7.57E-05	1.57E-05	6.95E-05	1.58E-05	2.6777E-02
520059.93	4258627.94	132802.8499	5.59286	4.642	12.35612	3.75046	2.66E-02	2.29E-04	1.66E-04	5.06E-04	1.29E-04	2.7625E-02
520412.63	4258393.36	132635.8445	0.2557	0.36515	0.25606	0.39128	2.66E-02	1.05E-05	1.31E-05	1.05E-05	1.34E-05	2.6610E-02
520385.17	4258822.79	132514.9772	0.44565	0.22346	0.4285	0.2376	2.65E-02	1.82E-05	7.99E-06	1.75E-05	8.16E-06	2.6590E-02
520275.62	4258382.93	132135.461	0.38502	0.8805	0.39439	0.97869	2.65E-02	1.58E-05	3.15E-05	1.61E-05	3.36E-05	2.6559E-02
520466.13	4258469.97	132120.1216	0.23335	0.26655	0.23113	0.28405	2.65E-02	9.55E-06	9.53E-06	9.46E-06	9.75E-06	2.6497E-02
520236.73	4258863.03	132112.3092	1.24726	0.35101	1.1712	0.37624	2.65E-02	5.11E-05	1.26E-05	4.80E-05	1.29E-05	2.6582E-02
520286.23	4258862.95	132024.313	0.84359	0.2893	0.80391	0.30941	2.64E-02	3.45E-05	1.03E-05	3.29E-05	1.06E-05	2.6528E-02
520355.5	4258842.84	131450.8379	0.5333	0.23846	0.51183	0.25319	2.63E-02	2.18E-05	8.53E-06	2.10E-05	8.69E-06	2.6385E-02
520432.17	4258403.42	130978.2417	0.24392	0.32853	0.24423	0.35158	2.62E-02	9.99E-06	1.18E-05	1.00E-05	1.21E-05	2.6274E-02
520057.12	4258655.32	130734.2964	5.70157	2.80164	10.94094	2.46113	2.62E-02	2.33E-04	1.00E-04	4.48E-04	8.45E-05	2.7047E-02
520140.81	4258822.19	130661.148	4.14003	0.6681	3.61552	0.65295	2.62E-02	1.70E-04	2.39E-05	1.48E-04	2.24E-05	2.6531E-02
520296.13	4258862.93	130625.9686	0.7865	0.27915	0.75084	0.29811	2.62E-02	3.22E-05	9.98E-06	3.07E-05	1.02E-05	2.6243E-02
520226.83	4258863.05	130576.0649	1.36202	0.36625	1.27347	0.39167	2.61E-02	5.58E-05	1.31E-05	5.21E-05	1.34E-05	2.6284E-02
520393.08	4258383.3	130406.5107	0.26781	0.4084	0.26763	0.43905	2.61E-02	1.10E-05	1.46E-05	1.10E-05	1.51E-05	2.6167E-02
520057.12	4258664.6	130193.9881	5.88804	2.46504	11.27206	2.19759	2.61E-02	2.41E-04	8.82E-05	4.62E-04	7.54E-05	2.6939E-02
520429.44	4258778.52	130181.936	0.34806	0.21117	0.33559	0.22327	2.61E-02	1.43E-05	7.55E-06	1.37E-05	7.67E-06	2.6114E-02
520403.38	4258809.32	130089.266	0.4021	0.21563	0.38702	0.22913	2.61E-02	1.65E-05	7.71E-06	1.58E-05	7.87E-06	2.6100E-02
520122.29	4258804.55	130081.4844	6.10089	0.79324	5.24665	0.74935	2.61E-02	2.50E-04	2.84E-05	2.15E-04	2.57E-05	2.6569E-02
520265.83	4258382.9	129999.0607	0.39589	0.95716	0.40662	1.06602	2.60E-02	1.62E-05	3.42E-05	1.66E-05	3.66E-05	2.6138E-02
520099.33	4258775.09	129874.4156	11.71094	1.0061	10.34697	0.91907	2.60E-02	4.79E-04	3.60E-05	4.24E-04	3.16E-05	2.6980E-02
520177.64	4258412.63	129802.1145	0.55028	2.42296	0.57697	2.79704	2.60E-02	2.25E-05	8.67E-05	2.36E-05	9.60E-05	2.6223E-02
520375.29	4258832.8	129595.1651	0.47274	0.22656	0.45416	0.24073	2.60E-02	1.94E-05	8.10E-06	1.86E-05	8.26E-06	2.6008E-02
520057.12	4258646.05	129559.9686	5.48912	3.22165	10.57322	2.77667	2.59E-02	2.25E-04	1.15E-04	4.33E-04	9.53E-05	2.6814E-02
520226.64	4258392.78	129390.869	0.45412	1.37258	0.46786	1.54617	2.59E-02	1.86E-05	4.91E-05	1.92E-05	5.31E-05	2.6052E-02
520187.21	4258853.12	129258.4221	2.07616	0.46119	1.89315	0.48107	2.59E-02	8.50E-05	1.65E-05	7.75E-05	1.65E-05	2.6081E-02
520108.75	4258788.97	129114.4304	8.66986	0.9053	7.4867	0.83655	2.59E-02	3.55E-04	3.24E-05	3.07E-04	2.87E-05	2.6580E-02
520158.03	4258422.56	128932.8088	0.59548	3.24352	0.63631	3.79087	2.58E-02	2.44E-05	1.16E-04	2.61E-05	1.30E-04	2.6117E-02
520216.92	4258863.07	128716.6999	1.49732	0.38336	1.39294	0.40836	2.58E-02	6.13E-05	1.37E-05	5.70E-05	1.40E-05	2.5923E-02
520306.03	4258862.92	128696.6476	0.73437	0.2694	0.7021	0.2872	2.58E-02	3.01E-05	9.64E-06	2.87E-05	9.86E-06	2.5852E-02
520060.71	4258691.8	128620.7213	7.29848	1.83533	16.66343	1.67402	2.58E-02	2.99E-04	6.56E-05	6.82E-04	5.75E-05	2.6862E-02
520197.24	4258402.69	128274.2611	0.50567	1.89307	0.52391	2.15985	2.57E-02	2.07E-05	6.77E-05	2.15E-05	7.41E-05	2.5873E-02
520458.02	4258723.39	128226.9709	0.2923	0.21323	0.28215	0.22407	2.57E-02	1.20E-05	7.63E-06	1.16E-05	7.69E-06	2.5718E-02

520057.12	4258673.87	128011.2239	6.04053	2.19197	11.57685	1.97632	2.56E-02	2.47E-04	7.84E-05	4.74E-04	6.78E-05	2.6504E-02
520334.38	4258373.11	127864.2489	0.31527	0.57846	0.31781	0.63352	2.56E-02	1.29E-05	2.07E-05	1.30E-05	2.17E-05	2.5675E-02
520422.41	4258393.39	127823.5263	0.2483	0.34808	0.24875	0.37241	2.56E-02	1.02E-05	1.25E-05	1.02E-05	1.28E-05	2.5644E-02
520059.89	4258618.24	127798.949	5.0988	5.70599	11.54337	4.35416	2.56E-02	2.09E-04	2.04E-04	4.73E-04	1.49E-04	2.6628E-02
520344.17	4258373.14	127770.2899	0.306	0.5441	0.30764	0.59402	2.56E-02	1.25E-05	1.95E-05	1.26E-05	2.04E-05	2.5653E-02
520324.59	4258373.08	127629.4557	0.32477	0.61704	0.32841	0.67763	2.56E-02	1.33E-05	2.21E-05	1.34E-05	2.33E-05	2.5632E-02
520256.04	4258382.87	127533.4671	0.40657	1.0442	0.41831	1.16547	2.55E-02	1.66E-05	3.73E-05	1.71E-05	4.00E-05	2.5651E-02
520158.67	4258839.55	127217.8379	3.04657	0.5646	2.71257	0.56785	2.55E-02	1.25E-04	2.02E-05	1.11E-04	1.95E-05	2.5753E-02
520402.87	4258383.33	127188.3482	0.25996	0.38752	0.25992	0.41576	2.55E-02	1.06E-05	1.39E-05	1.06E-05	1.43E-05	2.5521E-02
520314.8	4258373.05	127073.5358	0.33447	0.66008	0.33936	0.72674	2.54E-02	1.37E-05	2.36E-05	1.39E-05	2.49E-05	2.5524E-02
520459.13	4258430.83	126994.4416	0.23085	0.28358	0.22957	0.30264	2.54E-02	9.45E-06	1.01E-05	9.40E-06	1.04E-05	2.5472E-02
520353.96	4258373.18	126877.1818	0.29684	0.51347	0.29798	0.55847	2.54E-02	1.22E-05	1.84E-05	1.22E-05	1.92E-05	2.5471E-02
520118.78	4258452.44	126849.2885	0.72405	7.19521	0.79178	8.75012	2.54E-02	2.96E-05	2.57E-04	3.24E-05	3.00E-04	2.6023E-02
520057.12	4258636.77	126816.4181	5.22246	3.7567	10.15607	3.15456	2.54E-02	2.14E-04	1.34E-04	4.16E-04	1.08E-04	2.6269E-02
520365.4	4258842.82	126667.0159	0.5043	0.23037	0.48408	0.24458	2.54E-02	2.06E-05	8.24E-06	1.98E-05	8.40E-06	2.5424E-02
520128.6	4258442.47	126557.8477	0.67831	5.65848	0.73882	6.83124	2.53E-02	2.78E-05	2.02E-04	3.03E-05	2.35E-04	2.5840E-02
520207.02	4258863.08	126553.3572	1.65869	0.40251	1.53401	0.42625	2.53E-02	6.79E-05	1.44E-05	6.28E-05	1.46E-05	2.5504E-02
520315.93	4258862.9	126408.9243	0.68729	0.26019	0.65784	0.27692	2.53E-02	2.81E-05	9.31E-06	2.69E-05	9.51E-06	2.5389E-02
520363.74	4258373.21	126036.6049	0.28817	0.48485	0.28874	0.52573	2.52E-02	1.18E-05	1.73E-05	1.18E-05	1.80E-05	2.5300E-02
520441.94	4258763.34	126023.0079	0.32461	0.2093	0.31324	0.22058	2.52E-02	1.33E-05	7.49E-06	1.28E-05	7.57E-06	2.5279E-02
520411.7	4258805.88	125442.1413	0.38516	0.2113	0.37073	0.22431	2.51E-02	1.58E-05	7.56E-06	1.52E-05	7.70E-06	2.5168E-02
520216.85	4258392.75	125343.656	0.46422	1.52426	0.47857	1.72346	2.51E-02	1.90E-05	5.45E-05	1.96E-05	5.92E-05	2.5254E-02
520177.3	4258853.13	125241.4161	2.35245	0.48594	2.12804	0.50067	2.51E-02	9.63E-05	1.74E-05	8.71E-05	1.72E-05	2.5299E-02
520395.07	4258822.77	125156.8251	0.42336	0.21606	0.407	0.22961	2.51E-02	1.73E-05	7.73E-06	1.67E-05	7.88E-06	2.5114E-02
520149.95	4258835.95	125051.7093	3.50389	0.59985	3.09445	0.59418	2.50E-02	1.43E-04	2.15E-05	1.27E-04	2.04E-05	2.5355E-02
520464.75	4258707.32	125010.7697	0.28009	0.21349	0.27043	0.22459	2.50E-02	1.15E-05	7.64E-06	1.11E-05	7.71E-06	2.5073E-02
520246.25	4258382.84	124735.8452	0.41691	1.14371	0.42928	1.27958	2.50E-02	1.71E-05	4.09E-05	1.76E-05	4.39E-05	2.5100E-02
520108.93	4258472.41	124717.3121	0.85546	9.53156	0.9477	11.54478	2.50E-02	3.50E-05	3.41E-04	3.88E-05	3.96E-04	2.5787E-02
520373.53	4258373.24	124685.1433	0.27974	0.45874	0.27998	0.49586	2.50E-02	1.15E-05	1.64E-05	1.15E-05	1.70E-05	2.5026E-02
520113.27	4258800.83	124659.5734	7.65586	0.83441	6.58663	0.77545	2.50E-02	3.13E-04	2.98E-05	2.70E-04	2.66E-05	2.5604E-02
520057.12	4258683.15	124562.5859	6.15111	1.96683	11.85848	1.78869	2.49E-02	2.52E-04	7.04E-05	4.86E-04	6.14E-05	2.5815E-02
520256.54	4258873	124507.0312	1.06138	0.3138	1.00363	0.33667	2.49E-02	4.35E-05	1.12E-05	4.11E-05	1.16E-05	2.5042E-02
520266.45	4258872.98	124422.7199	0.98177	0.30202	0.93109	0.32389	2.49E-02	4.02E-05	1.08E-05	3.81E-05	1.11E-05	2.5018E-02
520246.64	4258873.02	124089.674	1.15037	0.32634	1.08414	0.35001	2.49E-02	4.71E-05	1.17E-05	4.44E-05	1.20E-05	2.4966E-02
520276.35	4258872.97	123866.2553	0.91055	0.29095	0.86572	0.31171	2.48E-02	3.73E-05	1.04E-05	3.54E-05	1.07E-05	2.4900E-02
520325.83	4258862.89	123863.4979	0.64508	0.25156	0.61794	0.26735	2.48E-02	2.64E-05	9.00E-06	2.53E-05	9.18E-06	2.4875E-02
520197.12	4258863.1	123802.2529	1.84733	0.42292	1.69753	0.44431	2.48E-02	7.56E-05	1.51E-05	6.95E-05	1.53E-05	2.4969E-02
520450.43	4258749.82	123731.0592	0.30901	0.20868	0.29808	0.21952	2.48E-02	1.27E-05	7.46E-06	1.22E-05	7.54E-06	2.4819E-02
520138.42	4258432.5	123640.5487	0.63542	4.61588	0.68931	5.48525	2.48E-02	2.60E-05	1.65E-04	2.82E-05	1.88E-04	2.5168E-02
520285.44	4258372.96	123553.217	0.36419	0.82329	0.37322	0.91214	2.47E-02	1.49E-05	2.94E-05	1.53E-05	3.13E-05	2.4834E-02
520100.38	4258785.51	123490.5115	11.32571	0.93852	9.96805	0.85837	2.47E-02	4.64E-04	3.36E-05	4.08E-04	2.95E-05	2.5666E-02
520412.66	4258383.36	123347.5167	0.25241	0.36841	0.25253	0.39453	2.47E-02	1.03E-05	1.32E-05	1.03E-05	1.35E-05	2.4749E-02
520385.19	4258832.79	123269.4833	0.44817	0.21888	0.43052	0.23251	2.47E-02	1.83E-05	7.83E-06	1.76E-05	7.98E-06	2.4738E-02
520236.74	4258873.03	123266.9844	1.25177	0.34004	1.17514	0.36416	2.47E-02	5.13E-05	1.22E-05	4.81E-05	1.25E-05	2.4810E-02
520286.25	4258872.95	122910.5116	0.84671	0.28057	0.80674	0.30022	2.46E-02	3.47E-05	1.00E-05	3.30E-05	1.03E-05	2.4703E-02
520123.11	4258814.88	122889.9973	6.00755	0.74906	5.16491	0.70674	2.46E-02	2.46E-04	2.68E-05	2.11E-04	2.43E-05	2.5119E-02
520428.83	4258788.78	122863.8962	0.3517	0.20737	0.33885	0.21939	2.46E-02	1.44E-05	7.42E-06	1.39E-05	7.53E-06	2.4648E-02
520090.84	4258771.58	122794.2832	15.24834	1.03275	15.16187	0.93849	2.46E-02	6.24E-04	3.69E-05	6.21E-04	3.22E-05	2.5906E-02
520141.24	4258832.36	122738.3269	4.11508	0.63694	3.59592	0.62044	2.46E-02	1.68E-04	2.28E-05	1.47E-04	2.13E-05	2.4940E-02
520355.52	4258852.84	122620.1712	0.53727	0.23336	0.51538	0.24756	2.46E-02	2.20E-05	8.35E-06	2.11E-05	8.50E-06	2.4616E-02
520438.05	4258774.96	122523.0276	0.33344	0.20713	0.32155	0.21859	2.45E-02	1.37E-05	7.41E-06	1.32E-05	7.50E-06	2.4579E-02
520187.46	4258402.66	122499.8936	0.51377	2.14294	0.53585	2.4586	2.45E-02	2.10E-05	7.66E-05	2.19E-05	8.44E-05	2.4736E-02
520059.85	4258608.54	122497.0667	4.51414	7.14133	10.43773	5.02645	2.45E-02	1.85E-04	2.55E-04	4.27E-04	1.73E-04	2.5572E-02
520167.85	4258412.59	122261.8449	0.55552	2.79837	0.58896	3.25095	2.45E-02	2.27E-05	1.00E-04	2.41E-05	1.12E-04	2.4743E-02
520432.2	4258393.42	122061.6155	0.24109	0.33187	0.24155	0.35465	2.44E-02	9.87E-06	1.19E-05	9.89E-06	1.22E-05	2.4488E-02
520226.84	4258873.05	122014.593	1.36825	0.35504	1.27886	0.37911	2.44E-02	5.60E-05	1.27E-05	5.24E-05	1.30E-05	2.4569E-02
520275.65	4258372.93	121771.3296	0.37405	0.89211	0.3843	0.99014	2.44E-02	1.53E-05	3.19E-05	1.57E-05	3.40E-05	2.4483E-02
520296.15	4258872.93	121617.8877	0.78957	0.27088	0.75363	0.28945	2.44E-02	3.23E-05	9.69E-06	3.09E-05	9.94E-06	2.4438E-02
520236.46	4258382.81	121593.4244	0.42678	1.25777	0.43947	1.41116	2.44E-02	1.75E-05	4.50E-05	1.80E-05	4.84E-05	2.4480E-02
520393.11	4258373.3	121253.9375	0.26402	0.41161	0.26375	0.44278	2.43E-02	1.08E-05	1.47E-05	1.08E-05	1.52E-05	2.4334E-02
520335.74	4258862.87	121188.9067	0.60747	0.24357	0.58222	0.25859	2.43E-02	2.49E-05	8.71E-06	2.38E-05	8.88E-06	2.4336E-02
520375.31	4258842.8	121077.8574	0.47653	0.22226	0.45742	0.23595	2.42E-02	1.95E-05	7.95E-06	1.87E-05	8.10E-06	2.4302E-02
520167.4	4258853.15	120919.4209	2.6963	0.51213	2.4177	0.51978	2.42E-02	1.10E-04	1.83E-05	9.90E-05	1.78E-05	2.4461E-02
520207.06	4258392.72	120866.9456	0.47337	1.70277	0.48916	1.93316	2.42E-02	1.94E-05	6.09E-05	2.00E-05	6.64E-05	2.4372E-02
520187.22	4258863.12	120643.1101	2.07393	0.44494	1.89218	0.46268	2.42E-02	8.49E-05	1.59E-05	7.75E-05	1.59E-05	2.4355E-02
520216.94	4258873.07	120314.5132	1.50282	0.37138	1.39768	0.39474	2.41E-02	6.15E-05	1.33E-05	5.72E-05	1.36E-05	2.4240E-02
520458.69	4258420.62	120293.4796	0.22892	0.28646	0.22804	0.3058	2.41E-02	9.37E-06	1.02E-05	9.34E-06	1.05E-05	2.4130E-02
520306.05	4258872.92	120006.4859	0.73826	0.26184	0.70565	0.27935	2.40E-02	3.02E-05	9.37E-06	2.89E-05	9.59E-06	2.4111E-02
520265.86	4258372.9	119685.5135	0.38375	0.96991	0.39492	1.07853	2.40E-02	1.57E-05	3.47E-05	1.62E-05	3.70E-05	2.4072E-02
520471.48	4258691.25	119469.2905	0.26859	0.2134	0.25965	0.2247	2.39E-02	1.10E-05	7.63E-06	1.06E-05	7.71E-06	2.3962E-02
520422.44	4258383.39	119137.8277	0.24523	0.35132	0.24553	0.37553	2.39E-02	1.00E-05	1.26E-05	1.01E-05	1.29E-05	2.3905E-02
520104.26	4258797.11	119008.5514	9.94722	0.86876	8.66777	0.79766	2.38E-02	4.07E-04	3.11E-05	3.55E-04	2.74E-05	2.4654E-02
520148.24	4258422.53	118946.8435	0.59435	3.85489	0.64165	4.52308	2.38E-02	2.43E-05	1.38E-04	2.63E-05	1.55E-04	2.4165E-02
520472.09	4258480.39	118941.9821	0.23055	0.25794	0.22798	0.27476	2.38E-02	9.44E-06	9.23E-06	9.33E-06	9.43E-06	2.3857E-02
520334.41	4258363.11	118723.8996	0.30926	0.58396	0.31302	0.63968	2.38E-02	1.27E-05	2.09E-05	1.28E-05	2.20E-05	2.3844E-02
520344.2	4258363.15	118714.9168	0.3005	0.54881	0.30327	0.59951	2.38E-02	1.23E-05	1.96E-05	1.24E-05	2.06E-05	2.3839E-02
520402.9	4258373.33	118499.1541	0.25646	0.39065	0.25622	0.41926	2.37E-02	1.05E-05	1.40E-05	1.05E-05	1.44E-05	2.3780E-02
520324.62	4258363.08	118431.6281	0.31817	0.62327	0.32308	0.68443	2.37E-02	1.30E-05	2.23E-05	1.32E-05	2.35E-05	2.3790E-02
520207.04	4258873.08	118305.8339	1.66248	0.38948	1.53735	0.41136	2.37E-02	6.81E-05	1.39E-05	6.29E-05	1.41E-05	2.3851E-02
520114.26	4258811.23	118282.1445	7.49525	0.78532	6.43349	0.72982	2.37E-02	3.07E-04	2.81E-05	2.63E-04	2.51E-05	2.4311E-02
520226.67	4258382.78	118088.6024	0.43605	1.38894	0.44908	1.56372	2.36E-02	1.79E-05	4.97E-05	1.84E-05	5.37E-05	2.3788E-02
520353.99	4258363.18	117991.5186	0.2918	0.51758	0.29388	0.56342	2.36E-02	1.19E-05	1.85E-05	1.20E-05	1.93E-05	2.3691E-02
520365.42	4258852.82	117893.5438	0.50668	0.22518	0.48605	0.23885	2.36E-02	2.07E-05	8.05E-06	1.99E-05	8.20E-06	2.3667E-02
520315.95	4258872.9	117844.9876	0.6906	0.25298	0.66088	0.26944	2.36E-02	2.83E-05	9.05E-06	2.71E-05	9.25E-06	2.3674E-02
520314.83	4258363.05	117836.5265	0.3272	0.66702	0.33333	0.73415	2.36E-02	1.34E-05	2.39E-05	1.36E-05	2.52E-05	2.3674E-02
520108.96	4258462.41	117707.6003	0.76902	9.58585	0.84506	11.61428	2.36E-02	3.15E-05	3.43E-04	3.46E-05	3.99E-04	2.4380E-02
520092.01	4258782.06	117339.7232	14.77259	0.96193	14.31826	0.87563	2.35E-02	6.05E-04	3.44E-05	5.86E-04	3.01E-05	2.4754E-02
520256.07	4258372.87	117291.683	0.39319	1.05805	0.40488	1.17914	2.35E-02	1.61E-05	3.78E-05	1.66E-05	4.05E-05	2.3600E-02
520363.78	4258363.21	117140.166	0.28344	0.48863	0.28484	0.53025	2.35E-02	1.16E-05	1.75E-05	1.17E-05	1.82E-05	2.3518E-02
520177.32	4258863.13	117045.5749	2.34694	0.4682	2.12485	0.48074	2.34E-02	9.61E-05	1.67E-05	8.70E-05	1.65E-05	2.3656E-02
520305.04	4258363.02	116949.1769	0.3363	0.71606	0.34369	0.78974	2.34E-02	1.38E-05	2.56E-05	1.41E-05	2.71E-05	2.3501E-02
520059.81	4258598.85	116771.6907	3.78442	8.9405	8.72421	5.65802	2.34E-02	1.55E-04	3.20E-04	3.57E-04	1.94E-04	2.4411E-02
520467.75	4258434.52	116731.7623	0.22541	0.27218	0.22389	0.29004	2.34E-02	9.23E-06	9.74E-06	9.17E-06	9.96E-06	2.3415E-02
520395.09	4258832.77	116684.092	0.42556	0.21167	0.40871	0.22477	2.34E-02	1.74E-05	7.57E-06	1.67E-05	7.72E-06	2.3417E-02
520256.56	4258883	116508.0465	1.06715	0.30473	1.00873	0.32694	2.33E-02	4.37E-05	1.09E-05	4.13E-05	1.12E-05	2.3439E-02
520266.46	4258882.98	116398.5835	0.98726	0.29337	0.936	0.3147	2.33E-02	4.04E-05	1.05E-05	3.83E-05	1.08E-05	2.3410E-02
520473.34	4258463.05	116296.5474	0.22668	0.26021	0.22457	0.27691	2.33E-02	9.28E-06	9.31E-06	9.19E-06	9.51E-06	2.3327E-02
520246.66	4258883.02	116209.6131	1.15714	0.317	1.09006	0.33983	2.33E-02	4.74E-05	1.13E-05	4.46E-05	1.17E-05	2.3388E-02
520123.81	4258825.16	116178.2826	5.9324	0.70926	5.09729	0.66833	2.33E-02	2.43E-04	2.54E-05	2.09E-04	2.29E-05	2.3766E-02
520177.67	4258402.63	116133.059	0.51969	2.44863	0.54728	2.82496	2.33E-02	2.13E-05	8.76E-05	2.24E-05	9.70E-05	2.3485E-02
520437.28	4258785.28	116101.0763	0.3371	0.2034	0.3248	0.21483	2.33E-02	1.38E-05	7.28E-06	1.33E-05	7.38E-06	2.3293E-02
520373.56	4258363.24	116071.2179	0.27541	0.4621	0.27622	0.50001	2.32E-02	1.13E-05	1.65E-05	1.13E-05	1.72E-05	2.3301E-02
520197.28	4258392.69	115919.7878	0.48122	1.91323	0.49983	2.18238	2.32E-02	1.97E-05	6.84E-05	2.05E-05	7.49E-05	2.3398E-02
520276.36	4258882.97	115911.415	0.91613	0.28281	0.87076	0.30314	2.32E-02	3.75E-05	1.01E-05	3.57E-05	1.04E-05	2.3307E-02
520197.14	4258873.1	115852.6276	1.85088	0.40896	1.70073	0.42832	2.32E-02	7.58E-05	1.46E-05	6.96E-05	1.47E-05	2.3376E-02
520428.34	4258798.99	115832.2635	0.35498	0.20357	0.34171	0.21551	2.32E-02	1.45E-05	7.28E-06	1.40E-05	7.40E-06	2.3240E-02
520295.26	4258362.99	115774.6334	0.34538	0.77105	0.35399	0.85194	2.32E-02	1.41E-05	2.76E-05	1.45E-05	2.92E-05	2.3271E-02
520061.21	4258717.12	115629.3663	7.55732	1.43669	17.63332	1.32556	2.32E-02	3.09E-04	5.14E-05	7.22E-04	4.55E-05	2.4285E-02
520236.76	4258883.03	115514.2898	1.25938	0.33035	1.18172	0.35342	2.31E-02	5.16E-05	1.18E-05	4.84E-05	1.21E-05	2.3257E-02
520325.85	4258872.89	115430.1794	0.64775	0.24468	0.62038	0.26017	2.31E-02	2.65E-05	8.75E-06	2.54E-05	8.93E-06	2.3186E-02
520385.21	4258842.79	115283.0009	0.45132	0.21471	0.43315	0.22789	2.31E-02	1.85E-05	7.68E-06	1.77E-05	7.82E-06	2.3139E-02
520412.69	4258373.36	115118.8841	0.24913	0.37137	0.249	0.3977	2.31E-02	1.02E-05	1.33E-05	1.02E-05	1.37E-05	2.3101E-02
520461.66	4258738.63	115079.7257	0.29129	0.20514	0.28079	0.2154	2.30E-02	1.19E-05	7.34E-06	1.15E-05	7.39E-06	2.3084E-02
520286.26	4258882.95	115048.4904	0.85223	0.27289	0.81175	0.29219	2.30E-02	3.49E-05	9.76E-06	3.32E-05	1.00E-05	2.3128E-02
520446.65	4258771.39	114729.1854	0.31949	0.20296	0.30806	0.21383	2.30E-02	1.31E-05	7.26E-06	1.26E-05	7.34E-06	2.3016E-02
520246.28	4258372.84	114583.7415	0.40223	1.15847	0.41415	1.29436	2.29E-02	1.65E-05	4.14E-05	1.70E-05	4.44E-05	2.3066E-02
520226.86	4258883.05	114461.5989	1.37748	0.34503	1.28674	0.36784	2.29E-02	5.64E-05	1.23E-05	5.27E-05	1.26E-05	2.3057E-02
520285.47	4258362.96	114312.6785	0.35438	0.83305	0.36409	0.92197	2.29E-02	1.45E-05	2.98E-05	1.49E-05	3.17E-05	2.2984E-02
520216.88	4258382.75	114210.6964	0.44456	1.54172	0.4585	1.74241	2.29E-02	1.82E-05	5.51E-05	1.88E-05	5.98E-05	2.3024E-02
520355.54	4258862.84	114171.6069	0.53935	0.22771	0.51713	0.24142	2.29E-02	2.21E-05	8.14E-06	2.12E-05	8.29E-06	2.2924E-02
520432.23	4258383.42	114138.1713	0.23822	0.3349	0.23863	0.35747	2.29E-02	9.75E-06	1.20E-05	9.77E-06	1.23E-05	2.2902E-02
520158.06	4258412.56	113992.7823	0.55714	3.27538	0.59706	3.82522	2.28E-02	2.28E-05	1.17E-04	2.44E-05	1.31E-04	2.3124E-02
520296.17	4258882.93	113799.9688	0.79439	0.26351	0.758	0.28177	2.28E-02	3.25E-05	9.43E-06	3.10E-05	9.67E-06	2.2873E-02
520057.69	4258708.63	113753.036	6.34969	1.52196	12.77138	1.40367	2.28E-02	2.60E-04	5.44E-05	5.23E-04	4.82E-05	2.3666E-02
520468.29	4258722.81	113634.1804	0.27939	0.20604	0.26937	0.21631	2.28E-02	1.14E-05	7.37E-06	1.10E-05	7.43E-06	2.2794E-02
520095.25	4258793.39	113564.9744	13.38444	0.89426	12.31441	0.8159	2.27E-02	5.48E-04	3.20E-05	5.04E-04	2.80E-05	2.3855E-02
520105.4	4258807.57	113368.8308	9.64865	0.8156	8.36747	0.74953	2.27E-02	3.95E-04	2.92E-05	3.43E-04	2.57E-05	2.3496E-02
520167.42	4258863.15	113200.2549	2.6881	0.49288	2.41305	0.49842	2.27E-02	1.10E-04	1.76E-05	9.88E-05	1.71E-05	2.2913E-02
520393.14	4258363.3	113124.7898	0.26027	0.4146	0.26016	0.44641	2.27E-02	1.07E-05	1.48E-05	1.07E-05	1.53E-05	2.2706E-02
520335.75	4258872.87	113121.0629	0.61057	0.23733	0.58502	0.25204	2.27E-02	2.50E-05	8.49E-06	2.40E-05	8.65E-06	2.2720E-02
520187.24	4258873.12	113085.4786	2.07894	0.43009	1.89657	0.44569	2.26E-02	8.51E-05	1.54E-05	7.77E-05	1.53E-05	2.2840E-02
520375.32	4258852.8	113051.7155	0.47921	0.21762	0.45964	0.2308	2.26E-02	1.96E-05	7.78E-06	1.88E-05	7.92E-06	2.2694E-02
520216.96	4258883.07	112997.6094	1.51405	0.36097	1.40714	0.38286	2.26E-02	6.20E-05	1.29E-05	5.76E-05	1.31E-05	2.2775E-02
520275.68	4258362.93	112554.0575	0.36322	0.90282	0.37377	1.00087	2.25E-02	1.49E-05	3.23E-05	1.53E-05	3.44E-05	2.2637E-02
520306.07	4258882.92	112345.7591	0.74299	0.25488	0.70996	0.27216	2.25E-02	3.04E-05	9.12E-06	2.91E-05	9.34E-06	2.2577E-02
520467.07	4258424.21	112253.5207	0.22381	0.27506	0.22259	0.29327	2.25E-02	9.16E-06	9.84E-06	9.11E-06	1.01E-05	2.2518E-02
520115.09	4258821.56	112176.9083	7.35523	0.74127	6.30434	0.68881	2.25E-02	3.01E-04	2.65E-05	2.58E-04	2.36E-05	2.3074E-02
520158.32	4258859.39	111975.3068	3.0764	0.52349	2.73854	0.52181	2.24E-02	1.26E-04	1.87E-05	1.12E-04	1.79E-05	2.2699E-02
520054.16	4258700.13	111611.0321	5.6169	1.61282	9.94732	1.4881	2.24E-02	2.30E-04	5.77E-05	4.07E-04	5.11E-05	2.3098E-02
520236.49	4258372.81	111551.4125	0.41079	1.27314	0.42285	1.42697	2.23E-02	1.68E-05	4.55E-05	1.73E-05	4.90E-05	2.2468E-02
520422.48	4258373.39	111421.2067	0.24214	0.35441	0.24221	0.37863	2.23E-02	9.91E-06	1.27E-05	9.92E-06	1.30E-05	2.2359E-02
520207.06	4258883.08	111194.6568	1.67487	0.37838	1.54764	0.39854	2.23E-02	6.86E-05	1.35E-05	6.34E-05	1.37E-05	2.2427E-02
520402.93	4258363.33	110719.4093	0.25298	0.3936	0.25273	0.42274	2.22E-02	1.04E-05	1.41E-05	1.03E-05	1.45E-05	2.2222E-02
520059.77	4258589.15	110619.6087	3.04233	10.75058	6.37004	6.12036	2.22E-02	1.25E-04	3.85E-04	2.61E-04	2.10E-04	2.3133E-02
520344.23	4258353.15	110583.159	0.29496	0.55398	0.29889	0.60518	2.21E-02	1.21E-05	1.98E-05	1.22E-05	2.08E-05	2.2211E-02
520334.44	4258353.11	110557.5662	0.3032	0.58982	0.30814	0.64597	2.21E-02	1.24E-05	2.11E-05	1.26E-05	2.22E-05	2.2209E-02
520457.59	4258756.86	110540.1485	0.30083	0.20117	0.28985	0.21147	2.21E-02	1.23E-05	7.20E-06	1.19E-05	7.26E-06	2.2176E-02
520265.89	4258362.9	110498.9696	0.37183	0.98157	0.38289	1.09021	2.21E-02	1.52E-05	3.51E-05	1.57E-05	3.74E-05	2.2232E-02
520187.49	4258392.66	110470.0993	0.48739	2.16548	0.51034	2.48305	2.21E-02	2.00E-05	7.75E-05	2.09E-05	8.52E-05	2.2327E-02
520474.91	4258707	110392.3136	0.26822	0.20602	0.25862	0.2166	2.21E-02	1.10E-05	7.37E-06	1.06E-05	7.44E-06	2.2144E-02
520149.21	4258855.63	110360.0392	3.57183	0.55559	3.15019	0.54508	2.21E-02	1.46E-04	1.99E-05	1.29E-04	1.87E-05	2.2415E-02
520315.97	4258882.9	110339.6568	0.69493	0.24637	0.6648	0.26262	2.21E-02	2.85E-05	8.81E-06	2.72E-05	9.02E-06	2.2171E-02
520324.65	4258353.08	110210.8729	0.31153	0.62975	0.31756	0.69123	2.21E-02	1.28E-05	2.25E-05	1.30E-05	2.37E-05	2.2143E-02
520411.34	4258826.04	110123.8349	0.39062	0.20336	0.37519	0.21581	2.21E-02	1.60E-05	7.27E-06	1.54E-05	7.41E-06	2.2100E-02
520354.02	4258353.18	109968.9373	0.28672	0.52192	0.28988	0.56838	2.20E-02	1.17E-05	1.87E-05	1.19E-05	1.95E-05	2.2085E-02
520207.1	4258382.72	109942.8235	0.45206	1.721	0.46803	1.95303	2.20E-02	1.85E-05	6.16E-05	1.92E-05	6.70E-05	2.2184E-02
520436.66	4258795.55	109918.7996	0.34042	0.19962	0.32765	0.21101	2.20E-02	1.39E-05	7.14E-06	1.34E-05	7.24E-06	2.2054E-02
520124.41	4258835.4	109877.6637	5.86404	0.67307	5.03704	0.63345	2.20E-02	2.40E-04	2.41E-05	2.06E-04	2.17E-05	2.2497E-02
520177.34	4258873.13	109849.1619	2.35113	0.45201	2.1287	0.46237	2.20E-02	9.63E-05	1.62E-05	8.72E-05	1.59E-05	2.2214E-02
520128.63	4258432.47	109660.6478	0.62363	5.70127	0.67586	6.87447	2.20E-02	2.55E-05	2.04E-04	2.77E-05	2.36E-04	2.2454E-02
520314.86	4258353.05	109582.5538	0.31989	0.67437	0.32705	0.74167	2.19E-02	1.31E-05	2.41E-05	1.34E-05	2.55E-05	2.2021E-02
520365.44	4258862.82	109551.8987	0.50733	0.21951	0.48644	0.23259	2.19E-02	2.08E-05	7.85E-06	1.99E-05	7.99E-06	2.1996E-02
520118.81	4258442.44	109491.883	0.65995	7.23077	0.71673	8.80412	2.19E-02	2.70E-05	2.59E-04	2.93E-05	3.02E-04	2.2544E-02
520363.81	4258353.21	109351.7298	0.27881	0.49237	0.28113	0.53474	2.19E-02	1.14E-05	1.76E-05	1.15E-05	1.84E-05	2.1958E-02
520445.73	4258781.78	109336.8365	0.32322	0.19948	0.31142	0.21033	2.19E-02	1.32E-05	7.14E-06	1.28E-05	7.22E-06	2.1937E-02
520395.11	4258842.77	109318.4382	0.42825	0.20766	0.4109	0.22034	2.19E-02	1.75E-05	7.43E-06	1.68E-05	7.56E-06	2.1942E-02
520167.88	4258402.59	109133.1497	0.52272	2.82683	0.55632	3.28049	2.19E-02	2.14E-05	1.01E-04	2.28E-05	1.13E-04	2.2113E-02
520256.58	4258893	109097.975	1.07085	0.29585	1.01194	0.3173	2.18E-02	4.38E-05	1.06E-05	4.14E-05	1.09E-05	2.1955E-02
520266.48	4258892.98	109039.7121	0.99155	0.28501	0.93978	0.30576	2.18E-02	4.06E-05	1.02E-05	3.85E-05	1.05E-05	2.1936E-02
520197.16	4258883.1	108976.5265	1.86432	0.39699	1.71173	0.41442	2.18E-02	7.63E-05	1.42E-05	7.01E-05	1.42E-05	2.1999E-02
520246.68	4258893.02	108890.01	1.16146	0.30782	1.09377	0.32972	2.18E-02	4.76E-05	1.10E-05	4.48E-05	1.13E-05	2.1921E-02
520305.08	4258353.02	108677.0272	0.32825	0.72392	0.33647	0.7977	2.18E-02	1.34E-05	2.59E-05	1.38E-05	2.74E-05	2.1845E-02
520276.38	4258892.97	108578.5093	0.9203	0.27483	0.87446	0.2947	2.17E-02	3.77E-05	9.83E-06	3.58E-05	1.01E-05	2.1838E-02
520096.55	4258803.92	108559.0269	12.84618	0.83818	11.65184	0.76577	2.17E-02	5.26E-04	3.00E-05	4.77E-04	2.63E-05	2.2800E-02
520373.6	4258353.24	108477.3664	0.27114	0.46536	0.27269	0.50407	2.17E-02	1.11E-05	1.66E-05	1.12E-05	1.73E-05	2.1780E-02
520236.78	4258893.03	108363.0097	1.26515	0.32096	1.18665	0.34293	2.17E-02	5.18E-05	1.15E-05	4.86E-05	1.18E-05	2.1825E-02
520050.64	4258691.64	108241.8075	4.88251	1.71325	7.92564	1.57659	2.17E-02	2.00E-04	6.13E-05	3.25E-04	5.41E-05	2.2317E-02
520256.1	4258362.87	108204.8804	0.38014	1.0705	0.39136	1.19179	2.17E-02	1.56E-05	3.83E-05	1.60E-05	4.09E-05	2.1780E-02
520226.7	4258372.78	108187.3722	0.4187	1.40551	0.43132	1.58084	2.17E-02	1.71E-05	5.03E-05	1.77E-05	5.43E-05	2.1805E-02
520325.87	4258882.89	108174.3618	0.65204	0.23852	0.62427	0.25384	2.17E-02	2.67E-05	8.53E-06	2.56E-05	8.71E-06	2.1733E-02
520138.45	4258422.5	107950.0865	0.5883	4.65338	0.63638	5.52632	2.16E-02	2.41E-05	1.66E-04	2.61E-05	1.90E-04	2.2025E-02
520385.22	4258852.79	107913.0372	0.45392	0.21044	0.43528	0.22315	2.16E-02	1.86E-05	7.53E-06	1.78E-05	7.66E-06	2.1663E-02
520412.72	4258363.36	107844.4084	0.24591	0.37424	0.24564	0.40096	2.16E-02	1.01E-05	1.34E-05	1.01E-05	1.38E-05	2.1645E-02
520106.37	4258817.97	107795.6467	9.36398	0.76774	8.10522	0.70615	2.16E-02	3.83E-04	2.75E-05	3.32E-04	2.42E-05	2.2355E-02
520286.28	4258892.95	107775.2143	0.85625	0.26531	0.81535	0.28421	2.16E-02	3.51E-05	9.49E-06	3.34E-05	9.76E-06	2.1671E-02
520295.29	4258352.99	107493.4041	0.33656	0.77902	0.34568	0.86015	2.15E-02	1.38E-05	2.79E-05	1.42E-05	2.95E-05	2.1612E-02
520226.88	4258893.05	107451.5452	1.38403	0.33523	1.2923	0.35672	2.15E-02	5.67E-05	1.20E-05	5.29E-05	1.22E-05	2.1652E-02
520466.58	4258413.99	107394.1519	0.22203	0.27781	0.2212	0.29627	2.15E-02	9.09E-06	9.94E-06	9.06E-06	1.02E-05	2.1545E-02
520086.23	4258789.67	107325.5708	13.91869	0.908	19.87962	0.82876	2.15E-02	5.70E-04	3.25E-05	8.14E-04	2.85E-05	2.2938E-02
520455.26	4258767.83	107226.7585	0.30641	0.19872	0.29522	0.20906	2.15E-02	1.25E-05	7.11E-06	1.21E-05	7.18E-06	2.1513E-02

520432.26	4258373.42	107067.715	0.23536	0.33782	0.23556	0.3603	2.14E-02	9.64E-06	1.21E-05	9.64E-06	1.24E-05	2.1486E-02
520355.55	4258872.84	106709.0299	0.54181	0.22231	0.51927	0.23561	2.14E-02	2.22E-05	7.95E-06	2.13E-05	8.09E-06	2.1429E-02
520296.18	4258892.93	106623.0072	0.79831	0.25631	0.76152	0.27423	2.14E-02	3.27E-05	9.17E-06	3.12E-05	9.41E-06	2.1435E-02
520187.26	4258883.12	106453.2689	2.0928	0.41698	1.90775	0.43047	2.13E-02	8.57E-05	1.49E-05	7.81E-05	1.48E-05	2.1512E-02
520167.44	4258873.15	106406.0295	2.69201	0.47522	2.41676	0.47871	2.13E-02	1.10E-04	1.70E-05	9.90E-05	1.64E-05	2.1552E-02
520115.81	4258831.85	106378.5908	7.22662	0.7014	6.18938	0.65165	2.13E-02	2.96E-04	2.51E-05	2.53E-04	2.24E-05	2.1901E-02
520216.97	4258893.07	106151.8843	1.52146	0.35064	1.41338	0.37101	2.13E-02	6.23E-05	1.25E-05	5.79E-05	1.27E-05	2.1404E-02
520285.5	4258352.96	106055.4397	0.34467	0.84233	0.35458	0.93131	2.12E-02	1.41E-05	3.01E-05	1.45E-05	3.20E-05	2.1330E-02
520335.77	4258882.87	106038.401	0.61442	0.23151	0.5885	0.24602	2.12E-02	2.52E-05	8.28E-06	2.41E-05	8.45E-06	2.1302E-02
520403.77	4258839.18	105909.5252	0.40774	0.20277	0.39124	0.21512	2.12E-02	1.67E-05	7.25E-06	1.60E-05	7.39E-06	2.1257E-02
520393.17	4258353.3	105856.5985	0.25656	0.41739	0.25687	0.4499	2.12E-02	1.05E-05	1.49E-05	1.05E-05	1.54E-05	2.1251E-02
520476.37	4258438.21	105718.0657	0.22008	0.26173	0.21837	0.27844	2.12E-02	9.01E-06	9.36E-06	8.94E-06	9.56E-06	2.1208E-02
520246.31	4258362.84	105586.6476	0.38802	1.17167	0.39931	1.308	2.11E-02	1.59E-05	4.19E-05	1.63E-05	4.49E-05	2.1264E-02
520481.53	4258691.19	105423.489	0.25765	0.20602	0.2488	0.21672	2.11E-02	1.05E-05	7.37E-06	1.02E-05	7.44E-06	2.1148E-02
520375.34	4258862.8	105343.3661	0.48022	0.21249	0.46033	0.22512	2.11E-02	1.97E-05	7.60E-06	1.88E-05	7.73E-06	2.1150E-02
520158.47	4258869.45	105318.7525	3.07054	0.50323	2.73468	0.49986	2.11E-02	1.26E-04	1.80E-05	1.12E-04	1.72E-05	2.1364E-02
520197.31	4258382.69	105251.7771	0.45826	1.93329	0.47762	2.20383	2.11E-02	1.88E-05	6.92E-05	1.96E-05	7.57E-05	2.1261E-02
520306.08	4258892.92	105188.2415	0.74609	0.24788	0.71271	0.26484	2.11E-02	3.05E-05	8.87E-06	2.92E-05	9.09E-06	2.1143E-02
520108.99	4258452.41	104957.4952	0.69593	9.62409	0.75893	11.66282	2.10E-02	2.85E-05	3.44E-04	3.11E-05	4.00E-04	2.1823E-02
520148.27	4258412.53	104917.3067	0.55391	3.88845	0.59761	4.55859	2.10E-02	2.27E-05	1.39E-04	2.45E-05	1.57E-04	2.1354E-02
520047.12	4258664.6	104619.5494	3.95167	2.24575	6.12433	2.00939	2.10E-02	1.62E-04	8.03E-05	2.51E-04	6.90E-05	2.1513E-02
520047.12	4258673.87	104568.0113	4.08627	2.01746	6.30665	1.82703	2.09E-02	1.67E-04	7.22E-05	2.58E-04	6.27E-05	2.1502E-02
520207.07	4258893.08	104534.2599	1.68286	0.36735	1.55434	0.38582	2.09E-02	6.89E-05	1.31E-05	6.36E-05	1.32E-05	2.1093E-02
520422.51	4258363.39	104515.5423	0.2391	0.35692	0.23894	0.38141	2.09E-02	9.79E-06	1.28E-05	9.78E-06	1.31E-05	2.0976E-02
520177.7	4258392.63	104510.0708	0.49135	2.47247	0.51958	2.85055	2.09E-02	2.01E-05	8.84E-05	2.13E-05	9.79E-05	2.1157E-02
520216.92	4258372.75	104482.2261	0.42579	1.55912	0.43984	1.76035	2.09E-02	1.74E-05	5.58E-05	1.80E-05	6.04E-05	2.1076E-02
520061.4	4258741.7	104436.9872	8.15642	1.16717	18.12166	1.08754	2.09E-02	3.34E-04	4.17E-05	7.42E-04	3.73E-05	2.2070E-02
520275.71	4258352.93	104339.997	0.3526	0.91256	0.36293	1.01087	2.09E-02	1.44E-05	3.26E-05	1.49E-05	3.47E-05	2.0992E-02
520436.14	4258805.77	104073.9263	0.34345	0.19604	0.33029	0.20734	2.08E-02	1.41E-05	7.01E-06	1.35E-05	7.12E-06	2.0884E-02
520444.98	4258792.1	104015.6237	0.32663	0.19589	0.31436	0.20672	2.08E-02	1.34E-05	7.01E-06	1.29E-05	7.10E-06	2.0871E-02
520059.73	4258579.45	103971.4385	2.5146	12.03481	4.53985	6.47735	2.08E-02	1.03E-04	4.30E-04	1.86E-04	2.22E-04	2.1763E-02
520149.5	4258865.74	103872.5981	3.54739	0.5323	3.13273	0.52077	2.08E-02	1.45E-04	1.90E-05	1.28E-04	1.79E-05	2.1112E-02
520402.96	4258353.33	103748.6003	0.24953	0.39613	0.2495	0.42591	2.08E-02	1.02E-05	1.42E-05	1.02E-05	1.46E-05	2.0826E-02
520097.66	4258814.37	103621.0435	12.38413	0.78784	11.10901	0.72069	2.08E-02	5.07E-04	2.82E-05	4.55E-04	2.47E-05	2.1766E-02
520177.35	4258883.13	103568.4087	2.36872	0.4379	2.14252	0.44608	2.07E-02	9.70E-05	1.57E-05	8.77E-05	1.53E-05	2.0957E-02
520047.12	4258683.15	103482.8226	4.19826	1.82437	6.46955	1.66827	2.07E-02	1.72E-04	6.53E-05	2.65E-04	5.73E-05	2.1283E-02
520047.12	4258655.32	103478.4047	3.79612	2.51763	5.91625	2.21941	2.07E-02	1.55E-04	9.01E-05	2.42E-04	7.62E-05	2.1287E-02
520315.98	4258892.9	103434.6094	0.69843	0.23986	0.66793	0.25589	2.07E-02	2.86E-05	8.58E-06	2.73E-05	8.78E-06	2.0788E-02
520475.44	4258427.8	103394.8956	0.21877	0.2646	0.2173	0.28169	2.07E-02	8.96E-06	9.46E-06	8.90E-06	9.67E-06	2.0743E-02
520344.26	4258343.15	103174.9312	0.28938	0.55925	0.2944	0.61077	2.07E-02	1.18E-05	2.00E-05	1.21E-05	2.10E-05	2.0727E-02
520087.7	4258800.27	103108.3497	15.27936	0.85111	18.13949	0.77763	2.06E-02	6.26E-04	3.04E-05	7.43E-04	2.67E-05	2.2074E-02
520427.58	4258819.32	103072.2303	0.36076	0.19626	0.34662	0.20788	2.06E-02	1.48E-05	7.02E-06	1.42E-05	7.14E-06	2.0685E-02
520334.47	4258343.11	103047.2009	0.29705	0.59599	0.30309	0.65224	2.06E-02	1.22E-05	2.13E-05	1.24E-05	2.24E-05	2.0705E-02
520471.95	4258738	103012.2162	0.27837	0.19848	0.26801	0.20816	2.06E-02	1.14E-05	7.10E-06	1.10E-05	7.15E-06	2.0666E-02
520412.44	4258835.59	102951.565	0.39053	0.19895	0.37471	0.21102	2.06E-02	1.60E-05	7.12E-06	1.53E-05	7.24E-06	2.0663E-02
520121.89	4258844.36	102915.4704	6.22361	0.64937	5.33522	0.60765	2.06E-02	2.55E-04	2.32E-05	2.18E-04	2.09E-05	2.1128E-02
520354.05	4258343.18	102803.3622	0.28167	0.52636	0.28584	0.57331	2.06E-02	1.15E-05	1.88E-05	1.17E-05	1.97E-05	2.0650E-02
520454.18	4258778.28	102766.0557	0.31017	0.19553	0.2987	0.20584	2.06E-02	1.27E-05	6.99E-06	1.22E-05	7.07E-06	2.0619E-02
520324.68	4258343.08	102669.037	0.30477	0.63673	0.31182	0.69817	2.06E-02	1.25E-05	2.28E-05	1.28E-05	2.40E-05	2.0633E-02
520236.52	4258362.81	102668.3307	0.39539	1.28719	0.40697	1.44165	2.06E-02	1.62E-05	4.60E-05	1.67E-05	4.95E-05	2.0689E-02
520107.21	4258828.3	102646.0596	9.16981	0.72505	7.89922	0.66729	2.06E-02	3.75E-04	2.59E-05	3.23E-04	2.29E-05	2.1304E-02
520395.12	4258852.77	102622.6404	0.43079	0.2037	0.41295	0.21596	2.06E-02	1.76E-05	7.29E-06	1.69E-05	7.41E-06	2.0601E-02
520197.17	4258893.1	102577.8239	1.87423	0.38527	1.71993	0.40085	2.05E-02	7.67E-05	1.38E-05	7.04E-05	1.38E-05	2.0717E-02
520466.23	4258403.82	102494.768	0.22011	0.28062	0.21973	0.29916	2.05E-02	9.01E-06	1.00E-05	9.00E-06	1.03E-05	2.0564E-02
520256.59	4258903	102451.8826	1.0755	0.2877	1.01595	0.30841	2.05E-02	4.40E-05	1.03E-05	4.16E-05	1.06E-05	2.0624E-02
520140.53	4258862.04	102449.5091	4.20634	0.56284	3.66819	0.54172	2.05E-02	1.72E-04	2.01E-05	1.50E-04	1.86E-05	2.0878E-02
520365.45	4258872.82	102433.8188	0.50922	0.21442	0.48803	0.22705	2.05E-02	2.08E-05	7.67E-06	2.00E-05	7.79E-06	2.0570E-02
520265.92	4258352.9	102357.4291	0.36024	0.99195	0.37073	1.10107	2.05E-02	1.47E-05	3.55E-05	1.52E-05	3.78E-05	2.0602E-02
520266.5	4258902.98	102331.456	0.99535	0.27706	0.94307	0.29721	2.05E-02	4.08E-05	9.91E-06	3.86E-05	1.02E-05	2.0593E-02
520246.69	4258903.02	102285.0237	1.16641	0.29933	1.098	0.32031	2.05E-02	4.78E-05	1.07E-05	4.50E-05	1.10E-05	2.0598E-02
520363.84	4258343.21	102212.8483	0.27412	0.49638	0.27745	0.53923	2.05E-02	1.12E-05	1.78E-05	1.14E-05	1.85E-05	2.0528E-02
520054.46	4258724.97	102212.1665	5.84044	1.29142	10.27215	1.20498	2.05E-02	2.39E-04	4.62E-05	4.21E-04	4.14E-05	2.1217E-02
520481.25	4258457.95	102067.906	0.22008	0.25294	0.21801	0.2688	2.04E-02	9.01E-06	9.05E-06	8.93E-06	9.23E-06	2.0477E-02
520314.9	4258343.05	102018.4452	0.31246	0.68205	0.32049	0.74915	2.04E-02	1.28E-05	2.44E-05	1.31E-05	2.57E-05	2.0507E-02
520049.93	4258627.98	101877.4904	3.5615	3.85492	5.93579	3.16212	2.04E-02	1.46E-04	1.38E-04	2.43E-04	1.09E-04	2.1038E-02
520276.4	4258902.97	101863.42	0.92367	0.26717	0.8774	0.28653	2.04E-02	3.78E-05	9.56E-06	3.59E-05	9.84E-06	2.0493E-02
520236.79	4258903.03	101795.6751	1.26989	0.312	1.19066	0.33283	2.04E-02	5.20E-05	1.12E-05	4.88E-05	1.14E-05	2.0509E-02
520158.09	4258402.56	101540.4031	0.52226	3.305	0.56041	3.85602	2.03E-02	2.14E-05	1.18E-04	2.29E-05	1.32E-04	2.0630E-02
520325.88	4258892.89	101515.8007	0.65572	0.23245	0.62755	0.2476	2.03E-02	2.68E-05	8.31E-06	2.57E-05	8.50E-06	2.0399E-02
520373.63	4258343.24	101460.076	0.26681	0.46894	0.2693	0.50817	2.03E-02	1.09E-05	1.68E-05	1.10E-05	1.74E-05	2.0375E-02
520047.12	4258646.05	101298.2705	3.6197	2.84111	5.6737	2.46016	2.03E-02	1.48E-04	1.02E-04	2.32E-04	8.45E-05	2.0853E-02
520478.49	4258722.38	101292.2787	0.26744	0.19906	0.25746	0.20883	2.03E-02	1.10E-05	7.12E-06	1.05E-05	7.17E-06	2.0321E-02
520412.75	4258353.36	101230.0018	0.24269	0.37677	0.24249	0.40401	2.03E-02	9.94E-06	1.35E-05	9.93E-06	1.39E-05	2.0320E-02
520305.11	4258343.02	101165.3938	0.32013	0.73251	0.32897	0.80597	2.03E-02	1.31E-05	2.62E-05	1.35E-05	2.77E-05	2.0340E-02
520286.3	4258902.95	101138.7125	0.85974	0.25804	0.81842	0.27654	2.03E-02	3.52E-05	9.23E-06	3.35E-05	9.49E-06	2.0342E-02
520459.98	4258391.14	101047.8738	0.22138	0.29213	0.22161	0.31117	2.02E-02	9.06E-06	1.04E-05	9.07E-06	1.07E-05	2.0275E-02
520482.08	4258480.77	101039.6651	0.22306	0.24739	0.22034	0.2632	2.02E-02	9.13E-06	8.85E-06	9.02E-06	9.04E-06	2.0271E-02
520226.89	4258903.05	100976.7171	1.38884	0.32576	1.29635	0.34593	2.02E-02	5.69E-05	1.17E-05	5.31E-05	1.19E-05	2.0355E-02
520385.24	4258862.79	100771.2254	0.45495	0.20567	0.43594	0.21787	2.02E-02	1.86E-05	7.36E-06	1.78E-05	7.48E-06	2.0232E-02
520432.3	4258363.42	100707.6038	0.2325	0.34044	0.23246	0.36301	2.02E-02	9.52E-06	1.22E-05	9.52E-06	1.25E-05	2.0212E-02
520167.45	4258883.15	100473.3836	2.71315	0.45972	2.43274	0.46111	2.01E-02	1.11E-04	1.64E-05	9.96E-05	1.58E-05	2.0364E-02
520207.13	4258372.72	100415.6138	0.43186	1.73948	0.44851	1.97188	2.01E-02	1.77E-05	6.22E-05	1.84E-05	6.77E-05	2.0276E-02
520050.99	4258716.6	100360.4099	5.04562	1.36055	8.33612	1.26831	2.01E-02	2.07E-04	4.87E-05	3.41E-04	4.35E-05	2.0739E-02
520187.27	4258893.12	100264.0608	2.10211	0.40414	1.91544	0.41571	2.01E-02	8.61E-05	1.45E-05	7.84E-05	1.43E-05	2.0272E-02
520355.57	4258882.84	100166.7392	0.54498	0.21725	0.52207	0.23026	2.01E-02	2.23E-05	7.77E-06	2.14E-05	7.91E-06	2.0119E-02
520187.52	4258382.66	100126.9752	0.46278	2.18714	0.48658	2.5058	2.01E-02	1.89E-05	7.82E-05	1.99E-05	8.60E-05	2.0255E-02
520463.86	4258764.27	100122.8658	0.2941	0.19456	0.28311	0.20441	2.01E-02	1.20E-05	6.96E-06	1.16E-05	7.02E-06	2.0089E-02
520256.13	4258352.87	100102.2724	0.36753	1.08138	0.37802	1.20346	2.00E-02	1.50E-05	3.87E-05	1.55E-05	4.13E-05	2.0157E-02
520295.32	4258342.99	100070.3491	0.32768	0.78871	0.33712	0.8694	2.00E-02	1.34E-05	2.82E-05	1.38E-05	2.98E-05	2.0126E-02
520296.2	4258902.93	100040.4885	0.8014	0.24933	0.76424	0.26689	2.00E-02	3.28E-05	8.92E-06	3.13E-05	9.16E-06	2.0117E-02
520216.99	4258903.07	99766.34423	1.52518	0.34043	1.41652	0.3593	2.00E-02	6.24E-05	1.22E-05	5.80E-05	1.23E-05	2.0125E-02
520335.79	4258892.87	99569.04779	0.61787	0.22577	0.59158	0.24011	1.99E-02	2.53E-05	8.08E-06	2.42E-05	8.24E-06	2.0006E-02
520112.79	4258840.6	99549.78366	7.83442	0.67476	6.70481	0.62417	1.99E-02	3.21E-04	2.41E-05	2.75E-04	2.14E-05	2.0577E-02
520226.74	4258362.78	99446.65237	0.40209	1.42016	0.41463	1.59626	1.99E-02	1.65E-05	5.08E-05	1.70E-05	5.48E-05	2.0055E-02
520158.6	4258879.5	99427.12015	3.08084	0.4851	2.74193	0.48003	1.99E-02	1.26E-04	1.74E-05	1.12E-04	1.65E-05	2.0184E-02
520450.83	4258377.21	99387.2402	0.22394	0.30882	0.22445	0.32853	1.99E-02	9.17E-06	1.10E-05	9.19E-06	1.13E-05	1.9944E-02
520393.2	4258343.3	99321.91859	0.25289	0.42024	0.25381	0.4534	1.99E-02	1.04E-05	1.50E-05	1.04E-05	1.56E-05	1.9942E-02
520088.94	4258810.77	98905.23773	14.80654	0.80001	16.84123	0.73174	1.98E-02	6.06E-04	2.86E-05	6.90E-04	2.51E-05	2.1157E-02
520098.61	4258824.75	98787.58034	11.97909	0.7426	10.65881	0.68011	1.98E-02	4.90E-04	2.66E-05	4.36E-04	2.33E-05	2.0760E-02
520306.1	4258902.92	98708.47935	0.74899	0.24121	0.71527	0.25787	1.98E-02	3.07E-05	8.63E-06	2.93E-05	8.85E-06	1.9845E-02
520285.53	4258342.96	98604.7512	0.33495	0.85228	0.34485	0.94089	1.97E-02	1.37E-05	3.05E-05	1.41E-05	3.23E-05	1.9838E-02
520375.36	4258872.8	98579.24005	0.48174	0.20768	0.46151	0.21984	1.97E-02	1.97E-05	7.43E-06	1.89E-05	7.55E-06	1.9795E-02
520207.09	4258903.08	98325.10969	1.68687	0.35647	1.55776	0.37332	1.97E-02	6.91E-05	1.28E-05	6.38E-05	1.28E-05	1.9849E-02
520047.12	4258636.77	98308.77144	3.40868	3.22763	5.38755	2.73211	1.97E-02	1.40E-04	1.15E-04	2.21E-04	9.38E-05	2.0257E-02
520422.54	4258353.39	98308.45848	0.23607	0.35944	0.23585	0.38431	1.97E-02	9.67E-06	1.29E-05	9.66E-06	1.32E-05	1.9733E-02
520453.3	4258788.66	98245.48509	0.31359	0.19221	0.30178	0.20251	1.97E-02	1.28E-05	6.88E-06	1.24E-05	6.95E-06	1.9714E-02
520149.75	4258875.84	98159.67812	3.54914	0.51159	3.13225	0.4989	1.97E-02	1.45E-04	1.83E-05	1.28E-04	1.71E-05	1.9967E-02
520047.53	4258708.24	98153.1564	4.46991	1.43458	6.94217	1.33547	1.97E-02	1.83E-04	5.13E-05	2.84E-04	4.58E-05	2.0221E-02
520485.03	4258706.76	98123.54788	0.25708	0.19896	0.24758	0.20903	1.97E-02	1.05E-05	7.12E-06	1.01E-05	7.18E-06	1.9686E-02
520167.91	4258392.59	97976.36693	0.49244	2.85066	0.52544	3.30648	1.96E-02	2.02E-05	1.02E-04	2.15E-05	1.14E-04	1.9878E-02
520177.37	4258893.13	97752.05313	2.3831	0.4242	2.15391	0.43042	1.96E-02	9.76E-05	1.52E-05	8.82E-05	1.48E-05	1.9792E-02
520122.59	4258854.64	97660.61767	6.13487	0.61749	5.25412	0.57754	1.96E-02	2.51E-04	2.21E-05	2.15E-04	1.98E-05	2.0066E-02
520246.34	4258352.84	97576.4535	0.37436	1.18341	0.38503	1.32072	1.95E-02	1.53E-05	4.23E-05	1.58E-05	4.53E-05	1.9660E-02
520402.99	4258343.33	97479.05858	0.24611	0.39891	0.24654	0.42928	1.95E-02	1.01E-05	1.43E-05	1.01E-05	1.47E-05	1.9571E-02
520049.89	4258618.28	97427.77614	3.2211	4.48042	5.4233	3.53232	1.95E-02	1.32E-04	1.60E-04	2.22E-04	1.21E-04	2.0147E-02
520316	4258902.9	97054.46901	0.70092	0.23345	0.6701	0.2492	1.94E-02	2.87E-05	8.35E-06	2.74E-05	8.56E-06	1.9510E-02
520275.74	4258342.93	96964.02415	0.34206	0.92293	0.35204	1.02109	1.94E-02	1.40E-05	3.30E-05	1.44E-05	3.51E-05	1.9515E-02
520484.73	4258467.07	96942.34573	0.21905	0.24725	0.2167	0.26279	1.94E-02	8.97E-06	8.84E-06	8.87E-06	9.02E-06	1.9450E-02
520140.9	4258872.19	96884.88333	4.18811	0.53913	3.65181	0.5177	1.94E-02	1.71E-04	1.93E-05	1.50E-04	1.78E-05	1.9761E-02
520256.61	4258913	96780.93946	1.08535	0.28092	1.02462	0.30095	1.94E-02	4.44E-05	1.00E-05	4.20E-05	1.03E-05	1.9488E-02
520059.69	4258569.75	96770.19266	2.12571	12.82806	3.33569	6.85191	1.94E-02	8.70E-05	4.59E-04	1.37E-04	2.35E-04	2.0297E-02
520246.71	4258913.02	96640.07475	1.17725	0.29227	1.10745	0.31237	1.94E-02	4.82E-05	1.05E-05	4.53E-05	1.07E-05	1.9468E-02
520197.19	4258903.1	96583.35762	1.87886	0.37364	1.72392	0.38753	1.93E-02	7.69E-05	1.34E-05	7.06E-05	1.33E-05	1.9516E-02
520266.51	4258912.98	96565.97827	1.00328	0.27035	0.95008	0.28997	1.93E-02	4.11E-05	9.67E-06	3.89E-05	9.95E-06	1.9438E-02
520395.14	4258862.77	96475.16064	0.43306	0.19975	0.41474	0.21159	1.93E-02	1.77E-05	7.14E-06	1.70E-05	7.26E-06	1.9370E-02
520462.63	4258774.79	96469.64031	0.29787	0.19164	0.28667	0.20146	1.93E-02	1.22E-05	6.85E-06	1.17E-05	6.92E-06	1.9357E-02
520365.47	4258882.82	96389.89334	0.51261	0.20991	0.49098	0.22223	1.93E-02	2.10E-05	7.51E-06	2.01E-05	7.63E-06	1.9360E-02
520236.81	4258913.03	96202.71595	1.28187	0.30459	1.201	0.32434	1.93E-02	5.25E-05	1.09E-05	4.92E-05	1.11E-05	1.9390E-02
520429.77	4258828.42	96168.81832	0.35875	0.19166	0.34439	0.20294	1.93E-02	1.47E-05	6.86E-06	1.41E-05	6.97E-06	1.9302E-02
520276.41	4258912.97	96131.87099	0.93106	0.26073	0.88399	0.27971	1.93E-02	3.81E-05	9.33E-06	3.62E-05	9.60E-06	1.9345E-02
520099.14	4258472.38	96100.00321	0.81096	13.82781	0.89932	15.73937	1.92E-02	3.32E-05	4.95E-04	3.68E-05	5.40E-04	2.0350E-02
520459.61	4258380.96	96049.70161	0.21926	0.29533	0.21967	0.31414	1.92E-02	8.98E-06	1.06E-05	8.99E-06	1.08E-05	1.9275E-02
520103.68	4258836.84	96035.98539	10.23108	0.69487	8.8498	0.63807	1.92E-02	4.19E-04	2.49E-05	3.62E-04	2.19E-05	2.0061E-02
520128.66	4258422.47	95988.43063	0.57589	5.74265	0.62063	6.9111	1.92E-02	2.36E-05	2.05E-04	2.54E-05	2.37E-04	1.9715E-02
520197.34	4258372.69	95982.38955	0.4366	1.9531	0.45696	2.22342	1.92E-02	1.79E-05	6.99E-05	1.87E-05	7.63E-05	1.9405E-02
520468.95	4258394.98	95962.84011	0.21646	0.27936	0.21636	0.29751	1.92E-02	8.86E-06	9.99E-06	8.86E-06	1.02E-05	1.9256E-02
520216.95	4258362.75	95908.00982	0.408	1.57452	0.42245	1.77681	1.92E-02	1.67E-05	5.63E-05	1.73E-05	6.10E-05	1.9358E-02
520226.91	4258913.05	95462.97781	1.40215	0.31791	1.3077	0.33681	1.91E-02	5.74E-05	1.14E-05	5.35E-05	1.16E-05	1.9252E-02
520286.31	4258912.95	95452.19103	0.86655	0.25185	0.82453	0.27004	1.91E-02	3.55E-05	9.01E-06	3.38E-05	9.27E-06	1.9203E-02
520325.9	4258902.89	95330.93257	0.65834	0.2264	0.62983	0.24133	1.91E-02	2.70E-05	8.10E-06	2.58E-05	8.29E-06	1.9160E-02
520412.78	4258343.36	95268.7575	0.23951	0.37947	0.23961	0.40725	1.91E-02	9.81E-06	1.36E-05	9.81E-06	1.40E-05	1.9126E-02
520138.48	4258412.5	95164.07803	0.54639	4.68896	0.58872	5.55751	1.91E-02	2.24E-05	1.68E-04	2.41E-05	1.91E-04	1.9463E-02
520118.84	4258432.44	95079.08181	0.60527	7.26911	0.65297	8.84459	1.90E-02	2.48E-05	2.60E-04	2.67E-05	3.04E-04	1.9656E-02
520265.95	4258342.9	95033.395	0.34881	1.00283	0.35877	1.112	1.90E-02	1.43E-05	3.59E-05	1.47E-05	3.82E-05	1.9135E-02
520432.33	4258353.42	94959.85164	0.22968	0.34268	0.22947	0.36555	1.90E-02	9.40E-06	1.23E-05	9.40E-06	1.25E-05	1.9061E-02
520167.47	4258893.15	94939.90425	2.72872	0.44463	2.44473	0.4442	1.90E-02	1.12E-04	1.59E-05	1.00E-04	1.52E-05	1.9256E-02
520090.01	4258821.21	94777.94513	15.57065	0.75393	15.80948	0.69034	1.90E-02	6.38E-04	2.70E-05	6.47E-04	2.37E-05	2.0316E-02
520113.61	4258850.93	94725.20389	7.6777	0.64018	6.55437	0.59239	1.90E-02	3.14E-04	2.29E-05	2.68E-04	2.03E-05	1.9596E-02
520236.55	4258352.81	94654.0795	0.38056	1.30048	0.39202	1.45535	1.90E-02	1.56E-05	4.65E-05	1.61E-05	5.00E-05	1.9084E-02
520060.74	4258764.21	94591.0113	8.11071	0.98555	17.28105	0.92384	1.89E-02	3.32E-04	3.53E-05	7.08E-04	3.17E-05	2.0050E-02
520177.73	4258382.63	94575.47412	0.46512	2.49617	0.49356	2.87457	1.89E-02	1.90E-05	8.93E-05	2.02E-05	9.87E-05	1.9167E-02
520385.26	4258872.79	94516.84468	0.45654	0.20125	0.43714	0.21299	1.89E-02	1.87E-05	7.20E-06	1.79E-05	7.31E-06	1.8979E-02
520187.29	4258903.12	94495.58484	2.10671	0.39158	1.91948	0.40142	1.89E-02	8.63E-05	1.40E-05	7.86E-05	1.38E-05	1.9117E-02
520383.45	4258333.27	94411.5019	0.25578	0.44691	0.25831	0.48346	1.89E-02	1.05E-05	1.60E-05	1.06E-05	1.66E-05	1.8961E-02
520296.22	4258912.93	94405.93509	0.80743	0.24336	0.76965	0.26069	1.89E-02	3.31E-05	8.70E-06	3.15E-05	8.95E-06	1.8988E-02
520217.01	4258913.07	94336.38261	1.53933	0.33203	1.42844	0.34949	1.89E-02	6.30E-05	1.19E-05	5.85E-05	1.20E-05	1.9038E-02
520355.59	4258892.84	94295.79229	0.54837	0.21236	0.52506	0.22517	1.89E-02	2.25E-05	7.60E-06	2.15E-05	7.73E-06	1.8943E-02
520403.59	4258859.27	94234.63085	0.41386	0.1958	0.39632	0.20741	1.89E-02	1.69E-05	7.00E-06	1.62E-05	7.12E-06	1.8919E-02
520483.82	4258431.38	94233.45435	0.21381	0.25482	0.21214	0.27086	1.89E-02	8.75E-06	9.11E-06	8.69E-06	9.30E-06	1.8907E-02
520158.72	4258889.54	94204.99318	3.10761	0.46867	2.76018	0.46189	1.89E-02	1.27E-04	1.68E-05	1.13E-04	1.59E-05	1.9139E-02
520057	4258755.21	94155.39162	6.90518	1.03206	12.50685	0.97063	1.89E-02	2.83E-04	3.69E-05	5.12E-04	3.33E-05	1.9721E-02
520450.7	4258367.14	94065.73775	0.22151	0.31166	0.22188	0.33121	1.88E-02	9.07E-06	1.11E-05	9.08E-06	1.14E-05	1.8879E-02
520443.83	4258812.59	94029.4416	0.33247	0.18913	0.31956	0.19982	1.88E-02	1.36E-05	6.76E-06	1.31E-05	6.86E-06	1.8871E-02
520452.57	4258798.97	93776.5796	0.31674	0.18877	0.30448	0.19906	1.88E-02	1.30E-05	6.75E-06	1.25E-05	6.83E-06	1.8819E-02
520491.57	4258691.14	93631.08516	0.24734	0.1991	0.2386	0.20921	1.88E-02	1.01E-05	7.12E-06	9.77E-06	7.18E-06	1.8785E-02
520335.8	4258902.87	93523.20073	0.62025	0.21996	0.59359	0.23413	1.87E-02	2.54E-05	7.87E-06	2.43E-05	8.04E-06	1.8795E-02
520476.06	4258752.12	93395.89096	0.27638	0.19123	0.26582	0.20047	1.87E-02	1.13E-05	6.84E-06	1.09E-05	6.88E-06	1.8740E-02
520053.27	4258746.2	93380.67328	5.9247	1.08283	9.71313	1.02061	1.87E-02	2.43E-04	3.87E-05	3.98E-04	3.50E-05	1.9415E-02
520148.3	4258402.53	93359.99135	0.51753	3.91894	0.55708	4.59149	1.87E-02	2.12E-05	1.40E-04	2.28E-05	1.58E-04	1.9038E-02
520306.12	4258912.92	93147.42905	0.7544	0.23547	0.7201	0.25193	1.87E-02	3.09E-05	8.42E-06	2.95E-05	8.65E-06	1.8731E-02
520149.97	4258885.93	93072.65149	3.5719	0.49286	3.1453	0.47897	1.86E-02	1.46E-04	1.76E-05	1.29E-04	1.64E-05	1.8948E-02
520479.66	4258743.53	93054.92787	0.2704	0.19196	0.26012	0.2011	1.86E-02	1.11E-05	6.87E-06	1.07E-05	6.90E-06	1.8671E-02
520207.11	4258913.08	93027.7612	1.70279	0.34741	1.57098	0.36267	1.86E-02	6.97E-05	1.24E-05	6.43E-05	1.25E-05	1.8789E-02
520256.16	4258342.87	92849.88229	0.35523	1.09264	0.36518	1.21509	1.86E-02	1.45E-05	3.91E-05	1.50E-05	4.17E-05	1.8705E-02
520375.37	4258882.8	92798.45871	0.48452	0.20339	0.46387	0.21519	1.86E-02	1.98E-05	7.27E-06	1.90E-05	7.39E-06	1.8638E-02
520422.57	4258343.39	92689.30869	0.23309	0.36168	0.233	0.38705	1.86E-02	9.54E-06	1.29E-05	9.54E-06	1.33E-05	1.8608E-02
520049.85	4258608.59	92638.5658	2.83555	5.1694	4.76511	3.89594	1.86E-02	1.16E-04	1.85E-04	1.95E-04	1.34E-04	1.9182E-02
520483	4258421.02	92534.7754	0.21252	0.25755	0.21111	0.27392	1.85E-02	8.70E-06	9.21E-06	8.64E-06	9.40E-06	1.8567E-02
520483.26	4258734.93	92399.39344	0.26458	0.19244	0.25453	0.20157	1.85E-02	1.08E-05	6.88E-06	1.04E-05	6.92E-06	1.8539E-02
520177.39	4258903.13	92268.602	2.38984	0.41073	2.15967	0.41524	1.85E-02	9.78E-05	1.47E-05	8.84E-05	1.43E-05	1.8693E-02
520207.16	4258362.72	92050.87449	0.41285	1.75571	0.43026	1.98927	1.84E-02	1.69E-05	6.28E-05	1.76E-05	6.83E-05	1.8600E-02
520049.53	4258737.19	92023.02838	5.01796	1.14028	7.85534	1.07397	1.84E-02	2.05E-04	4.08E-05	3.22E-04	3.69E-05	1.9034E-02
520468.39	4258384.72	91871.16622	0.21461	0.28257	0.21482	0.30057	1.84E-02	8.79E-06	1.01E-05	8.80E-06	1.03E-05	1.8436E-02
520438.43	4258824.83	91870.75003	0.34343	0.18789	0.32973	0.19873	1.84E-02	1.41E-05	6.72E-06	1.35E-05	6.82E-06	1.8439E-02
520099.17	4258462.38	91804.13437	0.72841	13.82615	0.80114	15.79152	1.84E-02	2.98E-05	4.95E-04	3.28E-05	5.42E-04	1.9484E-02
520141.23	4258882.32	91796.71595	4.18074	0.51719	3.64263	0.49553	1.84E-02	1.71E-04	1.85E-05	1.49E-04	1.70E-05	1.8739E-02
520412.04	4258855.77	91759.18868	0.3961	0.19203	0.3793	0.20339	1.84E-02	1.62E-05	6.87E-06	1.55E-05	6.98E-06	1.8422E-02
520395.16	4258872.77	91691.52456	0.43729	0.19657	0.41853	0.20801	1.84E-02	1.79E-05	7.03E-06	1.71E-05	7.14E-06	1.8412E-02
520316.02	4258912.9	91593.31162	0.70579	0.22792	0.6744	0.2435	1.83E-02	2.89E-05	8.15E-06	2.76E-05	8.36E-06	1.8416E-02
520226.77	4258352.78	91592.27534	0.38625	1.43397	0.39908	1.61074	1.83E-02	1.58E-05	5.13E-05	1.63E-05	5.53E-05	1.8481E-02

520104.64	4258847.23	91579.267	9.91839	0.65803	8.54143	0.60481	1.83E-02	4.06E-04	2.35E-05	3.50E-04	2.08E-05	1.9140E-02
520486.85	4258726.34	91411.10498	0.25897	0.19266	0.2491	0.20187	1.83E-02	1.06E-05	6.89E-06	1.02E-05	6.93E-06	1.8341E-02
520256.63	4258923	91396.63196	1.09222	0.27398	1.03056	0.2932	1.83E-02	4.47E-05	9.80E-06	4.22E-05	1.01E-05	1.8410E-02
520197.21	4258913.1	91393.22591	1.89496	0.36365	1.73707	0.37581	1.83E-02	7.76E-05	1.30E-05	7.11E-05	1.29E-05	1.8477E-02
520109.02	4258442.41	91391.429	0.63348	9.64666	0.68592	11.70149	1.83E-02	2.59E-05	3.45E-04	2.81E-05	4.02E-04	1.9103E-02
520459.32	4258370.83	91338.06871	0.21706	0.29842	0.21748	0.31699	1.83E-02	8.89E-06	1.07E-05	8.90E-06	1.09E-05	1.8331E-02
520488.6	4258472.02	91304.88749	0.21703	0.2424	0.2145	0.25759	1.83E-02	8.89E-06	8.67E-06	8.78E-06	8.84E-06	1.8320E-02
520246.73	4258923.02	91279.6848	1.18471	0.28502	1.11386	0.30415	1.83E-02	4.85E-05	1.02E-05	4.56E-05	1.04E-05	1.8395E-02
520266.53	4258922.98	91214.15312	1.01004	0.26375	0.956	0.28273	1.83E-02	4.14E-05	9.43E-06	3.91E-05	9.71E-06	1.8367E-02
520187.55	4258372.66	91182.60501	0.43965	2.20928	0.46427	2.52605	1.83E-02	1.80E-05	7.90E-05	1.90E-05	8.67E-05	1.8463E-02
520040.59	4258691.51	91174.47535	3.44682	1.60192	4.93618	1.47694	1.83E-02	1.41E-04	5.73E-05	2.02E-04	5.07E-05	1.8710E-02
520429.32	4258838.61	91109.0773	0.36149	0.18826	0.34661	0.19931	1.82E-02	1.48E-05	6.73E-06	1.42E-05	6.84E-06	1.8288E-02
520158.12	4258392.56	91090.32943	0.49052	3.33074	0.5261	3.88495	1.82E-02	2.01E-05	1.19E-04	2.15E-05	1.33E-04	1.8536E-02
520365.49	4258892.82	90964.66024	0.51628	0.20555	0.49419	0.21766	1.82E-02	2.11E-05	7.35E-06	2.02E-05	7.47E-06	1.8273E-02
520236.83	4258923.03	90917.19894	1.29041	0.29701	1.20831	0.31563	1.82E-02	5.28E-05	1.06E-05	4.95E-05	1.08E-05	1.8331E-02
520276.43	4258922.97	90754.39344	0.93672	0.25428	0.88898	0.27276	1.82E-02	3.84E-05	9.10E-06	3.64E-05	9.36E-06	1.8268E-02
520471.08	4258771.29	90502.74106	0.28623	0.18789	0.27533	0.19724	1.81E-02	1.17E-05	6.72E-06	1.13E-05	6.77E-06	1.8161E-02
520246.37	4258342.84	90414.12545	0.36117	1.19492	0.37152	1.33295	1.81E-02	1.48E-05	4.27E-05	1.52E-05	4.58E-05	1.8225E-02
520344.32	4258323.15	90306.55992	0.27797	0.57035	0.28482	0.62162	1.81E-02	1.14E-05	2.04E-05	1.17E-05	2.13E-05	1.8150E-02
520354.11	4258323.18	90305.3834	0.27136	0.53591	0.27733	0.58313	1.81E-02	1.11E-05	1.92E-05	1.14E-05	2.00E-05	1.8147E-02
520226.93	4258923.05	90214.92463	1.41082	0.30982	1.31505	0.32744	1.81E-02	5.78E-05	1.11E-05	5.38E-05	1.12E-05	1.8201E-02
520045.8	4258728.19	90190.3446	4.30977	1.20126	6.51248	1.12936	1.81E-02	1.76E-04	4.30E-05	2.67E-04	3.88E-05	1.8587E-02
520477.93	4258398.82	90168.37894	0.21157	0.26766	0.21111	0.28486	1.81E-02	8.66E-06	9.57E-06	8.64E-06	9.78E-06	1.8094E-02
520482.39	4258410.74	90164.668	0.21104	0.26014	0.20999	0.27677	1.81E-02	8.64E-06	9.30E-06	8.60E-06	9.50E-06	1.8093E-02
520114.34	4258861.23	90160.59153	7.54222	0.60858	6.42382	0.56332	1.81E-02	3.09E-04	2.18E-05	2.63E-04	1.93E-05	1.8669E-02
520325.92	4258912.89	90075.15973	0.66334	0.22124	0.63427	0.23605	1.80E-02	2.72E-05	7.91E-06	2.60E-05	8.10E-06	1.8108E-02
520334.53	4258323.11	90069.56293	0.28457	0.6084	0.29223	0.66411	1.80E-02	1.17E-05	2.18E-05	1.20E-05	2.28E-05	1.8106E-02
520286.33	4258922.95	90048.57052	0.87107	0.24553	0.8285	0.26332	1.80E-02	3.57E-05	8.78E-06	3.39E-05	9.04E-06	1.8121E-02
520490.45	4258717.75	90047.13237	0.25353	0.19258	0.24382	0.20195	1.80E-02	1.04E-05	6.89E-06	9.98E-06	6.93E-06	1.8067E-02
520432.36	4258343.42	89740.79249	0.22688	0.34492	0.22667	0.36818	1.80E-02	9.29E-06	1.23E-05	9.28E-06	1.26E-05	1.8015E-02
520167.49	4258903.15	89736.84271	2.7367	0.42994	2.45142	0.428	1.80E-02	1.12E-04	1.54E-05	1.00E-04	1.47E-05	1.8214E-02
520324.75	4258323.08	89512.95878	0.29103	0.65064	0.29948	0.71103	1.79E-02	1.19E-05	2.33E-05	1.23E-05	2.44E-05	1.7998E-02
520187.31	4258913.12	89485.2593	2.12464	0.38069	1.93382	0.38874	1.79E-02	8.70E-05	1.36E-05	7.92E-05	1.33E-05	1.8114E-02
520217.02	4258923.07	89284.40069	1.55144	0.32363	1.43865	0.33967	1.79E-02	6.35E-05	1.16E-05	5.89E-05	1.17E-05	1.8026E-02
520403.52	4258869.31	89246.1977	0.41708	0.19247	0.39907	0.20369	1.79E-02	1.71E-05	6.88E-06	1.63E-05	6.99E-06	1.7920E-02
520450.6	4258357.08	89231.29642	0.21908	0.31417	0.21921	0.33373	1.79E-02	8.97E-06	1.12E-05	8.98E-06	1.15E-05	1.7910E-02
520385.27	4258882.79	89160.50774	0.45927	0.19732	0.43942	0.2087	1.79E-02	1.88E-05	7.06E-06	1.80E-05	7.16E-06	1.7907E-02
520296.23	4258922.93	89132.05118	0.81224	0.23743	0.77392	0.25444	1.78E-02	3.33E-05	8.49E-06	3.17E-05	8.74E-06	1.7932E-02
520420.49	4258852.28	89090.57918	0.37957	0.1884	0.36345	0.19948	1.78E-02	1.55E-05	6.74E-06	1.49E-05	6.85E-06	1.7886E-02
520059.65	4258560.06	89049.42614	1.77752	13.22401	2.51946	7.13694	1.78E-02	7.28E-05	4.73E-04	1.03E-04	2.45E-04	1.8727E-02
520158.83	4258899.58	88988.80677	3.10129	0.45178	2.75656	0.44394	1.78E-02	1.27E-04	1.62E-05	1.13E-04	1.52E-05	1.8092E-02
520355.6	4258902.84	88837.2435	0.55113	0.2074	0.52743	0.22004	1.78E-02	2.26E-05	7.42E-06	2.16E-05	7.55E-06	1.7850E-02
520167.94	4258382.59	88598.34995	0.46478	2.87664	0.49659	3.3318	1.77E-02	1.90E-05	1.03E-04	2.03E-05	1.14E-04	1.8000E-02
520314.96	4258323.05	88545.19382	0.2972	0.69777	0.30643	0.76297	1.77E-02	1.22E-05	2.50E-05	1.25E-05	2.62E-05	1.7808E-02
520095.67	4258843.53	88450.65162	13.18314	0.67038	11.92996	0.61488	1.77E-02	5.40E-04	2.40E-05	4.88E-04	2.11E-05	1.8787E-02
520216.98	4258352.75	88323.72354	0.39123	1.58806	0.40619	1.79221	1.77E-02	1.60E-05	5.68E-05	1.66E-05	6.15E-05	1.7839E-02
520494.05	4258709.16	88318.59411	0.24823	0.19246	0.23878	0.202	1.77E-02	1.02E-05	6.88E-06	9.78E-06	6.93E-06	1.7721E-02
520085.47	4258829.33	88286.42159	15.98889	0.71469	20.56115	0.65689	1.77E-02	6.55E-04	2.56E-05	8.42E-04	2.26E-05	1.9225E-02
520335.82	4258912.87	88245.9786	0.62385	0.21475	0.59673	0.22877	1.77E-02	2.55E-05	7.68E-06	2.44E-05	7.85E-06	1.7738E-02
520150.18	4258896	88098.71859	3.56582	0.47428	3.14053	0.45972	1.76E-02	1.46E-04	1.70E-05	1.29E-04	1.58E-05	1.7950E-02
520042.06	4258719.18	88079.22885	3.81068	1.26618	5.52515	1.18798	1.76E-02	1.56E-04	4.53E-05	2.26E-04	4.08E-05	1.8107E-02
520306.13	4258922.92	88011.20841	0.75927	0.22988	0.72444	0.24607	1.76E-02	3.11E-05	8.22E-06	2.97E-05	8.45E-06	1.7703E-02
520207.12	4258923.08	88004.07784	1.71365	0.3382	1.58003	0.35194	1.76E-02	7.02E-05	1.21E-05	6.47E-05	1.21E-05	1.7783E-02
520467.94	4258374.52	87897.41161	0.21265	0.28581	0.21301	0.30356	1.76E-02	8.71E-06	1.02E-05	8.72E-06	1.04E-05	1.7641E-02
520197.37	4258362.69	87841.00388	0.41632	1.97076	0.43748	2.2416	1.76E-02	1.70E-05	7.05E-05	1.79E-05	7.70E-05	1.7774E-02
520305.17	4258323.02	87817.86469	0.30366	0.74945	0.31313	0.82111	1.76E-02	1.24E-05	2.68E-05	1.28E-05	2.82E-05	1.7667E-02
520375.39	4258892.8	87732.05128	0.48809	0.19941	0.46695	0.21097	1.76E-02	2.00E-05	7.13E-06	1.91E-05	7.24E-06	1.7623E-02
520049.81	4258598.89	87562.19374	2.42919	5.83157	3.9813	4.20921	1.75E-02	9.95E-05	2.09E-04	1.63E-04	1.45E-04	1.8151E-02
520236.59	4258342.81	87547.55459	0.36642	1.31245	0.37799	1.46802	1.75E-02	1.50E-05	4.69E-05	1.55E-05	5.04E-05	1.7660E-02
520447.1	4258821.24	87541.10433	0.32898	0.18428	0.31596	0.19464	1.75E-02	1.35E-05	6.59E-06	1.29E-05	6.68E-06	1.7571E-02
520491.66	4258459.42	87478.20388	0.21308	0.24206	0.21086	0.2569	1.75E-02	8.72E-06	8.66E-06	8.63E-06	8.82E-06	1.7554E-02
520177.4	4258913.13	87409.09588	2.40783	0.39855	2.17371	0.40135	1.75E-02	9.86E-05	1.43E-05	8.90E-05	1.38E-05	1.7720E-02
520105.49	4258857.57	87372.27633	9.66473	0.62454	8.28388	0.57452	1.75E-02	3.96E-04	2.23E-05	3.39E-04	1.97E-05	1.8274E-02
520469.94	4258781.77	87327.94343	0.28969	0.18498	0.27853	0.19432	1.75E-02	1.19E-05	6.62E-06	1.14E-05	6.67E-06	1.7525E-02
520437.87	4258835.07	87317.46788	0.34624	0.18461	0.33204	0.19528	1.75E-02	1.42E-05	6.60E-06	1.36E-05	6.70E-06	1.7528E-02
520141.52	4258892.43	87086.77204	4.17626	0.49676	3.63679	0.47496	1.74E-02	1.71E-04	1.78E-05	1.49E-04	1.63E-05	1.7794E-02
520477.17	4258388.48	87075.35925	0.20999	0.27079	0.20991	0.28797	1.74E-02	8.60E-06	9.69E-06	8.59E-06	9.89E-06	1.7475E-02
520459.09	4258360.72	86962.16101	0.21484	0.30114	0.21509	0.3196	1.74E-02	8.80E-06	1.08E-05	8.81E-06	1.10E-05	1.7455E-02
520411.88	4258865.85	86891.71084	0.39885	0.1887	0.38158	0.19969	1.74E-02	1.63E-05	6.75E-06	1.56E-05	6.86E-06	1.7447E-02
520492.07	4258481.14	86835.28691	0.21587	0.23761	0.21301	0.25246	1.74E-02	8.84E-06	8.50E-06	8.72E-06	8.67E-06	1.7425E-02
520295.38	4258322.99	86753.41351	0.30983	0.80705	0.31937	0.88589	1.74E-02	1.27E-05	2.89E-05	1.31E-05	3.04E-05	1.7459E-02
520316.03	4258922.9	86716.32667	0.71144	0.22283	0.67948	0.23821	1.74E-02	2.91E-05	7.97E-06	2.78E-05	8.18E-06	1.7439E-02
520395.17	4258882.77	86698.81126	0.43949	0.19317	0.42076	0.20419	1.74E-02	1.80E-05	6.91E-06	1.72E-05	7.01E-06	1.7412E-02
520197.22	4258923.1	86477.99166	1.90566	0.35362	1.74591	0.36421	1.73E-02	7.80E-05	1.26E-05	7.15E-05	1.25E-05	1.7493E-02
520428.93	4258848.78	86388.47358	0.36403	0.18499	0.34867	0.19577	1.73E-02	1.49E-05	6.62E-06	1.43E-05	6.72E-06	1.7343E-02
520037.12	4258683.15	86313.46727	3.00815	1.69355	4.21178	1.54866	1.73E-02	1.23E-04	6.06E-05	1.72E-04	5.32E-05	1.7695E-02
520497.64	4258700.57	86271.46949	0.2431	0.19251	0.23404	0.20212	1.73E-02	9.95E-06	6.89E-06	9.58E-06	6.94E-06	1.7310E-02
520037.12	4258673.87	86096.63812	2.90821	1.85608	4.08675	1.68053	1.72E-02	1.19E-04	6.64E-05	1.67E-04	5.77E-05	1.7653E-02
520256.65	4258933	86042.7521	1.09249	0.26659	1.03055	0.28505	1.72E-02	4.47E-05	9.54E-06	4.22E-05	9.79E-06	1.7337E-02
520057.47	4258780.46	86029.12259	7.2075	0.87184	13.11518	0.82308	1.72E-02	2.95E-04	3.12E-05	5.37E-04	2.83E-05	1.8120E-02
520177.76	4258372.63	86025.76706	0.44063	2.52017	0.46895	2.89536	1.72E-02	1.80E-05	9.01E-05	1.92E-05	9.94E-05	1.7455E-02
520246.74	4258933.02	85910.82024	1.18414	0.27722	1.11313	0.29545	1.72E-02	4.85E-05	9.92E-06	4.56E-05	1.01E-05	1.7319E-02
520266.55	4258932.98	85866.65109	1.01048	0.25663	0.95612	0.27498	1.72E-02	4.14E-05	9.18E-06	3.91E-05	9.44E-06	1.7295E-02
520114.98	4258871.48	85837.87886	7.42133	0.57961	6.31078	0.53665	1.72E-02	3.04E-04	2.07E-05	2.58E-04	1.84E-05	1.7792E-02
520365.5	4258902.82	85798.09204	0.51889	0.20095	0.49639	0.21286	1.72E-02	2.12E-05	7.19E-06	2.03E-05	7.31E-06	1.7238E-02
520053.81	4258771.61	85731.45593	6.21284	0.90891	10.19945	0.86073	1.72E-02	2.54E-04	3.25E-05	4.18E-04	2.95E-05	1.7903E-02
520236.84	4258933.03	85622.1762	1.29024	0.28892	1.20801	0.30652	1.71E-02	5.28E-05	1.03E-05	4.95E-05	1.05E-05	1.7270E-02
520285.59	4258322.96	85538.141	0.31585	0.87097	0.3252	0.95849	1.71E-02	1.29E-05	3.12E-05	1.33E-05	3.29E-05	1.7220E-02
520276.45	4258932.97	85463.26966	0.93767	0.24747	0.88956	0.26544	1.71E-02	3.84E-05	8.85E-06	3.64E-05	9.11E-06	1.7208E-02
520038.33	4258710.17	85274.87608	3.35222	1.33676	4.70555	1.24884	1.71E-02	1.37E-04	4.78E-05	1.93E-04	4.29E-05	1.7498E-02
520325.93	4258922.89	85245.59613	0.66805	0.21621	0.63846	0.23081	1.71E-02	2.74E-05	7.73E-06	2.61E-05	7.92E-06	1.7141E-02
520354.14	4258313.18	85182.76945	0.26637	0.54042	0.27281	0.58796	1.71E-02	1.09E-05	1.93E-05	1.12E-05	2.02E-05	1.7121E-02
520050.14	4258762.77	85136.84696	5.39066	0.94867	8.26461	0.90042	1.70E-02	2.21E-04	3.39E-05	3.38E-04	3.09E-05	1.7674E-02
520037.12	4258664.6	85112.04839	2.79532	2.04192	3.94425	1.82776	1.70E-02	1.14E-04	7.30E-05	1.61E-04	6.27E-05	1.7457E-02
520167.5	4258913.15	85079.41046	2.7555	0.41645	2.4657	0.41302	1.70E-02	1.13E-04	1.49E-05	1.01E-04	1.42E-05	1.7281E-02
520460.08	4258805.86	85022.84143	0.30734	0.18211	0.29512	0.19189	1.70E-02	1.26E-05	6.51E-06	1.21E-05	6.59E-06	1.7065E-02
520363.93	4258313.21	85003.97983	0.26019	0.50869	0.26584	0.55255	1.70E-02	1.07E-05	1.82E-05	1.09E-05	1.90E-05	1.7082E-02
520344.35	4258313.15	84955.34521	0.27238	0.57569	0.2797	0.62693	1.70E-02	1.12E-05	2.06E-05	1.15E-05	2.15E-05	1.7078E-02
520226.94	4258933.05	84908.49075	1.40791	0.30099	1.3125	0.31752	1.70E-02	5.76E-05	1.08E-05	5.37E-05	1.09E-05	1.7137E-02
520128.69	4258412.47	84869.28826	0.53388	5.78203	0.57204	6.93622	1.70E-02	2.19E-05	2.07E-04	2.34E-05	2.38E-04	1.7486E-02
520086.7	4258839.83	84846.84843	15.5131	0.67659	18.79702	0.62227	1.70E-02	6.35E-04	2.42E-05	7.70E-04	2.14E-05	1.8442E-02
520483.06	4258759.36	84829.09194	0.26959	0.18473	0.25902	0.19354	1.70E-02	1.10E-05	6.61E-06	1.06E-05	6.64E-06	1.7023E-02
520420.24	4258862.39	84813.92287	0.38247	0.18536	0.36599	0.19612	1.70E-02	1.57E-05	6.63E-06	1.50E-05	6.73E-06	1.7029E-02
520286.35	4258932.95	84772.50759	0.8717	0.23888	0.82879	0.25625	1.70E-02	3.57E-05	8.54E-06	3.39E-05	8.80E-06	1.7064E-02
520187.32	4258923.12	84741.35392	2.13655	0.36982	1.94354	0.37629	1.70E-02	8.75E-05	1.32E-05	7.96E-05	1.29E-05	1.7164E-02
520138.51	4258402.5	84689.81628	0.50906	4.72078	0.54585	5.58806	1.70E-02	2.08E-05	1.69E-04	2.23E-05	1.92E-04	1.7364E-02
520207.19	4258352.72	84675.16876	0.39503	1.7698	0.41307	2.00566	1.70E-02	1.62E-05	6.33E-05	1.69E-05	6.89E-05	1.7123E-02
520096.64	4258853.92	84649.24094	12.79461	0.63582	11.3963	0.58375	1.70E-02	5.24E-04	2.27E-05	4.67E-04	2.00E-05	1.7985E-02
520226.8	4258342.78	84608.7405	0.37117	1.44683	0.38455	1.62425	1.69E-02	1.52E-05	5.18E-05	1.57E-05	5.58E-05	1.7083E-02
520486.59	4258750.92	84584.79065	0.26399	0.18544	0.25367	0.19413	1.69E-02	1.08E-05	6.63E-06	1.04E-05	6.66E-06	1.6974E-02
520334.57	4258313.11	84577.71676	0.27838	0.61442	0.28644	0.66981	1.69E-02	1.14E-05	2.20E-05	1.17E-05	2.30E-05	1.7006E-02
520373.72	4258313.24	84481.01086	0.25395	0.47998	0.25888	0.52032	1.69E-02	1.04E-05	1.72E-05	1.06E-05	1.79E-05	1.6975E-02
520158.45	4258909.41	84423.11546	3.14453	0.43791	2.78975	0.42853	1.69E-02	1.29E-04	1.57E-05	1.14E-04	1.47E-05	1.7180E-02
520385.29	4258892.79	84420.26823	0.46258	0.19364	0.44224	0.20474	1.69E-02	1.89E-05	6.93E-06	1.81E-05	7.03E-06	1.6957E-02
520046.47	4258753.92	84226.81337	4.706	0.99228	6.88273	0.94258	1.69E-02	1.93E-04	3.55E-05	2.82E-04	3.24E-05	1.7410E-02
520217.04	4258933.07	84164.13002	1.55042	0.31456	1.43789	0.32938	1.69E-02	6.35E-05	1.13E-05	5.89E-05	1.13E-05	1.7000E-02
520490.12	4258742.49	84094.04676	0.25851	0.18602	0.24843	0.19465	1.68E-02	1.06E-05	6.65E-06	1.02E-05	6.68E-06	1.6875E-02
520467.58	4258364.35	84072.84981	0.21063	0.28877	0.21095	0.30631	1.68E-02	8.62E-06	1.03E-05	8.64E-06	1.05E-05	1.6875E-02
520324.78	4258313.08	84043.90616	0.28434	0.65718	0.29295	0.71726	1.68E-02	1.16E-05	2.35E-05	1.20E-05	2.46E-05	1.6903E-02
520469	4258792.16	84036.50388	0.29284	0.18196	0.28137	0.19129	1.68E-02	1.20E-05	6.51E-06	1.15E-05	6.57E-06	1.6866E-02
520296.25	4258932.93	83924.57811	0.81299	0.23103	0.77432	0.24769	1.68E-02	3.33E-05	8.26E-06	3.17E-05	8.50E-06	1.6889E-02
520501.24	4258691.98	83912.43596	0.23812	0.19253	0.22946	0.20211	1.68E-02	9.75E-06	6.89E-06	9.40E-06	6.94E-06	1.6838E-02
520486.91	4258402.66	83895.79415	0.20675	0.25673	0.2059	0.27297	1.68E-02	8.47E-06	9.18E-06	8.43E-06	9.37E-06	1.6837E-02
520476.56	4258378.21	83890.01941	0.20826	0.27413	0.20848	0.2911	1.68E-02	8.53E-06	9.81E-06	8.54E-06	9.99E-06	1.6837E-02
520275.8	4258322.93	83879.73668	0.32137	0.94295	0.33071	1.03988	1.68E-02	1.32E-05	3.37E-05	1.35E-05	3.57E-05	1.6894E-02
520355.62	4258912.84	83849.80489	0.55374	0.20256	0.52963	0.21506	1.68E-02	2.27E-05	7.25E-06	2.17E-05	7.38E-06	1.6851E-02
520383.51	4258313.27	83845.36076	0.24786	0.45358	0.25198	0.49083	1.68E-02	1.01E-05	1.62E-05	1.03E-05	1.69E-05	1.6845E-02
520062.79	4258799.98	83784.65051	9.1055	0.78993	17.2231	0.74233	1.68E-02	3.73E-04	2.83E-05	7.05E-04	2.55E-05	1.7911E-02
520118.87	4258422.44	83548.15397	0.55801	7.30821	0.59824	8.88098	1.67E-02	2.28E-05	2.61E-04	2.45E-05	3.05E-04	1.7345E-02
520446.42	4258831.53	83485.86277	0.33184	0.18118	0.31839	0.19143	1.67E-02	1.36E-05	6.48E-06	1.30E-05	6.57E-06	1.6759E-02
520149.41	4258905.68	83439.71275	3.62542	0.45927	3.18866	0.44337	1.67E-02	1.48E-04	1.64E-05	1.31E-04	1.52E-05	1.7021E-02
520187.58	4258362.66	83355.63517	0.41815	2.22831	0.44301	2.54502	1.67E-02	1.71E-05	7.97E-05	1.81E-05	8.74E-05	1.6895E-02
520037.12	4258655.32	83343.36916	2.66772	2.25418	3.78072	1.99134	1.67E-02	1.09E-04	8.06E-05	1.55E-04	6.84E-05	1.7104E-02
520314.99	4258313.05	83342.88378	0.29021	0.70441	0.29916	0.76989	1.67E-02	1.19E-05	2.52E-05	1.22E-05	2.64E-05	1.6766E-02
520493.65	4258734.05	83340.7498	0.25318	0.18641	0.24332	0.19506	1.67E-02	1.04E-05	6.67E-06	9.96E-06	6.70E-06	1.6724E-02
520099.2	4258452.38	83321.50609	0.65953	13.82893	0.72015	15.83704	1.67E-02	2.70E-05	4.95E-04	2.95E-05	5.44E-04	1.7781E-02
520106.23	4258867.87	83315.69847	9.42837	0.59373	8.05927	0.54667	1.67E-02	3.86E-04	2.12E-05	3.30E-04	1.88E-05	1.7441E-02
520495	4258468.18	83231.41901	0.21203	0.23691	0.20952	0.2515	1.67E-02	8.68E-06	8.47E-06	8.58E-06	8.63E-06	1.6703E-02
520455.76	4258817.66	83217.08052	0.31543	0.18071	0.30293	0.19061	1.67E-02	1.29E-05	6.46E-06	1.24E-05	6.54E-06	1.6704E-02
520207.14	4258933.08	83054.71724	1.71329	0.3286	1.58002	0.34105	1.66E-02	7.01E-05	1.18E-05	6.47E-05	1.17E-05	1.6791E-02
520437.38	4258845.28	83034.34485	0.34882	0.18151	0.3342	0.19196	1.66E-02	1.43E-05	6.49E-06	1.37E-05	6.59E-06	1.6670E-02
520393.3	4258313.3	83003.82002	0.24186	0.42934	0.24517	0.46378	1.66E-02	9.90E-06	1.54E-05	1.00E-05	1.59E-05	1.6674E-02
520306.15	4258932.92	82899.00474	0.76019	0.22377	0.72501	0.23967	1.66E-02	3.11E-05	8.00E-06	2.97E-05	8.23E-06	1.6679E-02
520458.9	4258350.62	82855.9088	0.2126	0.30362	0.21261	0.3221	1.66E-02	8.70E-06	1.09E-05	8.71E-06	1.11E-05	1.6632E-02
520375.41	4258902.8	82853.60398	0.49052	0.19513	0.46898	0.20646	1.66E-02	2.01E-05	6.98E-06	1.92E-05	7.09E-06	1.6646E-02
520042.8	4258745.07	82846.17439	4.07594	1.04073	5.84402	0.98707	1.66E-02	1.67E-04	3.72E-05	2.39E-04	3.39E-05	1.7068E-02
520411.74	4258875.91	82803.16042	0.40161	0.18608	0.38461	0.19664	1.66E-02	1.64E-05	6.66E-06	1.57E-05	6.75E-06	1.6628E-02
520177.42	4258923.13	82794.58077	2.41723	0.38651	2.18155	0.38786	1.66E-02	9.90E-05	1.38E-05	8.93E-05	1.33E-05	1.6796E-02
520495.45	4258443.49	82555.90289	0.20817	0.24115	0.20617	0.25574	1.65E-02	8.52E-06	8.63E-06	8.44E-06	8.78E-06	1.6567E-02
520305.2	4258313.02	82491.35942	0.29597	0.75659	0.30499	0.82843	1.65E-02	1.21E-05	2.71E-05	1.25E-05	2.84E-05	1.6600E-02
520140.36	4258901.94	82405.12918	4.27268	0.48066	3.71478	0.45779	1.65E-02	1.75E-04	1.72E-05	1.52E-04	1.57E-05	1.6863E-02
520497.18	4258725.62	82302.39617	0.24801	0.18655	0.23834	0.19532	1.65E-02	1.02E-05	6.67E-06	9.76E-06	6.71E-06	1.6515E-02
520158.15	4258382.56	82267.44232	0.46154	3.35636	0.49418	3.91005	1.65E-02	1.89E-05	1.20E-04	2.02E-05	1.34E-04	1.6769E-02
520478.26	4258778.32	82248.59079	0.27871	0.18147	0.26782	0.19038	1.65E-02	1.14E-05	6.49E-06	1.10E-05	6.54E-06	1.6507E-02
520049.77	4258589.19	82228.50204	2.0809	6.38381	3.25707	4.47122	1.65E-02	8.52E-05	2.28E-04	1.33E-04	1.54E-04	1.7068E-02
520266.01	4258322.9	82170.65121	0.32676	1.02313	0.33608	1.13193	1.65E-02	1.34E-05	3.66E-05	1.38E-05	3.89E-05	1.6558E-02
520428.6	4258858.92	82002.68045	0.36632	0.18205	0.35074	0.19252	1.64E-02	1.50E-05	6.51E-06	1.44E-05	6.61E-06	1.6465E-02
520395.19	4258892.77	81896.94468	0.44144	0.18926	0.42224	0.19994	1.64E-02	1.81E-05	6.77E-06	1.73E-05	6.86E-06	1.6450E-02
520485.94	4258392.24	81822.02517	0.20542	0.25989	0.20501	0.27623	1.64E-02	8.41E-06	9.30E-06	8.39E-06	9.48E-06	1.6422E-02
520115.55	4258881.71	81808.27427	7.33325	0.55303	6.2202	0.51215	1.64E-02	3.00E-04	1.98E-05	2.55E-04	1.76E-05	1.6976E-02
520403.09	4258313.33	81751.41791	0.23586	0.40733	0.2385	0.43901	1.64E-02	9.66E-06	1.46E-05	9.77E-06	1.51E-05	1.6421E-02
520197.24	4258933.1	81731.72212	1.90703	0.34348	1.74753	0.35272	1.64E-02	7.81E-05	1.23E-05	7.16E-05	1.21E-05	1.6542E-02
520034.59	4258701.16	81703.93805	2.93956	1.41209	4.02786	1.31096	1.64E-02	1.20E-04	5.05E-05	1.65E-04	4.50E-05	1.6743E-02
520316.05	4258932.9	81624.55234	0.71173	0.21685	0.67943	0.23195	1.63E-02	2.91E-05	7.76E-06	2.78E-05	7.96E-06	1.6419E-02
520217.01	4258342.75	81575.5016	0.37524	1.60193	0.39097	1.80665	1.63E-02	1.54E-05	5.73E-05	1.60E-05	6.20E-05	1.6487E-02
520087.78	4258850.27	81476.47694	15.04291	0.64178	17.44691	0.59066	1.63E-02	6.16E-04	2.30E-05	7.14E-04	2.03E-05	1.7690E-02
520295.41	4258312.99	81380.73934	0.30149	0.81458	0.31044	0.89367	1.63E-02	1.23E-05	2.91E-05	1.27E-05	3.07E-05	1.6382E-02
520256.66	4258943	81291.92058	1.09521	0.25991	1.03274	0.27756	1.63E-02	4.48E-05	9.30E-06	4.23E-05	9.53E-06	1.6386E-02
520246.76	4258943.02	81166.27409	1.18659	0.27017	1.1151	0.28748	1.63E-02	4.86E-05	9.66E-06	4.57E-05	9.87E-06	1.6368E-02
520365.52	4258912.82	81147.82944	0.52176	0.19653	0.49883	0.20833	1.63E-02	2.14E-05	7.03E-06	2.04E-05	7.15E-06	1.6307E-02
520266.56	4258942.98	81134.46542	1.01329	0.25024	0.95841	0.26792	1.62E-02	4.15E-05	8.95E-06	3.92E-05	9.20E-06	1.6347E-02
520039.13	4258736.23	81052.56127	3.55864	1.09235	5.01452	1.03304	1.62E-02	1.46E-04	3.91E-05	2.05E-04	3.55E-05	1.6657E-02
520097.49	4258864.26	80982.896	12.46281	0.60418	10.9551	0.55523	1.62E-02	5.10E-04	2.16E-05	4.49E-04	1.91E-05	1.7217E-02
520236.86	4258943.03	80944.23784	1.29354	0.2816	1.21075	0.29816	1.62E-02	5.30E-05	1.01E-05	4.96E-05	1.02E-05	1.6333E-02
520037.12	4258646.05	80887.11257	2.52398	2.49403	3.59196	2.17033	1.62E-02	1.03E-04	8.92E-05	1.47E-04	7.45E-05	1.6613E-02
520059.6	4258550.36	80817.46227	1.49072	13.34975	1.96939	7.34557	1.62E-02	6.10E-05	4.78E-04	8.06E-05	2.52E-04	1.7056E-02
520276.46	4258942.97	80809.58029	0.94111	0.24144	0.89244	0.25887	1.62E-02	3.85E-05	8.64E-06	3.65E-05	8.89E-06	1.6276E-02
520197.4	4258352.69	80753.1912	0.39744	1.98598	0.41894	2.25921	1.62E-02	1.63E-05	7.10E-05	1.72E-05	7.76E-05	1.6354E-02
520476.07	4258367.98	80692.46465	0.20644	0.2771	0.20675	0.29385	1.62E-02	8.45E-06	9.91E-06	8.47E-06	1.01E-05	1.6197E-02
520167.52	4258923.15	80671.83565	2.76565	0.40326	2.47405	0.39863	1.62E-02	1.13E-04	1.44E-05	1.01E-04	1.37E-05	1.6398E-02
520167.97	4258372.59	80530.32436	0.43913	2.90317	0.46937	3.35295	1.61E-02	1.80E-05	1.04E-04	1.92E-05	1.15E-04	1.6383E-02
520467.28	4258354.21	80431.83298	0.20857	0.29137	0.2087	0.30882	1.61E-02	8.54E-06	1.04E-05	8.55E-06	1.06E-05	1.6146E-02
520325.95	4258932.89	80352.51111	0.66911	0.21066	0.63912	0.22504	1.61E-02	2.74E-05	7.54E-06	2.62E-05	7.73E-06	1.6161E-02
520354.17	4258303.18	80305.34096	0.2612	0.54533	0.26808	0.59276	1.61E-02	1.07E-05	1.95E-05	1.10E-05	2.04E-05	1.6144E-02
520226.96	4258943.05	80291.39967	1.41118	0.29321	1.31526	0.30859	1.61E-02	5.78E-05	1.05E-05	5.39E-05	1.06E-05	1.6212E-02
520412.87	4258313.36	80255.96082	0.22999	0.38706	0.23199	0.41622	1.61E-02	9.42E-06	1.38E-05	9.50E-06	1.43E-05	1.6119E-02
520363.96	4258303.21	80240.57502	0.25548	0.51301	0.26165	0.55693	1.61E-02	1.05E-05	1.83E-05	1.07E-05	1.91E-05	1.6128E-02
520403.89	4258889.17	80213.6144	0.42073	0.18584	0.40271	0.19624	1.61E-02	1.72E-05	6.65E-06	1.65E-05	6.74E-06	1.6111E-02
520286.36	4258942.95	80212.24273	0.8755	0.23316	0.83203	0.25013	1.61E-02	3.58E-05	8.34E-06	3.41E-05	8.59E-06	1.6150E-02
520158.57	4258919.46	80184.84079	3.15667	0.42326	2.7994	0.41297	1.61E-02	1.29E-04	1.51E-05	1.15E-04	1.42E-05	1.6331E-02

520187.34	4258933.12	80126.97819	2.13587	0.35878	1.94382	0.36395	1.60E-02	8.75E-05	1.28E-05	7.96E-05	1.25E-05	1.6239E-02
520109.05	4258432.41	80126.01377	0.58058	9.67626	0.6247	11.73287	1.60E-02	2.38E-05	3.46E-04	2.56E-05	4.03E-04	1.6845E-02
520285.62	4258312.96	80121.11756	0.30683	0.87886	0.31559	0.9667	1.60E-02	1.26E-05	3.14E-05	1.29E-05	3.32E-05	1.6135E-02
520256.23	4258322.87	80043.96576	0.33155	1.11416	0.34147	1.23588	1.60E-02	1.36E-05	3.99E-05	1.40E-05	4.24E-05	1.6140E-02
520344.39	4258303.15	79979.58935	0.2667	0.58118	0.27436	0.63209	1.60E-02	1.09E-05	2.08E-05	1.12E-05	2.17E-05	1.6082E-02
520385.31	4258902.79	79844.22355	0.46486	0.18966	0.44413	0.20051	1.60E-02	1.90E-05	6.78E-06	1.82E-05	6.88E-06	1.6041E-02
520373.75	4258303.24	79827.35624	0.24965	0.48382	0.25515	0.52432	1.60E-02	1.02E-05	1.73E-05	1.04E-05	1.80E-05	1.6042E-02
520039.93	4258628.02	79775.93649	2.41343	3.19592	3.54716	2.66784	1.60E-02	9.88E-05	1.14E-04	1.45E-04	9.16E-05	1.6426E-02
520454.97	4258827.99	79634.16971	0.31831	0.17775	0.30546	0.18757	1.59E-02	1.30E-05	6.36E-06	1.25E-05	6.44E-06	1.5986E-02
520445.83	4258841.78	79624.06708	0.33447	0.17816	0.3206	0.18825	1.59E-02	1.37E-05	6.37E-06	1.31E-05	6.46E-06	1.5985E-02
520217.06	4258943.07	79598.74258	1.55311	0.30621	1.44023	0.31982	1.59E-02	6.36E-05	1.10E-05	5.90E-05	1.10E-05	1.6085E-02
520106.9	4258878.14	79592.53197	9.27436	0.56579	7.88558	0.52127	1.59E-02	3.80E-04	2.02E-05	3.23E-04	1.79E-05	1.6680E-02
520334.6	4258303.11	79571.2515	0.27221	0.62044	0.28043	0.67543	1.59E-02	1.11E-05	2.22E-05	1.15E-05	2.32E-05	1.6003E-02
520485.18	4258381.89	79435.61216	0.20392	0.26292	0.20387	0.27919	1.59E-02	8.35E-06	9.40E-06	8.35E-06	9.58E-06	1.5944E-02
520296.27	4258942.93	79403.39654	0.81626	0.22547	0.77708	0.24181	1.59E-02	3.34E-05	8.06E-06	3.18E-05	8.30E-06	1.5983E-02
520504.24	4258708.75	79354.08959	0.23819	0.1863	0.22894	0.19538	1.59E-02	9.75E-06	6.66E-06	9.37E-06	6.71E-06	1.5924E-02
520149.63	4258915.77	79352.06123	3.6386	0.44297	3.19633	0.4266	1.59E-02	1.49E-04	1.58E-05	1.31E-04	1.46E-05	1.6202E-02
520355.64	4258922.84	79292.56644	0.55628	0.19786	0.53174	0.21024	1.59E-02	2.28E-05	7.08E-06	2.18E-05	7.22E-06	1.5938E-02
520383.54	4258303.27	79269.90217	0.24389	0.45703	0.24865	0.49448	1.59E-02	9.99E-06	1.63E-05	1.02E-05	1.70E-05	1.5928E-02
520122.26	4258894.47	79223.38425	6.21394	0.51791	5.29762	0.48235	1.59E-02	2.54E-04	1.85E-05	2.17E-04	1.66E-05	1.6372E-02
520035.46	4258727.38	79056.73053	3.17942	1.14665	4.3631	1.08125	1.58E-02	1.30E-04	4.10E-05	1.79E-04	3.71E-05	1.6219E-02
520436.96	4258855.46	79034.08975	0.35115	0.1786	0.33628	0.18878	1.58E-02	1.44E-05	6.39E-06	1.38E-05	6.48E-06	1.5869E-02
520324.81	4258303.08	79029.16922	0.27767	0.66362	0.28623	0.72332	1.58E-02	1.14E-05	2.37E-05	1.17E-05	2.48E-05	1.5898E-02
520498.73	4258472.76	78962.63874	0.21011	0.23264	0.20742	0.24691	1.58E-02	8.60E-06	8.32E-06	8.49E-06	8.48E-06	1.5847E-02
520464.43	4258814.07	78957.92413	0.30273	0.17716	0.29053	0.18661	1.58E-02	1.24E-05	6.34E-06	1.19E-05	6.41E-06	1.5849E-02
520275.83	4258312.93	78693.36112	0.31196	0.95034	0.32056	1.04871	1.58E-02	1.28E-05	3.40E-05	1.31E-05	3.60E-05	1.5855E-02
520460.13	4258341.14	78645.5454	0.20967	0.3039	0.20955	0.3223	1.57E-02	8.58E-06	1.09E-05	8.58E-06	1.11E-05	1.5789E-02
520207.16	4258943.08	78627.4054	1.71736	0.31979	1.58363	0.33095	1.57E-02	7.03E-05	1.14E-05	6.48E-05	1.14E-05	1.5904E-02
520177.79	4258362.63	78607.96467	0.418	2.54047	0.44545	2.9151	1.57E-02	1.71E-05	9.09E-05	1.82E-05	1.00E-04	1.5969E-02
520422.66	4258313.39	78547.58632	0.22426	0.36824	0.22566	0.3951	1.57E-02	9.18E-06	1.32E-05	9.24E-06	1.36E-05	1.5775E-02
520050.47	4258787.67	78493.0757	5.58704	0.80977	8.52941	0.77145	1.57E-02	2.29E-04	2.90E-05	3.49E-04	2.65E-05	1.6353E-02
520393.33	4258303.3	78478.34033	0.23816	0.43252	0.24219	0.46715	1.57E-02	9.75E-06	1.55E-05	9.92E-06	1.60E-05	1.5768E-02
520306.17	4258942.92	78431.78803	0.76306	0.21838	0.72739	0.234	1.57E-02	3.12E-05	7.81E-06	2.98E-05	8.03E-06	1.5784E-02
520375.42	4258912.8	78394.92152	0.49293	0.19092	0.47098	0.20209	1.57E-02	2.02E-05	6.83E-06	1.93E-05	6.94E-06	1.5753E-02
520177.44	4258933.13	78330.79093	2.41362	0.37444	2.17996	0.37465	1.57E-02	9.88E-05	1.34E-05	8.93E-05	1.29E-05	1.5901E-02
520315.02	4258303.05	78316.24048	0.28301	0.71123	0.2917	0.77638	1.57E-02	1.16E-05	2.54E-05	1.19E-05	2.67E-05	1.5760E-02
520140.68	4258912.07	78280.52614	4.25323	0.4621	3.69915	0.43945	1.57E-02	1.74E-04	1.65E-05	1.51E-04	1.51E-05	1.6034E-02
520412.58	4258885.57	78250.13456	0.40134	0.18236	0.38438	0.19252	1.57E-02	1.64E-05	6.52E-06	1.57E-05	6.61E-06	1.5716E-02
520088.74	4258860.65	78206.10544	16.02295	0.60987	16.37517	0.56171	1.57E-02	6.56E-04	2.18E-05	6.70E-04	1.93E-05	1.7029E-02
520207.22	4258342.72	78147.29737	0.37809	1.78474	0.39683	2.02086	1.57E-02	1.55E-05	6.38E-05	1.62E-05	6.94E-05	1.5815E-02
520046.85	4258778.96	78054.39662	4.901	0.84193	7.12507	0.8038	1.56E-02	2.01E-04	3.01E-05	2.92E-04	2.76E-05	1.6182E-02
520246.44	4258322.84	77964.37974	0.33621	1.21648	0.34696	1.35504	1.56E-02	1.38E-05	4.35E-05	1.42E-05	4.65E-05	1.5731E-02
520037.12	4258636.77	77919.31872	2.36049	2.7619	3.37405	2.36154	1.56E-02	9.66E-05	9.88E-05	1.38E-04	8.11E-05	1.6019E-02
520428.3	4258869.05	77886.73301	0.36857	0.17885	0.3525	0.18903	1.56E-02	1.51E-05	6.40E-06	1.44E-05	6.49E-06	1.5640E-02
520475.66	4258357.8	77565.92053	0.20456	0.27989	0.20479	0.29645	1.55E-02	8.38E-06	1.00E-05	8.38E-06	1.02E-05	1.5571E-02
520395.21	4258902.77	77500.39846	0.44325	0.18545	0.42372	0.19583	1.55E-02	1.81E-05	6.63E-06	1.73E-05	6.72E-06	1.5569E-02
520197.26	4258943.1	77485.29514	1.91419	0.33419	1.7537	0.34208	1.55E-02	7.84E-05	1.20E-05	7.18E-05	1.17E-05	1.5691E-02
520305.23	4258303.02	77479.08522	0.28826	0.76367	0.29683	0.83537	1.55E-02	1.18E-05	2.73E-05	1.22E-05	2.87E-05	1.5596E-02
520507.78	4258700.32	77468.08167	0.23346	0.18628	0.22457	0.19541	1.55E-02	9.56E-06	6.66E-06	9.19E-06	6.71E-06	1.5546E-02
520098.24	4258874.57	77417.46248	12.15308	0.57499	10.5781	0.52892	1.55E-02	4.98E-04	2.06E-05	4.33E-04	1.82E-05	1.6473E-02
520403.12	4258303.33	77411.59075	0.23246	0.41009	0.23581	0.44206	1.55E-02	9.52E-06	1.47E-05	9.66E-06	1.52E-05	1.5552E-02
520030.86	4258692.16	77403.4986	2.57417	1.49019	3.46039	1.37293	1.55E-02	1.05E-04	5.33E-05	1.42E-04	4.71E-05	1.5849E-02
520495.89	4258406.5	77380.79645	0.20196	0.24645	0.20076	0.26172	1.55E-02	8.27E-06	8.82E-06	8.22E-06	8.99E-06	1.5531E-02
520043.24	4258770.25	77368.64241	4.32457	0.87654	6.06921	0.8378	1.55E-02	1.77E-04	3.14E-05	2.48E-04	2.88E-05	1.5980E-02
520113.21	4258890.74	77365.35578	7.808	0.53266	6.60339	0.49243	1.55E-02	3.20E-04	1.91E-05	2.70E-04	1.69E-05	1.6119E-02
520493.54	4258758.26	77224.65896	0.25772	0.17913	0.24735	0.18743	1.55E-02	1.06E-05	6.41E-06	1.01E-05	6.43E-06	1.5499E-02
520316.07	4258942.9	77222.23292	0.71416	0.21161	0.68139	0.22648	1.55E-02	2.92E-05	7.57E-06	2.79E-05	7.78E-06	1.5537E-02
520256.68	4258953	77145.54208	1.10197	0.25412	1.03864	0.27095	1.54E-02	4.51E-05	9.09E-06	4.25E-05	9.30E-06	1.5555E-02
520266.58	4258952.98	77040.60969	1.02017	0.24479	0.96443	0.26176	1.54E-02	4.18E-05	8.76E-06	3.95E-05	8.99E-06	1.5527E-02
520246.78	4258953.02	77033.96563	1.19408	0.26413	1.1216	0.2805	1.54E-02	4.89E-05	9.45E-06	4.59E-05	9.63E-06	1.5541E-02
520266.05	4258312.9	76944.84649	0.31663	1.03088	0.32552	1.1411	1.54E-02	1.30E-05	3.69E-05	1.33E-05	3.92E-05	1.5512E-02
520498.55	4258417.66	76927.8609	0.20218	0.24199	0.2006	0.25678	1.54E-02	8.28E-06	8.66E-06	8.21E-06	8.82E-06	1.5440E-02
520484.55	4258371.61	76913.90397	0.2023	0.26598	0.20249	0.28205	1.54E-02	8.28E-06	9.51E-06	8.29E-06	9.68E-06	1.5439E-02
520497.01	4258749.96	76854.22454	0.25258	0.17974	0.24242	0.18795	1.54E-02	1.03E-05	6.43E-06	9.93E-06	6.45E-06	1.5424E-02
520365.54	4258922.82	76842.902	0.52433	0.19216	0.50096	0.20386	1.54E-02	2.15E-05	6.87E-06	2.05E-05	7.00E-06	1.5445E-02
520236.88	4258953.03	76756.58558	1.2998	0.27496	1.21615	0.29049	1.54E-02	5.32E-05	9.83E-06	4.98E-05	9.97E-06	1.5494E-02
520055.61	4258807.01	76755.09214	6.85081	0.7368	11.62339	0.6997	1.54E-02	2.81E-04	2.64E-05	4.76E-04	2.40E-05	1.6178E-02
520276.48	4258952.97	76682.1285	0.94657	0.23605	0.89719	0.2529	1.54E-02	3.88E-05	8.44E-06	3.67E-05	8.68E-06	1.5449E-02
520049.73	4258579.49	76635.26388	1.80328	6.83525	2.68075	4.70097	1.53E-02	7.38E-05	2.44E-04	1.10E-04	1.61E-04	1.5937E-02
520476.32	4258799.14	76598.81114	0.28475	0.17575	0.27333	0.18465	1.53E-02	1.17E-05	6.29E-06	1.12E-05	6.34E-06	1.5375E-02
520187.61	4258352.66	76567.33172	0.39821	2.24465	0.42266	2.56378	1.53E-02	1.63E-05	8.03E-05	1.73E-05	8.80E-05	1.5536E-02
520432.45	4258313.42	76546.89046	0.21865	0.35085	0.21953	0.37555	1.53E-02	8.95E-06	1.25E-05	8.99E-06	1.29E-05	1.5373E-02
520031.79	4258718.53	76520.60235	2.82848	1.20472	3.79988	1.13079	1.53E-02	1.16E-04	4.31E-05	1.56E-04	3.88E-05	1.5678E-02
520167.54	4258933.15	76446.35243	2.76438	0.39035	2.47459	0.38475	1.53E-02	1.13E-04	1.40E-05	1.01E-04	1.32E-05	1.5551E-02
520039.63	4258761.54	76401.44978	3.83276	0.91431	5.24334	0.87365	1.53E-02	1.57E-04	3.27E-05	2.15E-04	3.00E-05	1.5735E-02
520469.11	4258344.98	76399.46786	0.20551	0.29094	0.20546	0.30814	1.53E-02	8.41E-06	1.04E-05	8.41E-06	1.06E-05	1.5338E-02
520295.44	4258302.99	76388.51946	0.29324	0.82185	0.30166	0.90105	1.53E-02	1.20E-05	2.94E-05	1.24E-05	3.09E-05	1.5383E-02
520494.72	4258395.99	76276.86134	0.2009	0.24965	0.20013	0.26514	1.53E-02	8.23E-06	8.93E-06	8.19E-06	9.10E-06	1.5310E-02
520226.98	4258953.05	76237.01047	1.42038	0.28643	1.3232	0.30069	1.53E-02	5.82E-05	1.02E-05	5.42E-05	1.03E-05	1.5400E-02
520454.28	4258838.28	76180.19624	0.32097	0.17484	0.30774	0.18455	1.53E-02	1.31E-05	6.25E-06	1.26E-05	6.34E-06	1.5294E-02
520412.91	4258303.36	76172.2929	0.22689	0.38932	0.22953	0.4189	1.53E-02	9.29E-06	1.39E-05	9.40E-06	1.44E-05	1.5302E-02
520286.38	4258952.95	76092.47681	0.88012	0.22789	0.83602	0.2444	1.52E-02	3.60E-05	8.15E-06	3.42E-05	8.39E-06	1.5325E-02
520138.54	4258392.5	76027.56458	0.47575	4.7484	0.50733	5.62239	1.52E-02	1.95E-05	1.70E-04	2.08E-05	1.93E-04	1.5629E-02
520325.97	4258942.89	76017.28085	0.67117	0.20558	0.64071	0.21975	1.52E-02	2.75E-05	7.35E-06	2.62E-05	7.54E-06	1.5292E-02
520158.68	4258929.5	76001.6616	3.14859	0.40883	2.79418	0.3979	1.52E-02	1.29E-04	1.46E-05	1.14E-04	1.37E-05	1.5492E-02
520403.81	4258899.21	75992.59783	0.42272	0.18223	0.40427	0.19233	1.52E-02	1.73E-05	6.52E-06	1.66E-05	6.60E-06	1.5266E-02
520187.36	4258943.12	75973.73844	2.14094	0.34858	1.94853	0.35246	1.52E-02	8.77E-05	1.25E-05	7.98E-05	1.21E-05	1.5407E-02
520445.32	4258852	75969.32815	0.33688	0.17524	0.32266	0.18512	1.52E-02	1.38E-05	6.27E-06	1.32E-05	6.36E-06	1.5254E-02
520501.93	4258460.52	75951.76887	0.20639	0.23203	0.20399	0.24597	1.52E-02	8.45E-06	8.30E-06	8.35E-06	8.44E-06	1.5244E-02
520421.28	4258881.97	75911.09358	0.3838	0.17823	0.36659	0.18829	1.52E-02	1.57E-05	6.38E-06	1.50E-05	6.46E-06	1.5246E-02
520463.52	4258824.45	75831.00993	0.3056	0.1744	0.29321	0.1838	1.52E-02	1.25E-05	6.24E-06	1.20E-05	6.31E-06	1.5223E-02
520363.99	4258293.21	75819.93839	0.2507	0.5175	0.25727	0.56129	1.52E-02	1.03E-05	1.85E-05	1.05E-05	1.93E-05	1.5243E-02
520039.89	4258618.32	75816.89227	2.18261	3.55246	3.20466	2.89523	1.52E-02	8.94E-05	1.27E-04	1.31E-04	9.94E-05	1.5630E-02
520354.21	4258293.18	75763.00651	0.25594	0.55038	0.26316	0.59747	1.52E-02	1.05E-05	1.97E-05	1.08E-05	2.05E-05	1.5234E-02
520128.72	4258402.47	75722.37547	0.49649	5.81651	0.52906	6.95403	1.52E-02	2.03E-05	2.08E-04	2.17E-05	2.39E-04	1.5653E-02
520385.32	4258912.79	75586.71947	0.46683	0.18565	0.44572	0.19628	1.51E-02	1.91E-05	6.64E-06	1.82E-05	6.74E-06	1.5188E-02
520217.07	4258953.07	75556.66473	1.56182	0.29877	1.44772	0.31117	1.51E-02	6.39E-05	1.07E-05	5.93E-05	1.07E-05	1.5276E-02
520502.07	4258481.52	75536.02711	0.20897	0.22825	0.20593	0.24224	1.51E-02	8.56E-06	8.16E-06	8.43E-06	8.32E-06	1.5161E-02
520373.78	4258293.24	75528.79499	0.24528	0.4878	0.25126	0.5283	1.51E-02	1.00E-05	1.74E-05	1.03E-05	1.81E-05	1.5182E-02
520503.97	4258733.34	75469.4977	0.2426	0.18056	0.2329	0.18881	1.51E-02	9.93E-06	6.46E-06	9.54E-06	6.48E-06	1.5146E-02
520344.42	4258293.15	75420.53629	0.26102	0.58667	0.26884	0.63718	1.51E-02	1.07E-05	2.10E-05	1.10E-05	2.19E-05	1.5169E-02
520236.65	4258322.81	75401.00747	0.33995	1.33482	0.35255	1.49105	1.51E-02	1.39E-05	4.77E-05	1.44E-05	5.12E-05	1.5227E-02
520149.83	4258925.84	75366.93052	3.63076	0.42717	3.19091	0.41056	1.51E-02	1.49E-04	1.53E-05	1.31E-04	1.41E-05	1.5402E-02
520511.31	4258691.88	75365.9069	0.22891	0.18619	0.22034	0.19527	1.51E-02	9.37E-06	6.66E-06	9.02E-06	6.70E-06	1.5125E-02
520296.28	4258952.93	75338.84159	0.82056	0.22038	0.78079	0.23637	1.51E-02	3.36E-05	7.88E-06	3.20E-05	8.11E-06	1.5169E-02
520104.16	4258887	75300.2271	10.10179	0.54366	8.57809	0.50072	1.51E-02	4.14E-04	1.94E-05	3.51E-04	1.72E-05	1.5881E-02
520058.16	4258818.05	75272.16268	7.62198	0.69903	14.115	0.66257	1.51E-02	3.12E-04	2.50E-05	5.78E-04	2.27E-05	1.6012E-02
520285.65	4258302.96	75156.19859	0.29805	0.88627	0.30631	0.9745	1.51E-02	1.22E-05	3.17E-05	1.25E-05	3.35E-05	1.5141E-02
520485.42	4258785.36	75101.85031	0.27145	0.17541	0.26062	0.1839	1.50E-02	1.11E-05	6.27E-06	1.07E-05	6.31E-06	1.5075E-02
520355.65	4258932.84	75066.0684	0.55847	0.19327	0.53347	0.20553	1.50E-02	2.29E-05	6.91E-06	2.18E-05	7.06E-06	1.5092E-02
520383.57	4258293.27	75060.64076	0.23987	0.46059	0.24518	0.49812	1.50E-02	9.82E-06	1.65E-05	1.00E-05	1.71E-05	1.5085E-02
520036.02	4258752.83	75050.24888	3.38228	0.95608	4.58254	0.91135	1.50E-02	1.38E-04	3.42E-05	1.88E-04	3.13E-05	1.5421E-02
520089.59	4258871	75039.22448	15.72186	0.58037	15.50529	0.535	1.50E-02	6.44E-04	2.08E-05	6.35E-04	1.84E-05	1.6345E-02
520502.59	4258436.39	75020.34348	0.20256	0.23519	0.20055	0.24923	1.50E-02	8.29E-06	8.41E-06	8.21E-06	8.56E-06	1.5057E-02
520334.63	4258293.11	75009.00662	0.2661	0.6263	0.27426	0.68091	1.50E-02	1.09E-05	2.24E-05	1.12E-05	2.34E-05	1.5089E-02
520256.26	4258312.87	74969.22689	0.32091	1.12196	0.33059	1.24591	1.50E-02	1.31E-05	4.01E-05	1.35E-05	4.28E-05	1.5123E-02
520473.09	4258810.48	74861.36577	0.29072	0.17375	0.27888	0.18276	1.50E-02	1.19E-05	6.21E-06	1.14E-05	6.27E-06	1.5028E-02
520158.18	4258372.56	74757.83843	0.43497	3.38278	0.46459	3.9306	1.50E-02	1.78E-05	1.21E-04	1.90E-05	1.35E-04	1.5264E-02
520493.79	4258385.58	74689.22515	0.19962	0.25255	0.19925	0.26809	1.50E-02	8.17E-06	9.03E-06	8.16E-06	9.20E-06	1.4992E-02
520207.17	4258953.08	74642.16494	1.72594	0.31171	1.591	0.32161	1.49E-02	7.07E-05	1.11E-05	6.51E-05	1.10E-05	1.5106E-02
520422.69	4258303.39	74633.91322	0.22138	0.37028	0.2234	0.39757	1.49E-02	9.06E-06	1.32E-05	9.15E-06	1.36E-05	1.4992E-02
520140.98	4258922.19	74510.57663	4.24523	0.44483	3.69181	0.42242	1.49E-02	1.74E-04	1.59E-05	1.51E-04	1.45E-05	1.5277E-02
520197.43	4258342.69	74468.70069	0.37953	2.0021	0.40128	2.27492	1.49E-02	1.55E-05	7.16E-05	1.64E-05	7.81E-05	1.5095E-02
520324.84	4258293.08	74429.72358	0.27106	0.66986	0.27939	0.72918	1.49E-02	1.11E-05	2.40E-05	1.14E-05	2.50E-05	1.4977E-02
520507.45	4258725.04	74424.95008	0.23785	0.18059	0.22832	0.18898	1.49E-02	9.74E-06	6.46E-06	9.35E-06	6.49E-06	1.4937E-02
520306.18	4258952.92	74410.60542	0.76677	0.21342	0.73054	0.22876	1.49E-02	3.14E-05	7.63E-06	2.99E-05	7.85E-06	1.4979E-02
520393.36	4258293.3	74400.34664	0.23448	0.43564	0.23909	0.47045	1.49E-02	9.60E-06	1.56E-05	9.79E-06	1.62E-05	1.4951E-02
520118.9	4258412.44	74368.84836	0.51686	7.34987	0.55101	8.90376	1.49E-02	2.12E-05	2.63E-04	2.26E-05	3.06E-04	1.5506E-02
520177.45	4258943.13	74363.35587	2.42152	0.36349	2.18704	0.36251	1.49E-02	9.91E-05	1.30E-05	8.95E-05	1.24E-05	1.5106E-02
520484.04	4258361.38	74329.02332	0.2006	0.2688	0.20083	0.28465	1.49E-02	8.21E-06	9.61E-06	8.22E-06	9.77E-06	1.4921E-02
520375.44	4258922.8	74286.04518	0.49518	0.18676	0.47282	0.19781	1.49E-02	2.03E-05	6.68E-06	1.94E-05	6.79E-06	1.4930E-02
520412.42	4258895.64	74253.06182	0.40336	0.17899	0.38603	0.18884	1.49E-02	1.65E-05	6.40E-06	1.58E-05	6.48E-06	1.4915E-02
520442.24	4258313.45	74208.60134	0.21313	0.33489	0.21363	0.35755	1.49E-02	8.73E-06	1.20E-05	8.75E-06	1.23E-05	1.4903E-02
520099.23	4258442.38	74145.44306	0.60121	13.83618	0.65228	15.87986	1.48E-02	2.46E-05	4.95E-04	2.67E-05	5.45E-04	1.5940E-02
520113.85	4258901	73741.63813	7.63126	0.50878	6.47059	0.47072	1.48E-02	3.12E-04	1.82E-05	2.65E-04	1.62E-05	1.5380E-02
520315.05	4258293.05	73707.98484	0.27592	0.71775	0.28422	0.78262	1.48E-02	1.13E-05	2.57E-05	1.16E-05	2.69E-05	1.4837E-02
520275.87	4258302.93	73683.33507	0.30253	0.9582	0.31091	1.05683	1.48E-02	1.24E-05	3.43E-05	1.27E-05	3.63E-05	1.4852E-02
520478.09	4258348.82	73637.53636	0.20134	0.27882	0.20144	0.29499	1.47E-02	8.24E-06	9.97E-06	8.25E-06	1.01E-05	1.4784E-02
520197.27	4258953.1	73566.49119	1.92181	0.32535	1.76036	0.33197	1.47E-02	7.87E-05	1.16E-05	7.21E-05	1.14E-05	1.4906E-02
520168	4258362.6	73564.39921	0.41557	2.92447	0.44361	3.3734	1.47E-02	1.70E-05	1.05E-04	1.82E-05	1.16E-04	1.4988E-02
520429.98	4258878.37	73497.89285	0.36703	0.17482	0.35059	0.18467	1.47E-02	1.50E-05	6.25E-06	1.44E-05	6.34E-06	1.4761E-02
520403.15	4258293.33	73454.41056	0.22907	0.41288	0.23304	0.44507	1.47E-02	9.38E-06	1.48E-05	9.54E-06	1.53E-05	1.4759E-02
520395.22	4258912.77	73444.12269	0.44498	0.18165	0.42512	0.19179	1.47E-02	1.82E-05	6.50E-06	1.74E-05	6.58E-06	1.4757E-02
520316.08	4258952.9	73443.53345	0.7191	0.20712	0.68573	0.22177	1.47E-02	2.94E-05	7.41E-06	2.81E-05	7.61E-06	1.4781E-02
520028.13	4258709.69	73429.87436	2.51027	1.2658	3.31777	1.18093	1.47E-02	1.03E-04	4.53E-05	1.36E-04	4.05E-05	1.5030E-02
520095.11	4258883.27	73247.94411	13.41912	0.55083	11.92286	0.50742	1.47E-02	5.49E-04	1.97E-05	4.88E-04	1.74E-05	1.5744E-02
520032.4	4258744.12	73238.47406	2.97135	1.00074	4.00913	0.94988	1.47E-02	1.22E-04	3.58E-05	1.64E-04	3.26E-05	1.5021E-02
520450.96	4258317.18	73194.4279	0.20922	0.32099	0.20931	0.3418	1.47E-02	8.57E-06	1.15E-05	8.57E-06	1.17E-05	1.4699E-02
520468.73	4258334.8	73056.66198	0.20342	0.29364	0.2033	0.31087	1.46E-02	8.33E-06	1.05E-05	8.32E-06	1.07E-05	1.4668E-02
520256.7	4258963	73017.30338	1.10257	0.24788	1.03889	0.26393	1.46E-02	4.51E-05	8.87E-06	4.25E-05	9.06E-06	1.4728E-02
520246.79	4258963.02	72902.84138	1.1942	0.25751	1.12147	0.27302	1.46E-02	4.89E-05	9.21E-06	4.59E-05	9.37E-06	1.4713E-02
520305.26	4258293.02	72874.23839	0.28069	0.77037	0.28878	0.842	1.46E-02	1.15E-05	2.76E-05	1.18E-05	2.89E-05	1.4674E-02
520453.68	4258848.54	72872.26498	0.32342	0.17201	0.30984	0.18156	1.46E-02	1.32E-05	6.15E-06	1.27E-05	6.23E-06	1.4632E-02
520266.6	4258962.98	72869.13162	1.02006	0.23871	0.964	0.25501	1.46E-02	4.18E-05	8.54E-06	3.95E-05	8.75E-06	1.4692E-02
520432.48	4258303.42	72852.2952	0.21597	0.35265	0.21742	0.37781	1.46E-02	8.84E-06	1.26E-05	8.90E-06	1.30E-05	1.4633E-02
520246.47	4258312.84	72828.53137	0.32476	1.22523	0.33575	1.36538	1.46E-02	1.33E-05	4.38E-05	1.37E-05	4.69E-05	1.4703E-02
520493.04	4258375.25	72827.57084	0.1982	0.25553	0.19816	0.27095	1.46E-02	8.12E-06	9.14E-06	8.11E-06	9.30E-06	1.4619E-02
520462.73	4258834.79	72756.78283	0.30828	0.17161	0.29558	0.18093	1.46E-02	1.26E-05	6.14E-06	1.21E-05	6.21E-06	1.4608E-02
520236.89	4258963.03	72703.30296	1.30106	0.26813	1.21711	0.28271	1.46E-02	5.33E-05	9.59E-06	4.98E-05	9.71E-06	1.4682E-02
520365.55	4258932.82	72687.32106	0.52565	0.1876	0.50187	0.19917	1.46E-02	2.15E-05	6.71E-06	2.05E-05	6.84E-06	1.4612E-02
520226.86	4258322.78	72668.13219	0.34301	1.47111	0.35798	1.64796	1.46E-02	1.40E-05	5.26E-05	1.47E-05	5.66E-05	1.4691E-02
520167.55	4258943.15	72640.93147	2.7728	0.37838	2.48222	0.37184	1.45E-02	1.14E-04	1.35E-05	1.02E-04	1.28E-05	1.4789E-02
520276.5	4258962.97	72521.61579	0.94642	0.23016	0.89668	0.24645	1.45E-02	3.88E-05	8.23E-06	3.67E-05	8.46E-06	1.4616E-02
520444.87	4258862.19	72508.12744	0.33913	0.17237	0.32455	0.18202	1.45E-02	1.39E-05	6.17E-06	1.33E-05	6.25E-06	1.4560E-02
520505.17	4258469.04	72409.0705	0.2053	0.22732	0.20262	0.24105	1.45E-02	8.41E-06	8.13E-06	8.30E-06	8.28E-06	1.4534E-02
520027.12	4258683.15	72383.67715	2.2452	1.5684	2.97529	1.43252	1.45E-02	9.19E-05	5.61E-05	1.22E-04	4.92E-05	1.4815E-02
520412.94	4258293.36	72320.23758	0.22373	0.39189	0.22704	0.42169	1.45E-02	9.16E-06	1.40E-05	9.30E-06	1.45E-05	1.4530E-02
520187.37	4258953.12	72279.60941	2.15505	0.33932	1.96034	0.34191	1.45E-02	8.82E-05	1.21E-05	8.03E-05	1.17E-05	1.4667E-02
520059.56	4258540.66	72255.47644	1.26617	13.34593	1.59225	7.51885	1.45E-02	5.18E-05	4.77E-04	6.52E-05	2.58E-04	1.5323E-02
520158.79	4258939.53	72254.00075	3.15168	0.39545	2.79757	0.38393	1.45E-02	1.29E-04	1.41E-05	1.15E-04	1.32E-05	1.4741E-02
520226.99	4258963.05	72239.41138	1.4218	0.2792	1.32438	0.29243	1.45E-02	5.82E-05	9.99E-06	5.42E-05	1.00E-05	1.4599E-02
520421.02	4258892.08	72160.74402	0.3859	0.17506	0.36829	0.18482	1.45E-02	1.58E-05	6.26E-06	1.51E-05	6.35E-06	1.4495E-02
520177.82	4258352.63	72140.68335	0.39708	2.55821	0.42306	2.93462	1.44E-02	1.63E-05	9.15E-05	1.73E-05	1.01E-04	1.4673E-02
520472.06	4258820.91	72136.80447	0.29362	0.17116	0.28165	0.18014	1.44E-02	1.20E-05	6.12E-06	1.15E-05	6.18E-06	1.4482E-02
520403.75	4258909.24	72090.41399	0.42454	0.17865	0.40573	0.18848	1.44E-02	1.74E-05	6.39E-06	1.66E-05	6.47E-06	1.4484E-02
520266.08	4258302.9	71976.06451	0.30664	1.03916	0.3156	1.14973	1.44E-02	1.26E-05	3.72E-05	1.29E-05	3.95E-05	1.4516E-02
520286.4	4258962.95	71953.63287	0.87978	0.22214	0.83532	0.23817	1.44E-02	3.60E-05	7.95E-06	3.42E-05	8.18E-06	1.4496E-02
520043.45	4258794.86	71882.07167	4.45511	0.75478	6.22755	0.72426	1.44E-02	1.82E-04	2.70E-05	2.55E-04	2.49E-05	1.4885E-02
520104.9	4258897.3	71868.46738	9.79092	0.51861	8.32661	0.4782	1.44E-02	4.01E-04	1.85E-05	3.41E-04	1.64E-05	1.5169E-02
520459.68	4258320.92	71815.63945	0.20531	0.30798	0.20518	0.32706	1.44E-02	8.41E-06	1.10E-05	8.40E-06	1.12E-05	1.4421E-02
520295.47	4258292.99	71756.52355	0.28513	0.82885	0.29314	0.90802	1.44E-02	1.17E-05	2.96E-05	1.20E-05	3.12E-05	1.4455E-02
520385.34	4258922.79	71727.86457	0.469	0.18178	0.44752	0.19226	1.44E-02	1.92E-05	6.50E-06	1.83E-05	6.60E-06	1.4415E-02
520364.03	4258283.21	71681.27339	0.24584	0.52217	0.25271	0.56557	1.44E-02	1.01E-05	1.87E-05	1.03E-05	1.94E-05	1.4414E-02
520514.4	4258708.42	71641.66466	0.22876	0.18043	0.21973	0.18907	1.43E-02	9.37E-06	6.45E-06	9.00E-06	6.49E-06	1.4379E-02
520150.02	4258935.91	71595.17556	3.6139	0.41204	3.18082	0.39534	1.43E-02	1.48E-04	1.47E-05	1.30E-04	1.36E-05	1.4644E-02
520039.85	4258608.63	71588.3185	1.94447	3.89281	2.82138	3.10539	1.43E-02	7.96E-05	1.39E-04	1.16E-04	1.07E-04	1.4778E-02
520354.24	4258283.18	71582.06369	0.25069	0.55545	0.25806	0.6021	1.43E-02	1.03E-05	1.99E-05	1.06E-05	2.07E-05	1.4397E-02
520217.09	4258963.07	71565.51181	1.56084	0.29088	1.44699	0.30222	1.43E-02	6.39E-05	1.04E-05	5.92E-05	1.04E-05	1.4476E-02
520373.81	4258283.24	71561.47992	0.24089	0.49184	0.24719	0.53223	1.43E-02	9.86E-06	1.76E-05	1.01E-05	1.83E-05	1.4387E-02
520027.12	4258673.87	71471.82176	2.15949	1.70166	2.87135	1.54021	1.43E-02	8.84E-05	6.09E-05	1.18E-04	5.29E-05	1.4633E-02

520028.79	4258735.41	71417.85438	2.69044	1.04649	3.55652	0.99022	1.43E-02	1.10E-04	3.74E-05	1.46E-04	3.40E-05	1.4630E-02
520039.88	4258786.27	71365.23448	3.97141	0.78326	5.39742	0.75236	1.43E-02	1.63E-04	2.80E-05	2.21E-04	2.58E-05	1.4729E-02
520296.3	4258962.93	71292.11391	0.82087	0.2149	0.78068	0.23051	1.43E-02	3.36E-05	7.69E-06	3.20E-05	7.91E-06	1.4358E-02
520344.45	4258283.15	71251.34477	0.25538	0.59202	0.26316	0.64215	1.43E-02	1.05E-05	2.12E-05	1.08E-05	2.20E-05	1.4334E-02
520383.6	4258283.27	71188.49988	0.23583	0.46421	0.24156	0.50172	1.43E-02	9.66E-06	1.66E-05	9.89E-06	1.72E-05	1.4310E-02
520109.08	4258422.41	71182.74741	0.53535	9.71718	0.57288	11.77283	1.43E-02	2.19E-05	3.48E-04	2.35E-05	4.04E-04	1.5052E-02
520355.67	4258942.84	71151.98925	0.56033	0.18881	0.53486	0.20094	1.42E-02	2.29E-05	6.75E-06	2.19E-05	6.90E-06	1.4308E-02
520504.86	4258410.35	71016.76731	0.19731	0.2372	0.19582	0.25149	1.42E-02	8.08E-06	8.48E-06	8.02E-06	8.63E-06	1.4255E-02
520422.73	4258293.39	70985.39176	0.21847	0.37247	0.22113	0.40007	1.42E-02	8.95E-06	1.33E-05	9.05E-06	1.37E-05	1.4261E-02
520438.67	4258874.77	70949.3572	0.35128	0.17157	0.33564	0.18117	1.42E-02	1.44E-05	6.14E-06	1.37E-05	6.22E-06	1.4249E-02
520497.07	4258773.76	70942.08348	0.25654	0.17282	0.24614	0.18083	1.42E-02	1.05E-05	6.18E-06	1.01E-05	6.21E-06	1.4240E-02
520481.76	4258806.89	70936.74089	0.27935	0.17047	0.26788	0.17905	1.42E-02	1.14E-05	6.10E-06	1.10E-05	6.15E-06	1.4241E-02
520141.25	4258932.29	70854.49252	4.21801	0.4283	3.67377	0.40625	1.42E-02	1.73E-04	1.53E-05	1.50E-04	1.39E-05	1.4542E-02
520049.05	4258814.29	70850.9085	5.44229	0.69011	8.0621	0.66066	1.42E-02	2.23E-04	2.47E-05	3.30E-04	2.27E-05	1.4789E-02
520086.06	4258879.53	70828.60964	14.04818	0.5539	18.67299	0.51233	1.42E-02	5.75E-04	1.98E-05	7.65E-04	1.76E-05	1.5562E-02
520334.66	4258283.11	70803.91405	0.26002	0.63198	0.26798	0.68622	1.42E-02	1.06E-05	2.26E-05	1.10E-05	2.36E-05	1.4247E-02
520492.42	4258364.97	70802.12089	0.19666	0.25839	0.19682	0.27361	1.42E-02	8.05E-06	9.24E-06	8.06E-06	9.39E-06	1.4214E-02
520177.47	4258953.13	70790.48061	2.43639	0.35333	2.19944	0.35121	1.42E-02	9.98E-05	1.26E-05	9.01E-05	1.21E-05	1.4391E-02
520049.69	4258569.8	70769.13705	1.56866	7.16762	2.19599	4.91445	1.42E-02	6.42E-05	2.56E-04	8.99E-05	1.69E-04	1.4752E-02
520442.27	4258303.45	70760.31357	0.21063	0.33652	0.21162	0.35964	1.42E-02	8.62E-06	1.20E-05	8.66E-06	1.23E-05	1.4212E-02
520477.57	4258338.58	70748.22631	0.19945	0.28169	0.19943	0.29778	1.42E-02	8.17E-06	1.01E-05	8.17E-06	1.02E-05	1.4205E-02
520207.19	4258963.08	70709.51854	1.72329	0.30319	1.58913	0.31201	1.42E-02	7.06E-05	1.08E-05	6.51E-05	1.07E-05	1.4318E-02
520503.5	4258399.75	70657.41896	0.19644	0.24022	0.19533	0.25481	1.42E-02	8.04E-06	8.59E-06	8.00E-06	8.75E-06	1.4183E-02
520036.32	4258777.68	70630.14412	3.55422	0.81389	4.72927	0.78179	1.41E-02	1.46E-04	2.91E-05	1.94E-04	2.68E-05	1.4540E-02
520393.39	4258283.3	70602.1046	0.23075	0.43893	0.23586	0.47375	1.41E-02	9.45E-06	1.57E-05	9.66E-06	1.63E-05	1.4190E-02
520187.64	4258342.66	70569.30035	0.3794	2.2621	0.40326	2.5799	1.41E-02	1.55E-05	8.09E-05	1.65E-05	8.86E-05	1.4334E-02
520285.69	4258292.96	70543.19626	0.28944	0.8934	0.29744	0.98178	1.41E-02	1.19E-05	3.20E-05	1.22E-05	3.37E-05	1.4217E-02
520412.27	4258905.71	70518.01334	0.40546	0.17557	0.38753	0.18515	1.41E-02	1.66E-05	6.28E-06	1.59E-05	6.36E-06	1.4167E-02
520503.94	4258757.36	70504.66167	0.24671	0.17388	0.23661	0.18171	1.41E-02	1.01E-05	6.22E-06	9.69E-06	6.24E-06	1.4152E-02
520487.07	4258352.66	70503.46663	0.19725	0.26705	0.1974	0.28242	1.41E-02	8.08E-06	9.55E-06	8.08E-06	9.70E-06	1.4155E-02
520306.2	4258962.92	70462.66968	0.76752	0.20818	0.73083	0.22323	1.41E-02	3.14E-05	7.45E-06	2.99E-05	7.66E-06	1.4188E-02
520236.68	4258312.81	70433.71435	0.32793	1.34388	0.34089	1.50222	1.41E-02	1.34E-05	4.81E-05	1.40E-05	5.16E-05	1.4232E-02
520114.42	4258911.23	70403.41389	7.50828	0.48691	6.36939	0.45075	1.41E-02	3.07E-04	1.74E-05	2.61E-04	1.55E-05	1.4700E-02
520375.46	4258932.8	70383.8913	0.49667	0.18251	0.47391	0.19344	1.41E-02	2.03E-05	6.53E-06	1.94E-05	6.64E-06	1.4148E-02
520324.87	4258283.08	70237.42513	0.26459	0.67574	0.27253	0.73485	1.41E-02	1.08E-05	2.42E-05	1.12E-05	2.52E-05	1.4137E-02
520256.29	4258302.87	70094.33392	0.31038	1.1305	0.32038	1.25498	1.40E-02	1.27E-05	4.04E-05	1.31E-05	4.31E-05	1.4147E-02
520095.96	4258893.61	70073.95213	13.03243	0.52549	11.43155	0.48454	1.40E-02	5.34E-04	1.88E-05	4.68E-04	1.66E-05	1.5070E-02
520507.37	4258749.16	70052.04587	0.24194	0.17438	0.23204	0.18216	1.40E-02	9.91E-06	6.24E-06	9.50E-06	6.25E-06	1.4061E-02
520027.12	4258664.6	70021.54012	2.06541	1.84842	2.75386	1.65694	1.40E-02	8.46E-05	6.61E-05	1.13E-04	5.69E-05	1.4343E-02
520450.89	4258307.14	69946.85261	0.20691	0.32256	0.20736	0.34387	1.40E-02	8.47E-06	1.15E-05	8.49E-06	1.18E-05	1.4048E-02
520217.07	4258322.75	69933.87479	0.34547	1.62853	0.36284	1.83168	1.40E-02	1.41E-05	5.83E-05	1.49E-05	6.29E-05	1.4155E-02
520429.63	4258888.52	69895.48641	0.36905	0.17171	0.35215	0.18127	1.40E-02	1.51E-05	6.14E-06	1.44E-05	6.22E-06	1.4039E-02
520502.41	4258389.27	69787.01199	0.19536	0.24312	0.19467	0.25786	1.40E-02	8.00E-06	8.70E-06	7.97E-06	8.85E-06	1.4009E-02
520024.46	4258700.84	69781.83533	2.22368	1.32825	2.89884	1.23058	1.40E-02	9.10E-05	4.75E-05	1.19E-04	4.22E-05	1.4274E-02
520462.04	4258845.08	69781.02814	0.31075	0.16886	0.29773	0.17807	1.40E-02	1.27E-05	6.04E-06	1.22E-05	6.11E-06	1.4012E-02
520197.29	4258963.1	69778.64747	1.92115	0.31642	1.76056	0.32196	1.40E-02	7.87E-05	1.13E-05	7.21E-05	1.11E-05	1.4147E-02
520403.18	4258283.33	69753.56669	0.22561	0.41587	0.23015	0.4481	1.40E-02	9.24E-06	1.49E-05	9.42E-06	1.54E-05	1.4018E-02
520395.24	4258922.77	69687.35492	0.44659	0.17786	0.42638	0.18781	1.40E-02	1.83E-05	6.36E-06	1.75E-05	6.45E-06	1.4004E-02
520032.76	4258769.08	69651.60082	3.18997	0.84693	4.17786	0.8126	1.39E-02	1.31E-04	3.03E-05	1.71E-04	2.79E-05	1.4309E-02
520315.08	4258283.05	69514.88171	0.26902	0.72379	0.27683	0.78864	1.39E-02	1.10E-05	2.59E-05	1.13E-05	2.71E-05	1.3997E-02
520345.79	4258952.85	69445.29775	0.59758	0.18999	0.57021	0.20261	1.39E-02	2.45E-05	6.80E-06	2.33E-05	6.96E-06	1.3969E-02
520471.18	4258831.29	69409.13885	0.2963	0.16847	0.28408	0.17741	1.39E-02	1.21E-05	6.03E-06	1.16E-05	6.09E-06	1.3936E-02
520432.51	4258293.42	69404.99645	0.21328	0.35458	0.21534	0.3801	1.39E-02	8.73E-06	1.27E-05	8.82E-06	1.30E-05	1.3943E-02
520256.71	4258973	69332.78075	1.10582	0.24226	1.04159	0.25753	1.39E-02	4.53E-05	8.67E-06	4.26E-05	8.84E-06	1.3990E-02
520050.82	4258825.02	69280.05516	5.78377	0.65605	8.89386	0.62733	1.39E-02	2.37E-04	2.35E-05	3.64E-04	2.15E-05	1.4520E-02
520246.81	4258973.02	69243.85845	1.19798	0.25165	1.12467	0.26628	1.39E-02	4.91E-05	9.00E-06	4.60E-05	9.14E-06	1.3980E-02
520266.61	4258972.98	69197.40448	1.02317	0.23336	0.96655	0.24896	1.39E-02	4.19E-05	8.35E-06	3.96E-05	8.55E-06	1.3956E-02
520167.57	4258953.15	69163.4176	2.78485	0.36708	2.49273	0.35971	1.39E-02	1.14E-04	1.31E-05	1.02E-04	1.23E-05	1.4092E-02
520025.18	4258726.7	69148.81582	2.42133	1.09467	3.14766	1.03122	1.38E-02	9.91E-05	3.92E-05	1.29E-04	3.54E-05	1.4151E-02
520275.9	4258292.93	69075.85183	0.29339	0.96577	0.30179	1.06454	1.38E-02	1.20E-05	3.45E-05	1.24E-05	3.65E-05	1.3929E-02
520365.57	4258942.82	69073.5244	0.52817	0.18354	0.50391	0.19503	1.38E-02	2.16E-05	6.56E-06	2.06E-05	6.70E-06	1.3888E-02
520236.91	4258973.03	68971.36231	1.30241	0.2616	1.21818	0.27526	1.38E-02	5.33E-05	9.36E-06	4.99E-05	9.45E-06	1.3934E-02
520508.82	4258473.37	68948.15442	0.20342	0.22335	0.20055	0.23681	1.38E-02	8.33E-06	7.99E-06	8.21E-06	8.13E-06	1.3840E-02
520276.51	4258972.97	68843.98807	0.94879	0.22495	0.89852	0.24064	1.38E-02	3.88E-05	8.05E-06	3.68E-05	8.26E-06	1.3879E-02
520492.57	4258792.41	68842.1122	0.26449	0.1695	0.25365	0.17763	1.38E-02	1.08E-05	6.06E-06	1.04E-05	6.10E-06	1.3820E-02
520412.97	4258283.36	68833.76723	0.2206	0.39434	0.22445	0.42436	1.38E-02	9.03E-06	1.41E-05	9.19E-06	1.46E-05	1.3832E-02
520459.51	4258310.83	68812.64333	0.20319	0.30954	0.20324	0.32916	1.38E-02	8.32E-06	1.11E-05	8.32E-06	1.13E-05	1.3820E-02
520158.47	4258949.39	68804.59835	3.18073	0.38363	2.82222	0.37136	1.38E-02	1.30E-04	1.37E-05	1.16E-04	1.27E-05	1.4051E-02
520138.58	4258382.5	68796.33599	0.44579	4.77466	0.47287	5.64604	1.38E-02	1.83E-05	1.71E-04	1.94E-05	1.94E-04	1.4180E-02
520420.79	4258902.18	68665.32267	0.3879	0.17212	0.3701	0.18157	1.38E-02	1.59E-05	6.16E-06	1.52E-05	6.23E-06	1.3795E-02
520105.57	4258907.57	68632.40515	9.51588	0.49522	8.10751	0.45717	1.37E-02	3.90E-04	1.77E-05	3.32E-04	1.57E-05	1.4500E-02
520227.01	4258973.05	68598.51732	1.42484	0.27246	1.32701	0.28469	1.37E-02	5.83E-05	9.75E-06	5.43E-05	9.77E-06	1.3870E-02
520514.24	4258732.76	68596.51	0.23274	0.17493	0.22322	0.18282	1.37E-02	9.53E-06	6.26E-06	9.14E-06	6.28E-06	1.3769E-02
520187.39	4258963.12	68592.34235	2.15336	0.32967	1.96013	0.33126	1.37E-02	8.82E-05	1.18E-05	8.03E-05	1.14E-05	1.3928E-02
520305.29	4258283.02	68588.16073	0.27323	0.77682	0.28094	0.84826	1.37E-02	1.12E-05	2.78E-05	1.15E-05	2.91E-05	1.3815E-02
520501.53	4258378.88	68547.89768	0.19412	0.2459	0.19382	0.26064	1.37E-02	7.95E-06	8.80E-06	7.94E-06	8.95E-06	1.3761E-02
520480.61	4258817.37	68547.60049	0.28232	0.16795	0.27066	0.17653	1.37E-02	1.16E-05	6.01E-06	1.11E-05	6.06E-06	1.3762E-02
520403.69	4258919.27	68477.00097	0.42627	0.1751	0.40714	0.1847	1.37E-02	1.75E-05	6.26E-06	1.67E-05	6.34E-06	1.3760E-02
520286.41	4258972.95	68359.63046	0.8827	0.21722	0.83765	0.23277	1.37E-02	3.61E-05	7.77E-06	3.43E-05	7.99E-06	1.3776E-02
520029.19	4258760.49	68348.30521	2.85681	0.88315	3.71783	0.84486	1.37E-02	1.17E-04	3.16E-05	1.52E-04	2.90E-05	1.4017E-02
520447.37	4258871.17	68310.96164	0.33647	0.16835	0.3216	0.17769	1.37E-02	1.38E-05	6.02E-06	1.32E-05	6.10E-06	1.3719E-02
520158.21	4258362.56	68301.13401	0.41072	3.40506	0.43711	3.95121	1.37E-02	1.68E-05	1.22E-04	1.79E-05	1.36E-04	1.3970E-02
520385.36	4258932.79	68233.39609	0.47144	0.17805	0.44959	0.18842	1.37E-02	1.93E-05	6.37E-06	1.84E-05	6.47E-06	1.3715E-02
520486.41	4258342.37	68186.18428	0.19557	0.27014	0.19562	0.28536	1.37E-02	8.01E-06	9.66E-06	8.01E-06	9.80E-06	1.3691E-02
520128.76	4258392.47	68174.93712	0.46336	5.83713	0.49082	6.99866	1.37E-02	1.90E-05	2.09E-04	2.01E-05	2.40E-04	1.4141E-02
520149.36	4258945.63	68149.17364	3.66653	0.39958	3.22456	0.38226	1.36E-02	1.50E-04	1.43E-05	1.32E-04	1.31E-05	1.3957E-02
520087.01	4258889.92	68087.5125	15.52568	0.52874	17.48178	0.48935	1.36E-02	6.36E-04	1.89E-05	7.16E-04	1.68E-05	1.5023E-02
520027.12	4258655.32	68057.89442	1.96193	2.00876	2.62136	1.78219	1.36E-02	8.03E-05	7.19E-05	1.07E-04	6.12E-05	1.3950E-02
520217.11	4258973.07	68041.16092	1.56651	0.2839	1.45198	0.29416	1.36E-02	6.41E-05	1.02E-05	5.95E-05	1.01E-05	1.3770E-02
520521.36	4258691.81	68034.16547	0.22023	0.18014	0.21176	0.18876	1.36E-02	9.02E-06	6.44E-06	8.67E-06	6.48E-06	1.3655E-02
520246.5	4258302.84	68032.23737	0.31363	1.23436	0.32519	1.37487	1.36E-02	1.28E-05	4.42E-05	1.33E-05	4.72E-05	1.3742E-02
520364.06	4258273.21	67916.75887	0.24102	0.5267	0.248	0.56976	1.36E-02	9.87E-06	1.88E-05	1.02E-05	1.96E-05	1.3660E-02
520226.89	4258312.78	67895.59349	0.33042	1.48053	0.34568	1.66022	1.36E-02	1.35E-05	5.30E-05	1.42E-05	5.70E-05	1.3735E-02
520373.85	4258273.24	67852.18843	0.23642	0.49599	0.24297	0.53609	1.36E-02	9.68E-06	1.77E-05	9.95E-06	1.84E-05	1.3644E-02
520354.27	4258273.18	67796.3755	0.24551	0.56027	0.25282	0.60661	1.36E-02	1.01E-05	2.00E-05	1.04E-05	2.08E-05	1.3638E-02
520296.32	4258972.93	67741.52632	0.82349	0.21012	0.78272	0.22534	1.36E-02	3.37E-05	7.52E-06	3.20E-05	7.74E-06	1.3647E-02
520438.23	4258884.96	67696.70348	0.35344	0.16853	0.3373	0.17788	1.36E-02	1.45E-05	6.03E-06	1.38E-05	6.11E-06	1.3598E-02
520355.69	4258952.84	67686.12223	0.56291	0.18471	0.53695	0.1967	1.36E-02	2.30E-05	6.61E-06	2.20E-05	6.75E-06	1.3613E-02
520422.76	4258283.39	67590.65824	0.21554	0.37479	0.2188	0.40259	1.35E-02	8.83E-06	1.34E-05	8.96E-06	1.38E-05	1.3581E-02
520052.37	4258835.65	67556.71051	6.08535	0.62441	9.76329	0.59647	1.35E-02	2.49E-04	2.23E-05	4.00E-04	2.05E-05	1.4221E-02
520442.3	4258293.45	67538.0819	0.20812	0.33822	0.20968	0.36172	1.35E-02	8.52E-06	1.21E-05	8.59E-06	1.24E-05	1.3567E-02
520383.63	4258273.27	67512.85794	0.23168	0.46812	0.23778	0.50533	1.35E-02	9.49E-06	1.67E-05	9.74E-06	1.73E-05	1.3574E-02
520168.03	4258352.6	67504.78011	0.39391	2.94239	0.41934	3.3937	1.35E-02	1.61E-05	1.05E-04	1.72E-05	1.17E-04	1.3774E-02
520295.51	4258282.99	67500.63187	0.27724	0.83535	0.28497	0.91454	1.35E-02	1.14E-05	2.99E-05	1.17E-05	3.14E-05	1.3602E-02
520344.48	4258273.15	67473.69235	0.24987	0.59706	0.25738	0.64699	1.35E-02	1.02E-05	2.14E-05	1.05E-05	2.22E-05	1.3577E-02
520140.25	4258941.88	67470.77132	4.31533	0.41514	3.75202	0.39269	1.35E-02	1.77E-04	1.48E-05	1.54E-04	1.35E-05	1.3871E-02
520266.11	4258292.9	67425.01761	0.297	1.04705	0.30624	1.15779	1.35E-02	1.22E-05	3.75E-05	1.25E-05	3.97E-05	1.3605E-02
520335.9	4258962.87	67419.34687	0.63678	0.19101	0.60725	0.2041	1.35E-02	2.61E-05	6.83E-06	2.49E-05	7.01E-06	1.3566E-02
520468.13	4258314.52	67358.55545	0.19948	0.29735	0.19928	0.31539	1.35E-02	8.17E-06	1.06E-05	8.16E-06	1.08E-05	1.3527E-02
520114.95	4258921.44	67273.58845	7.40312	0.46664	6.2837	0.4322	1.35E-02	3.03E-04	1.67E-05	2.57E-04	1.48E-05	1.4064E-02
520207.21	4258973.08	67266.71059	1.73008	0.29576	1.59516	0.30346	1.35E-02	7.08E-05	1.06E-05	6.53E-05	1.04E-05	1.3628E-02
520177.49	4258963.13	67225.33608	2.4331	0.34287	2.19856	0.33992	1.35E-02	9.96E-05	1.23E-05	9.00E-05	1.17E-05	1.3676E-02
520490.42	4258803.31	67186.07901	0.26861	0.16726	0.25749	0.17545	1.35E-02	1.10E-05	5.98E-06	1.05E-05	6.02E-06	1.3488E-02
520039.81	4258598.93	67166.03637	1.71612	4.18897	2.44419	3.28564	1.35E-02	7.03E-05	1.50E-04	1.00E-04	1.13E-04	1.3884E-02
520496.04	4258356.5	67078.66314	0.19318	0.256	0.19332	0.27071	1.34E-02	7.91E-06	9.16E-06	7.92E-06	9.29E-06	1.3468E-02
520500.8	4258368.55	67065.01065	0.19276	0.24873	0.19275	0.26332	1.34E-02	7.89E-06	8.90E-06	7.89E-06	9.04E-06	1.3464E-02
520412.14	4258915.77	67037.98023	0.40737	0.17215	0.38889	0.1815	1.34E-02	1.67E-05	6.16E-06	1.59E-05	6.23E-06	1.3470E-02
520334.69	4258273.11	67025.98398	0.25414	0.6372	0.26168	0.6914	1.34E-02	1.04E-05	2.28E-05	1.07E-05	2.37E-05	1.3491E-02
520393.42	4258273.3	67020.78113	0.22692	0.44246	0.23249	0.47707	1.34E-02	9.29E-06	1.58E-05	9.52E-06	1.64E-05	1.3473E-02
520096.72	4258903.92	67014.99478	12.62655	0.50175	11.00146	0.46318	1.34E-02	5.17E-04	1.79E-05	4.50E-04	1.59E-05	1.4422E-02
520461.44	4258855.34	66913.50231	0.31304	0.16616	0.29969	0.17523	1.34E-02	1.28E-05	5.94E-06	1.23E-05	6.02E-06	1.3437E-02
520375.47	4258942.8	66900.505	0.49876	0.17856	0.47557	0.18942	1.34E-02	2.04E-05	6.39E-06	1.95E-05	6.50E-06	1.3451E-02
520450.83	4258297.1	66846.34587	0.20458	0.32427	0.20553	0.34601	1.34E-02	8.38E-06	1.16E-05	8.42E-06	1.19E-05	1.3427E-02
520207.28	4258322.72	66804.2752	0.34649	1.81472	0.36645	2.04556	1.34E-02	1.42E-05	6.49E-05	1.50E-05	7.02E-05	1.3543E-02
520470.4	4258841.62	66742.30132	0.29879	0.16581	0.28629	0.17468	1.34E-02	1.22E-05	5.93E-06	1.17E-05	6.00E-06	1.3402E-02
520118.94	4258402.44	66727.24285	0.48045	7.38365	0.5096	8.91	1.34E-02	1.97E-05	2.64E-04	2.09E-05	3.06E-04	1.3974E-02
520025.63	4258751.9	66682.22047	2.54787	0.92172	3.31277	0.87782	1.34E-02	1.04E-04	3.30E-05	1.36E-04	3.01E-05	1.3657E-02
520512.12	4258461.42	66679.69661	0.19995	0.22268	0.19738	0.2358	1.34E-02	8.19E-06	7.96E-06	8.08E-06	8.10E-06	1.3386E-02
520429.31	4258898.66	66569.60073	0.37101	0.16872	0.35375	0.17799	1.33E-02	1.52E-05	6.03E-06	1.45E-05	6.11E-06	1.3373E-02
520177.85	4258342.63	66473.54191	0.37748	2.57704	0.40185	2.95076	1.33E-02	1.55E-05	9.22E-05	1.65E-05	1.01E-04	1.3538E-02
520021.57	4258717.99	66458.6131	2.17388	1.14433	2.78436	1.07234	1.33E-02	8.90E-05	4.09E-05	1.14E-04	3.68E-05	1.3590E-02
520324.9	4258273.08	66406.98762	0.25827	0.6812	0.26573	0.74031	1.33E-02	1.06E-05	2.44E-05	1.09E-05	2.54E-05	1.3370E-02
520521.1	4258716.36	66367.67141	0.22406	0.17495	0.215	0.1831	1.33E-02	9.17E-06	6.26E-06	8.80E-06	6.29E-06	1.3322E-02
520197.31	4258973.1	66357.38838	1.92534	0.30817	1.76463	0.31263	1.33E-02	7.88E-05	1.10E-05	7.23E-05	1.07E-05	1.3462E-02
520403.21	4258273.33	66357.09375	0.22214	0.41886	0.22713	0.45109	1.33E-02	9.10E-06	1.50E-05	9.30E-06	1.55E-05	1.3338E-02
520512.06	4258481.89	66312.22942	0.20233	0.21944	0.19912	0.23262	1.33E-02	8.28E-06	7.85E-06	8.15E-06	7.99E-06	1.3312E-02
520285.72	4258282.96	66293.51468	0.28109	0.90021	0.28904	0.98869	1.33E-02	1.15E-05	3.22E-05	1.18E-05	3.39E-05	1.3366E-02
520099.26	4258432.38	66246.05501	0.5517	13.86168	0.59523	15.91144	1.33E-02	2.26E-05	4.96E-04	2.44E-05	5.46E-04	1.4356E-02
520395.26	4258932.77	66213.65843	0.44808	0.17413	0.42758	0.18393	1.33E-02	1.83E-05	6.23E-06	1.75E-05	6.31E-06	1.3309E-02
520345.8	4258962.85	66176.33859	0.59981	0.18607	0.57234	0.19851	1.33E-02	2.46E-05	6.66E-06	2.34E-05	6.82E-06	1.3314E-02
520432.55	4258283.42	66176.27132	0.21055	0.35665	0.21323	0.38241	1.33E-02	8.62E-06	1.28E-05	8.73E-06	1.31E-05	1.3296E-02
520479.62	4258827.79	66156.733	0.28502	0.16541	0.27318	0.17397	1.32E-02	1.17E-05	5.92E-06	1.12E-05	5.97E-06	1.3284E-02
520365.59	4258952.82	66098.07055	0.53202	0.17999	0.50738	0.19137	1.32E-02	2.18E-05	6.44E-06	2.08E-05	6.57E-06	1.3293E-02
520036.17	4258801.44	66032.06856	3.62419	0.70783	4.79642	0.68289	1.32E-02	1.48E-04	2.53E-05	1.96E-04	2.34E-05	1.3617E-02
520459.36	4258300.75	65906.74014	0.20103	0.3112	0.20145	0.33128	1.32E-02	8.23E-06	1.11E-05	8.25E-06	1.14E-05	1.3238E-02
520106.18	4258917.82	65783.13274	9.40007	0.47465	7.97682	0.43842	1.32E-02	3.85E-04	1.70E-05	3.27E-04	1.51E-05	1.3917E-02
520236.71	4258302.81	65765.37016	0.31622	1.35357	0.32982	1.51215	1.32E-02	1.29E-05	4.84E-05	1.35E-05	5.19E-05	1.3297E-02
520053.74	4258846.21	65743.21763	6.40646	0.59484	10.72055	0.56781	1.32E-02	2.62E-04	2.13E-05	4.39E-04	1.95E-05	1.3908E-02
520167.59	4258963.15	65742.18441	2.78105	0.3558	2.49206	0.34783	1.32E-02	1.14E-04	1.27E-05	1.02E-04	1.19E-05	1.3406E-02
520027.12	4258646.05	65653.08603	1.84887	2.18087	2.47343	1.91373	1.31E-02	7.57E-05	7.80E-05	1.01E-04	6.57E-05	1.3469E-02
520456.07	4258867.56	65642.11288	0.32256	0.1652	0.30842	0.17427	1.31E-02	1.32E-05	5.91E-06	1.26E-05	5.98E-06	1.3183E-02
520256.32	4258292.87	65635.54699	0.30024	1.13871	0.31074	1.26344	1.31E-02	1.23E-05	4.07E-05	1.27E-05	4.34E-05	1.3254E-02
520020.79	4258692	65633.36835	1.96546	1.38942	2.53132	1.27805	1.31E-02	8.05E-05	4.97E-05	1.04E-04	4.39E-05	1.3422E-02
520315.11	4258273.05	65569.84347	0.26216	0.72966	0.2696	0.79429	1.31E-02	1.07E-05	2.61E-05	1.10E-05	2.73E-05	1.3206E-02
520476.75	4258318.21	65542.8319	0.19575	0.28592	0.1955	0.30248	1.31E-02	8.01E-06	1.02E-05	8.00E-06	1.04E-05	1.3162E-02
520413	4258273.36	65503.32213	0.21736	0.39715	0.22175	0.42716	1.31E-02	8.90E-06	1.42E-05	9.08E-06	1.47E-05	1.3165E-02
520158.57	4258959.43	65471.78454	3.17595	0.37128	2.82081	0.35868	1.31E-02	1.30E-04	1.33E-05	1.15E-04	1.23E-05	1.3383E-02
520087.87	4258900.27	65442.37231	15.23026	0.50535	16.54014	0.46802	1.31E-02	6.24E-04	1.81E-05	6.77E-04	1.61E-05	1.4441E-02
520032.4	4258792.34	65405.0401	3.24496	0.73558	4.22096	0.70951	1.31E-02	1.33E-04	2.63E-05	1.73E-04	2.44E-05	1.3455E-02
520420.59	4258912.28	65392.80037	0.38976	0.16894	0.3716	0.17813	1.31E-02	1.60E-05	6.04E-06	1.52E-05	6.12E-06	1.3139E-02
520326.02	4258972.89	65346.5309	0.67945	0.19218	0.64747	0.20573	1.31E-02	2.78E-05	6.87E-06	2.65E-05	7.06E-06	1.3155E-02
520446.84	4258881.39	65342.3547	0.33872	0.16541	0.32332	0.17454	1.31E-02	1.39E-05	5.92E-06	1.32E-05	5.99E-06	1.3125E-02
520041.85	4258821.31	65297.38129	4.32005	0.64827	5.95521	0.62472	1.31E-02	1.77E-04	2.32E-05	2.44E-04	2.14E-05	1.3542E-02
520495.25	4258346.15	65252.13538	0.19172	0.25898	0.19179	0.2735	1.31E-02	7.85E-06	9.26E-06	7.85E-06	9.39E-06	1.3102E-02
520187.41	4258973.12	65214.91631	2.15378	0.32055	1.96154	0.32119	1.31E-02	8.82E-05	1.15E-05	8.03E-05	1.10E-05	1.3251E-02
520217.1	4258312.75	65205.17484	0.33203	1.63937	0.34962	1.84404	1.31E-02	1.36E-05	5.86E-05	1.43E-05	6.33E-05	1.3208E-02
520507.49	4258772.83	65143.92133	0.24558	0.16788	0.23549	0.17543	1.30E-02	1.01E-05	6.00E-06	9.64E-06	6.02E-06	1.3078E-02
520489.16	4258813.84	65120.71342	0.27161	0.16477	0.26028	0.17297	1.30E-02	1.11E-05	5.89E-06	1.07E-05	5.94E-06	1.3075E-02
520403.64	4258929.3	65102.80736	0.42794	0.17151	0.40835	0.18095	1.30E-02	1.75E-05	6.13E-06	1.67E-05	6.21E-06	1.3084E-02
520385.37	4258942.79	65100.47988	0.47404	0.17446	0.45182	0.18474	1.30E-02	1.94E-05	6.24E-06	1.85E-05	6.34E-06	1.3088E-02
520149.56	4258955.71	64995.38742	3.66618	0.38622	3.22538	0.36889	1.30E-02	1.50E-04	1.38E-05	1.32E-04	1.27E-05	1.3325E-02
520524.54	4258708.16	64965.74142	0.21991	0.17483	0.21112	0.18306	1.30E-02	9.00E-06	6.25E-06	8.64E-06	6.28E-06	1.3040E-02
520275.93	4258282.93	64924.67495	0.28467	0.97257	0.29318	1.07187	1.30E-02	1.17E-05	3.48E-05	1.20E-05	3.68E-05	1.3097E-02
520510.88	4258764.72	64917.89809	0.24097	0.16845	0.23105	0.1759	1.30E-02	9.87E-06	6.03E-06	9.46E-06	6.04E-06	1.3032E-02
520022.07	4258743.3	64887.8951	2.30741	0.96113	2.96702	0.9117	1.30E-02	9.45E-05	3.44E-05	1.21E-04	3.13E-05	1.3276E-02
520049.65	4258560.1	64712.33512	1.35979	7.40139	1.80865	5.08338	1.30E-02	5.57E-05	2.65E-04	7.41E-05	1.75E-04	1.3529E-02
520467.89	4258304.4	64641.90467	0.19746	0.29908	0.19751	0.31754	1.29E-02	8.08E-06	1.07E-05	8.09E-06	1.09E-05	1.2983E-02
520355.7	4258962.84	64628.84307	0.56521	0.18117	0.5395	0.19298	1.29E-02	2.31E-05	6.48E-06	2.21E-05	6.63E-06	1.3001E-02
520305.32	4258273.02	64606.98068	0.26592	0.78293	0.27338	0.85413	1.29E-02	1.09E-05	2.80E-05	1.12E-05	2.93E-05	1.3018E-02
520437.84	4258895.13	64594.51902	0.35544	0.1657	0.33895	0.17478	1.29E-02	1.46E-05	5.93E-06	1.39E-05	6.00E-06	1.2976E-02
520028.63	4258783.24	64550.46512	2.91721	0.76526	3.73952	0.73727	1.29E-02	1.19E-04	2.74E-05	1.53E-04	2.53E-05	1.3252E-02
520442.33	4258283.45	64528.05353	0.20561	0.33999	0.20775	0.36379	1.29E-02	8.42E-06	1.22E-05	8.51E-06	1.25E-05	1.2964E-02
520140.55	4258951.99	64438.24372	4.30436	0.40056	3.74591	0.37852	1.29E-02	1.76E-04	1.43E-05	1.53E-04	1.30E-05	1.3262E-02
520422.79	4258273.39	64410.3397	0.21256	0.37726	0.21639	0.40512	1.29E-02	8.70E-06	1.35E-05	8.86E-06	1.39E-05	1.2944E-02
520364.09	4258263.21	64399.64015	0.23617	0.53124	0.24315	0.57385	1.29E-02	9.67E-06	1.90E-05	9.96E-06	1.97E-05	1.2955E-02
520373.88	4258263.24	64362.75175	0.2319	0.50028	0.23859	0.53992	1.29E-02	9.49E-06	1.79E-05	9.77E-06	1.85E-05	1.2945E-02
520335.92	4258972.87	64262.77211	0.63877	0.18705	0.60914	0.19993	1.29E-02	2.62E-05	6.69E-06	2.49E-05	6.86E-06	1.2934E-02
520354.3	4258263.18	64253.98329	0.24033	0.56504	0.24747	0.61097	1.29E-02	9.84E-06	2.02E-05	1.01E-05	2.10E-05	1.2929E-02
520097.41	4258914.2	64230.86681	12.32647	0.48005	10.6813	0.44357	1.29E-02	5.05E-04	1.72E-05	4.37E-04	1.52E-05	1.3838E-02
520383.67	4258263.27	64147.34873	0.22753	0.47191	0.23385	0.50882	1.28E-02	9.32E-06	1.69E-05	9.57E-06	1.75E-05	1.2900E-02

520109.12	4258412.41	64059.94829	0.49613	9.76209	0.52838	11.79485	1.28E-02	2.03E-05	3.49E-04	2.16E-05	4.05E-04	1.3625E-02
520517.67	4258748.5	64053.48207	0.23203	0.16926	0.22241	0.17664	1.28E-02	9.50E-06	6.05E-06	9.11E-06	6.06E-06	1.2858E-02
520177.5	4258973.13	64027.29189	2.43929	0.33327	2.20485	0.32946	1.28E-02	9.99E-05	1.19E-05	9.03E-05	1.13E-05	1.3036E-02
520375.49	4258952.8	63973.74825	0.5023	0.17512	0.47869	0.1859	1.28E-02	2.06E-05	6.26E-06	1.96E-05	6.38E-06	1.2864E-02
520112.94	4258930.6	63958.55402	7.79797	0.45014	6.6155	0.4167	1.28E-02	3.19E-04	1.61E-05	2.71E-04	1.43E-05	1.3429E-02
520043.52	4258832	63955.53049	4.55647	0.617	6.40691	0.59431	1.28E-02	1.87E-04	2.21E-05	2.62E-04	2.04E-05	1.3299E-02
520344.51	4258263.15	63925.68401	0.24436	0.60198	0.25154	0.65164	1.28E-02	1.00E-05	2.15E-05	1.03E-05	2.24E-05	1.2866E-02
520451.31	4258287.29	63917.58639	0.20205	0.3251	0.2035	0.34711	1.28E-02	8.27E-06	1.16E-05	8.33E-06	1.19E-05	1.2841E-02
520054.96	4258856.71	63870.77833	6.71133	0.56739	11.76173	0.54129	1.28E-02	2.75E-04	2.03E-05	4.82E-04	1.86E-05	1.3586E-02
520029.93	4258628.06	63823.44766	1.73978	2.66306	2.36914	2.26801	1.28E-02	7.12E-05	9.53E-05	9.70E-05	7.79E-05	1.3123E-02
520412.02	4258925.83	63819.55135	0.40907	0.16881	0.39028	0.17796	1.28E-02	1.67E-05	6.04E-06	1.60E-05	6.11E-06	1.2826E-02
520478.76	4258838.16	63785.0792	0.28749	0.16288	0.27547	0.17139	1.28E-02	1.18E-05	5.83E-06	1.13E-05	5.88E-06	1.2809E-02
520393.45	4258263.3	63724.40756	0.22308	0.44596	0.22897	0.48033	1.28E-02	9.13E-06	1.60E-05	9.37E-06	1.65E-05	1.2813E-02
520246.53	4258292.84	63691.28425	0.30299	1.24295	0.31515	1.38379	1.28E-02	1.24E-05	4.45E-05	1.29E-05	4.75E-05	1.2872E-02
520515.3	4258469.76	63651.13446	0.19883	0.21834	0.19596	0.23127	1.27E-02	8.14E-06	7.81E-06	8.02E-06	7.94E-06	1.2779E-02
520499.09	4258799.72	63607.67095	0.25842	0.1642	0.24769	0.172	1.27E-02	1.06E-05	5.87E-06	1.01E-05	5.90E-06	1.2771E-02
520059.52	4258530.96	63578.99187	1.09112	13.28282	1.32468	7.65591	1.27E-02	4.47E-05	4.75E-04	5.42E-05	2.63E-04	1.3569E-02
520429.03	4258908.78	63574.03288	0.37301	0.16582	0.35546	0.17482	1.27E-02	1.53E-05	5.93E-06	1.46E-05	6.00E-06	1.2773E-02
520295.54	4258272.99	63526.15713	0.26951	0.84164	0.27718	0.92064	1.27E-02	1.10E-05	3.01E-05	1.13E-05	3.16E-05	1.2806E-02
520197.49	4258322.69	63512.19159	0.34622	2.03507	0.36802	2.29825	1.27E-02	1.42E-05	7.28E-05	1.51E-05	7.89E-05	1.2900E-02
520334.72	4258263.11	63450.61533	0.24826	0.6423	0.25539	0.69631	1.27E-02	1.02E-05	2.30E-05	1.05E-05	2.39E-05	1.2774E-02
520505.02	4258360.35	63447.12707	0.18913	0.24596	0.18919	0.26001	1.27E-02	7.74E-06	8.80E-06	7.75E-06	8.93E-06	1.2739E-02
520024.85	4258774.14	63442.27128	2.62765	0.79695	3.32931	0.76613	1.27E-02	1.08E-04	2.85E-05	1.36E-04	2.63E-05	1.3004E-02
520266.14	4258282.9	63358.07748	0.28785	1.05401	0.29739	1.16551	1.27E-02	1.18E-05	3.77E-05	1.22E-05	4.00E-05	1.2790E-02
520226.92	4258302.78	63341.99738	0.31805	1.49118	0.33389	1.67045	1.27E-02	1.30E-05	5.33E-05	1.37E-05	5.73E-05	1.2822E-02
520017.96	4258709.28	63312.58018	1.94396	1.1946	2.46491	1.11272	1.27E-02	7.96E-05	4.27E-05	1.01E-04	3.82E-05	1.2941E-02
520432.58	4258273.42	63187.52179	0.20782	0.35875	0.21106	0.38468	1.27E-02	8.51E-06	1.28E-05	8.64E-06	1.32E-05	1.2697E-02
520403.24	4258263.33	63154.1056	0.2186	0.42203	0.22398	0.45408	1.26E-02	8.95E-06	1.51E-05	9.17E-06	1.56E-05	1.2696E-02
520494.57	4258335.85	63151.45531	0.19004	0.26218	0.19011	0.27642	1.26E-02	7.78E-06	9.38E-06	7.78E-06	9.49E-06	1.2681E-02
520476.42	4258308.05	63116.51471	0.19389	0.28764	0.19372	0.30462	1.26E-02	7.94E-06	1.03E-05	7.93E-06	1.05E-05	1.2677E-02
520316.13	4258982.9	63070.3292	0.72521	0.19342	0.69023	0.20733	1.26E-02	2.97E-05	6.92E-06	2.83E-05	7.12E-06	1.2703E-02
520460.29	4258291.14	63051.47066	0.19845	0.31125	0.19928	0.33156	1.26E-02	8.13E-06	1.11E-05	8.16E-06	1.14E-05	1.2666E-02
520488.07	4258824.29	63012.95449	0.27435	0.16232	0.26282	0.17052	1.26E-02	1.12E-05	5.81E-06	1.08E-05	5.85E-06	1.2653E-02
520395.27	4258942.77	63003.73247	0.44945	0.17048	0.42875	0.18017	1.26E-02	1.84E-05	6.10E-06	1.76E-05	6.19E-06	1.2666E-02
520464.77	4258863.96	62963.87777	0.30949	0.16211	0.29601	0.1709	1.26E-02	1.27E-05	5.80E-06	1.21E-05	5.87E-06	1.2646E-02
520345.82	4258972.85	62946.85057	0.60106	0.18204	0.57343	0.1943	1.26E-02	2.46E-05	6.51E-06	2.35E-05	6.67E-06	1.2667E-02
520256.75	4258993	62932.58317	1.11493	0.23211	1.04949	0.24583	1.26E-02	4.56E-05	8.30E-06	4.30E-05	8.44E-06	1.2708E-02
520455.44	4258877.83	62920.80106	0.32489	0.16242	0.31023	0.1713	1.26E-02	1.33E-05	5.81E-06	1.27E-05	5.88E-06	1.2638E-02
520365.6	4258962.82	62919.96573	0.53351	0.17627	0.50876	0.18751	1.26E-02	2.18E-05	6.30E-06	2.08E-05	6.44E-06	1.2656E-02
520027.12	4258636.77	62917.32357	1.72569	2.36234	2.3111	2.04783	1.26E-02	7.07E-05	8.45E-05	9.46E-05	7.03E-05	1.2920E-02
520517.32	4258423.32	62915.68398	0.19194	0.22428	0.19001	0.23713	1.26E-02	7.86E-06	8.02E-06	7.78E-06	8.14E-06	1.2632E-02
520148.43	4258362.53	62902.85888	0.40364	4.01685	0.42677	4.69858	1.26E-02	1.65E-05	1.44E-04	1.75E-05	1.61E-04	1.2936E-02
520088.64	4258910.58	62896.04374	14.95675	0.48363	15.80866	0.44822	1.26E-02	6.12E-04	1.73E-05	6.47E-04	1.54E-05	1.3888E-02
520246.84	4258993.02	62885.32253	1.20911	0.24104	1.13444	0.25399	1.26E-02	4.95E-05	8.62E-06	4.64E-05	8.72E-06	1.2707E-02
520058.92	4258868.33	62864.21256	7.93548	0.5435	16.4273	0.51675	1.26E-02	3.25E-04	1.94E-05	6.73E-04	1.77E-05	1.3624E-02
520266.65	4258992.98	62843.35441	1.03173	0.22373	0.97392	0.23794	1.26E-02	4.22E-05	8.00E-06	3.99E-05	8.17E-06	1.2684E-02
520018.5	4258734.71	62830.74122	2.09531	1.00158	2.65827	0.94602	1.26E-02	8.58E-05	3.58E-05	1.09E-04	3.25E-05	1.2846E-02
520324.93	4258263.08	62767.88528	0.25196	0.68658	0.25905	0.74544	1.26E-02	1.03E-05	2.46E-05	1.06E-05	2.56E-05	1.2641E-02
520236.94	4258993.03	62717.48341	1.31651	0.25056	1.23068	0.26238	1.26E-02	5.39E-05	8.96E-06	5.04E-05	9.01E-06	1.2682E-02
520158.25	4258352.56	62715.68744	0.38856	3.42407	0.41173	3.97105	1.26E-02	1.59E-05	1.22E-04	1.69E-05	1.36E-04	1.2851E-02
520138.61	4258372.5	62676.54897	0.41876	4.80034	0.44195	5.66578	1.26E-02	1.71E-05	1.72E-04	1.81E-05	1.95E-04	1.2953E-02
520167.6	4258973.15	62638.40908	2.78477	0.34527	2.49709	0.33673	1.25E-02	1.14E-04	1.23E-05	1.02E-04	1.16E-05	1.2784E-02
520039.77	4258589.23	62606.54953	1.52089	4.44824	2.12594	3.4428	1.25E-02	6.23E-05	1.59E-04	8.70E-05	1.18E-04	1.2964E-02
520276.55	4258992.97	62583.282	0.95738	0.21584	0.90589	0.2303	1.25E-02	3.92E-05	7.72E-06	3.71E-05	7.91E-06	1.2625E-02
520524.46	4258732.28	62581.08206	0.22351	0.16962	0.21423	0.17716	1.25E-02	9.15E-06	6.07E-06	8.77E-06	6.08E-06	1.2563E-02
520103.83	4258926.84	62540.81202	10.07805	0.45699	8.5717	0.42235	1.25E-02	4.13E-04	1.63E-05	3.51E-04	1.45E-05	1.3319E-02
520045	4258842.6	62494.3978	4.80901	0.58784	6.87773	0.56603	1.25E-02	1.97E-04	2.10E-05	2.82E-04	1.94E-05	1.3034E-02
520413.03	4258263.36	62429.75984	0.21411	0.39996	0.21893	0.42989	1.25E-02	8.77E-06	1.43E-05	8.96E-06	1.48E-05	1.2549E-02
520446.36	4258891.6	62416.16613	0.34069	0.16266	0.32492	0.17154	1.25E-02	1.39E-05	5.82E-06	1.33E-05	5.89E-06	1.2539E-02
520227.04	4258993.05	62408.99238	1.43969	0.26063	1.3404	0.27089	1.25E-02	5.89E-05	9.32E-06	5.49E-05	9.30E-06	1.2631E-02
520207.31	4258312.72	62380.48029	0.33261	1.82541	0.35207	2.05987	1.25E-02	1.36E-05	6.53E-05	1.44E-05	7.07E-05	1.2657E-02
520158.67	4258969.46	62344.29272	3.16653	0.3594	2.81678	0.34661	1.25E-02	1.30E-04	1.29E-05	1.15E-04	1.19E-05	1.2755E-02
520420.4	4258922.36	62342.41717	0.39149	0.1659	0.37312	0.17484	1.25E-02	1.60E-05	5.93E-06	1.53E-05	6.00E-06	1.2528E-02
520285.75	4258272.96	62338.53696	0.27294	0.90678	0.28106	0.99506	1.25E-02	1.12E-05	3.24E-05	1.15E-05	3.42E-05	1.2573E-02
520326.03	4258982.89	62281.97224	0.68119	0.18812	0.64894	0.20145	1.25E-02	2.79E-05	6.73E-06	2.66E-05	6.92E-06	1.2541E-02
520168.07	4258342.6	62219.68018	0.37377	2.96195	0.39673	3.40981	1.25E-02	1.53E-05	1.06E-04	1.62E-05	1.17E-04	1.2715E-02
520286.45	4258992.95	62162.86827	0.89062	0.20845	0.84432	0.22295	1.24E-02	3.65E-05	7.46E-06	3.46E-05	7.65E-06	1.2535E-02
520385.39	4258952.79	62133.95622	0.47581	0.17081	0.45333	0.18102	1.24E-02	1.95E-05	6.11E-06	1.86E-05	6.21E-06	1.2494E-02
520504.08	4258349.93	62078.29481	0.18785	0.24884	0.18795	0.26271	1.24E-02	7.69E-06	8.90E-06	7.70E-06	9.02E-06	1.2465E-02
520021.08	4258765.04	62059.98996	2.36812	0.83094	2.97885	0.79612	1.24E-02	9.70E-05	2.97E-05	1.22E-04	2.73E-05	1.2704E-02
520315.14	4258263.05	61985.07822	0.25556	0.73499	0.26263	0.79973	1.24E-02	1.05E-05	2.63E-05	1.08E-05	2.75E-05	1.2488E-02
520149.75	4258965.78	61950.42781	3.65174	0.37327	3.21761	0.35607	1.24E-02	1.50E-04	1.34E-05	1.32E-04	1.22E-05	1.2713E-02
520403.99	4258939.16	61939.50887	0.42848	0.16791	0.40873	0.17719	1.24E-02	1.75E-05	6.01E-06	1.67E-05	6.08E-06	1.2451E-02
520217.14	4258993.07	61915.78896	1.58163	0.27116	1.46578	0.27935	1.24E-02	6.48E-05	9.70E-06	6.00E-05	9.59E-06	1.2544E-02
520128.79	4258382.47	61893.12564	0.43384	5.86707	0.45725	7.02077	1.24E-02	1.78E-05	2.10E-04	1.87E-05	2.41E-04	1.2882E-02
520469.27	4258294.98	61872.67636	0.19482	0.29844	0.19516	0.31708	1.24E-02	7.98E-06	1.07E-05	7.99E-06	1.09E-05	1.2428E-02
520497.71	4258810.3	61848.10751	0.26144	0.16184	0.25051	0.16965	1.24E-02	1.07E-05	5.79E-06	1.03E-05	5.82E-06	1.2419E-02
520442.37	4258273.45	61791.98181	0.20314	0.34146	0.20578	0.36559	1.24E-02	8.32E-06	1.22E-05	8.43E-06	1.26E-05	1.2416E-02
520531.4	4258691.76	61710.06088	0.21201	0.17463	0.20376	0.18278	1.24E-02	8.68E-06	6.25E-06	8.34E-06	6.28E-06	1.2388E-02
520437.48	4258905.28	61687.96499	0.35732	0.16289	0.34052	0.17171	1.24E-02	1.46E-05	5.83E-06	1.39E-05	5.89E-06	1.2394E-02
520256.35	4258282.87	61637.69433	0.29062	1.1461	0.30158	1.27154	1.23E-02	1.19E-05	4.10E-05	1.23E-05	4.37E-05	1.2453E-02
520296.35	4258992.93	61590.31538	0.83039	0.20155	0.78837	0.21591	1.23E-02	3.40E-05	7.21E-06	3.23E-05	7.41E-06	1.2415E-02
520236.74	4258292.81	61514.31578	0.30499	1.36299	0.31921	1.52132	1.23E-02	1.25E-05	4.88E-05	1.31E-05	5.22E-05	1.2446E-02
520140.82	4258962.09	61507.27769	4.28663	0.38662	3.73443	0.36504	1.23E-02	1.76E-04	1.38E-05	1.53E-04	1.25E-05	1.2672E-02
520422.82	4258263.39	61498.14818	0.20958	0.37967	0.21386	0.40757	1.23E-02	8.58E-06	1.36E-05	8.76E-06	1.40E-05	1.2361E-02
520355.72	4258972.84	61491.88925	0.56649	0.17715	0.54028	0.18881	1.23E-02	2.32E-05	6.34E-06	2.21E-05	6.48E-06	1.2373E-02
520478	4258848.48	61457.09731	0.28978	0.16037	0.27754	0.1688	1.23E-02	1.19E-05	5.74E-06	1.14E-05	5.80E-06	1.2342E-02
520484.95	4258311.7	61453.09128	0.19043	0.2766	0.19008	0.29236	1.23E-02	7.80E-06	9.89E-06	7.78E-06	1.00E-05	1.2342E-02
520113.51	4258940.83	61305.11653	7.72282	0.43262	6.54205	0.40061	1.23E-02	3.16E-04	1.55E-05	2.68E-04	1.38E-05	1.2890E-02
520451.24	4258277.25	61288.09589	0.19978	0.32662	0.20175	0.34902	1.23E-02	8.18E-06	1.17E-05	8.26E-06	1.20E-05	1.2314E-02
520207.24	4258993.08	61252.26998	1.74697	0.28208	1.61067	0.28766	1.23E-02	7.15E-05	1.01E-05	6.59E-05	9.88E-06	1.2424E-02
520094.73	4258923.08	61228.16265	13.53111	0.46187	11.91497	0.42737	1.23E-02	5.54E-04	1.65E-05	4.88E-04	1.47E-05	1.3335E-02
520335.94	4258982.87	61161.39489	0.63996	0.18295	0.60996	0.19566	1.22E-02	2.62E-05	6.54E-06	2.50E-05	6.72E-06	1.2313E-02
520373.91	4258253.24	61117.06306	0.22737	0.50451	0.23409	0.54361	1.22E-02	9.31E-06	1.80E-05	9.58E-06	1.87E-05	1.2295E-02
520375.51	4258962.8	61109.80503	0.50419	0.1716	0.48043	0.18228	1.22E-02	2.06E-05	6.14E-06	1.97E-05	6.26E-06	1.2291E-02
520364.12	4258253.21	61103.08537	0.23132	0.53573	0.23818	0.5778	1.22E-02	9.47E-06	1.92E-05	9.75E-06	1.98E-05	1.2295E-02
520017.12	4258683.15	61048.83775	1.73178	1.44644	2.20619	1.32151	1.22E-02	7.09E-05	5.17E-05	9.03E-05	4.54E-05	1.2484E-02
520305.36	4258263.02	61028.76903	0.25894	0.78832	0.26619	0.85974	1.22E-02	1.06E-05	2.82E-05	1.09E-05	2.95E-05	1.2301E-02
520275.96	4258272.93	60999.14107	0.27609	0.97952	0.28501	1.07849	1.22E-02	1.13E-05	3.50E-05	1.17E-05	3.70E-05	1.2311E-02
520383.7	4258253.27	60995.20939	0.22335	0.47577	0.22978	0.51227	1.22E-02	9.14E-06	1.70E-05	9.41E-06	1.76E-05	1.2268E-02
520060.17	4258878.84	60954.5146	8.40351	0.51965	15.98008	0.4938	1.22E-02	3.44E-04	1.86E-05	6.54E-04	1.70E-05	1.3241E-02
520046.31	4258853.13	60931.93116	5.04025	0.56088	7.35846	0.53984	1.22E-02	2.06E-04	2.01E-05	3.01E-04	1.85E-05	1.2749E-02
520354.33	4258253.18	60930.94621	0.23516	0.56971	0.24206	0.61516	1.22E-02	9.63E-06	2.04E-05	9.91E-06	2.11E-05	1.2263E-02
520487.12	4258834.69	60908.88332	0.27681	0.15998	0.26518	0.16815	1.22E-02	1.13E-05	5.72E-06	1.09E-05	5.77E-06	1.2232E-02
520306.25	4258992.92	60881.19705	0.77588	0.19513	0.7374	0.20919	1.22E-02	3.18E-05	6.98E-06	3.02E-05	7.18E-06	1.2268E-02
520029.16	4258808.65	60878.26095	3.03102	0.66469	3.88562	0.64347	1.22E-02	1.24E-04	2.38E-05	1.59E-04	2.21E-05	1.2521E-02
520217.13	4258302.75	60843.9057	0.31912	1.65061	0.33688	1.85493	1.22E-02	1.31E-05	5.90E-05	1.38E-05	6.37E-05	1.2334E-02
520428.78	4258918.89	60748.95181	0.37484	0.16292	0.35704	0.17167	1.22E-02	1.53E-05	5.83E-06	1.46E-05	5.89E-06	1.2207E-02
520520.79	4258432.44	60712.0833	0.19113	0.21997	0.189	0.23243	1.22E-02	7.83E-06	7.87E-06	7.74E-06	7.98E-06	1.2190E-02
520412.71	4258935.55	60706.98703	0.4089	0.16527	0.38994	0.17421	1.22E-02	1.67E-05	5.91E-06	1.60E-05	5.98E-06	1.2202E-02
520393.48	4258253.3	60678.50541	0.21923	0.44944	0.22531	0.48351	1.22E-02	8.98E-06	1.61E-05	9.23E-06	1.66E-05	1.2203E-02
520344.54	4258253.15	60573.0528	0.23885	0.60682	0.24572	0.65605	1.21E-02	9.78E-06	2.17E-05	1.01E-05	2.25E-05	1.2195E-02
520460.11	4258281.05	60518.04289	0.19635	0.31289	0.19769	0.33361	1.21E-02	8.04E-06	1.12E-05	8.09E-06	1.15E-05	1.2158E-02
520503.29	4258339.58	60485.83599	0.18641	0.25185	0.18649	0.26546	1.21E-02	7.63E-06	9.01E-06	7.64E-06	9.11E-06	1.2147E-02
520464.05	4258874.27	60485.74454	0.31183	0.1595	0.29791	0.16813	1.21E-02	1.28E-05	5.71E-06	1.22E-05	5.77E-06	1.2150E-02
520531.26	4258716.06	60451.79148	0.21544	0.16958	0.20664	0.17736	1.21E-02	8.82E-06	6.07E-06	8.46E-06	6.09E-06	1.2136E-02
520014.94	4258726.12	60428.39726	1.89633	1.04302	2.37919	0.98022	1.21E-02	7.76E-05	3.73E-05	9.74E-05	3.37E-05	1.2348E-02
520478.24	4258298.82	60416.64116	0.19118	0.28648	0.19117	0.30354	1.21E-02	7.83E-06	1.02E-05	7.83E-06	1.04E-05	1.2136E-02
520197.34	4258993.1	60401.13693	1.94135	0.2932	1.77954	0.29563	1.21E-02	7.95E-05	1.05E-05	7.29E-05	1.01E-05	1.2269E-02
520118.97	4258392.44	60398.83816	0.44817	7.4066	0.47298	8.95933	1.21E-02	1.83E-05	2.65E-04	1.94E-05	3.08E-04	1.2706E-02
520432.61	4258263.42	60383.15569	0.20506	0.36096	0.2088	0.38694	1.21E-02	8.40E-06	1.29E-05	8.55E-06	1.33E-05	1.2136E-02
520034.67	4258828.34	60372.2201	3.55253	0.6103	4.66205	0.59124	1.21E-02	1.45E-04	2.18E-05	1.91E-04	2.03E-05	1.2469E-02
520187.71	4258322.66	60336.87622	0.34504	2.29579	0.36695	2.60542	1.21E-02	1.41E-05	8.21E-05	1.50E-05	8.94E-05	1.2284E-02
520473.46	4258860.36	60330.64339	0.29718	0.15915	0.28436	0.16763	1.21E-02	1.22E-05	5.69E-06	1.16E-05	5.75E-06	1.2117E-02
520029.89	4258618.37	60326.79516	1.58299	2.87004	2.1453	2.41176	1.21E-02	6.48E-05	1.03E-04	8.78E-05	8.28E-05	1.2419E-02
520454.88	4258888.07	60310.89067	0.32694	0.15978	0.31192	0.16844	1.21E-02	1.34E-05	5.72E-06	1.28E-05	5.78E-06	1.2116E-02
520316.15	4258992.9	60256.17561	0.72732	0.18944	0.69196	0.20306	1.21E-02	2.98E-05	6.78E-06	2.83E-05	6.97E-06	1.2139E-02
520025.45	4258799.68	60235.81354	2.74633	0.68951	3.47487	0.66685	1.21E-02	1.12E-04	2.47E-05	1.42E-04	2.29E-05	1.2365E-02
520511.37	4258787.48	60224.54275	0.24389	0.162	0.23379	0.16932	1.21E-02	9.99E-06	5.79E-06	9.57E-06	5.81E-06	1.2092E-02
520017.31	4258755.94	60223.79578	2.10953	0.86781	2.66719	0.82666	1.21E-02	8.64E-05	3.10E-05	1.09E-04	2.84E-05	1.2316E-02
520403.27	4258253.33	60215.93819	0.21506	0.42514	0.22069	0.457	1.21E-02	8.81E-06	1.52E-05	9.04E-06	1.57E-05	1.2108E-02
520515	4258778.83	60122.96496	0.23907	0.1627	0.22919	0.1699	1.20E-02	9.79E-06	5.82E-06	9.38E-06	5.83E-06	1.2071E-02
520334.75	4258253.12	60074.56342	0.24242	0.64727	0.24921	0.70094	1.20E-02	9.93E-06	2.32E-05	1.02E-05	2.41E-05	1.2098E-02
520519.65	4258396.65	60054.19496	0.18697	0.22595	0.18567	0.23905	1.20E-02	7.66E-06	8.08E-06	7.60E-06	8.21E-06	1.2058E-02
520049.87	4258864.6	60052.19627	5.67077	0.53752	8.83531	0.51591	1.20E-02	2.32E-04	1.92E-05	3.62E-04	1.77E-05	1.2657E-02
520256.76	4259003	60044.81827	1.11763	0.22724	1.05195	0.24022	1.20E-02	4.58E-05	8.13E-06	4.31E-05	8.25E-06	1.2130E-02
520104.49	4258937.11	60020.77732	9.91854	0.43878	8.4191	0.40577	1.20E-02	4.06E-04	1.57E-05	3.45E-04	1.39E-05	1.2800E-02
520496.52	4258820.8	60012.47659	0.26418	0.15951	0.25311	0.16733	1.20E-02	1.08E-05	5.71E-06	1.04E-05	5.74E-06	1.2051E-02
520395.29	4258952.77	60004.38903	0.45071	0.16684	0.42972	0.17646	1.20E-02	1.85E-05	5.97E-06	1.76E-05	6.06E-06	1.2065E-02
520266.66	4259002.98	59973.97724	1.0341	0.21914	0.9761	0.23266	1.20E-02	4.23E-05	7.84E-06	4.00E-05	7.99E-06	1.2109E-02
520246.86	4259003.02	59968.58496	1.2118	0.23585	1.13689	0.24801	1.20E-02	4.96E-05	8.44E-06	4.65E-05	8.51E-06	1.2123E-02
520295.57	4258262.99	59957.10428	0.26216	0.84725	0.26981	0.92655	1.20E-02	1.07E-05	3.03E-05	1.10E-05	3.18E-05	1.2091E-02
520345.84	4258982.85	59921.64882	0.60228	0.17796	0.57395	0.19007	1.20E-02	2.47E-05	6.37E-06	2.35E-05	6.53E-06	1.2061E-02
520365.62	4258972.82	59911.84877	0.53468	0.17245	0.5096	0.18356	1.20E-02	2.19E-05	6.17E-06	2.09E-05	6.30E-06	1.2053E-02
520518.62	4258770.18	59907.19542	0.23437	0.1633	0.22467	0.1704	1.20E-02	9.60E-06	5.84E-06	9.20E-06	5.85E-06	1.2028E-02
520099.3	4258422.38	59821.70777	0.50937	13.90391	0.54689	15.93435	1.20E-02	2.09E-05	4.97E-04	2.24E-05	5.47E-04	1.3068E-02
520518.51	4258386.15	59813.7668	0.18607	0.22853	0.18517	0.24182	1.20E-02	7.62E-06	8.17E-06	7.58E-06	8.30E-06	1.2010E-02
520017.12	4258673.87	59807.47258	1.66012	1.55246	2.11824	1.40835	1.20E-02	6.80E-05	5.55E-05	8.67E-05	4.83E-05	1.2236E-02
520445.93	4258901.78	59790.10747	0.34268	0.16005	0.32664	0.16868	1.20E-02	1.40E-05	5.72E-06	1.34E-05	5.79E-06	1.2013E-02
520085.62	4258919.33	59761.71853	15.99824	0.46354	18.61698	0.43094	1.20E-02	6.55E-04	1.66E-05	7.62E-04	1.48E-05	1.3417E-02
520236.96	4259003.03	59741.05518	1.31855	0.24493	1.23243	0.25593	1.20E-02	5.40E-05	8.76E-06	5.05E-05	8.79E-06	1.2086E-02
520014.34	4258700.57	59740.05953	1.73331	1.24463	2.18128	1.15125	1.20E-02	7.10E-05	4.45E-05	8.93E-05	3.95E-05	1.2208E-02
520246.56	4258282.84	59712.52472	0.29277	1.25134	0.30555	1.39202	1.20E-02	1.20E-05	4.48E-05	1.25E-05	4.78E-05	1.2075E-02
520276.56	4259002.97	59692.3919	0.95936	0.21137	0.90747	0.22522	1.20E-02	3.93E-05	7.56E-06	3.72E-05	7.73E-06	1.2046E-02
520514	4258364.19	59621.27917	0.18508	0.23643	0.185	0.24985	1.19E-02	7.58E-06	8.46E-06	7.57E-06	8.58E-06	1.1972E-02
520158.77	4258979.5	59611.36486	3.18006	0.34871	2.8285	0.33559	1.19E-02	1.30E-04	1.25E-05	1.16E-04	1.15E-05	1.2208E-02
520413.06	4258253.36	59578.52976	0.21083	0.40278	0.21599	0.43257	1.19E-02	8.63E-06	1.44E-05	8.84E-06	1.49E-05	1.1978E-02
520522.24	4258761.53	59563.60959	0.22979	0.16372	0.2202	0.17075	1.19E-02	9.41E-06	5.86E-06	9.02E-06	5.86E-06	1.1959E-02
520227.06	4259003.05	59503.60707	1.44228	0.25473	1.34288	0.2641	1.19E-02	5.91E-05	9.11E-06	5.50E-05	9.07E-06	1.2049E-02
520266.17	4258272.9	59495.57991	0.27885	1.06136	0.28898	1.1724	1.19E-02	1.14E-05	3.80E-05	1.18E-05	4.02E-05	1.2016E-02
520468.98	4258284.84	59491.49228	0.19287	0.30012	0.19367	0.31919	1.19E-02	7.90E-06	1.07E-05	7.93E-06	1.10E-05	1.1952E-02
520493.47	4258315.35	59482.06403	0.18695	0.26627	0.18659	0.28088	1.19E-02	7.65E-06	9.52E-06	7.64E-06	9.64E-06	1.1947E-02
520187.44	4258993.12	59429.73347	2.17346	0.30441	1.97962	0.30319	1.19E-02	8.90E-05	1.09E-05	8.11E-05	1.04E-05	1.2093E-02
520324.96	4258253.08	59400.83531	0.2458	0.69158	0.25258	0.7503	1.19E-02	1.01E-05	2.47E-05	1.03E-05	2.58E-05	1.1967E-02
520021.73	4258790.72	59387.2426	2.49441	0.71578	3.11991	0.69106	1.19E-02	1.02E-04	2.56E-05	1.28E-04	2.37E-05	1.2172E-02
520421.42	4258931.94	59370.54775	0.3904	0.1627	0.37256	0.17133	1.19E-02	1.60E-05	5.82E-06	1.53E-05	5.88E-06	1.1933E-02
520197.53	4258312.69	59369.72395	0.33188	2.04568	0.35235	2.31477	1.19E-02	1.36E-05	7.32E-05	1.44E-05	7.95E-05	1.2070E-02
520286.46	4259002.95	59340.97477	0.89257	0.2042	0.84589	0.21816	1.19E-02	3.65E-05	7.30E-06	3.46E-05	7.49E-06	1.1970E-02
520326.05	4258992.89	59325.90602	0.68224	0.18412	0.64968	0.19722	1.19E-02	2.79E-05	6.59E-06	2.66E-05	6.77E-06	1.1949E-02
520517.56	4258375.73	59260.27556	0.18503	0.23105	0.18453	0.24439	1.19E-02	7.58E-06	8.26E-06	7.56E-06	8.39E-06	1.1899E-02
520226.95	4258292.78	59236.13929	0.3063	1.50129	0.32251	1.68002	1.19E-02	1.25E-05	5.37E-05	1.32E-05	5.77E-05	1.2000E-02
520036.25	4258838.99	59235.15309	3.7425	0.58141	4.94835	0.56343	1.19E-02	1.53E-04	2.08E-05	2.03E-04	1.93E-05	1.2259E-02
520385.41	4258962.79	59192.92594	0.47704	0.16733	0.45446	0.17744	1.19E-02	1.95E-05	5.99E-06	1.86E-05	6.09E-06	1.1904E-02
520149.92	4258975.84	59192.81748	3.65224	0.36132	3.21992	0.34417	1.19E-02	1.50E-04	1.29E-05	1.32E-04	1.18E-05	1.2160E-02
520442.4	4258263.45	59089.03885	0.20054	0.34368	0.20376	0.36785	1.18E-02	8.21E-06	1.23E-05	8.34E-06	1.26E-05	1.1875E-02
520525.86	4258752.88	59080.91057	0.22528	0.16399	0.2158	0.17102	1.18E-02	9.22E-06	5.87E-06	8.84E-06	5.87E-06	1.1862E-02
520522.26	4258462.18	59080.2337	0.19378	0.21404	0.19104	0.2264	1.18E-02	7.93E-06	7.66E-06	7.82E-06	7.77E-06	1.1863E-02
520061.31	4258889.3	59046.48343	8.7725	0.49757	17.52718	0.47255	1.18E-02	3.59E-04	1.78E-05	7.18E-04	1.62E-05	1.2936E-02
520403.93	4258949.19	59040.95467	0.4299	0.16445	0.40989	0.17363	1.18E-02	1.76E-05	5.88E-06	1.68E-05	5.96E-06	1.1870E-02
520437.16	4258915.42	58964.89374	0.3591	0.16011	0.34202	0.16867	1.18E-02	1.47E-05	5.73E-06	1.40E-05	5.79E-06	1.1849E-02
520217.16	4259003.07	58920.49491	1.58271	0.26462	1.46658	0.27194	1.18E-02	6.48E-05	9.47E-06	6.00E-05	9.34E-06	1.1943E-02
520114.03	4258951.04	58881.21726	7.71107	0.41652	6.49863	0.38574	1.18E-02	3.16E-04	1.49E-05	2.66E-04	1.32E-05	1.2402E-02
520487.22	4258302.66	58881.09549	0.18768	0.27476	0.18733	0.29057	1.18E-02	7.68E-06	9.83E-06	7.67E-06	9.98E-06	1.1827E-02
520296.37	4259002.93	58835.9912	0.8323	0.19748	0.78989	0.21137	1.18E-02	3.41E-05	7.06E-06	3.23E-05	7.26E-06	1.1863E-02
520285.78	4258262.96	58784.04053	0.2652	0.91264	0.27352	1.00119	1.18E-02	1.09E-05	3.26E-05	1.12E-05	3.44E-05	1.1861E-02
520095.48	4258933.39	58783.21893	13.20616	0.44299	11.55912	0.41022	1.18E-02	5.41E-04	1.58E-05	4.73E-04	1.41E-05	1.2816E-02
520451.17	4258267.21	58769.34393	0.19747	0.32835	0.19996	0.351	1.18E-02	8.09E-06	1.17E-05	8.19E-06	1.21E-05	1.1809E-02
520422.85	4258253.39	58768.47442	0.20657	0.38216	0.21122	0.41001	1.18E-02	8.46E-06	1.37E-05	8.65E-06	1.41E-05	1.1814E-02
520141.06	4258972.19	58761.70625	4.27111	0.37347	3.72554	0.35236	1.18E-02	1.75E-04	1.34E-05	1.53E-04	1.21E-05	1.2121E-02
520506.26	4258806.76	58722.47205	0.25178	0.15907	0.24131	0.16651	1.18E-02	1.03E-05	5.69E-06	9.88E-06	5.72E-06	1.1792E-02

520315.18	4258253.05	58622.96968	0.24907	0.74003	0.25595	0.80474	1.17E-02	1.02E-05	2.65E-05	1.05E-05	2.76E-05	1.1815E-02
520355.74	4258982.84	58565.30284	0.56766	0.1732	0.54075	0.18473	1.17E-02	2.32E-05	6.20E-06	2.21E-05	6.34E-06	1.1786E-02
520049.6	4258550.4	58504.54961	1.18236	7.54373	1.50489	5.2306	1.17E-02	4.84E-05	2.70E-04	6.16E-05	1.80E-04	1.2276E-02
520529.48	4258744.23	58454.55511	0.22091	0.16427	0.21159	0.17135	1.17E-02	9.04E-06	5.88E-06	8.66E-06	5.88E-06	1.1736E-02
520051.23	4258875.15	58422.17105	5.97633	0.51423	9.63062	0.49323	1.17E-02	2.45E-04	1.84E-05	3.94E-04	1.69E-05	1.2374E-02
520524.27	4258441.57	58353.97248	0.19025	0.21565	0.18792	0.22779	1.17E-02	7.79E-06	7.71E-06	7.69E-06	7.82E-06	1.1717E-02
520013.53	4258746.84	58340.73755	1.91565	0.90432	2.39682	0.85773	1.17E-02	7.84E-05	3.23E-05	9.81E-05	2.94E-05	1.1922E-02
520018.01	4258781.76	58318.50919	2.26729	0.74366	2.81123	0.71613	1.17E-02	9.28E-05	2.66E-05	1.15E-04	2.46E-05	1.1938E-02
520335.95	4258992.87	58285.84273	0.64102	0.17901	0.61061	0.19153	1.17E-02	2.62E-05	6.40E-06	2.50E-05	6.58E-06	1.1737E-02
520477.85	4258288.64	58255.52816	0.1894	0.28812	0.18973	0.30565	1.17E-02	7.75E-06	1.03E-05	7.77E-06	1.05E-05	1.1703E-02
520207.26	4259003.08	58234.73666	1.74543	0.2749	1.60936	0.27965	1.17E-02	7.15E-05	9.83E-06	6.59E-05	9.60E-06	1.1819E-02
520375.52	4258972.8	58227.78853	0.50531	0.16798	0.48132	0.17855	1.17E-02	2.07E-05	6.01E-06	1.97E-05	6.13E-06	1.1713E-02
520207.35	4258302.72	58223.24539	0.31916	1.837	0.33817	2.07121	1.17E-02	1.31E-05	6.57E-05	1.38E-05	7.11E-05	1.1824E-02
520017.12	4258664.6	58187.86172	1.58231	1.66595	2.02276	1.49974	1.17E-02	6.48E-05	5.96E-05	8.28E-05	5.15E-05	1.1912E-02
520306.27	4259002.92	58186.01607	0.77778	0.19119	0.73885	0.20487	1.17E-02	3.18E-05	6.84E-06	3.03E-05	7.03E-06	1.1729E-02
520524.45	4258416.19	58167.17724	0.18701	0.21901	0.18509	0.2314	1.16E-02	7.66E-06	7.83E-06	7.58E-06	7.94E-06	1.1680E-02
520373.94	4258243.24	58146.60235	0.22291	0.5085	0.22949	0.54719	1.16E-02	9.13E-06	1.82E-05	9.40E-06	1.88E-05	1.1700E-02
520459.95	4258270.97	58127.85537	0.19423	0.31454	0.1961	0.33559	1.16E-02	7.95E-06	1.13E-05	8.03E-06	1.15E-05	1.1680E-02
520463.4	4258884.54	58118.53856	0.31393	0.15692	0.29963	0.16536	1.16E-02	1.29E-05	5.61E-06	1.23E-05	5.68E-06	1.1675E-02
520472.65	4258870.71	58077.79841	0.29954	0.15664	0.2863	0.16501	1.16E-02	1.23E-05	5.60E-06	1.17E-05	5.66E-06	1.1666E-02
520383.73	4258243.27	58053.81823	0.21916	0.47958	0.22559	0.51561	1.16E-02	8.97E-06	1.72E-05	9.24E-06	1.77E-05	1.1679E-02
520364.15	4258243.21	58044.0473	0.22651	0.54002	0.23316	0.58158	1.16E-02	9.27E-06	1.93E-05	9.55E-06	2.00E-05	1.1682E-02
520109.15	4258402.41	58017.62765	0.46145	9.8017	0.48933	11.79989	1.16E-02	1.89E-05	3.51E-04	2.00E-05	4.05E-04	1.2413E-02
520037.65	4258849.56	57968.82987	3.92074	0.55472	5.23294	0.5376	1.16E-02	1.61E-04	1.98E-05	2.14E-04	1.85E-05	1.2022E-02
520412.57	4258945.61	57952.45915	0.41032	0.16208	0.39138	0.17087	1.16E-02	1.68E-05	5.80E-06	1.60E-05	5.87E-06	1.1650E-02
520039.73	4258579.53	57942.50988	1.35497	4.68102	1.84768	3.58376	1.16E-02	5.55E-05	1.67E-04	7.57E-05	1.23E-04	1.2025E-02
520158.28	4258342.56	57844.71869	0.36811	3.44421	0.3884	3.98681	1.16E-02	1.51E-05	1.23E-04	1.59E-05	1.37E-04	1.1875E-02
520354.36	4258243.18	57834.69559	0.23004	0.57416	0.23665	0.61915	1.16E-02	9.42E-06	2.05E-05	9.69E-06	2.13E-05	1.1643E-02
520256.38	4258272.87	57834.48873	0.28115	1.15405	0.29281	1.2786	1.16E-02	1.15E-05	4.13E-05	1.20E-05	4.39E-05	1.1691E-02
520148.46	4258352.53	57830.77037	0.3813	4.03717	0.40117	4.71787	1.16E-02	1.56E-05	1.44E-04	1.64E-05	1.62E-04	1.1920E-02
520393.52	4258243.3	57821.53805	0.21535	0.4529	0.22152	0.48659	1.16E-02	8.82E-06	1.62E-05	9.07E-06	1.67E-05	1.1630E-02
520454.38	4258898.28	57782.7481	0.32883	0.15722	0.31353	0.16566	1.16E-02	1.35E-05	5.62E-06	1.28E-05	5.69E-06	1.1609E-02
520432.64	4258253.42	57775.27534	0.20227	0.36318	0.20643	0.38916	1.16E-02	8.28E-06	1.30E-05	8.45E-06	1.34E-05	1.1613E-02
520430.14	4258928.33	57761.76049	0.37346	0.15951	0.35557	0.16799	1.16E-02	1.53E-05	5.71E-06	1.46E-05	5.77E-06	1.1609E-02
520482.16	4258856.76	57752.49356	0.28556	0.15627	0.27335	0.16444	1.16E-02	1.17E-05	5.59E-06	1.12E-05	5.65E-06	1.1600E-02
520538.05	4258699.84	57737.18318	0.20786	0.1694	0.19959	0.17721	1.16E-02	8.51E-06	6.06E-06	8.17E-06	6.08E-06	1.1591E-02
520105.1	4258947.35	57715.93437	9.84747	0.42215	8.31439	0.3905	1.16E-02	4.03E-04	1.51E-05	3.40E-04	1.34E-05	1.2331E-02
520011.37	4258717.52	57705.59409	1.71294	1.08346	2.1246	1.01345	1.16E-02	7.01E-05	3.88E-05	8.70E-05	3.48E-05	1.1787E-02
520305.39	4258253.02	57683.13089	0.25213	0.7935	0.25934	0.86502	1.16E-02	1.03E-05	2.84E-05	1.06E-05	2.97E-05	1.1631E-02
520533.11	4258735.58	57668.50777	0.21663	0.16451	0.20754	0.17168	1.15E-02	8.87E-06	5.88E-06	8.50E-06	5.89E-06	1.1578E-02
520236.77	4258282.81	57637.57982	0.29425	1.37211	0.30898	1.52974	1.15E-02	1.20E-05	4.91E-05	1.27E-05	5.25E-05	1.1669E-02
520086.47	4258929.67	57523.21176	15.66034	0.4448	17.7428	0.41371	1.15E-02	6.41E-04	1.59E-05	7.26E-04	1.42E-05	1.2918E-02
520275.99	4258262.93	57490.54318	0.26797	0.98565	0.27727	1.0849	1.15E-02	1.10E-05	3.53E-05	1.14E-05	3.72E-05	1.1608E-02
520344.57	4258243.15	57482.89694	0.23347	0.6113	0.23998	0.66027	1.15E-02	9.56E-06	2.19E-05	9.83E-06	2.27E-05	1.1576E-02
520197.36	4259003.1	57467.10817	1.93841	0.28549	1.77764	0.28716	1.15E-02	7.94E-05	1.02E-05	7.28E-05	9.86E-06	1.1681E-02
520138.64	4258362.5	57445.63148	0.39439	4.82252	0.41414	5.68892	1.15E-02	1.61E-05	1.72E-04	1.70E-05	1.95E-04	1.1905E-02
520316.17	4259002.9	57443.95927	0.72834	0.1854	0.69238	0.19874	1.15E-02	2.98E-05	6.63E-06	2.83E-05	6.82E-06	1.1576E-02
520403.3	4258243.33	57437.01179	0.21146	0.42834	0.21728	0.45989	1.15E-02	8.66E-06	1.53E-05	8.90E-06	1.58E-05	1.1551E-02
520502	4258319	57288.18359	0.18347	0.25643	0.18321	0.27004	1.15E-02	7.51E-06	9.17E-06	7.50E-06	9.27E-06	1.1506E-02
520256.78	4259013	57287.34267	1.11932	0.22251	1.05347	0.23479	1.15E-02	4.58E-05	7.96E-06	4.31E-05	8.06E-06	1.1578E-02
520246.88	4259013.02	57251.41552	1.2139	0.23087	1.1389	0.24227	1.15E-02	4.97E-05	8.26E-06	4.66E-05	8.32E-06	1.1578E-02
520468.73	4258274.72	57240.25749	0.19091	0.30174	0.19222	0.3212	1.15E-02	7.82E-06	1.08E-05	7.87E-06	1.10E-05	1.1501E-02
520395.31	4258962.77	57218.03947	0.45184	0.16331	0.43062	0.17286	1.15E-02	1.85E-05	5.84E-06	1.76E-05	5.93E-06	1.1507E-02
520040.82	4258860.86	57215.39045	4.30631	0.53134	5.92596	0.51411	1.15E-02	1.76E-04	1.90E-05	2.43E-04	1.76E-05	1.1914E-02
520266.68	4259012.98	57189.51256	1.03549	0.21458	0.97714	0.22746	1.15E-02	4.24E-05	7.68E-06	4.00E-05	7.81E-06	1.1551E-02
520062.34	4258899.72	57151.61917	9.15261	0.47684	16.05601	0.45271	1.14E-02	3.75E-04	1.71E-05	6.57E-04	1.55E-05	1.2510E-02
520345.85	4258992.85	57144.16506	0.60323	0.1742	0.57471	0.18614	1.14E-02	2.47E-05	6.23E-06	2.35E-05	6.39E-06	1.1505E-02
520504.97	4258817.3	57138.00906	0.25453	0.15681	0.24391	0.16427	1.14E-02	1.04E-05	5.61E-06	9.99E-06	5.64E-06	1.1474E-02
520445.55	4258911.95	57125.97621	0.34427	0.15732	0.32794	0.16571	1.14E-02	1.41E-05	5.63E-06	1.34E-05	5.69E-06	1.1479E-02
520365.64	4258982.82	57116.00614	0.53571	0.16875	0.51027	0.17972	1.14E-02	2.19E-05	6.04E-06	2.09E-05	6.17E-06	1.1493E-02
520014.29	4258772.79	57027.0168	2.06299	0.77295	2.5388	0.74194	1.14E-02	8.45E-05	2.76E-05	1.04E-04	2.55E-05	1.1662E-02
520236.98	4259013.03	57024.14394	1.32098	0.23962	1.23473	0.24981	1.14E-02	5.41E-05	8.57E-06	5.06E-05	8.58E-06	1.1542E-02
520334.78	4258243.12	56978.27025	0.23675	0.65181	0.24321	0.70536	1.14E-02	9.69E-06	2.33E-05	9.96E-06	2.42E-05	1.1478E-02
520496.2	4258306.51	56969.14968	0.18411	0.26413	0.18367	0.27868	1.14E-02	7.54E-06	9.45E-06	7.52E-06	9.57E-06	1.1443E-02
520276.58	4259012.97	56958.11556	0.96075	0.20708	0.90851	0.22033	1.14E-02	3.93E-05	7.41E-06	3.72E-05	7.56E-06	1.1498E-02
520486.72	4258292.44	56928.73071	0.18603	0.27648	0.18589	0.29273	1.14E-02	7.62E-06	9.89E-06	7.61E-06	1.00E-05	1.1436E-02
520217.17	4258292.75	56900.82495	0.30684	1.66126	0.32453	1.86482	1.14E-02	1.26E-05	5.94E-05	1.33E-05	6.40E-05	1.1544E-02
520413.09	4258243.36	56880.08465	0.20749	0.40571	0.21292	0.43524	1.14E-02	8.50E-06	1.45E-05	8.72E-06	1.49E-05	1.1438E-02
520052.46	4258885.65	56759.42128	6.26509	0.4925	10.47565	0.4721	1.14E-02	2.57E-04	1.76E-05	4.29E-04	1.62E-05	1.2086E-02
520227.08	4259013.05	56752.64962	1.44424	0.24898	1.34468	0.25752	1.14E-02	5.91E-05	8.91E-06	5.51E-05	8.84E-06	1.1497E-02
520177.92	4258322.63	56740.21173	0.34179	2.61419	0.36282	2.97154	1.14E-02	1.40E-05	9.35E-05	1.49E-05	1.02E-04	1.1587E-02
520536.73	4258726.93	56722.75178	0.21249	0.1645	0.20361	0.17181	1.14E-02	8.70E-06	5.88E-06	8.34E-06	5.90E-06	1.1388E-02
520421.21	4258942.04	56721.43005	0.39198	0.15964	0.374	0.16811	1.14E-02	1.60E-05	5.71E-06	1.53E-05	5.77E-06	1.1402E-02
520029.85	4258608.67	56667.42939	1.43258	3.05372	1.9179	2.54288	1.13E-02	5.87E-05	1.09E-04	7.85E-05	8.73E-05	1.1682E-02
520295.6	4258252.99	56659.44609	0.25506	0.85251	0.26283	0.9321	1.13E-02	1.04E-05	3.05E-05	1.08E-05	3.20E-05	1.1431E-02
520442.43	4258253.45	56635.37232	0.19799	0.34559	0.20163	0.36984	1.13E-02	8.11E-06	1.24E-05	8.26E-06	1.27E-05	1.1383E-02
520286.48	4259012.95	56603.10453	0.89375	0.20006	0.84663	0.21348	1.13E-02	3.66E-05	7.16E-06	3.47E-05	7.33E-06	1.1421E-02
520525.39	4258470.4	56579.49844	0.19269	0.21012	0.18965	0.2223	1.13E-02	7.89E-06	7.52E-06	7.77E-06	7.63E-06	1.1362E-02
520187.46	4259003.12	56578.65129	2.1685	0.2961	1.9769	0.29424	1.13E-02	8.88E-05	1.06E-05	8.09E-05	1.01E-05	1.1521E-02
520326.07	4259002.89	56574.51594	0.68321	0.18014	0.64997	0.19301	1.13E-02	2.80E-05	6.44E-06	2.66E-05	6.63E-06	1.1397E-02
520128.82	4258372.47	56555.99102	0.40709	5.90104	0.42745	7.00157	1.13E-02	1.67E-05	2.11E-04	1.75E-05	2.40E-04	1.1812E-02
520096.17	4258943.67	56508.48178	12.94703	0.42555	11.28113	0.39433	1.13E-02	5.30E-04	1.52E-05	4.62E-04	1.35E-05	1.2337E-02
520385.42	4258972.79	56463.61346	0.47809	0.16383	0.45538	0.17385	1.13E-02	1.96E-05	5.86E-06	1.86E-05	5.97E-06	1.1358E-02
520451.12	4258257.17	56355.49635	0.19509	0.33033	0.19811	0.3531	1.13E-02	7.99E-06	1.18E-05	8.11E-06	1.21E-05	1.1326E-02
520403.88	4258959.22	56334.2741	0.43119	0.16104	0.41093	0.17015	1.13E-02	1.77E-05	5.76E-06	1.68E-05	5.84E-06	1.1328E-02
520325	4258243.08	56327.48117	0.23987	0.69606	0.24638	0.7549	1.13E-02	9.82E-06	2.49E-05	1.01E-05	2.59E-05	1.1351E-02
520022.15	4258815.84	56318.6066	2.58888	0.62587	3.23065	0.60742	1.13E-02	1.06E-04	2.24E-05	1.32E-04	2.09E-05	1.1560E-02
520494.57	4258841.62	56295.14169	0.26894	0.15493	0.25767	0.16271	1.13E-02	1.10E-05	5.54E-06	1.06E-05	5.59E-06	1.1307E-02
520114.51	4258961.23	56289.13152	7.53376	0.40029	6.39801	0.37107	1.13E-02	3.08E-04	1.43E-05	2.62E-04	1.27E-05	1.1870E-02
520527.85	4258425.11	56268.26537	0.18626	0.21487	0.18411	0.22688	1.13E-02	7.63E-06	7.69E-06	7.54E-06	7.79E-06	1.1299E-02
520217.18	4259013.07	56244.0665	1.58544	0.25856	1.46932	0.26502	1.13E-02	6.49E-05	9.25E-06	6.02E-05	9.10E-06	1.1407E-02
520017.12	4258655.32	56220.07633	1.49953	1.78457	1.91759	1.59487	1.13E-02	6.14E-05	6.38E-05	7.85E-05	5.48E-05	1.1517E-02
520187.74	4258312.66	56218.8975	0.32981	2.30899	0.35	2.61994	1.13E-02	1.35E-05	8.26E-05	1.43E-05	8.99E-05	1.1459E-02
520541.44	4258691.73	56204.97161	0.20425	0.16927	0.1962	0.17699	1.13E-02	8.36E-06	6.05E-06	8.03E-06	6.08E-06	1.1284E-02
520009.76	4258737.74	56175.10011	1.73775	0.94156	2.1517	0.88881	1.12E-02	7.12E-05	3.37E-05	8.81E-05	3.05E-05	1.1473E-02
520422.88	4258243.39	56172.08589	0.20348	0.38482	0.20847	0.41246	1.12E-02	8.33E-06	1.38E-05	8.54E-06	1.42E-05	1.1294E-02
520477.51	4258278.48	56169.30548	0.18759	0.2897	0.18836	0.30766	1.12E-02	7.68E-06	1.04E-05	7.71E-06	1.06E-05	1.1285E-02
520140.2	4258981.82	56165.98561	4.34414	0.36245	3.79007	0.34134	1.12E-02	1.78E-04	1.30E-05	1.55E-04	1.17E-05	1.1606E-02
520296.38	4259012.93	56125.70219	0.83337	0.19342	0.79036	0.20686	1.12E-02	3.41E-05	6.92E-06	3.24E-05	7.10E-06	1.1320E-02
520246.59	4258272.84	56061.10856	0.28294	1.25953	0.29629	1.39954	1.12E-02	1.16E-05	4.51E-05	1.21E-05	4.80E-05	1.1344E-02
520266.2	4258262.9	56042.30271	0.27034	1.06788	0.28096	1.17907	1.12E-02	1.11E-05	3.82E-05	1.15E-05	4.05E-05	1.1324E-02
520438.86	4258924.73	56006.34258	0.35714	0.1567	0.34002	0.16499	1.12E-02	1.46E-05	5.60E-06	1.39E-05	5.66E-06	1.1256E-02
520027.5	4258835.38	55982.13246	2.99278	0.57601	3.78373	0.56023	1.12E-02	1.23E-04	2.06E-05	1.55E-04	1.92E-05	1.1528E-02
520471.93	4258881.01	55924.82844	0.30168	0.15418	0.28811	0.16239	1.12E-02	1.24E-05	5.51E-06	1.18E-05	5.58E-06	1.1235E-02
520010.73	4258691.86	55892.38768	1.54426	1.2899	1.92483	1.18653	1.12E-02	6.32E-05	4.61E-05	7.88E-05	4.07E-05	1.1422E-02
520522.98	4258368.03	55888.84787	0.18117	0.22714	0.18075	0.24003	1.12E-02	7.42E-06	8.12E-06	7.40E-06	8.24E-06	1.1224E-02
520355.75	4258992.84	55884.57771	0.56853	0.1696	0.54154	0.18097	1.12E-02	2.33E-05	6.07E-06	2.22E-05	6.21E-06	1.1249E-02
520459.82	4258260.89	55857.72888	0.19207	0.31623	0.19446	0.33753	1.12E-02	7.86E-06	1.13E-05	7.96E-06	1.16E-05	1.1225E-02
520042.28	4258871.46	55845.68983	4.50945	0.50857	6.33086	0.49178	1.12E-02	1.85E-04	1.82E-05	2.59E-04	1.69E-05	1.1663E-02
520462.83	4258894.79	55775.2243	0.31583	0.15447	0.30126	0.16271	1.12E-02	1.29E-05	5.53E-06	1.23E-05	5.59E-06	1.1206E-02
520518.38	4258794.68	55761.86858	0.23802	0.15701	0.22817	0.16401	1.12E-02	9.75E-06	5.62E-06	9.34E-06	5.63E-06	1.1197E-02
520481.26	4258867.14	55716.15816	0.28792	0.15387	0.27535	0.16195	1.12E-02	1.18E-05	5.50E-06	1.13E-05	5.56E-06	1.1192E-02
520521.96	4258786.15	55683.61827	0.23349	0.15761	0.22381	0.16451	1.12E-02	9.56E-06	5.64E-06	9.16E-06	5.65E-06	1.1181E-02
520207.27	4259013.08	55651.95105	1.75042	0.26854	1.61422	0.27242	1.11E-02	7.17E-05	9.61E-06	6.61E-05	9.35E-06	1.1302E-02
520018.48	4258807	55645.58616	2.35913	0.64839	2.92373	0.62813	1.11E-02	9.66E-05	2.32E-05	1.20E-04	2.16E-05	1.1405E-02
520526.99	4258389.78	55638.43616	0.18219	0.22021	0.18091	0.23285	1.11E-02	7.46E-06	7.88E-06	7.41E-06	7.99E-06	1.1173E-02
520540.35	4258718.28	55618.53092	0.20849	0.16438	0.19984	0.17181	1.11E-02	8.54E-06	5.88E-06	8.18E-06	5.90E-06	1.1167E-02
520335.97	4259002.87	55598.81809	0.64192	0.17515	0.61089	0.1875	1.11E-02	2.63E-05	6.26E-06	2.50E-05	6.44E-06	1.1198E-02
520177.55	4259003.13	55588.47438	2.44821	0.30651	2.21714	0.30078	1.11E-02	1.00E-04	1.10E-05	9.08E-05	1.03E-05	1.1345E-02
520375.54	4258982.8	55565.28695	0.50624	0.16449	0.48213	0.17492	1.11E-02	2.07E-05	5.88E-06	1.97E-05	6.01E-06	1.1180E-02
520315.21	4258243.05	55525.25621	0.2428	0.74472	0.24959	0.80954	1.11E-02	9.94E-06	2.66E-05	1.02E-05	2.78E-05	1.1194E-02
520226.98	4258282.78	55518.47751	0.29511	1.51092	0.31148	1.68898	1.11E-02	1.21E-05	5.40E-05	1.28E-05	5.80E-05	1.1255E-02
520525.53	4258777.61	55515.6609	0.22904	0.15822	0.21954	0.16501	1.11E-02	9.38E-06	5.66E-06	8.99E-06	5.66E-06	1.1147E-02
520503.84	4258827.77	55510.17626	0.25702	0.15461	0.24633	0.16206	1.11E-02	1.05E-05	5.53E-06	1.01E-05	5.56E-06	1.1148E-02
520285.81	4258252.96	55497.129	0.25772	0.91819	0.26636	1.0069	1.11E-02	1.06E-05	3.28E-05	1.09E-05	3.46E-05	1.1203E-02
520306.28	4259012.92	55495.69075	0.77868	0.18721	0.73908	0.20051	1.11E-02	3.19E-05	6.70E-06	3.03E-05	6.88E-06	1.1189E-02
520010.58	4258763.83	55469.08837	1.87321	0.80399	2.29964	0.76835	1.11E-02	7.67E-05	2.88E-05	9.42E-05	2.64E-05	1.1334E-02
520525.94	4258379.31	55462.46055	0.1813	0.22262	0.18041	0.23539	1.11E-02	7.42E-06	7.96E-06	7.39E-06	8.08E-06	1.1138E-02
520197.56	4258302.69	55432.80448	0.31796	2.05783	0.33726	2.32715	1.11E-02	1.30E-05	7.36E-05	1.38E-05	7.99E-05	1.1282E-02
520087.24	4258939.98	55367.98779	15.32321	0.42726	17.03636	0.39759	1.11E-02	6.27E-04	1.53E-05	6.98E-04	1.36E-05	1.2442E-02
520412.45	4258955.67	55344.17464	0.41174	0.15883	0.39257	0.16753	1.11E-02	1.69E-05	5.68E-06	1.61E-05	5.75E-06	1.1128E-02
520521.76	4258357.5	55324.42432	0.18021	0.23006	0.18009	0.24282	1.11E-02	7.38E-06	8.23E-06	7.37E-06	8.34E-06	1.1111E-02
520105.65	4258957.57	55319.85693	9.63781	0.40572	8.17073	0.37565	1.11E-02	3.95E-04	1.45E-05	3.35E-04	1.29E-05	1.1835E-02
520373.97	4258233.24	55318.88772	0.21842	0.51246	0.22482	0.5506	1.11E-02	8.94E-06	1.83E-05	9.21E-06	1.89E-05	1.1134E-02
520495.6	4258296.23	55272.70413	0.1826	0.26582	0.18222	0.28077	1.11E-02	7.48E-06	9.51E-06	7.46E-06	9.64E-06	1.1103E-02
520432.67	4258243.42	55269.35837	0.19939	0.36562	0.20396	0.39142	1.11E-02	8.16E-06	1.31E-05	8.35E-06	1.34E-05	1.1111E-02
520383.76	4258233.27	55265.3729	0.21493	0.48337	0.2213	0.51882	1.11E-02	8.80E-06	1.73E-05	9.06E-06	1.78E-05	1.1121E-02
520490.86	4258853.16	55255.76993	0.27458	0.15351	0.26297	0.16135	1.11E-02	1.12E-05	5.49E-06	1.08E-05	5.54E-06	1.1099E-02
520429.85	4258938.46	55255.44435	0.37515	0.15663	0.35708	0.16493	1.11E-02	1.54E-05	5.60E-06	1.46E-05	5.66E-06	1.1107E-02
520453.93	4258908.48	55247.95448	0.33032	0.15458	0.31475	0.16278	1.11E-02	1.35E-05	5.53E-06	1.29E-05	5.59E-06	1.1102E-02
520529.1	4258769.08	55240.90524	0.22471	0.15862	0.21529	0.16535	1.11E-02	9.20E-06	5.67E-06	8.81E-06	5.68E-06	1.1092E-02
520364.18	4258233.21	55211.0645	0.22178	0.54404	0.22814	0.5852	1.11E-02	9.08E-06	1.95E-05	9.34E-06	2.01E-05	1.1115E-02
520059.48	4258521.27	55174.71735	0.9535	13.20721	1.12797	7.76162	1.10E-02	3.90E-05	4.72E-04	4.62E-05	2.66E-04	1.1874E-02
520119	4258382.44	55120.09386	0.41956	7.43683	0.44093	8.97942	1.10E-02	1.72E-05	2.66E-04	1.81E-05	3.08E-04	1.1648E-02
520393.55	4258233.3	55114.21399	0.21142	0.45643	0.21761	0.4896	1.10E-02	8.66E-06	1.63E-05	8.91E-06	1.68E-05	1.1088E-02
520468.51	4258264.61	55109.86718	0.18895	0.30334	0.19076	0.32313	1.10E-02	7.74E-06	1.09E-05	7.81E-06	1.11E-05	1.1074E-02
520053.57	4258896.1	55084.76948	6.56251	0.47211	11.38423	0.45235	1.10E-02	2.69E-04	1.69E-05	4.66E-04	1.55E-05	1.1799E-02
520486.29	4258282.24	55030.58841	0.18437	0.27804	0.18457	0.29473	1.10E-02	7.55E-06	9.95E-06	7.56E-06	1.01E-05	1.1056E-02
520029	4258845.99	55001.34692	3.1306	0.54959	3.98	0.5349	1.10E-02	1.28E-04	1.97E-05	1.63E-04	1.84E-05	1.1344E-02
520197.37	4259013.1	54961.07069	1.94523	0.27872	1.78424	0.27955	1.10E-02	7.96E-05	9.97E-06	7.31E-05	9.60E-06	1.1179E-02
520354.39	4258233.18	54959.24128	0.22502	0.57832	0.23131	0.62295	1.10E-02	9.21E-06	2.07E-05	9.47E-06	2.14E-05	1.1067E-02
520505.18	4258310.35	54854.16267	0.18056	0.25398	0.18014	0.26745	1.10E-02	7.39E-06	9.08E-06	7.38E-06	9.18E-06	1.1018E-02
520532.68	4258760.54	54852.46608	0.22041	0.15897	0.21111	0.16565	1.10E-02	9.02E-06	5.69E-06	8.64E-06	5.69E-06	1.1014E-02
520014.81	4258798.15	54823.22833	2.16152	0.67172	2.65239	0.64943	1.10E-02	8.85E-05	2.40E-05	1.09E-04	2.23E-05	1.1223E-02
520403.34	4258233.33	54819.42834	0.20782	0.43155	0.21374	0.46267	1.10E-02	8.51E-06	1.54E-05	8.75E-06	1.59E-05	1.1027E-02
520316.18	4259012.9	54784.52835	0.72909	0.18148	0.6924	0.19451	1.10E-02	2.99E-05	6.49E-06	2.83E-05	6.68E-06	1.1043E-02
520121.9	4258974.27	54710.93677	6.33363	0.38084	5.4023	0.354	1.10E-02	2.59E-04	1.36E-05	2.21E-04	1.22E-05	1.1463E-02
520256.8	4259023	54662.35306	1.12047	0.21777	1.054	0.22938	1.09E-02	4.59E-05	7.79E-06	4.32E-05	7.87E-06	1.1052E-02
520007.81	4258708.93	54647.78964	1.54217	1.12376	1.89899	1.04523	1.09E-02	6.31E-05	4.02E-05	7.78E-05	3.59E-05	1.1161E-02
520246.89	4259023.02	54639.62011	1.21534	0.22593	1.1399	0.23661	1.09E-02	4.98E-05	8.08E-06	4.67E-05	8.12E-06	1.1055E-02
520395.32	4258972.77	54604.90258	0.45292	0.15982	0.43132	0.16931	1.09E-02	1.85E-05	5.72E-06	1.77E-05	5.81E-06	1.0983E-02
520305.42	4258243.02	54604.86763	0.24556	0.79829	0.25285	0.87001	1.09E-02	1.01E-05	2.86E-05	1.04E-05	2.99E-05	1.1014E-02
520266.7	4259022.98	54590.20778	1.03661	0.21013	0.97768	0.22238	1.09E-02	4.24E-05	7.52E-06	4.00E-05	7.63E-06	1.1030E-02
520344.6	4258233.15	54578.89585	0.22816	0.61555	0.23438	0.66424	1.09E-02	9.34E-06	2.20E-05	9.60E-06	2.28E-05	1.0994E-02
520099.33	4258412.38	54552.31934	0.47264	13.96792	0.50533	15.87652	1.09E-02	1.94E-05	5.00E-04	2.07E-05	5.45E-04	1.2010E-02
520345.87	4259002.85	54523.14052	0.60411	0.17042	0.57488	0.18222	1.09E-02	2.47E-05	6.10E-06	2.35E-05	6.26E-06	1.0980E-02
520520.73	4258347.04	54520.01029	0.17911	0.23288	0.17916	0.24542	1.09E-02	7.33E-06	8.33E-06	7.34E-06	8.43E-06	1.0950E-02
520365.65	4258992.82	54507.92984	0.53664	0.16516	0.51078	0.176	1.09E-02	2.20E-05	5.91E-06	2.09E-05	6.04E-06	1.0971E-02
520167.65	4259003.15	54485.89842	2.79117	0.31631	2.5094	0.30656	1.09E-02	1.14E-04	1.13E-05	1.03E-04	1.05E-05	1.1150E-02
520256.41	4258262.87	54482.89744	0.27229	1.16089	0.28441	1.2857	1.09E-02	1.11E-05	4.15E-05	1.16E-05	4.41E-05	1.1019E-02
520207.38	4258292.72	54451.92118	0.3064	1.84843	0.32475	2.08181	1.09E-02	1.25E-05	6.61E-05	1.33E-05	7.15E-05	1.1068E-02
520236.99	4259023.03	54447.17011	1.32274	0.23444	1.23629	0.24387	1.09E-02	5.42E-05	8.39E-06	5.06E-05	8.37E-06	1.1025E-02
520043.6	4258882	54423.00133	4.72261	0.48716	6.74383	0.47085	1.09E-02	1.93E-04	1.74E-05	2.76E-04	1.62E-05	1.1402E-02
520513.42	4258813.8	54385.6573	0.24537	0.15417	0.23519	0.16129	1.09E-02	1.00E-05	5.51E-06	9.63E-06	5.54E-06	1.0922E-02
520276.6	4259022.97	54374.10246	0.96175	0.20285	0.90894	0.21552	1.09E-02	3.94E-05	7.26E-06	3.72E-05	7.40E-06	1.0980E-02
520543.97	4258709.63	54368.80228	0.2046	0.16427	0.19622	0.17176	1.09E-02	8.38E-06	5.88E-06	8.03E-06	5.90E-06	1.0916E-02
520031.77	4258857.13	54357.61776	3.38104	0.52581	4.35564	0.51165	1.09E-02	1.38E-04	1.88E-05	1.78E-04	1.76E-05	1.1239E-02
520536.25	4258752.01	54349.70991	0.21625	0.15928	0.20709	0.16598	1.09E-02	8.85E-06	5.70E-06	8.48E-06	5.70E-06	1.0913E-02
520413.12	4258233.36	54347.69065	0.20411	0.40866	0.20973	0.43783	1.09E-02	8.36E-06	1.46E-05	8.59E-06	1.50E-05	1.0930E-02
520158.59	4258999.41	54327.38081	3.18476	0.32825	2.83982	0.31484	1.09E-02	1.30E-04	1.17E-05	1.16E-04	1.08E-05	1.1149E-02
520096.8	4258953.92	54322.69424	12.70579	0.40919	11.03961	0.37943	1.09E-02	5.20E-04	1.46E-05	4.52E-04	1.30E-05	1.1879E-02
520276.02	4258252.93	54249.92706	0.26014	0.99152	0.26989	1.09085	1.09E-02	1.07E-05	3.55E-05	1.11E-05	3.74E-05	1.0959E-02
520531.25	4258434.03	54248.55186	0.18542	0.21086	0.18309	0.22255	1.09E-02	7.59E-06	7.54E-06	7.50E-06	7.64E-06	1.0894E-02
520442.46	4258243.45	54243.46305	0.19532	0.3478	0.19942	0.3719	1.09E-02	8.00E-06	1.24E-05	8.17E-06	1.28E-05	1.0904E-02
520058.31	4258908.05	54223.42773	7.86047	0.45494	16.71729	0.43408	1.09E-02	3.22E-04	1.63E-05	6.84E-04	1.49E-05	1.1896E-02
520421.02	4258952.12	54217.64144	0.39358	0.15653	0.37527	0.16489	1.09E-02	1.61E-05	5.60E-06	1.54E-05	5.66E-06	1.0901E-02
520227.09	4259023.05	54209.21421	1.4462	0.24354	1.34675	0.25127	1.09E-02	5.92E-05	8.71E-06	5.51E-05	8.63E-06	1.0988E-02
520447.57	4258921.12	54177.8653	0.34171	0.15389	0.32539	0.16199	1.08E-02	1.40E-05	5.50E-06	1.33E-05	5.56E-06	1.0888E-02
520477.2	4258268.34	54173.86173	0.18577	0.29126	0.18704	0.30959	1.08E-02	7.61E-06	1.04E-05	7.66E-06	1.06E-05	1.0885E-02
520236.8	4258272.81	54163.88751	0.28409	1.38047	0.29908	1.53797	1.08E-02	1.16E-05	4.94E-05	1.22E-05	5.28E-05	1.0973E-02

520187.47	4259013.12	54119.0162	2.17614	0.28876	1.98433	0.28616	1.08E-02	8.91E-05	1.03E-05	8.12E-05	9.82E-06	1.1029E-02
520334.82	4258233.12	54078.7613	0.23118	0.65604	0.23742	0.70947	1.08E-02	9.47E-06	2.35E-05	9.72E-06	2.44E-05	1.0897E-02
520451.08	4258247.14	54075.35954	0.19268	0.33234	0.19616	0.35514	1.08E-02	7.89E-06	1.19E-05	8.03E-06	1.22E-05	1.0869E-02
520149.52	4258995.67	54073.61223	3.68338	0.33976	3.25293	0.32266	1.08E-02	1.51E-04	1.22E-05	1.33E-04	1.11E-05	1.1136E-02
520286.5	4259022.95	54042.35966	0.89464	0.196	0.84688	0.2089	1.08E-02	3.66E-05	7.01E-06	3.47E-05	7.17E-06	1.0908E-02
520326.08	4259012.89	54010.12892	0.68405	0.17624	0.64992	0.18888	1.08E-02	2.80E-05	6.30E-06	2.66E-05	6.48E-06	1.0884E-02
520531.6	4258409.1	53984.24051	0.18228	0.21374	0.18035	0.22572	1.08E-02	7.46E-06	7.65E-06	7.38E-06	7.75E-06	1.0841E-02
520017.12	4258646.05	53967.56951	1.41155	1.90682	1.80477	1.69131	1.08E-02	5.78E-05	6.82E-05	7.39E-05	5.81E-05	1.1066E-02
520385.44	4258982.79	53916.18569	0.479	0.16041	0.45612	0.17033	1.08E-02	1.96E-05	5.74E-06	1.87E-05	5.85E-06	1.0847E-02
520471.28	4258891.29	53848.75812	0.30366	0.15188	0.28986	0.15991	1.08E-02	1.24E-05	5.43E-06	1.19E-05	5.49E-06	1.0819E-02
520011.14	4258789.3	53805.49525	1.98003	0.69627	2.41165	0.67137	1.08E-02	8.11E-05	2.49E-05	9.87E-05	2.30E-05	1.1003E-02
520403.83	4258969.25	53790.40734	0.43242	0.15764	0.41177	0.16672	1.08E-02	1.77E-05	5.64E-06	1.69E-05	5.72E-06	1.0818E-02
520217.19	4259023.07	53787.7566	1.58822	0.25283	1.47242	0.25845	1.08E-02	6.50E-05	9.04E-06	6.03E-05	8.87E-06	1.0915E-02
520480.45	4258877.48	53759.34302	0.29009	0.1515	0.27721	0.15947	1.08E-02	1.19E-05	5.42E-06	1.14E-05	5.47E-06	1.0800E-02
520112.75	4258970.5	53737.75876	7.87503	0.38687	6.6966	0.35868	1.08E-02	3.22E-04	1.38E-05	2.74E-04	1.23E-05	1.1384E-02
520422.91	4258233.39	53728.94688	0.20035	0.38751	0.20559	0.41486	1.08E-02	8.20E-06	1.39E-05	8.42E-06	1.42E-05	1.0805E-02
520539.82	4258743.47	53721.31583	0.21222	0.15953	0.20323	0.1663	1.08E-02	8.69E-06	5.71E-06	8.32E-06	5.71E-06	1.0787E-02
520005.99	4258728.64	53703.78316	1.57224	0.97872	1.92789	0.91919	1.08E-02	6.44E-05	3.50E-05	7.89E-05	3.16E-05	1.0965E-02
520459.7	4258250.83	53677.71601	0.18987	0.31812	0.19276	0.33954	1.07E-02	7.77E-06	1.14E-05	7.89E-06	1.17E-05	1.0788E-02
520295.63	4258242.99	53604.11725	0.24818	0.85747	0.2562	0.93728	1.07E-02	1.02E-05	3.07E-05	1.05E-05	3.22E-05	1.0818E-02
520438.49	4258934.88	53602.84072	0.35876	0.15396	0.34145	0.16204	1.07E-02	1.47E-05	5.51E-06	1.40E-05	5.56E-06	1.0774E-02
520296.4	4259022.93	53596.15361	0.83417	0.18953	0.79051	0.2025	1.07E-02	3.42E-05	6.78E-06	3.24E-05	6.95E-06	1.0814E-02
520495.06	4258285.99	53585.14354	0.18108	0.26734	0.1809	0.28274	1.07E-02	7.41E-06	9.56E-06	7.41E-06	9.71E-06	1.0765E-02
520519.84	4258336.65	53573.26708	0.17792	0.23549	0.17797	0.2478	1.07E-02	7.28E-06	8.42E-06	7.29E-06	8.51E-06	1.0760E-02
520006.86	4258754.86	53564.82096	1.68996	0.83626	2.07927	0.79457	1.07E-02	6.92E-05	2.99E-05	8.51E-05	2.73E-05	1.0939E-02
520462.31	4258905.01	53542.38223	0.31757	0.15204	0.30277	0.16007	1.07E-02	1.30E-05	5.44E-06	1.24E-05	5.50E-06	1.0759E-02
520531.22	4258459.82	53523.11921	0.18823	0.2074	0.18542	0.2191	1.07E-02	7.71E-06	7.42E-06	7.59E-06	7.52E-06	1.0749E-02
520489.86	4258863.58	53430.41337	0.27695	0.15123	0.26504	0.15902	1.07E-02	1.13E-05	5.41E-06	1.09E-05	5.46E-06	1.0733E-02
520325.03	4258233.08	53424.24383	0.23403	0.7004	0.24045	0.75921	1.07E-02	9.58E-06	2.51E-05	9.85E-06	2.61E-05	1.0769E-02
520148.49	4258342.53	53417.9575	0.36086	4.0575	0.37792	4.73336	1.07E-02	1.48E-05	1.45E-04	1.55E-05	1.63E-04	1.1036E-02
520504.47	4258300.03	53400.32952	0.17918	0.25584	0.1787	0.26961	1.07E-02	7.34E-06	9.15E-06	7.32E-06	9.26E-06	1.0727E-02
520355.77	4259002.84	53346.95439	0.56936	0.16596	0.54173	0.1772	1.07E-02	2.33E-05	5.94E-06	2.22E-05	6.08E-06	1.0741E-02
520087.95	4258950.27	53298.27414	16.50572	0.41077	16.44111	0.38246	1.07E-02	6.76E-04	1.47E-05	6.73E-04	1.31E-05	1.2051E-02
520217.2	4258282.75	53276.37	0.29508	1.6721	0.31255	1.87362	1.07E-02	1.21E-05	5.98E-05	1.28E-05	6.43E-05	1.0818E-02
520207.29	4259023.08	53274.97654	1.75388	0.26248	1.61844	0.26552	1.07E-02	7.18E-05	9.39E-06	6.63E-05	9.12E-06	1.0826E-02
520033.34	4258867.77	53249.14449	3.53878	0.50332	4.61327	0.4897	1.07E-02	1.45E-04	1.80E-05	1.89E-04	1.68E-05	1.1032E-02
520039.69	4258569.84	53207.87675	1.2109	4.86356	1.59274	3.7197	1.07E-02	4.96E-05	1.74E-04	6.52E-05	1.28E-04	1.1072E-02
520177.57	4259013.13	53197.21512	2.45643	0.29855	2.22534	0.29226	1.07E-02	1.01E-04	1.07E-05	9.11E-05	1.00E-05	1.0866E-02
520485.9	4258272.06	53194.3661	0.18273	0.27909	0.18331	0.29628	1.07E-02	7.48E-06	9.98E-06	7.51E-06	1.02E-05	1.0688E-02
520168.13	4258322.6	53169.01698	0.33731	3.00231	0.35601	3.42576	1.06E-02	1.38E-05	1.07E-04	1.46E-05	1.18E-04	1.0901E-02
520335.99	4259012.87	53096.19728	0.64271	0.17135	0.6108	0.18352	1.06E-02	2.63E-05	6.13E-06	2.50E-05	6.30E-06	1.0697E-02
520375.56	4258992.8	53059.77155	0.5071	0.16101	0.48262	0.17133	1.06E-02	2.08E-05	5.76E-06	1.98E-05	5.88E-06	1.0678E-02
520468.31	4258254.52	53043.61475	0.18692	0.30508	0.18926	0.32506	1.06E-02	7.65E-06	1.09E-05	7.75E-06	1.12E-05	1.0660E-02
520306.3	4259022.92	53027.64203	0.77944	0.18346	0.7392	0.19636	1.06E-02	3.19E-05	6.56E-06	3.03E-05	6.74E-06	1.0695E-02
520547.59	4258700.97	52990.64375	0.20083	0.16422	0.19273	0.17166	1.06E-02	8.22E-06	5.87E-06	7.89E-06	5.89E-06	1.0640E-02
520177.95	4258312.63	52979.38933	0.3264	2.6264	0.34499	2.99029	1.06E-02	1.34E-05	9.39E-05	1.41E-05	1.03E-04	1.0834E-02
520044.8	4258892.48	52967.57124	4.93667	0.46711	7.16145	0.45128	1.06E-02	2.02E-04	1.67E-05	2.93E-04	1.55E-05	1.1135E-02
520512.2	4258824.31	52963.85553	0.24788	0.15201	0.23761	0.15914	1.06E-02	1.01E-05	5.44E-06	9.73E-06	5.46E-06	1.0638E-02
520432.7	4258233.42	52952.63398	0.19652	0.36798	0.20137	0.39359	1.06E-02	8.05E-06	1.32E-05	8.24E-06	1.35E-05	1.0647E-02
520543.4	4258734.94	52949.99644	0.20826	0.15957	0.19945	0.16646	1.06E-02	8.53E-06	5.71E-06	8.17E-06	5.71E-06	1.0632E-02
520138.67	4258352.5	52933.44512	0.37227	4.84359	0.38911	5.70705	1.06E-02	1.52E-05	1.73E-04	1.59E-05	1.96E-04	1.1001E-02
520109.18	4258392.41	52924.318	0.43063	9.82729	0.4548	11.84313	1.06E-02	1.76E-05	3.52E-04	1.86E-05	4.07E-04	1.1393E-02
520029.81	4258598.97	52884.42774	1.29539	3.21443	1.71407	2.65889	1.06E-02	5.30E-05	1.15E-04	7.02E-05	9.13E-05	1.0920E-02
520266.23	4258252.9	52872.67757	0.26217	1.07409	0.27326	1.18533	1.06E-02	1.07E-05	3.84E-05	1.12E-05	4.07E-05	1.0690E-02
520429.59	4258948.58	52871.41079	0.3767	0.15374	0.35845	0.16188	1.06E-02	1.54E-05	5.50E-06	1.47E-05	5.56E-06	1.0629E-02
520412.34	4258965.73	52866.42353	0.41317	0.1555	0.39347	0.16418	1.06E-02	1.69E-05	5.56E-06	1.61E-05	5.64E-06	1.0631E-02
520499.55	4258849.56	52840.19078	0.26423	0.15082	0.25314	0.15834	1.06E-02	1.08E-05	5.39E-06	1.04E-05	5.44E-06	1.0614E-02
520246.62	4258262.84	52797.09305	0.27367	1.2669	0.28736	1.40697	1.06E-02	1.12E-05	4.53E-05	1.18E-05	4.83E-05	1.0690E-02
520103.61	4258966.72	52765.92673	10.1761	0.39125	8.69025	0.36269	1.06E-02	4.17E-04	1.40E-05	3.56E-04	1.25E-05	1.1366E-02
520383.79	4258223.27	52693.7461	0.21077	0.48693	0.21695	0.52189	1.06E-02	8.63E-06	1.74E-05	8.88E-06	1.79E-05	1.0605E-02
520374	4258223.24	52665.99325	0.21395	0.51624	0.22012	0.55382	1.05E-02	8.76E-06	1.85E-05	9.01E-06	1.90E-05	1.0602E-02
520315.24	4258233.05	52633.38288	0.23669	0.74913	0.24353	0.81401	1.05E-02	9.69E-06	2.68E-05	9.97E-06	2.79E-05	1.0615E-02
520197.39	4259023.1	52630.88976	1.94881	0.27216	1.78884	0.27222	1.05E-02	7.98E-05	9.73E-06	7.32E-05	9.35E-06	1.0712E-02
520514.15	4258314.19	52627.47405	0.17709	0.24417	0.17673	0.25678	1.05E-02	7.25E-06	8.73E-06	7.24E-06	8.82E-06	1.0571E-02
520007.47	4258780.46	52597.54505	1.81517	0.7217	2.19534	0.69373	1.05E-02	7.43E-05	2.58E-05	8.99E-05	2.38E-05	1.0747E-02
520393.58	4258223.3	52568.44161	0.20748	0.45987	0.21361	0.49248	1.05E-02	8.50E-06	1.64E-05	8.75E-06	1.69E-05	1.0578E-02
520364.21	4258223.21	52566.05598	0.21711	0.54783	0.22317	0.58863	1.05E-02	8.89E-06	1.96E-05	9.14E-06	2.02E-05	1.0585E-02
520059.43	4258918.51	52537.50618	8.30808	0.4369	18.78784	0.41671	1.05E-02	3.40E-04	1.56E-05	7.69E-04	1.43E-05	1.1661E-02
520285.84	4258242.96	52495.07635	0.25056	0.92333	0.25955	1.01236	1.05E-02	1.03E-05	3.30E-05	1.06E-05	3.48E-05	1.0602E-02
520187.77	4258302.66	52447.34572	0.31536	2.32254	0.3339	2.63168	1.05E-02	1.29E-05	8.31E-05	1.37E-05	9.03E-05	1.0703E-02
520403.37	4258223.33	52371.39693	0.20418	0.43471	0.2101	0.46538	1.05E-02	8.36E-06	1.55E-05	8.60E-06	1.60E-05	1.0537E-02
520456.29	4258917.51	52369.84253	0.32732	0.15115	0.3118	0.15907	1.05E-02	1.34E-05	5.41E-06	1.28E-05	5.46E-06	1.0525E-02
520049.56	4258540.7	52344.02875	1.03533	7.62916	1.2709	5.3466	1.05E-02	4.24E-05	2.73E-04	5.20E-05	1.84E-04	1.1033E-02
520534.94	4258417.86	52330.15172	0.18154	0.20985	0.17939	0.22144	1.05E-02	7.43E-06	7.51E-06	7.34E-06	7.60E-06	1.0510E-02
520354.42	4258223.18	52305.21392	0.22013	0.58213	0.22611	0.62656	1.05E-02	9.01E-06	2.08E-05	9.26E-06	2.15E-05	1.0535E-02
520316.2	4259022.9	52304.18117	0.72959	0.17776	0.6922	0.19046	1.05E-02	2.99E-05	6.36E-06	2.83E-05	6.54E-06	1.0546E-02
520476.93	4258258.21	52259.10792	0.18393	0.29283	0.1857	0.31146	1.05E-02	7.53E-06	1.05E-05	7.60E-06	1.07E-05	1.0502E-02
520015.13	4258823.02	52252.81191	2.24438	0.59076	2.73789	0.57439	1.05E-02	9.19E-05	2.11E-05	1.12E-04	1.97E-05	1.0709E-02
520049.2	4258904.29	52229.04617	5.72055	0.45004	8.91349	0.43333	1.05E-02	2.34E-04	1.61E-05	3.65E-04	1.49E-05	1.1090E-02
520256.81	4259033	52187.50346	1.12134	0.21323	1.05434	0.2242	1.05E-02	4.59E-05	7.63E-06	4.32E-05	7.70E-06	1.0556E-02
520534.65	4258442.96	52161.93531	0.18452	0.20707	0.18201	0.21849	1.04E-02	7.56E-06	7.41E-06	7.45E-06	7.50E-06	1.0476E-02
520266.71	4259032.98	52161.39039	1.03758	0.20588	0.97815	0.21753	1.04E-02	4.25E-05	7.36E-06	4.00E-05	7.47E-06	1.0543E-02
520531.95	4258371.87	52160.98345	0.17731	0.21829	0.17651	0.23064	1.04E-02	7.26E-06	7.81E-06	7.23E-06	7.92E-06	1.0476E-02
520227.02	4258272.78	52160.46211	0.2845	1.51982	0.30077	1.69736	1.04E-02	1.16E-05	5.44E-05	1.23E-05	5.83E-05	1.0582E-02
520246.91	4259033.02	52158.56943	1.2162	0.22111	1.14031	0.23112	1.04E-02	4.98E-05	7.91E-06	4.67E-05	7.93E-06	1.0558E-02
520395.34	4258982.77	52155.39248	0.45387	0.15639	0.43183	0.16583	1.04E-02	1.86E-05	5.59E-06	1.77E-05	5.69E-06	1.0492E-02
520167.67	4259013.15	52150.79861	2.79852	0.30764	2.51735	0.29757	1.04E-02	1.15E-04	1.10E-05	1.03E-04	1.02E-05	1.0683E-02
520442.49	4258233.45	52104.8772	0.19273	0.34973	0.1971	0.37383	1.04E-02	7.89E-06	1.25E-05	8.07E-06	1.28E-05	1.0476E-02
520345.89	4259012.85	52085.90549	0.60481	0.1668	0.57493	0.17845	1.04E-02	2.48E-05	5.97E-06	2.35E-05	6.13E-06	1.0491E-02
520365.67	4259002.82	52077.93488	0.53737	0.16171	0.51118	0.17242	1.04E-02	2.20E-05	5.78E-06	2.09E-05	5.92E-06	1.0484E-02
520034.75	4258878.34	52059.04821	3.69518	0.48221	4.86576	0.46908	1.04E-02	1.51E-04	1.72E-05	1.99E-04	1.61E-05	1.0809E-02
520546.97	4258726.4	52046.27685	0.20442	0.15946	0.1958	0.16649	1.04E-02	8.37E-06	5.70E-06	8.02E-06	5.72E-06	1.0451E-02
520020.34	4258842.42	52037.74906	2.5567	0.54539	3.15349	0.53178	1.04E-02	1.05E-04	1.95E-05	1.29E-04	1.83E-05	1.0693E-02
520237.01	4259033.03	52027.95404	1.32402	0.22943	1.23738	0.23813	1.04E-02	5.42E-05	8.21E-06	5.07E-05	8.18E-06	1.0541E-02
520128.85	4258362.47	52024.00474	0.38325	5.92358	0.40067	7.02607	1.04E-02	1.57E-05	2.12E-04	1.64E-05	2.41E-04	1.0904E-02
520530.6	4258361.28	51965.60785	0.17651	0.22109	0.17608	0.23341	1.04E-02	7.23E-06	7.91E-06	7.21E-06	8.01E-06	1.0437E-02
520451.47	4258237.29	51960.31983	0.19014	0.33347	0.19395	0.35623	1.04E-02	7.79E-06	1.19E-05	7.94E-06	1.22E-05	1.0446E-02
520276.61	4259032.97	51959.98386	0.96259	0.19884	0.90928	0.21094	1.04E-02	3.94E-05	7.11E-06	3.72E-05	7.24E-06	1.0497E-02
520158.68	4259009.44	51954.89706	3.17876	0.31851	2.83875	0.30509	1.04E-02	1.30E-04	1.14E-05	1.16E-04	1.05E-05	1.0673E-02
520413.16	4258223.36	51938.97954	0.20068	0.41164	0.20641	0.44032	1.04E-02	8.22E-06	1.47E-05	8.45E-06	1.51E-05	1.0448E-02
520503.84	4258289.75	51937.56694	0.17777	0.25747	0.17738	0.27163	1.04E-02	7.28E-06	9.21E-06	7.26E-06	9.33E-06	1.0434E-02
520447.13	4258931.31	51935.67111	0.34331	0.15129	0.32681	0.15918	1.04E-02	1.41E-05	5.41E-06	1.34E-05	5.46E-06	1.0439E-02
520494.59	4258275.78	51930.65186	0.17954	0.26867	0.17968	0.28452	1.04E-02	7.35E-06	9.61E-06	7.36E-06	9.77E-06	1.0434E-02
520094.46	4258962.95	51925.37528	13.68566	0.39444	12.14811	0.36641	1.04E-02	5.60E-04	1.41E-05	4.97E-04	1.26E-05	1.1483E-02
520479.72	4258887.79	51889.70253	0.29201	0.14953	0.27916	0.15731	1.04E-02	1.20E-05	5.35E-06	1.14E-05	5.40E-06	1.0426E-02
520019.93	4258628.11	51863.93831	1.32087	2.24134	1.70421	1.94819	1.04E-02	5.41E-05	8.02E-05	6.98E-05	6.69E-05	1.0657E-02
520344.64	4258223.15	51860.30452	0.22294	0.61948	0.22897	0.66789	1.04E-02	9.13E-06	2.22E-05	9.37E-06	2.29E-05	1.0449E-02
520187.49	4259023.12	51854.65768	2.18105	0.2817	1.99037	0.27846	1.04E-02	8.93E-05	1.01E-05	8.15E-05	9.56E-06	1.0575E-02
520420.85	4258962.2	51829.59005	0.39513	0.15333	0.37623	0.16164	1.04E-02	1.62E-05	5.48E-06	1.54E-05	5.55E-06	1.0422E-02
520113.27	4258980.7	51821.79389	7.89723	0.37383	6.66998	0.34655	1.04E-02	3.23E-04	1.34E-05	2.73E-04	1.19E-05	1.1000E-02
520197.59	4258292.69	51804.50569	0.30468	2.07052	0.32281	2.33741	1.04E-02	1.25E-05	7.41E-05	1.32E-05	8.02E-05	1.0555E-02
520007.12	4258683.15	51795.19095	1.37204	1.32904	1.6948	1.21691	1.04E-02	5.62E-05	4.75E-05	6.94E-05	4.18E-05	1.0588E-02
520525.4	4258801.87	51774.07296	0.23236	0.15207	0.22269	0.15879	1.04E-02	9.51E-06	5.44E-06	9.12E-06	5.45E-06	1.0398E-02
520227.11	4259033.05	51773.26276	1.44734	0.23812	1.3476	0.24511	1.04E-02	5.93E-05	8.52E-06	5.52E-05	8.41E-06	1.0500E-02
520470.69	4258901.54	51771.97826	0.3054	0.14951	0.29135	0.15734	1.04E-02	1.25E-05	5.35E-06	1.19E-05	5.40E-06	1.0403E-02
520305.45	4258233.02	51756.46872	0.23922	0.80275	0.24669	0.8747	1.04E-02	9.79E-06	2.87E-05	1.01E-05	3.00E-05	1.0444E-02
520534.32	4258382.9	51728.63554	0.17759	0.2147	0.17634	0.22687	1.04E-02	7.27E-06	7.68E-06	7.22E-06	7.79E-06	1.0389E-02
520528.93	4258793.43	51719.30066	0.22807	0.15266	0.21857	0.15929	1.04E-02	9.34E-06	5.46E-06	8.95E-06	5.47E-06	1.0387E-02
520149.69	4259005.73	51684.17746	3.65988	0.32897	3.24065	0.31221	1.04E-02	1.50E-04	1.18E-05	1.33E-04	1.07E-05	1.0655E-02
520286.51	4259032.95	51649.89643	0.89537	0.19214	0.84701	0.20452	1.03E-02	3.67E-05	6.87E-06	3.47E-05	7.02E-06	1.0429E-02
520003.14	4258745.9	51643.42803	1.54648	0.86765	1.88355	0.82097	1.03E-02	6.33E-05	3.10E-05	7.71E-05	2.82E-05	1.0542E-02
520488.97	4258873.96	51642.74893	0.27914	0.14893	0.26693	0.15663	1.03E-02	1.14E-05	5.33E-06	1.09E-05	5.38E-06	1.0375E-02
520460.45	4258241.14	51603.4084	0.18738	0.31853	0.19063	0.33991	1.03E-02	7.67E-06	1.14E-05	7.81E-06	1.17E-05	1.0373E-02
520011.5	4258814.28	51587.76101	2.06004	0.61102	2.50103	0.59283	1.03E-02	8.43E-05	2.19E-05	1.02E-04	2.04E-05	1.0560E-02
520532.46	4258785	51585.3233	0.22385	0.1533	0.21455	0.15983	1.03E-02	9.17E-06	5.48E-06	8.78E-06	5.49E-06	1.0360E-02
520326.1	4259022.89	51546.71655	0.68439	0.17253	0.6495	0.18491	1.03E-02	2.80E-05	6.17E-06	2.66E-05	6.35E-06	1.0390E-02
520529.45	4258350.78	51534.27337	0.17559	0.22377	0.1754	0.23595	1.03E-02	7.19E-06	8.00E-06	7.18E-06	8.10E-06	1.0351E-02
520385.46	4258992.79	51522.71008	0.47982	0.15705	0.45662	0.16687	1.03E-02	1.96E-05	5.62E-06	1.87E-05	5.73E-06	1.0368E-02
520551.22	4258692.32	51497.93615	0.19717	0.16419	0.18933	0.17151	1.03E-02	8.07E-06	5.87E-06	7.75E-06	5.89E-06	1.0341E-02
520017.12	4258636.77	51496.34068	1.31954	2.02975	1.68549	1.78629	1.03E-02	5.40E-05	7.26E-05	6.90E-05	6.13E-05	1.0570E-02
520022.72	4258853.39	51493.17727	2.71947	0.5215	3.3783	0.50893	1.03E-02	1.11E-04	1.87E-05	1.38E-04	1.75E-05	1.0598E-02
520511.13	4258834.76	51485.41954	0.2502	0.14979	0.23979	0.15692	1.03E-02	1.02E-05	5.36E-06	9.82E-06	5.39E-06	1.0341E-02
520485.55	4258261.89	51427.13856	0.181	0.28097	0.1821	0.29846	1.03E-02	7.41E-06	1.00E-05	7.46E-06	1.02E-05	1.0334E-02
520217.21	4259033.07	51411.27756	1.58964	0.24714	1.47397	0.252	1.03E-02	6.51E-05	8.84E-06	6.04E-05	8.65E-06	1.0439E-02
520403.79	4258979.27	51410.35652	0.43352	0.15425	0.41242	0.16329	1.03E-02	1.78E-05	5.52E-06	1.69E-05	5.61E-06	1.0341E-02
520256.44	4258252.87	51393.36114	0.26375	1.16754	0.27629	1.29228	1.03E-02	1.08E-05	4.18E-05	1.13E-05	4.44E-05	1.0400E-02
520513.34	4258303.83	51390.38429	0.1758	0.24625	0.17533	0.25902	1.03E-02	7.20E-06	8.81E-06	7.18E-06	8.89E-06	1.0324E-02
520422.94	4258223.39	51389.70531	0.19714	0.39028	0.20259	0.41718	1.03E-02	8.07E-06	1.40E-05	8.29E-06	1.43E-05	1.0336E-02
520140.71	4259002.02	51382.53332	4.29441	0.33894	3.76041	0.31895	1.03E-02	1.76E-04	1.21E-05	1.54E-04	1.09E-05	1.0643E-02
520535.99	4258776.56	51368.47685	0.21971	0.1539	0.21058	0.16032	1.03E-02	9.00E-06	5.50E-06	8.62E-06	5.50E-06	1.0316E-02
520438.16	4258945.03	51356.61052	0.36031	0.15123	0.34285	0.15913	1.03E-02	1.48E-05	5.41E-06	1.40E-05	5.46E-06	1.0325E-02
520334.85	4258223.12	51355.84737	0.22573	0.66005	0.23186	0.71333	1.03E-02	9.24E-06	2.36E-05	9.49E-06	2.45E-05	1.0352E-02
520004.25	4258700.34	51337.42457	1.38572	1.16109	1.69441	1.07433	1.03E-02	5.67E-05	4.15E-05	6.94E-05	3.69E-05	1.0486E-02
520276.05	4258242.93	51285.56373	0.25264	0.99701	0.26282	1.09652	1.03E-02	1.03E-05	3.57E-05	1.08E-05	3.76E-05	1.0365E-02
520296.42	4259032.93	51231.94341	0.83473	0.18577	0.79036	0.19827	1.03E-02	3.42E-05	6.64E-06	3.24E-05	6.81E-06	1.0340E-02
520498.46	4258860.02	51218.71692	0.26657	0.14867	0.25531	0.15615	1.03E-02	1.09E-05	5.32E-06	1.05E-05	5.36E-06	1.0289E-02
520003.81	4258771.61	51181.73719	1.66241	0.7483	2.002	0.71654	1.02E-02	6.81E-05	2.68E-05	8.20E-05	2.46E-05	1.0451E-02
520534.69	4258468.95	51082.91247	0.18702	0.20315	0.18388	0.21469	1.02E-02	7.66E-06	7.27E-06	7.53E-06	7.37E-06	1.0260E-02
520539.52	4258768.13	51058.555	0.21567	0.15432	0.20665	0.16068	1.02E-02	8.83E-06	5.52E-06	8.46E-06	5.52E-06	1.0254E-02
520469.42	4258244.98	51005.71469	0.18445	0.30487	0.18718	0.32481	1.02E-02	7.55E-06	1.09E-05	7.66E-06	1.12E-05	1.0252E-02
520131.72	4258998.31	51000.95362	5.12534	0.34782	4.43578	0.32503	1.02E-02	2.10E-04	1.24E-05	1.82E-04	1.12E-05	1.0629E-02
520236.84	4258262.81	50997.38356	0.2744	1.38833	0.28947	1.54556	1.02E-02	1.12E-05	4.97E-05	1.19E-05	5.31E-05	1.0339E-02
520355.79	4259012.84	50985.97097	0.57001	0.16247	0.54187	0.17358	1.02E-02	2.33E-05	5.81E-06	2.22E-05	5.96E-06	1.0268E-02
520177.59	4259023.13	50985.23408	2.46169	0.29091	2.23212	0.28413	1.02E-02	1.01E-04	1.04E-05	9.14E-05	9.75E-06	1.0423E-02
520550.54	4258717.87	50982.09096	0.20068	0.15932	0.19229	0.16645	1.02E-02	8.22E-06	5.70E-06	7.87E-06	5.71E-06	1.0237E-02
520002.21	4258719.55	50951.11547	1.41943	1.01423	1.72308	0.948	1.02E-02	5.81E-05	3.63E-05	7.05E-05	3.25E-05	1.0401E-02
520207.41	4258282.72	50946.26659	0.29413	1.86056	0.3118	2.09034	1.02E-02	1.20E-05	6.65E-05	1.28E-05	7.18E-05	1.0366E-02
520207.31	4259033.08	50931.01458	1.75525	0.25635	1.62009	0.25868	1.02E-02	7.19E-05	9.17E-06	6.63E-05	8.88E-06	1.0356E-02
520104.2	4258976.96	50879.93197	10.15584	0.37771	8.60388	0.35017	1.02E-02	4.16E-04	1.35E-05	3.52E-04	1.20E-05	1.0983E-02
520060.45	4258928.92	50876.54644	8.68165	0.42011	18.28267	0.40053	1.02E-02	3.55E-04	1.50E-05	7.49E-04	1.38E-05	1.1322E-02
520528.46	4258340.34	50868.85699	0.17451	0.22658	0.17447	0.23851	1.02E-02	7.15E-06	8.10E-06	7.14E-06	8.19E-06	1.0218E-02
520036.03	4258888.86	50812.04349	3.84751	0.46245	5.11585	0.44975	1.02E-02	1.58E-04	1.65E-05	2.09E-04	1.54E-05	1.0575E-02
520295.66	4258232.99	50801.78433	0.24159	0.86207	0.24989	0.94223	1.02E-02	9.89E-06	3.08E-05	1.02E-05	3.23E-05	1.0257E-02
520432.73	4258223.42	50785.78509	0.19363	0.37033	0.19868	0.39572	1.02E-02	7.93E-06	1.32E-05	8.13E-06	1.36E-05	1.0213E-02
520007.88	4258805.54	50772.22612	1.895	0.6321	2.28886	0.61175	1.02E-02	7.76E-05	2.26E-05	9.37E-05	2.10E-05	1.0383E-02
520336	4259022.87	50755.06502	0.64323	0.16772	0.61057	0.1797	1.02E-02	2.63E-05	6.00E-06	2.50E-05	6.17E-06	1.0228E-02
520465.01	4258913.9	50754.70828	0.31438	0.14867	0.29967	0.15641	1.02E-02	1.29E-05	5.32E-06	1.23E-05	5.37E-06	1.0200E-02
520050.41	4258914.79	50732.39467	5.98973	0.43244	9.58671	0.41613	1.02E-02	2.45E-04	1.55E-05	3.93E-04	1.43E-05	1.0827E-02
520375.57	4259002.8	50725.74798	0.50783	0.15768	0.48306	0.16788	1.02E-02	2.08E-05	5.64E-06	1.98E-05	5.76E-06	1.0210E-02
520306.32	4259032.92	50710.03475	0.77997	0.17985	0.73906	0.19234	1.02E-02	3.19E-05	6.43E-06	3.03E-05	6.60E-06	1.0231E-02
520325.06	4258223.08	50708.18529	0.22833	0.70447	0.23479	0.76321	1.02E-02	9.35E-06	2.52E-05	9.61E-06	2.62E-05	1.0225E-02
520429.35	4258958.68	50692.09557	0.37819	0.15091	0.35986	0.15893	1.02E-02	1.55E-05	5.40E-06	1.47E-05	5.46E-06	1.0193E-02
520119.03	4258372.44	50645.79008	0.39385	7.47085	0.41255	8.95863	1.01E-02	1.61E-05	2.67E-04	1.69E-05	3.08E-04	1.0750E-02
520024.39	4258864.07	50634.30232	2.84704	0.49902	3.55801	0.48729	1.01E-02	1.17E-04	1.78E-05	1.46E-04	1.67E-05	1.0437E-02
520538.28	4258426.62	50580.58641	0.18076	0.20621	0.17843	0.21746	1.01E-02	7.40E-06	7.38E-06	7.31E-06	7.47E-06	1.0159E-02
520412.24	4258975.77	50565.47634	0.41437	0.15229	0.39435	0.16092	1.01E-02	1.70E-05	5.45E-06	1.61E-05	5.52E-06	1.0171E-02
520520.56	4258820.85	50519.3658	0.2392	0.14946	0.22932	0.15628	1.01E-02	9.79E-06	5.35E-06	9.39E-06	5.37E-06	1.0147E-02
520508.25	4258845.96	50495.80425	0.25443	0.14816	0.24379	0.15536	1.01E-02	1.04E-05	5.30E-06	9.98E-06	5.33E-06	1.0144E-02
520503.29	4258279.5	50486.8132	0.17635	0.25889	0.17616	0.27348	1.01E-02	7.22E-06	9.26E-06	7.21E-06	9.39E-06	1.0144E-02
520007.12	4258673.87	50432.43184	1.31288	1.4118	1.62182	1.28637	1.01E-02	5.38E-05	5.05E-05	6.64E-05	4.42E-05	1.0315E-02
520122.73	4258994.6	50405.58852	6.23603	0.355	5.33205	0.33013	1.01E-02	2.55E-04	1.27E-05	2.18E-04	1.13E-05	1.0592E-02
520494.17	4258265.58	50317.30013	0.17798	0.2701	0.17854	0.28635	1.01E-02	7.29E-06	9.66E-06	7.31E-06	9.83E-06	1.0111E-02
520383.82	4258213.27	50315.93701	0.2067	0.49024	0.2126	0.52484	1.01E-02	8.46E-06	1.75E-05	8.70E-06	1.80E-05	1.0129E-02
520455.77	4258927.73	50295.1927	0.32896	0.1487	0.31327	0.15641	1.01E-02	1.35E-05	5.32E-06	1.28E-05	5.37E-06	1.0109E-02
520538.77	4258402.04	50278.75524	0.17771	0.2088	0.17581	0.22035	1.01E-02	7.28E-06	7.47E-06	7.20E-06	7.56E-06	1.0099E-02
520478.4	4258248.82	50276.40009	0.18148	0.29202	0.18362	0.31063	1.01E-02	7.43E-06	1.04E-05	7.52E-06	1.07E-05	1.0105E-02
520523.13	4258318.03	50241.17613	0.17363	0.23488	0.17338	0.24676	1.01E-02	7.11E-06	8.40E-06	7.10E-06	8.47E-06	1.0093E-02
520197.41	4259033.1	50232.71609	1.94833	0.26537	1.7888	0.26483	1.01E-02	7.98E-05	9.49E-06	7.32E-05	9.09E-06	1.0231E-02
520393.61	4258213.3	50224.46815	0.20362	0.46308	0.20956	0.49526	1.01E-02	8.34E-06	1.66E-05	8.58E-06	1.70E-05	1.0109E-02
520374.03	4258213.24	50219.84578	0.2096	0.5197	0.21548	0.5569	1.01E-02	8.58E-06	1.86E-05	8.82E-06	1.91E-05	1.0112E-02

520040.1	4258900.54	50186.90411	4.32893	0.44531	5.9603	0.43208	1.01E-02	1.77E-04	1.59E-05	2.44E-04	1.48E-05	1.0503E-02
520546.59	4258751.26	50135.92322	0.20782	0.15494	0.19907	0.16132	1.00E-02	8.51E-06	5.54E-06	8.15E-06	5.54E-06	1.0068E-02
520364.24	4258213.21	50124.80387	0.21259	0.55128	0.21832	0.59191	1.00E-02	8.70E-06	1.97E-05	8.94E-06	2.03E-05	1.0096E-02
520512.62	4258293.51	50087.11755	0.17445	0.24812	0.174	0.26111	1.00E-02	7.14E-06	8.87E-06	7.12E-06	8.96E-06	1.0063E-02
520316.22	4259032.9	50052.05277	0.73016	0.17428	0.69214	0.18663	1.00E-02	2.99E-05	6.23E-06	2.83E-05	6.41E-06	1.0094E-02
520217.23	4258272.75	50047.74357	0.28405	1.68176	0.30095	1.8825	1.00E-02	1.16E-05	6.02E-05	1.23E-05	6.46E-05	1.0171E-02
520442.52	4258223.45	50027.51265	0.19005	0.35187	0.19467	0.37578	1.00E-02	7.78E-06	1.26E-05	7.97E-06	1.29E-05	1.0060E-02
520479.07	4258898.07	50024.81409	0.29389	0.14726	0.28074	0.15488	1.00E-02	1.20E-05	5.27E-06	1.15E-05	5.32E-06	1.0052E-02
520403.4	4258213.33	50020.49217	0.20047	0.43788	0.20636	0.46796	1.00E-02	8.21E-06	1.57E-05	8.45E-06	1.61E-05	1.0066E-02
520167.69	4259023.15	50019.17754	2.80632	0.29947	2.52645	0.2891	1.00E-02	1.15E-04	1.07E-05	1.03E-04	9.93E-06	1.0256E-02
520451.41	4258227.26	49978.86458	0.18772	0.33537	0.19182	0.3581	1.00E-02	7.69E-06	1.20E-05	7.85E-06	1.23E-05	1.0049E-02
520266.26	4258242.9	49978.74312	0.25435	1.07993	0.26585	1.19131	1.00E-02	1.04E-05	3.86E-05	1.09E-05	4.09E-05	1.0110E-02
520315.27	4258223.05	49969.18471	0.23081	0.75318	0.23779	0.81824	1.00E-02	9.45E-06	2.69E-05	9.74E-06	2.81E-05	1.0081E-02
520099.36	4258402.38	49956.11732	0.44004	14.01788	0.46876	15.73276	1.00E-02	1.80E-05	5.01E-04	1.92E-05	5.40E-04	1.1083E-02
520095.14	4258973.22	49932.56186	13.38111	0.37983	11.83297	0.35309	1.00E-02	5.48E-04	1.36E-05	4.84E-04	1.21E-05	1.1058E-02
520488.17	4258884.29	49923.47747	0.28108	0.14693	0.26883	0.15449	1.00E-02	1.15E-05	5.26E-06	1.10E-05	5.30E-06	1.0031E-02
520266.73	4259042.98	49887.79774	1.03819	0.20173	0.97811	0.21279	9.99E-03	4.25E-05	7.22E-06	4.00E-05	7.31E-06	1.0088E-02
520395.36	4258992.77	49884.01248	0.45465	0.15313	0.43236	0.1625	9.99E-03	1.86E-05	5.48E-06	1.77E-05	5.58E-06	1.0037E-02
520554.12	4258709.33	49855.29915	0.19708	0.15927	0.18896	0.16642	9.98E-03	8.07E-06	5.70E-06	7.74E-06	5.71E-06	1.0011E-02
520158.77	4259019.47	49841.20528	3.18862	0.30963	2.84869	0.29611	9.98E-03	1.31E-04	1.11E-05	1.17E-04	1.02E-05	1.0250E-02
520354.46	4258213.18	49835.52557	0.21536	0.5856	0.22107	0.62994	9.98E-03	8.82E-06	2.09E-05	9.05E-06	2.16E-05	1.0041E-02
520246.93	4259043.02	49834.12762	1.21655	0.21646	1.14023	0.22582	9.98E-03	4.98E-05	7.74E-06	4.67E-05	7.75E-06	1.0092E-02
520256.83	4259043	49822.00083	1.12107	0.20875	1.05353	0.21911	9.98E-03	4.59E-05	7.47E-06	4.31E-05	7.52E-06	1.0082E-02
520345.9	4259022.85	49814.4603	0.6054	0.16324	0.57474	0.17474	9.98E-03	2.48E-05	5.84E-06	2.35E-05	6.00E-06	1.0036E-02
520004.25	4258796.8	49803.90937	1.74678	0.65376	2.09638	0.63103	9.97E-03	7.15E-05	2.34E-05	8.58E-05	2.17E-05	1.0176E-02
520365.69	4259012.82	49802.85003	0.53797	0.15836	0.5114	0.16895	9.97E-03	2.20E-05	5.66E-06	2.09E-05	5.80E-06	1.0028E-02
520246.66	4258252.84	49796.45581	0.26476	1.27394	0.27867	1.41373	9.97E-03	1.08E-05	4.56E-05	1.14E-05	4.85E-05	1.0089E-02
520237.03	4259043.03	49778.72409	1.32514	0.22463	1.23836	0.23262	9.97E-03	5.43E-05	8.03E-06	5.07E-05	7.99E-06	1.0090E-02
520446.73	4258941.48	49777.30603	0.34463	0.14864	0.32798	0.15634	9.97E-03	1.41E-05	5.32E-06	1.34E-05	5.37E-06	1.0007E-02
520285.87	4258232.96	49715.23902	0.24365	0.92823	0.25303	1.01746	9.96E-03	9.98E-06	3.32E-05	1.04E-05	3.49E-05	1.0045E-02
520276.63	4259042.97	49700.08087	0.96315	0.1949	0.90916	0.20646	9.95E-03	3.94E-05	6.97E-06	3.72E-05	7.09E-06	1.0044E-02
520460.31	4258231.06	49688.35545	0.18516	0.32037	0.18877	0.3418	9.95E-03	7.58E-06	1.15E-05	7.73E-06	1.17E-05	9.9893E-03
520413.19	4258213.36	49681.83144	0.19724	0.41455	0.203	0.44274	9.95E-03	8.08E-06	1.48E-05	8.31E-06	1.52E-05	9.9959E-03
520025.9	4258874.69	49671.07449	2.97054	0.478	3.73421	0.46695	9.95E-03	1.22E-04	1.71E-05	1.53E-04	1.60E-05	1.0255E-02
520168.16	4258312.6	49669.10503	0.32169	3.01447	0.33777	3.44665	9.95E-03	1.32E-05	1.08E-04	1.38E-05	1.18E-04	1.0200E-02
520420.69	4258972.28	49635.33393	0.39637	0.15032	0.37739	0.15858	9.94E-03	1.62E-05	5.38E-06	1.55E-05	5.44E-06	9.9827E-03
520497.49	4258870.43	49589.53069	0.26876	0.14647	0.25723	0.1539	9.93E-03	1.10E-05	5.24E-06	1.05E-05	5.28E-06	9.9630E-03
520149.85	4259015.79	49578.11913	3.66539	0.31928	3.24685	0.30267	9.93E-03	1.50E-04	1.14E-05	1.33E-04	1.04E-05	1.0234E-02
520158.34	4258322.56	49575.84239	0.33155	3.48488	0.34726	3.99903	9.93E-03	1.36E-05	1.25E-04	1.42E-05	1.37E-04	1.0218E-02
520227.13	4259043.05	49557.11074	1.44862	0.23309	1.34917	0.23934	9.92E-03	5.93E-05	8.34E-06	5.52E-05	8.22E-06	1.0056E-02
520000.14	4258762.77	49512.7052	1.51737	0.77591	1.82693	0.73932	9.92E-03	6.21E-05	2.78E-05	7.48E-05	2.54E-05	1.0106E-02
520550.12	4258742.83	49510.13172	0.20404	0.15508	0.19546	0.16156	9.92E-03	8.35E-06	5.55E-06	8.00E-06	5.55E-06	9.9425E-03
520487.38	4258252.66	49492.95819	0.17858	0.27941	0.18	0.29694	9.91E-03	7.31E-06	9.99E-06	7.37E-06	1.02E-05	9.9465E-03
520187.51	4259033.12	49480.79549	2.17737	0.27429	1.98822	0.2706	9.91E-03	8.92E-05	9.81E-06	8.14E-05	9.29E-06	1.0099E-02
520177.98	4258302.63	49446.00498	0.31167	2.64031	0.32825	3.00201	9.90E-03	1.28E-05	9.44E-05	1.34E-05	1.03E-04	1.0126E-02
519999.42	4258736.93	49444.58686	1.40886	0.89888	1.70178	0.8466	9.90E-03	5.77E-05	3.22E-05	6.97E-05	2.91E-05	1.0091E-02
520344.67	4258213.15	49384.24692	0.21796	0.62301	0.2238	0.67146	9.89E-03	8.92E-06	2.23E-05	9.16E-06	2.31E-05	9.9533E-03
520326.12	4259032.89	49377.9411	0.68499	0.16918	0.64958	0.18128	9.89E-03	2.80E-05	6.05E-06	2.66E-05	6.22E-06	9.9555E-03
520286.53	4259042.95	49323.81678	0.89539	0.18821	0.84601	0.20009	9.88E-03	3.67E-05	6.73E-06	3.46E-05	6.87E-06	9.9627E-03
520437.86	4258955.16	49313.96182	0.36195	0.14858	0.34439	0.15633	9.88E-03	1.48E-05	5.31E-06	1.41E-05	5.37E-06	9.9154E-03
520522.21	4258307.63	49293.71335	0.17249	0.23699	0.17205	0.24895	9.87E-03	7.06E-06	8.48E-06	7.04E-06	8.55E-06	9.9029E-03
520385.47	4259002.79	49285.24123	0.48054	0.1538	0.45705	0.16353	9.87E-03	1.97E-05	5.50E-06	1.87E-05	5.61E-06	9.9195E-03
520140.93	4259012.11	49256.28601	4.2789	0.32828	3.75292	0.30877	9.86E-03	1.75E-04	1.17E-05	1.54E-04	1.06E-05	1.0215E-02
520061.39	4258939.3	49247.53632	9.06667	0.40428	19.47478	0.38534	9.86E-03	3.71E-04	1.45E-05	7.97E-04	1.32E-05	1.1059E-02
520051.52	4258925.24	49241.67015	6.24871	0.41594	10.25635	0.40004	9.86E-03	2.56E-04	1.49E-05	4.20E-04	1.37E-05	1.0566E-02
520422.98	4258213.39	49210.04238	0.19393	0.39295	0.19948	0.41939	9.85E-03	7.94E-06	1.41E-05	8.17E-06	1.44E-05	9.8995E-03
520217.23	4259043.07	49203.63464	1.59085	0.24173	1.47568	0.24586	9.85E-03	6.51E-05	8.65E-06	6.04E-05	8.44E-06	9.9963E-03
520469.2	4258234.87	49177.75301	0.18242	0.30666	0.18557	0.3267	9.85E-03	7.47E-06	1.10E-05	7.60E-06	1.12E-05	9.8858E-03
520473.72	4258910.29	49173.11027	0.30212	0.14624	0.28823	0.1538	9.85E-03	1.24E-05	5.23E-06	1.18E-05	5.28E-06	9.8823E-03
520404.09	4258989.16	49167.46623	0.43367	0.15092	0.41233	0.1599	9.85E-03	1.78E-05	5.40E-06	1.69E-05	5.49E-06	9.8920E-03
520305.48	4258223.02	49150.71808	0.23316	0.80684	0.24084	0.87923	9.84E-03	9.55E-06	2.89E-05	9.86E-06	3.02E-05	9.9216E-03
520227.05	4258262.78	49084.97638	0.27436	1.52854	0.29036	1.70522	9.83E-03	1.12E-05	5.47E-05	1.19E-05	5.85E-05	9.9663E-03
520538.16	4258478.07	49075.74495	0.18586	0.19953	0.18235	0.21084	9.83E-03	7.61E-06	7.14E-06	7.47E-06	7.24E-06	9.8575E-03
520507.07	4258856.46	49051.0903	0.25678	0.14608	0.246	0.15327	9.82E-03	1.05E-05	5.23E-06	1.01E-05	5.26E-06	9.8542E-03
520086.07	4258969.48	49050.76739	14.12102	0.38064	18.36207	0.35556	9.82E-03	5.78E-04	1.36E-05	7.52E-04	1.22E-05	1.1179E-02
520502.79	4258269.27	49046.58877	0.17491	0.26023	0.17504	0.27525	9.82E-03	7.16E-06	9.31E-06	7.17E-06	9.45E-06	9.8553E-03
520029.77	4258589.27	49037.22162	1.17454	3.3659	1.54052	2.76174	9.82E-03	4.81E-05	1.20E-04	6.31E-05	9.48E-05	1.0147E-02
520187.8	4258292.66	49022.26699	0.30174	2.3358	0.31865	2.64153	9.82E-03	1.24E-05	8.35E-05	1.30E-05	9.07E-05	1.0017E-02
520138.7	4258342.5	49006.32667	0.35212	4.86375	0.36653	5.72042	9.81E-03	1.44E-05	1.74E-04	1.50E-05	1.96E-04	1.0214E-02
520132.02	4259008.43	48892.27455	5.09011	0.33638	4.41394	0.31434	9.79E-03	2.08E-04	1.20E-05	1.81E-04	1.08E-05	1.0203E-02
520296.43	4259042.93	48887.23938	0.83443	0.18199	0.78915	0.19404	9.79E-03	3.42E-05	6.51E-06	3.23E-05	6.66E-06	9.8700E-03
520041.4	4258911.07	48878.88804	4.51393	0.42801	6.30897	0.41506	9.79E-03	1.85E-04	1.53E-05	2.58E-04	1.42E-05	1.0261E-02
520334.88	4258213.12	48842.46983	0.22046	0.6637	0.22658	0.71696	9.78E-03	9.03E-06	2.37E-05	9.28E-06	2.46E-05	9.8480E-03
520511.98	4258283.22	48832.89653	0.17314	0.24963	0.17277	0.26301	9.78E-03	7.09E-06	8.93E-06	7.07E-06	9.03E-06	9.8116E-03
520542.05	4258410.67	48829.29932	0.17703	0.20518	0.17489	0.21635	9.78E-03	7.25E-06	7.34E-06	7.16E-06	7.43E-06	9.8079E-03
520019.89	4258618.41	48821.82738	1.21338	2.36728	1.55596	2.04395	9.78E-03	4.97E-05	8.47E-05	6.37E-05	7.02E-05	1.0045E-02
520464.41	4258924.15	48795.56843	0.31602	0.14634	0.30115	0.15388	9.77E-03	1.29E-05	5.23E-06	1.23E-05	5.28E-06	9.8078E-03
520007.12	4258664.6	48794.9619	1.24983	1.49798	1.54488	1.35767	9.77E-03	5.12E-05	5.36E-05	6.33E-05	4.66E-05	9.9865E-03
520355.8	4259022.84	48779.54041	0.5706	0.15898	0.54167	0.16998	9.77E-03	2.34E-05	5.69E-06	2.22E-05	5.84E-06	9.8258E-03
520541.61	4258435.38	48768.84093	0.17992	0.2026	0.17741	0.21358	9.77E-03	7.37E-06	7.25E-06	7.26E-06	7.33E-06	9.7958E-03
520553.65	4258734.39	48768.36828	0.20039	0.15503	0.19195	0.16164	9.77E-03	8.20E-06	5.55E-06	7.86E-06	5.55E-06	9.7937E-03
520207.32	4259043.08	48744.07634	1.75653	0.25049	1.6219	0.25214	9.76E-03	7.19E-05	8.96E-06	6.64E-05	8.66E-06	9.9176E-03
520177.6	4259033.13	48709.51663	2.45858	0.28306	2.23125	0.27598	9.75E-03	1.01E-04	1.01E-05	9.14E-05	9.47E-06	9.9664E-03
520432.76	4258213.42	48673.55608	0.19063	0.37283	0.19587	0.39779	9.75E-03	7.81E-06	1.33E-05	8.02E-06	1.37E-05	9.7904E-03
520000.62	4258788.06	48667.10484	1.61024	0.67614	1.92163	0.65062	9.75E-03	6.59E-05	2.42E-05	7.87E-05	2.23E-05	9.9374E-03
520109.21	4258382.41	48663.60889	0.40343	9.86327	0.42459	11.85859	9.75E-03	1.65E-05	3.53E-04	1.74E-05	4.07E-04	1.0539E-02
520013.67	4258849.66	48637.59529	2.23652	0.51788	2.71056	0.50576	9.74E-03	9.16E-05	1.85E-05	1.11E-04	1.74E-05	9.9788E-03
520027.27	4258885.25	48631.13569	3.08733	0.45838	3.90798	0.44787	9.74E-03	1.26E-04	1.64E-05	1.60E-04	1.54E-05	1.0057E-02
520539.44	4258365.07	48627.52332	0.17282	0.21289	0.17207	0.2247	9.74E-03	7.08E-06	7.61E-06	7.05E-06	7.71E-06	9.7678E-03
520008.1	4258830.19	48601.46538	1.96654	0.55895	2.35671	0.54413	9.73E-03	8.05E-05	2.00E-05	9.65E-05	1.87E-05	9.9488E-03
520557.69	4258700.8	48598.35108	0.1936	0.15932	0.18577	0.16639	9.73E-03	7.93E-06	5.70E-06	7.61E-06	5.71E-06	9.7594E-03
520429.13	4258968.78	48595.17174	0.37956	0.14814	0.36122	0.15607	9.73E-03	1.55E-05	5.30E-06	1.48E-05	5.36E-06	9.7728E-03
520276.08	4258232.93	48581.26838	0.24548	1.00212	0.25603	1.10198	9.73E-03	1.01E-05	3.58E-05	1.05E-05	3.78E-05	9.8233E-03
520336.02	4259032.87	48576.61227	0.64365	0.16444	0.61053	0.17619	9.73E-03	2.64E-05	5.88E-06	2.50E-05	6.05E-06	9.7914E-03
520256.48	4258242.87	48565.65748	0.25559	1.17375	0.26841	1.29839	9.73E-03	1.05E-05	4.20E-05	1.10E-05	4.46E-05	9.8339E-03
520478.09	4258238.67	48558.12968	0.17963	0.2937	0.18223	0.3125	9.72E-03	7.35E-06	1.05E-05	7.46E-06	1.07E-05	9.7605E-03
520375.59	4259012.8	48544.57112	0.50838	0.15446	0.48339	0.16455	9.72E-03	2.08E-05	5.52E-06	1.98E-05	5.65E-06	9.7735E-03
520540.93	4258375.72	48539.10895	0.17346	0.21015	0.1723	0.22189	9.72E-03	7.10E-06	7.52E-06	7.05E-06	7.62E-06	9.7499E-03
520197.62	4258282.69	48516.19038	0.29214	2.08264	0.30899	2.3465	9.72E-03	1.20E-05	7.45E-05	1.27E-05	8.06E-05	9.8957E-03
520538.17	4258354.51	48474.97245	0.17204	0.2154	0.17161	0.22716	9.71E-03	7.04E-06	7.70E-06	7.03E-06	7.80E-06	9.7373E-03
520306.33	4259042.92	48470.92257	0.78014	0.17631	0.73842	0.1884	9.71E-03	3.19E-05	6.31E-06	3.02E-05	6.47E-06	9.7819E-03
520039.65	4258560.14	48467.78435	1.07981	5.00718	1.37521	3.83459	9.71E-03	4.42E-05	1.79E-04	5.63E-05	1.32E-04	1.0118E-02
520496.36	4258256.51	48432.04771	0.17551	0.26842	0.17638	0.28466	9.70E-03	7.19E-06	9.60E-06	7.22E-06	9.77E-06	9.7330E-03
520412.82	4258985.54	48355.64303	0.41396	0.14896	0.39376	0.15754	9.68E-03	1.69E-05	5.33E-06	1.61E-05	5.41E-06	9.7277E-03
520455.3	4258937.93	48323.80362	0.33048	0.14626	0.31466	0.15377	9.68E-03	1.35E-05	5.23E-06	1.29E-05	5.28E-06	9.7144E-03
520123.1	4259004.75	48286.17482	6.14886	0.34272	5.27964	0.31889	9.67E-03	2.52E-04	1.23E-05	2.16E-04	1.09E-05	1.0161E-02
520487.45	4258894.6	48274.65997	0.28282	0.14496	0.27064	0.15233	9.67E-03	1.16E-05	5.19E-06	1.11E-05	5.23E-06	9.7007E-03
520516.95	4258842.36	48255.50498	0.24515	0.14552	0.23493	0.15242	9.66E-03	1.00E-05	5.21E-06	9.62E-06	5.23E-06	9.6939E-03
520325.09	4258213.08	48217.00653	0.22287	0.70815	0.22942	0.76702	9.66E-03	9.13E-06	2.53E-05	9.39E-06	2.63E-05	9.7263E-03
520295.69	4258222.99	48209.34018	0.23524	0.86639	0.24387	0.9469	9.65E-03	9.63E-06	3.10E-05	9.99E-06	3.25E-05	9.7377E-03
520095.76	4258983.47	48207.4656	13.14477	0.36665	11.61083	0.34096	9.65E-03	5.38E-04	1.31E-05	4.75E-04	1.17E-05	1.0693E-02
520532.42	4258809.04	48203.07305	0.2268	0.1474	0.2174	0.15385	9.65E-03	9.29E-06	5.27E-06	8.90E-06	5.28E-06	9.6821E-03
520521.4	4258297.26	48189.59233	0.17123	0.23901	0.17074	0.25108	9.65E-03	7.01E-06	8.55E-06	6.99E-06	8.62E-06	9.6818E-03
520537.07	4258344.03	48129.181	0.17114	0.218	0.17092	0.22959	9.64E-03	7.01E-06	7.80E-06	7.00E-06	7.88E-06	9.6682E-03
520383.85	4258203.27	48123.85701	0.20274	0.49326	0.2083	0.52768	9.64E-03	8.30E-06	1.76E-05	8.53E-06	1.81E-05	9.6900E-03
520197.42	4259043.1	48110.94338	1.95026	0.25912	1.79156	0.25798	9.63E-03	7.99E-05	9.27E-06	7.34E-05	8.86E-06	9.8062E-03
520030.99	4258896.78	48106.04437	3.39741	0.44111	4.38643	0.43048	9.63E-03	1.39E-04	1.58E-05	1.80E-04	1.48E-05	9.9832E-03
520236.87	4258252.81	48093.07945	0.26512	1.39599	0.2801	1.55277	9.63E-03	1.09E-05	4.99E-05	1.15E-05	5.33E-05	9.7569E-03
520128.88	4258352.47	48084.69957	0.36166	5.9459	0.37667	7.0405	9.63E-03	1.48E-05	2.13E-04	1.54E-05	2.42E-04	1.0114E-02
520393.64	4258203.3	48065.48918	0.19986	0.46604	0.20551	0.49793	9.63E-03	8.18E-06	1.67E-05	8.41E-06	1.71E-05	9.6761E-03
520451.37	4258217.22	48061.98886	0.18522	0.33746	0.18958	0.36004	9.63E-03	7.58E-06	1.21E-05	7.76E-06	1.24E-05	9.6648E-03
520539.41	4258792.35	48054.70003	0.21877	0.14863	0.20972	0.1549	9.62E-03	8.96E-06	5.32E-06	8.59E-06	5.32E-06	9.6518E-03
520442.55	4258213.45	48033.77982	0.1873	0.35409	0.19215	0.37771	9.62E-03	7.67E-06	1.27E-05	7.87E-06	1.30E-05	9.6606E-03
520015.45	4258860.38	48019.32612	2.34085	0.49556	2.84744	0.48459	9.62E-03	9.58E-05	1.77E-05	1.17E-04	1.66E-05	9.8633E-03
520496.62	4258880.8	48007.09571	0.27075	0.14436	0.25904	0.15169	9.61E-03	1.11E-05	5.16E-06	1.06E-05	5.21E-06	9.6461E-03
520541.44	4258460.8	47989.63247	0.18249	0.19959	0.17951	0.21061	9.61E-03	7.47E-06	7.14E-06	7.35E-06	7.23E-06	9.6398E-03
520374.06	4258203.24	47985.81695	0.20541	0.52281	0.21096	0.55988	9.61E-03	8.41E-06	1.87E-05	8.64E-06	1.92E-05	9.6648E-03
520004.51	4258821.54	47958.07566	1.81746	0.57709	2.16814	0.56058	9.60E-03	7.44E-05	2.06E-05	8.88E-05	1.92E-05	9.8073E-03
520316.23	4259042.9	47953.00638	0.73062	0.17102	0.69206	0.18301	9.60E-03	2.99E-05	6.12E-06	2.83E-05	6.28E-06	9.6739E-03
519998.44	4258710.45	47935.97572	1.27751	1.04715	1.53823	0.97458	9.60E-03	5.23E-05	3.75E-05	6.30E-05	3.35E-05	9.7860E-03
520486.98	4258242.48	47890.98654	0.17691	0.28068	0.17879	0.29851	9.59E-03	7.24E-06	1.00E-05	7.32E-06	1.02E-05	9.6257E-03
520542.9	4258784	47882.31686	0.21483	0.14931	0.20599	0.15547	9.59E-03	8.80E-06	5.34E-06	8.43E-06	5.34E-06	9.6170E-03
520557.18	4258725.96	47879.43494	0.19681	0.15476	0.18851	0.16151	9.59E-03	8.06E-06	5.54E-06	7.72E-06	5.54E-06	9.6154E-03
520460.18	4258221	47868.81736	0.1829	0.32224	0.1868	0.34364	9.59E-03	7.49E-06	1.15E-05	7.65E-06	1.18E-05	9.6248E-03
520403.43	4258203.33	47864.39259	0.19686	0.44082	0.20257	0.47045	9.59E-03	8.06E-06	1.58E-05	8.29E-06	1.62E-05	9.6338E-03
520364.28	4258203.21	47863.65092	0.20819	0.55436	0.21362	0.59498	9.59E-03	8.52E-06	1.98E-05	8.75E-06	2.04E-05	9.6429E-03
520446.37	4258951.64	47842.2585	0.34629	0.14614	0.32956	0.15367	9.58E-03	1.42E-05	5.23E-06	1.35E-05	5.28E-06	9.6192E-03
520207.44	4258272.72	47829.42337	0.28265	1.8711	0.29931	2.09894	9.58E-03	1.16E-05	6.69E-05	1.23E-05	7.21E-05	9.7413E-03
520000.68	4258691.74	47826.4751	1.24269	1.19268	1.50741	1.09953	9.58E-03	5.09E-05	4.27E-05	6.17E-05	3.77E-05	9.7709E-03
520167.7	4259033.15	47822.2248	2.80102	0.29107	2.52489	0.28061	9.58E-03	1.15E-04	1.04E-05	1.03E-04	9.63E-06	9.8152E-03
520052.54	4258935.65	47765.75931	6.4978	0.40043	10.91474	0.38494	9.57E-03	2.66E-04	1.43E-05	4.47E-04	1.32E-05	1.0306E-02
520395.37	4259002.77	47762.24981	0.45531	0.15005	0.43291	0.15932	9.57E-03	1.86E-05	5.37E-06	1.77E-05	5.47E-06	9.6122E-03
520158.85	4259029.5	47727.57021	3.1827	0.30072	2.84762	0.28726	9.56E-03	1.30E-04	1.08E-05	1.17E-04	9.86E-06	9.8256E-03
520246.94	4259053.02	47696.97813	1.2172	0.21206	1.14053	0.22077	9.55E-03	4.98E-05	7.59E-06	4.67E-05	7.58E-06	9.6637E-03
520345.92	4259032.85	47689.04333	0.60573	0.15996	0.5746	0.17129	9.55E-03	2.48E-05	5.72E-06	2.35E-05	5.88E-06	9.6103E-03
520266.75	4259052.98	47687.18866	1.03825	0.19766	0.97741	0.20817	9.55E-03	4.25E-05	7.07E-06	4.00E-05	7.15E-06	9.6468E-03
520114.18	4259001.06	47673.7991	7.64154	0.34781	6.5048	0.3229	9.55E-03	3.13E-04	1.24E-05	2.66E-04	1.11E-05	1.0150E-02
520256.85	4259053	47665.86643	1.12114	0.20452	1.05313	0.21428	9.55E-03	4.59E-05	7.32E-06	4.31E-05	7.36E-06	9.6494E-03
520365.7	4259022.82	47665.68431	0.53853	0.155	0.5113	0.16548	9.55E-03	2.20E-05	5.54E-06	2.09E-05	5.68E-06	9.5999E-03
520237.04	4259053.03	47660.96786	1.326	0.22	1.23907	0.22731	9.54E-03	5.43E-05	7.87E-06	5.07E-05	7.80E-06	9.6655E-03
519996.47	4258753.92	47645.45905	1.38461	0.80341	1.66394	0.76163	9.54E-03	5.67E-05	2.87E-05	6.81E-05	2.61E-05	9.7214E-03
520413.22	4258203.36	47615.5076	0.19389	0.41727	0.19952	0.44508	9.54E-03	7.94E-06	1.49E-05	8.17E-06	1.53E-05	9.5820E-03
520506.02	4258866.9	47603.57741	0.25893	0.14404	0.24801	0.15119	9.53E-03	1.06E-05	5.15E-06	1.02E-05	5.19E-06	9.5644E-03
520276.65	4259052.97	47582.03571	0.96343	0.19108	0.90865	0.2021	9.53E-03	3.94E-05	6.83E-06	3.72E-05	6.94E-06	9.6194E-03
520511.41	4258272.96	47580.52658	0.17181	0.25097	0.17165	0.26477	9.53E-03	7.03E-06	8.98E-06	7.03E-06	9.09E-06	9.5608E-03
520150	4259025.84	47557.24639	3.65947	0.30987	3.24619	0.2935	9.52E-03	1.50E-04	1.11E-05	1.33E-04	1.01E-05	9.8279E-03
520042.59	4258921.55	47540.13183	4.69109	0.41167	6.65115	0.39901	9.52E-03	1.92E-04	1.47E-05	2.72E-04	1.37E-05	1.0013E-02
520354.49	4258203.18	47530.3932	0.21072	0.58881	0.21623	0.63316	9.52E-03	8.63E-06	2.11E-05	8.85E-06	2.17E-05	9.5789E-03
520315.3	4258213.05	47513.57669	0.22517	0.75691	0.23233	0.82227	9.52E-03	9.22E-06	2.71E-05	9.51E-06	2.82E-05	9.5893E-03
520482.44	4258906.68	47483.40161	0.29026	0.14405	0.27745	0.15138	9.51E-03	1.19E-05	5.15E-06	1.14E-05	5.20E-06	9.5428E-03
520437.58	4258965.28	47477.54981	0.3636	0.146	0.34605	0.15364	9.51E-03	1.49E-05	5.22E-06	1.42E-05	5.27E-06	9.5476E-03
520469	4258224.77	47457.1328	0.18037	0.30839	0.18385	0.32852	9.50E-03	7.39E-06	1.10E-05	7.53E-06	1.13E-05	9.5412E-03
520059.44	4258511.57	47456.8268	0.84276	13.16372	0.97736	7.88119	9.50E-03	3.45E-05	4.71E-04	4.00E-05	2.71E-04	1.0320E-02
520421.55	4258981.93	47456.455	0.39544	0.14711	0.37644	0.15528	9.50E-03	1.62E-05	5.26E-06	1.54E-05	5.33E-06	9.5460E-03
520227.14	4259053.05	47442.03964	1.44947	0.22809	1.34986	0.23367	9.50E-03	5.93E-05	8.16E-06	5.53E-05	8.02E-06	9.6317E-03
519997	4258779.31	47369.16839	1.48461	0.69908	1.76203	0.6704	9.49E-03	6.08E-05	2.50E-05	7.21E-05	2.30E-05	9.6673E-03
520473.05	4258920.57	47353.35896	0.30386	0.14403	0.2898	0.15141	9.48E-03	1.24E-05	5.15E-06	1.19E-05	5.20E-06	9.5178E-03
520266.3	4258232.9	47337.34069	0.24689	1.08527	0.25868	1.19695	9.48E-03	1.01E-05	3.88E-05	1.06E-05	4.11E-05	9.5806E-03
520187.52	4259043.12	47334.91683	2.17347	0.2673	1.98655	0.26319	9.48E-03	8.90E-05	9.56E-06	8.13E-05	9.04E-06	9.6684E-03
520549.89	4258767.31	47302.94385	0.20719	0.15022	0.19862	0.15625	9.47E-03	8.48E-06	5.37E-06	8.13E-06	5.36E-06	9.5004E-03
520545.34	4258419.3	47296.70806	0.17629	0.20181	0.17397	0.21263	9.47E-03	7.22E-06	7.22E-06	7.12E-06	7.30E-06	9.5007E-03
520326.13	4259042.89	47283.17902	0.68528	0.16592	0.64926	0.17773	9.47E-03	2.81E-05	5.93E-06	2.66E-05	6.10E-06	9.5358E-03
520086.77	4258979.76	47282.44965	15.64038	0.36697	17.6955	0.34296	9.47E-03	6.40E-04	1.31E-05	7.25E-04	1.18E-05	1.0859E-02
520141.15	4259022.19	47276.79051	4.26484	0.31821	3.74668	0.29917	9.47E-03	1.75E-04	1.14E-05	1.53E-04	1.03E-05	9.8175E-03
520017.05	4258871.04	47274.11061	2.44107	0.47464	2.97943	0.4646	9.47E-03	9.99E-05	1.70E-05	1.22E-04	1.60E-05	9.7222E-03
520561.26	4258692.26	47247.31771	0.1902	0.15933	0.18261	0.16626	9.46E-03	7.79E-06	5.70E-06	7.48E-06	5.71E-06	9.4886E-03
520286.55	4259052.95	47230.21974	0.89566	0.18461	0.84558	0.196	9.46E-03	3.67E-05	6.60E-06	3.46E-05	6.73E-06	9.5431E-03
520423.01	4258203.39	47207.58221	0.19078	0.39549	0.19631	0.42157	9.45E-03	7.81E-06	1.41E-05	8.04E-06	1.45E-05	9.4984E-03
520505.33	4258260.35	47206.11038	0.17242	0.25814	0.1728	0.27315	9.45E-03	7.06E-06	9.23E-06	7.08E-06	9.38E-06	9.4864E-03
520385.49	4259012.79	47193.54807	0.48109	0.15068	0.45739	0.1603	9.45E-03	1.97E-05	5.39E-06	1.87E-05	5.50E-06	9.5005E-03
520285.9	4258222.96	47179.29656	0.23706	0.93275	0.24678	1.02241	9.45E-03	9.71E-06	3.34E-05	1.01E-05	3.51E-05	9.5366E-03
520000.93	4258812.89	47175.57473	1.68102	0.59594	1.99777	0.57743	9.45E-03	6.88E-05	2.13E-05	8.18E-05	1.98E-05	9.6393E-03
520520.67	4258286.94	47136.20059	0.17001	0.24061	0.16951	0.25298	9.44E-03	6.96E-06	8.61E-06	6.94E-06	8.69E-06	9.4709E-03
520531.08	4258311.42	47116.42507	0.16921	0.22808	0.16884	0.2394	9.44E-03	6.93E-06	8.16E-06	6.91E-06	8.22E-06	9.4659E-03
520217.26	4258262.75	47109.55263	0.27357	1.69083	0.28971	1.89082	9.43E-03	1.12E-05	6.05E-05	1.19E-05	6.49E-05	9.5828E-03
520217.24	4259053.07	47104.65721	1.59171	0.23638	1.47656	0.23986	9.43E-03	6.52E-05	8.45E-06	6.05E-05	8.23E-06	9.5757E-03
520404.04	4258999.18	47100.01645	0.43449	0.14791	0.41307	0.15683	9.43E-03	1.78E-05	5.29E-06	1.69E-05	5.38E-06	9.4778E-03
520105.26	4258997.38	47056.59023	9.84359	0.35157	8.35219	0.32636	9.42E-03	4.03E-04	1.26E-05	3.42E-04	1.12E-05	1.0193E-02
520344.7	4258203.15	47054.8082	0.21308	0.62631	0.21886	0.67477	9.42E-03	8.72E-06	2.24E-05	8.96E-06	2.32E-05	9.4866E-03
520527.7	4258827.9	47052.61473	0.23323	0.14495	0.22367	0.15149	9.42E-03	9.55E-06	5.18E-06	9.16E-06	5.20E-06	9.4520E-03

520246.69	4258242.84	47033.02363	0.25622	1.28084	0.27021	1.42013	9.42E-03	1.05E-05	4.58E-05	1.11E-05	4.88E-05	9.5351E-03
519995.71	4258727.97	47019.30662	1.28073	0.92882	1.53493	0.87093	9.42E-03	5.24E-05	3.32E-05	6.28E-05	2.99E-05	9.5947E-03
520057.87	4258947.84	46991.21862	7.93632	0.38763	16.08399	0.37096	9.41E-03	3.25E-04	1.39E-05	6.59E-04	1.27E-05	1.0421E-02
520463.87	4258934.38	46985.18364	0.3177	0.14407	0.3027	0.15141	9.41E-03	1.30E-05	5.15E-06	1.24E-05	5.20E-06	9.4452E-03
520032.39	4258907.35	46985.10108	3.5356	0.424	4.60874	0.41365	9.41E-03	1.45E-04	1.52E-05	1.89E-04	1.42E-05	9.7722E-03
520545.94	4258395	46980.01792	0.17331	0.20406	0.17146	0.2152	9.41E-03	7.10E-06	7.30E-06	7.02E-06	7.39E-06	9.4372E-03
520515.67	4258852.89	46978.33134	0.2475	0.14356	0.23719	0.15045	9.41E-03	1.01E-05	5.13E-06	9.71E-06	5.17E-06	9.4382E-03
520495.87	4258246.29	46967.39185	0.17398	0.26982	0.17533	0.2864	9.41E-03	7.12E-06	9.65E-06	7.18E-06	9.83E-06	9.4396E-03
520007.12	4258655.32	46921.22565	1.18387	1.58573	1.46321	1.42981	9.40E-03	4.85E-05	5.67E-05	5.99E-05	4.91E-05	9.6108E-03
520477.81	4258228.54	46913.04199	0.17774	0.2954	0.18075	0.31431	9.39E-03	7.28E-06	1.06E-05	7.40E-06	1.08E-05	9.4310E-03
520132.29	4259018.53	46905.24451	5.05659	0.32557	4.39435	0.30425	9.39E-03	2.07E-04	1.16E-05	1.80E-04	1.04E-05	9.8025E-03
520560.71	4258717.52	46900.47111	0.19334	0.15466	0.18528	0.16148	9.39E-03	7.92E-06	5.53E-06	7.59E-06	5.54E-06	9.4190E-03
520553.39	4258758.96	46882.29875	0.2035	0.1505	0.19503	0.15654	9.39E-03	8.33E-06	5.38E-06	7.99E-06	5.37E-06	9.4159E-03
520296.45	4259052.93	46829.93844	0.83473	0.17856	0.78872	0.19016	9.38E-03	3.42E-05	6.39E-06	3.23E-05	6.53E-06	9.4577E-03
520119.06	4258362.44	46794.34148	0.37086	7.49483	0.38709	8.9918	9.37E-03	1.52E-05	2.68E-04	1.58E-05	3.09E-04	9.9790E-03
520432.8	4258203.42	46730.99499	0.18767	0.37518	0.19297	0.39978	9.36E-03	7.68E-06	1.34E-05	7.90E-06	1.37E-05	9.4012E-03
520355.82	4259032.84	46718.38461	0.57091	0.15577	0.54159	0.16664	9.36E-03	2.34E-05	5.57E-06	2.22E-05	5.72E-06	9.4128E-03
520305.51	4258213.02	46704.60593	0.22725	0.81075	0.23524	0.88338	9.35E-03	9.30E-06	2.90E-05	9.63E-06	3.03E-05	9.4315E-03
520207.34	4259053.08	46691.53866	1.75726	0.24489	1.62363	0.2459	9.35E-03	7.19E-05	8.76E-06	6.65E-05	8.44E-06	9.5062E-03
520177.62	4259043.13	46616.80627	2.45314	0.27555	2.22903	0.26823	9.34E-03	1.00E-04	9.86E-06	9.13E-05	9.21E-06	9.5464E-03
520336.04	4259042.87	46529.95037	0.64379	0.16116	0.61003	0.17268	9.32E-03	2.64E-05	5.76E-06	2.50E-05	5.93E-06	9.3813E-03
520454.87	4258948.11	46513.36926	0.33217	0.14391	0.31627	0.15124	9.31E-03	1.36E-05	5.15E-06	1.29E-05	5.19E-06	9.3518E-03
520334.91	4258203.12	46497.69188	0.21535	0.66708	0.22154	0.72034	9.31E-03	8.82E-06	2.39E-05	9.07E-06	2.47E-05	9.3783E-03
520306.35	4259052.92	46489.15909	0.78047	0.17307	0.73813	0.18473	9.31E-03	3.20E-05	6.19E-06	3.02E-05	6.34E-06	9.3848E-03
520375.61	4259022.8	46484.56089	0.50886	0.15129	0.48344	0.16127	9.31E-03	2.08E-05	5.41E-06	1.98E-05	5.54E-06	9.3607E-03
520495.83	4258891.13	46471.2192	0.27256	0.14241	0.2608	0.14961	9.31E-03	1.12E-05	5.09E-06	1.07E-05	5.14E-06	9.3386E-03
520430.28	4258978.31	46458.89721	0.37811	0.1451	0.36	0.15291	9.30E-03	1.55E-05	5.19E-06	1.47E-05	5.25E-06	9.3447E-03
520049.52	4258531.01	46437.26878	0.91467	7.68277	1.09101	5.4396	9.30E-03	3.75E-05	2.75E-04	4.47E-05	1.87E-04	9.8434E-03
520018.5	4258881.63	46432.9775	2.53585	0.45507	3.10831	0.44579	9.30E-03	1.04E-04	1.63E-05	1.27E-04	1.53E-05	9.5615E-03
520096.34	4258993.7	46419.55057	12.92071	0.35371	11.36419	0.32915	9.30E-03	5.29E-04	1.27E-05	4.65E-04	1.13E-05	1.0314E-02
520123.44	4259014.88	46416.66381	6.11391	0.3316	5.25431	0.3086	9.30E-03	2.50E-04	1.19E-05	2.15E-04	1.06E-05	9.7835E-03
520168.19	4258302.6	46400.22745	0.30687	3.02833	0.32086	3.45857	9.29E-03	1.26E-05	1.08E-04	1.31E-05	1.19E-04	9.5450E-03
520412.7	4258995.59	46353.44842	0.41495	0.14598	0.39464	0.15451	9.28E-03	1.70E-05	5.22E-06	1.62E-05	5.30E-06	9.3266E-03
520486.62	4258232.31	46330.01876	0.17514	0.28292	0.17753	0.30083	9.28E-03	7.17E-06	1.01E-05	7.27E-06	1.03E-05	9.3131E-03
520158.37	4258312.56	46301.40595	0.31576	3.49818	0.32913	4.01805	9.27E-03	1.29E-05	1.25E-04	1.35E-05	1.38E-04	9.5620E-03
520227.08	4258252.78	46296.22679	0.26475	1.53659	0.28024	1.71283	9.27E-03	1.08E-05	5.50E-05	1.15E-05	5.88E-05	9.4075E-03
520530.18	4258301.02	46259.81665	0.16808	0.23018	0.16759	0.24153	9.26E-03	6.88E-06	8.23E-06	6.86E-06	8.29E-06	9.2944E-03
520178.01	4258292.63	46258.54603	0.29789	2.6535	0.31258	3.01216	9.26E-03	1.22E-05	9.49E-05	1.28E-05	1.03E-04	9.4872E-03
519997.34	4258804.24	46248.95423	1.55594	0.61529	1.84158	0.59452	9.26E-03	6.37E-05	2.20E-05	7.54E-05	2.04E-05	9.4435E-03
520451.33	4258207.19	46246.10443	0.18268	0.33956	0.18724	0.36193	9.26E-03	7.48E-06	1.21E-05	7.67E-06	1.24E-05	9.3011E-03
520043.69	4258932	46232.53328	4.86554	0.39648	6.98828	0.38408	9.26E-03	1.99E-04	1.42E-05	2.86E-04	1.32E-05	9.7714E-03
520197.44	4259053.1	46172.3601	1.95188	0.25321	1.7946	0.25149	9.25E-03	7.99E-05	9.06E-06	7.35E-05	8.63E-06	9.4177E-03
520505.07	4258877.3	46171.85931	0.26091	0.14205	0.24988	0.14912	9.25E-03	1.07E-05	5.08E-06	1.02E-05	5.12E-06	9.2777E-03
520442.58	4258203.45	46139.91286	0.18451	0.35632	0.18952	0.37956	9.24E-03	7.55E-06	1.27E-05	7.76E-06	1.30E-05	9.2812E-03
520460.07	4258210.94	46113.36375	0.18056	0.32425	0.18473	0.34552	9.23E-03	7.39E-06	1.16E-05	7.56E-06	1.19E-05	9.2732E-03
520525.64	4258838.76	46109.2233	0.23632	0.14307	0.22658	0.14966	9.23E-03	9.68E-06	5.12E-06	9.28E-06	5.14E-06	9.2632E-03
520446.03	4258961.78	46091.00252	0.34817	0.14374	0.3314	0.15113	9.23E-03	1.43E-05	5.14E-06	1.36E-05	5.19E-06	9.2685E-03
520276.12	4258222.93	46071.15663	0.23857	1.00696	0.24946	1.10697	9.23E-03	9.77E-06	3.60E-05	1.02E-05	3.80E-05	9.3204E-03
520099.39	4258392.38	46043.67426	0.41128	14.04458	0.43642	15.98746	9.22E-03	1.68E-05	5.02E-04	1.79E-05	5.49E-04	1.0307E-02
520520.02	4258276.65	46033.74578	0.16876	0.24204	0.16837	0.25476	9.22E-03	6.91E-06	8.66E-06	6.89E-06	8.75E-06	9.2501E-03
520544.84	4258469.73	46028.37022	0.18136	0.19584	0.17804	0.20671	9.22E-03	7.43E-06	7.00E-06	7.29E-06	7.10E-06	9.2466E-03
520383.88	4258193.27	46014.89522	0.19876	0.49617	0.20405	0.53031	9.22E-03	8.14E-06	1.77E-05	8.35E-06	1.82E-05	9.2676E-03
520021.89	4258893.02	46001.96692	2.74625	0.43757	3.40713	0.42861	9.21E-03	1.12E-04	1.57E-05	1.40E-04	1.47E-05	9.4948E-03
520187.83	4258282.66	45999.84514	0.28912	2.3468	0.30424	2.65257	9.21E-03	1.18E-05	8.39E-05	1.25E-05	9.11E-05	9.4114E-03
520256.51	4258232.87	45998.63801	0.24783	1.17948	0.26076	1.30449	9.21E-03	1.01E-05	4.22E-05	1.07E-05	4.48E-05	9.3197E-03
520393.67	4258193.3	45980.03973	0.19606	0.46893	0.20145	0.50042	9.21E-03	8.03E-06	1.68E-05	8.25E-06	1.72E-05	9.2584E-03
520148.55	4258322.53	45949.02218	0.32455	4.10004	0.33752	4.73413	9.20E-03	1.33E-05	1.47E-04	1.38E-05	1.63E-04	9.5382E-03
520316.25	4259052.9	45946.99358	0.7307	0.16783	0.69155	0.17946	9.20E-03	2.99E-05	6.00E-06	2.83E-05	6.16E-06	9.2719E-03
520325.12	4258203.08	45942.89557	0.21767	0.71144	0.22434	0.77072	9.20E-03	8.91E-06	2.54E-05	9.19E-06	2.65E-05	9.2707E-03
520504.77	4258250.09	45891.84475	0.17103	0.25937	0.17184	0.27479	9.19E-03	7.00E-06	9.28E-06	7.04E-06	9.43E-06	9.2232E-03
520564.24	4258709.09	45875.82464	0.19003	0.15471	0.18225	0.16152	9.19E-03	7.78E-06	5.53E-06	7.46E-06	5.55E-06	9.2136E-03
520374.09	4258193.24	45866.47611	0.20127	0.52572	0.20654	0.56264	9.19E-03	8.24E-06	1.88E-05	8.46E-06	1.93E-05	9.2402E-03
519993.37	4258770.57	45865.02237	1.36513	0.7228	1.61716	0.69015	9.19E-03	5.59E-05	2.59E-05	6.62E-05	2.37E-05	9.3568E-03
520114.59	4259011.23	45852.35496	7.57345	0.33622	6.4512	0.31228	9.18E-03	3.10E-04	1.20E-05	2.64E-04	1.07E-05	9.7795E-03
520481.69	4258917	45848.83848	0.29214	0.14193	0.27908	0.1491	9.18E-03	1.20E-05	5.08E-06	1.14E-05	5.12E-06	9.2154E-03
520403.46	4258193.33	45838.79544	0.19328	0.44359	0.19877	0.4728	9.18E-03	7.91E-06	1.59E-05	8.14E-06	1.62E-05	9.2280E-03
520468.81	4258214.68	45829.01081	0.17829	0.31005	0.18203	0.33023	9.18E-03	7.30E-06	1.11E-05	7.45E-06	1.13E-05	9.2151E-03
520514.31	4258264.19	45815.97619	0.16931	0.24849	0.1693	0.26231	9.18E-03	6.93E-06	8.89E-06	6.93E-06	9.01E-06	9.2070E-03
520295.72	4258212.99	45797.56087	0.2291	0.87051	0.23807	0.95125	9.17E-03	9.38E-06	3.11E-05	9.75E-06	3.27E-05	9.2545E-03
520033.66	4258917.87	45793.77192	3.66725	0.40789	4.82587	0.39779	9.17E-03	1.50E-04	1.46E-05	1.98E-04	1.37E-05	9.5468E-03
520395.39	4259012.77	45779.07468	0.45581	0.14707	0.43339	0.15625	9.17E-03	1.87E-05	5.26E-06	1.77E-05	5.36E-06	9.2149E-03
520167.72	4259043.15	45766.30067	2.78795	0.28291	2.51791	0.27243	9.17E-03	1.14E-04	1.01E-05	1.03E-04	9.35E-06	9.4020E-03
520560.37	4258742.27	45757.36632	0.1964	0.1507	0.18818	0.15691	9.16E-03	8.04E-06	5.39E-06	7.70E-06	5.39E-06	9.1901E-03
520491.16	4258903.07	45744.36247	0.27911	0.14155	0.26696	0.14869	9.16E-03	1.14E-05	5.06E-06	1.09E-05	5.10E-06	9.1935E-03
520548.62	4258427.92	45710.73578	0.17547	0.19859	0.17301	0.2091	9.15E-03	7.18E-06	7.10E-06	7.08E-06	7.18E-06	9.1827E-03
520364.31	4258193.21	45708.89872	0.20384	0.55731	0.20908	0.59786	9.15E-03	8.35E-06	1.99E-05	8.56E-06	2.05E-05	9.2112E-03
519992.8	4258745.07	45699.97222	1.27081	0.82979	1.51444	0.78351	9.15E-03	5.20E-05	2.97E-05	6.20E-05	2.69E-05	9.3227E-03
520345.94	4259042.85	45697.00917	0.60588	0.15677	0.57421	0.16792	9.15E-03	2.48E-05	5.61E-06	2.35E-05	5.76E-06	9.2111E-03
520549.18	4258403.52	45696.69264	0.17265	0.20086	0.17057	0.21161	9.15E-03	7.07E-06	7.18E-06	6.98E-06	7.26E-06	9.1799E-03
520158.62	4259039.39	45695.80986	3.18126	0.2923	2.85178	0.27891	9.15E-03	1.30E-04	1.05E-05	1.17E-04	9.58E-06	9.4183E-03
520514.54	4258863.37	45678.13895	0.24964	0.1416	0.23924	0.14848	9.15E-03	1.02E-05	5.06E-06	9.80E-06	5.10E-06	9.1778E-03
520365.72	4259032.82	45674.07409	0.53879	0.15194	0.5114	0.16232	9.15E-03	2.21E-05	5.43E-06	2.09E-05	5.57E-06	9.2009E-03
520019.85	4258608.71	45670.31437	1.11387	2.47692	1.41583	2.13126	9.15E-03	4.56E-05	8.86E-05	5.80E-05	7.32E-05	9.4114E-03
520472.44	4258930.83	45664.24811	0.30555	0.14188	0.29138	0.14907	9.14E-03	1.25E-05	5.07E-06	1.19E-05	5.12E-06	9.1795E-03
520413.25	4258193.36	45629.97083	0.19049	0.41995	0.19598	0.44729	9.14E-03	7.80E-06	1.50E-05	8.02E-06	1.54E-05	9.1842E-03
520149.51	4259035.63	45561.67673	3.68193	0.30123	3.27054	0.285	9.12E-03	1.51E-04	1.08E-05	1.34E-04	9.78E-06	9.4296E-03
520048.72	4258944.07	45560.65093	5.72072	0.38382	8.82508	0.37039	9.12E-03	2.34E-04	1.37E-05	3.61E-04	1.27E-05	9.7462E-03
520495.44	4258236.09	45540.7672	0.1724	0.27141	0.17422	0.28824	9.12E-03	7.06E-06	9.71E-06	7.13E-06	9.90E-06	9.1540E-03
520197.65	4258272.69	45539.25315	0.28033	2.09386	0.29581	2.35472	9.12E-03	1.15E-05	7.49E-05	1.21E-05	8.08E-05	9.2992E-03
520058.88	4258958.25	45528.20491	8.27544	0.37379	17.55504	0.35757	9.12E-03	3.39E-04	1.34E-05	7.19E-04	1.23E-05	1.0201E-02
520421.37	4258992.01	45522.12071	0.39654	0.1442	0.37745	0.15234	9.12E-03	1.62E-05	5.16E-06	1.55E-05	5.23E-06	9.1585E-03
520546.89	4258358.24	45478.4513	0.16852	0.20764	0.1678	0.21894	9.11E-03	6.90E-06	7.43E-06	6.87E-06	7.52E-06	9.1364E-03
520187.54	4259053.12	45448.93292	2.18082	0.26107	1.99417	0.25646	9.10E-03	8.93E-05	9.34E-06	8.16E-05	8.80E-06	9.2909E-03
520236.9	4258242.81	45440.3477	0.25628	1.40316	0.27098	1.55962	9.10E-03	1.05E-05	5.02E-05	1.11E-05	5.35E-05	9.2254E-03
520006.5	4258856.69	45411.40276	1.95821	0.49253	2.33648	0.48151	9.09E-03	8.02E-05	1.76E-05	9.57E-05	1.65E-05	9.3042E-03
520548.28	4258368.85	45400.27747	0.16917	0.20517	0.16807	0.21644	9.09E-03	6.93E-06	7.34E-06	6.88E-06	7.43E-06	9.1206E-03
520439.01	4258974.7	45392.93424	0.36184	0.14299	0.34451	0.15049	9.09E-03	1.48E-05	5.11E-06	1.41E-05	5.17E-06	9.1298E-03
520140.41	4259031.87	45381.68064	4.32278	0.30943	3.80084	0.2906	9.09E-03	1.77E-04	1.11E-05	1.56E-04	9.98E-06	9.4420E-03
520354.52	4258193.18	45368.34963	0.20619	0.59177	0.2116	0.63616	9.09E-03	8.44E-06	2.12E-05	8.66E-06	2.18E-05	9.1457E-03
520545.69	4258347.72	45361.24917	0.16776	0.21004	0.16732	0.22125	9.08E-03	6.87E-06	7.51E-06	6.85E-06	7.60E-06	9.1130E-03
520477.56	4258218.42	45354.10667	0.17583	0.29705	0.17916	0.31604	9.08E-03	7.20E-06	1.06E-05	7.34E-06	1.08E-05	9.1188E-03
520529.37	4258290.66	45335.04669	0.16691	0.232	0.16636	0.24348	9.08E-03	6.83E-06	8.30E-06	6.81E-06	8.36E-06	9.1093E-03
520423.04	4258193.39	45311.48642	0.18763	0.39797	0.19305	0.42365	9.07E-03	7.68E-06	1.42E-05	7.90E-06	1.45E-05	9.1186E-03
520326.15	4259052.89	45291.08203	0.68524	0.16272	0.64852	0.17422	9.07E-03	2.81E-05	5.82E-06	2.66E-05	5.98E-06	9.1366E-03
520000.87	4258836.88	45281.99286	1.73243	0.53087	2.04649	0.51718	9.07E-03	7.09E-05	1.90E-05	8.38E-05	1.78E-05	9.2598E-03
520463.38	4258944.59	45269.0306	0.31931	0.14182	0.30423	0.14897	9.07E-03	1.31E-05	5.07E-06	1.25E-05	5.11E-06	9.1015E-03
520315.33	4258203.05	45245.27783	0.21974	0.76033	0.22713	0.8261	9.06E-03	9.00E-06	2.72E-05	9.30E-06	2.84E-05	9.1348E-03
520385.51	4259022.79	45226.50174	0.48152	0.14764	0.45758	0.15716	9.06E-03	1.97E-05	5.28E-06	1.87E-05	5.40E-06	9.1064E-03
520105.74	4259007.57	45214.51213	9.63853	0.33933	8.21902	0.31528	9.05E-03	3.95E-04	1.21E-05	3.37E-04	1.08E-05	9.8089E-03
520029.73	4258579.58	45184.57512	1.06684	3.50678	1.37951	2.85376	9.05E-03	4.37E-05	1.25E-04	5.65E-05	9.80E-05	9.3724E-03
519993.75	4258795.6	45176.53091	1.44047	0.63512	1.69834	0.61177	9.05E-03	5.90E-05	2.27E-05	6.95E-05	2.10E-05	9.2195E-03
520404	4259009.21	45160.43639	0.43514	0.14507	0.4138	0.15391	9.04E-03	1.78E-05	5.19E-06	1.69E-05	5.28E-06	9.0892E-03
520023.37	4258903.63	45059.07353	2.85401	0.4206	3.56423	0.41203	9.02E-03	1.17E-04	1.50E-05	1.46E-04	1.41E-05	9.3157E-03
520563.87	4258733.92	45041.99074	0.19299	0.15063	0.18493	0.15697	9.02E-03	7.90E-06	5.39E-06	7.57E-06	5.39E-06	9.0465E-03
520207.47	4258262.72	45033.68652	0.27188	1.88042	0.28734	2.10766	9.02E-03	1.11E-05	6.73E-05	1.18E-05	7.24E-05	9.1811E-03
520544.65	4258337.25	45020.58419	0.16681	0.21269	0.16662	0.22365	9.02E-03	6.83E-06	7.61E-06	6.82E-06	7.68E-06	9.0449E-03
520109.24	4258372.41	45004.95271	0.37893	9.90479	0.3978	11.75688	9.01E-03	1.55E-05	3.54E-04	1.63E-05	4.04E-04	9.8026E-03
520131.3	4259028.12	44985.50449	5.15428	0.31622	4.48208	0.29531	9.01E-03	2.11E-04	1.13E-05	1.84E-04	1.01E-05	9.4250E-03
520524.28	4258849.33	44981.84535	0.23865	0.14123	0.22887	0.14782	9.01E-03	9.77E-06	5.05E-06	9.37E-06	5.07E-06	9.0375E-03
520542.9	4258807.93	44962.77372	0.21759	0.14362	0.20868	0.14973	9.00E-03	8.91E-06	5.14E-06	8.54E-06	5.14E-06	9.0321E-03
520432.83	4258193.42	44904.78968	0.18473	0.37747	0.19	0.40172	8.99E-03	7.56E-06	1.35E-05	7.78E-06	1.38E-05	9.0354E-03
520539.96	4258315.22	44883.51872	0.16597	0.2195	0.16564	0.23033	8.99E-03	6.80E-06	7.85E-06	6.78E-06	7.91E-06	9.0179E-03
520008.2	4258867.38	44879.44107	2.04235	0.47184	2.44132	0.46199	8.99E-03	8.36E-05	1.69E-05	1.00E-04	1.59E-05	9.2040E-03
520266.33	4258222.9	44875.75463	0.23967	1.09058	0.2517	1.20223	8.99E-03	9.81E-06	3.90E-05	1.03E-05	4.13E-05	9.0874E-03
520344.73	4258193.15	44861.69872	0.20831	0.62937	0.21413	0.67781	8.98E-03	8.53E-06	2.25E-05	8.77E-06	2.33E-05	9.0472E-03
520007.12	4258646.05	44860.43692	1.11586	1.67301	1.37777	1.50099	8.98E-03	4.57E-05	5.98E-05	5.64E-05	5.15E-05	9.1974E-03
520454.48	4258958.28	44854.61793	0.33401	0.14163	0.31808	0.14881	8.98E-03	1.37E-05	5.07E-06	1.30E-05	5.11E-06	9.0196E-03
520486.3	4258222.16	44823.73124	0.17335	0.2846	0.17616	0.3026	8.98E-03	7.10E-06	1.02E-05	7.21E-06	1.04E-05	9.0114E-03
520285.94	4258212.96	44789.15551	0.23062	0.93715	0.24072	1.02678	8.97E-03	9.44E-06	3.35E-05	9.86E-06	3.53E-05	9.0577E-03
520355.84	4259042.84	44786.3403	0.57106	0.15272	0.54142	0.16344	8.97E-03	2.34E-05	5.46E-06	2.22E-05	5.61E-06	9.0257E-03
520504.21	4258887.66	44753.37941	0.26275	0.14006	0.25159	0.14704	8.96E-03	1.08E-05	5.01E-06	1.03E-05	5.05E-06	8.9936E-03
520549.83	4258791.4	44733.7599	0.21007	0.1449	0.20152	0.15081	8.96E-03	8.60E-06	5.18E-06	8.25E-06	5.18E-06	8.9858E-03
520177.64	4259053.13	44725.51135	2.45632	0.26864	2.23365	0.26103	8.96E-03	1.01E-04	9.61E-06	9.15E-05	8.96E-06	9.1675E-03
520567.77	4258700.65	44719.77513	0.18676	0.15475	0.17924	0.16145	8.96E-03	7.65E-06	5.54E-06	7.34E-06	5.54E-06	8.9818E-03
519994.67	4258701.35	44712.17524	1.14729	1.0749	1.36884	0.99778	8.95E-03	4.70E-05	3.84E-05	5.60E-05	3.43E-05	9.1299E-03
520513.66	4258253.9	44677.15029	0.16806	0.24971	0.1684	0.26397	8.95E-03	6.88E-06	8.93E-06	6.89E-06	9.06E-06	8.9790E-03
520128.91	4258342.47	44675.79317	0.34212	5.96518	0.35503	7.06255	8.95E-03	1.40E-05	2.13E-04	1.45E-05	2.42E-04	9.4313E-03
520034.84	4258928.34	44637.37277	3.79666	0.39291	5.03889	0.38301	8.94E-03	1.55E-04	1.41E-05	2.06E-04	1.31E-05	9.3282E-03
519997.12	4258827.83	44617.50799	1.60372	0.54803	1.88516	0.53273	8.94E-03	6.57E-05	1.96E-05	7.72E-05	1.83E-05	9.1160E-03
520430.03	4258988.42	44615.53326	0.3793	0.14235	0.36121	0.15012	8.93E-03	1.55E-05	5.09E-06	1.48E-05	5.15E-06	8.9754E-03
520504.25	4258239.86	44596.12301	0.1696	0.26082	0.17088	0.27655	8.93E-03	6.94E-06	9.33E-06	7.00E-06	9.49E-06	8.9637E-03
520096.89	4259003.92	44591.30776	12.66601	0.34126	11.11196	0.31783	8.93E-03	5.19E-04	1.22E-05	4.55E-04	1.09E-05	9.9267E-03
520375.62	4259032.8	44573.51379	0.50916	0.1483	0.48363	0.15818	8.93E-03	2.08E-05	5.30E-06	1.98E-05	5.43E-06	8.9778E-03
520122.19	4259024.36	44549.55333	6.29143	0.32188	5.40753	0.29948	8.92E-03	2.58E-04	1.15E-05	2.21E-04	1.03E-05	9.4225E-03
520246.72	4258232.84	44540.07371	0.24813	1.28698	0.26197	1.42652	8.92E-03	1.02E-05	4.60E-05	1.07E-05	4.90E-05	9.0357E-03
520336.05	4259052.87	44539.78821	0.64364	0.15801	0.60925	0.16928	8.92E-03	2.64E-05	5.65E-06	2.49E-05	5.81E-06	8.9825E-03
520451.29	4258197.17	44523.57769	0.18012	0.34165	0.18481	0.36376	8.92E-03	7.37E-06	1.22E-05	7.57E-06	1.25E-05	8.9561E-03
520459.97	4258200.88	44475.11007	0.17823	0.32601	0.18256	0.34716	8.91E-03	7.30E-06	1.17E-05	7.47E-06	1.19E-05	8.9451E-03
520412.6	4259005.64	44468.16657	0.41578	0.1431	0.39542	0.15158	8.91E-03	1.70E-05	5.12E-06	1.62E-05	5.20E-06	8.9489E-03
520528.64	4258280.34	44449.28874	0.16579	0.23342	0.16522	0.24524	8.90E-03	6.79E-06	8.35E-06	6.76E-06	8.42E-06	8.9319E-03
520217.29	4258252.75	44430.81326	0.26363	1.69927	0.27885	1.89865	8.90E-03	1.08E-05	6.08E-05	1.14E-05	6.52E-05	9.0461E-03
520305.54	4258203.02	44430.42562	0.22155	0.81444	0.22986	0.88727	8.90E-03	9.07E-06	2.91E-05	9.41E-06	3.05E-05	8.9759E-03
520442.62	4258193.45	44402.89895	0.18178	0.35837	0.18681	0.38133	8.89E-03	7.44E-06	1.28E-05	7.65E-06	1.31E-05	8.9333E-03
520513.52	4258873.8	44384.03462	0.2516	0.13972	0.24115	0.14654	8.89E-03	1.03E-05	5.00E-06	9.87E-06	5.03E-06	8.9187E-03
519991.99	4258719.01	44377.50479	1.16121	0.95628	1.38185	0.89323	8.89E-03	4.75E-05	3.42E-05	5.66E-05	3.07E-05	9.0562E-03
520334.94	4258193.12	44340.06513	0.21045	0.67013	0.21676	0.72358	8.88E-03	8.62E-06	2.40E-05	8.88E-06	2.48E-05	8.9460E-03
520552.42	4258412.04	44339.58619	0.17193	0.19766	0.16967	0.20805	8.88E-03	7.04E-06	7.07E-06	6.95E-06	7.14E-06	8.9078E-03
520523.29	4258268.03	44304.41758	0.16621	0.23936	0.1659	0.25205	8.87E-03	6.81E-06	8.56E-06	6.79E-06	8.65E-06	8.9034E-03
520548.24	4258478.65	44282.4595	0.1802	0.19263	0.17654	0.20328	8.87E-03	7.38E-06	6.89E-06	7.23E-06	6.98E-06	8.8966E-03
520481.02	4258927.28	44280.72049	0.29383	0.13986	0.28065	0.14686	8.87E-03	1.20E-05	5.00E-06	1.15E-05	5.04E-06	8.9014E-03
520490.33	4258913.42	44267.62411	0.28094	0.13961	0.2687	0.14659	8.87E-03	1.15E-05	4.99E-06	1.10E-05	5.03E-06	8.8977E-03
520538.95	4258304.78	44264.93556	0.16498	0.22165	0.1645	0.23243	8.86E-03	6.75E-06	7.93E-06	6.74E-06	7.98E-06	8.8941E-03
520556.75	4258774.86	44259.04044	0.20282	0.14576	0.19448	0.15153	8.86E-03	8.30E-06	5.21E-06	7.96E-06	5.20E-06	8.8902E-03
520468.65	4258204.59	44242.24202	0.17612	0.3118	0.1801	0.3319	8.86E-03	7.21E-06	1.12E-05	7.37E-06	1.14E-05	8.8972E-03
520447.74	4258971.08	44236.95256	0.34645	0.1409	0.32994	0.14812	8.86E-03	1.42E-05	5.04E-06	1.35E-05	5.09E-06	8.8969E-03
520567.36	4258725.58	44231.02007	0.1897	0.15046	0.1818	0.15691	8.86E-03	7.77E-06	5.38E-06	7.44E-06	5.39E-06	8.8838E-03
520049.81	4258954.51	44230.13967	5.94919	0.37029	9.33885	0.35713	8.86E-03	2.44E-04	1.32E-05	3.82E-04	1.23E-05	9.5091E-03
520009.73	4258878.01	44229.47521	2.12217	0.45234	2.54198	0.44349	8.86E-03	8.69E-05	1.62E-05	1.04E-04	1.52E-05	9.0799E-03
519997.12	4258683.15	44188.18245	1.11183	1.21803	1.34011	1.11973	8.85E-03	4.55E-05	4.36E-05	5.49E-05	3.84E-05	9.0317E-03
519989.75	4258761.83	44169.64682	1.25248	0.74663	1.48273	0.70943	8.85E-03	5.13E-05	2.67E-05	6.07E-05	2.44E-05	9.0086E-03
520495.04	4258225.9	44140.88147	0.17077	0.27303	0.17304	0.29001	8.84E-03	6.99E-06	9.77E-06	7.08E-06	9.96E-06	8.8736E-03
520059.81	4258968.63	44096.89016	8.61049	0.36067	19.14181	0.34492	8.83E-03	3.53E-04	1.29E-05	7.84E-04	1.18E-05	9.9920E-03
520551.91	4258436.55	44073.65597	0.17459	0.19529	0.17198	0.20556	8.83E-03	7.15E-06	6.99E-06	7.04E-06	7.06E-06	8.8546E-03
520024.74	4258914.18	44061.30659	2.95841	0.40469	3.71912	0.39641	8.82E-03	1.21E-04	1.45E-05	1.52E-04	1.36E-05	9.1254E-03
520113.09	4259020.6	44056.06877	7.89529	0.32617	6.72091	0.30301	8.82E-03	3.23E-04	1.17E-05	2.75E-04	1.04E-05	9.4433E-03
520534.34	4258835.16	44048.22714	0.2279	0.14084	0.2187	0.14712	8.82E-03	9.33E-06	5.04E-06	8.95E-06	5.05E-06	8.8496E-03
520039.57	4258940.29	44046.32601	4.3305	0.38008	5.95892	0.36943	8.82E-03	1.77E-04	1.36E-05	2.44E-04	1.27E-05	9.2684E-03
520499.87	4258899.46	44045.80116	0.26859	0.1391	0.25706	0.14604	8.82E-03	1.10E-05	4.98E-06	1.05E-05	5.01E-06	8.8523E-03
520471.89	4258941.07	44031.61613	0.3071	0.13972	0.29285	0.14672	8.82E-03	1.26E-05	5.00E-06	1.20E-05	5.04E-06	8.8525E-03
520393.7	4258183.3	44010.88565	0.19231	0.47162	0.19745	0.50273	8.81E-03	7.87E-06	1.69E-05	8.08E-06	1.73E-05	8.8639E-03
520383.91	4258183.27	43997.50577	0.19481	0.49894	0.19988	0.53273	8.81E-03	7.98E-06	1.78E-05	8.18E-06	1.83E-05	8.8634E-03
519990.16	4258786.95	43966.35222	1.33404	0.65526	1.56582	0.62906	8.80E-03	5.46E-05	2.34E-05	6.41E-05	2.16E-05	8.9686E-03
520088.03	4259000.27	43960.55497	15.19593	0.34186	16.58513	0.31983	8.80E-03	6.22E-04	1.22E-05	6.79E-04	1.10E-05	1.0128E-02
520167.74	4259053.15	43954.44918	2.7955	0.27566	2.52631	0.26502	8.80E-03	1.14E-04	9.86E-06	1.03E-04	9.10E-06	9.0393E-03
520403.49	4258183.33	43933.45482	0.18975	0.44618	0.19498	0.47503	8.80E-03	7.77E-06	1.60E-05	7.98E-06	1.63E-05	8.8463E-03
520395.41	4259022.77	43908.08442	0.45621	0.14416	0.4337	0.15324	8.79E-03	1.87E-05	5.16E-06	1.78E-05	5.26E-06	8.8400E-03
520012.78	4258889.26	43879.60178	2.26967	0.43465	2.73907	0.4265	8.79E-03	9.29E-05	1.55E-05	1.12E-04	1.46E-05	9.0228E-03
520477.33	4258208.31	43861.15241	0.17387	0.29867	0.17747	0.3177	8.78E-03	7.12E-06	1.07E-05	7.27E-06	1.09E-05	8.8198E-03
520158.7	4259049.42	43856.29214	3.17784	0.28423	2.85235	0.27093	8.78E-03	1.30E-04	1.02E-05	1.17E-04	9.30E-06	9.0492E-03
520374.13	4258183.24	43834.65043	0.19715	0.52844	0.20225	0.56512	8.78E-03	8.07E-06	1.89E-05	8.28E-06	1.94E-05	8.8331E-03

520345.95	4259052.85	43829.11067	0.60591	0.15375	0.57379	0.16471	8.78E-03	2.48E-05	5.50E-06	2.35E-05	5.65E-06	8.8368E-03
520523.06	4258859.84	43824.55305	0.2408	0.13931	0.23094	0.1459	8.78E-03	9.86E-06	4.98E-06	9.46E-06	5.01E-06	8.8058E-03
520365.74	4259042.82	43811.23539	0.53892	0.149	0.51142	0.15925	8.77E-03	2.21E-05	5.33E-06	2.09E-05	5.47E-06	8.8276E-03
520039.6	4258550.44	43811.13413	0.96424	5.12003	1.19247	3.93196	8.77E-03	3.95E-05	1.83E-04	4.88E-05	1.35E-04	9.1802E-03
519993.37	4258818.79	43805.35337	1.48408	0.56592	1.73957	0.54863	8.77E-03	6.08E-05	2.02E-05	7.12E-05	1.88E-05	8.9437E-03
520325.15	4258193.08	43769.52347	0.21253	0.71466	0.21945	0.77402	8.77E-03	8.70E-06	2.56E-05	8.99E-06	2.66E-05	8.8353E-03
520413.28	4258183.36	43764.81041	0.18714	0.42247	0.19241	0.44939	8.76E-03	7.66E-06	1.51E-05	7.88E-06	1.54E-05	8.8106E-03
520149.67	4259045.69	43760.08544	3.67367	0.2926	3.2681	0.27664	8.76E-03	1.50E-04	1.05E-05	1.34E-04	9.50E-06	9.0677E-03
520227.11	4258242.78	43729.61364	0.25556	1.54428	0.2704	1.7198	8.76E-03	1.05E-05	5.52E-05	1.11E-05	5.90E-05	8.8933E-03
520553.38	4258388.69	43717.67121	0.16885	0.19823	0.16697	0.20901	8.76E-03	6.91E-06	7.09E-06	6.84E-06	7.18E-06	8.7831E-03
520276.15	4258212.93	43713.40859	0.23183	1.01184	0.24305	1.11154	8.75E-03	9.49E-06	3.62E-05	9.95E-06	3.82E-05	8.8480E-03
520421.21	4259002.08	43701.05373	0.3975	0.14136	0.37836	0.14948	8.75E-03	1.63E-05	5.06E-06	1.55E-05	5.13E-06	8.7937E-03
520462.93	4258954.79	43648.58865	0.32087	0.13958	0.30576	0.14657	8.74E-03	1.31E-05	4.99E-06	1.25E-05	5.03E-06	8.7769E-03
520140.63	4259041.96	43639.77713	4.30205	0.30032	3.79211	0.28193	8.74E-03	1.76E-04	1.07E-05	1.55E-04	9.68E-06	9.0913E-03
520438.7	4258984.83	43633.34527	0.36311	0.1404	0.34583	0.14784	8.74E-03	1.49E-05	5.02E-06	1.42E-05	5.08E-06	8.7773E-03
520364.34	4258183.21	43617.12571	0.19948	0.56021	0.20468	0.60043	8.73E-03	8.17E-06	2.00E-05	8.38E-06	2.06E-05	8.7921E-03
520256.54	4258222.87	43583.90698	0.24027	1.18531	0.25327	1.30989	8.73E-03	9.84E-06	4.24E-05	1.04E-05	4.50E-05	8.8358E-03
520295.75	4258202.99	43559.71203	0.22317	0.8744	0.23249	0.95532	8.72E-03	9.14E-06	3.13E-05	9.52E-06	3.28E-05	8.8062E-03
519989.13	4258736.23	43544.73491	1.16242	0.85495	1.37544	0.80413	8.72E-03	4.76E-05	3.06E-05	5.63E-05	2.76E-05	8.8825E-03
520513.07	4258243.63	43517.16072	0.16675	0.25098	0.16752	0.26562	8.71E-03	6.83E-06	8.98E-06	6.86E-06	9.12E-06	8.7467E-03
520423.07	4258183.39	43504.38046	0.18447	0.40037	0.18974	0.42563	8.71E-03	7.55E-06	1.43E-05	7.77E-06	1.46E-05	8.7566E-03
520563.68	4258758.32	43490.76792	0.19584	0.14633	0.18772	0.15212	8.71E-03	8.02E-06	5.23E-06	7.69E-06	5.22E-06	8.7358E-03
520571.31	4258692.22	43481.18206	0.1836	0.15467	0.17627	0.16124	8.71E-03	7.52E-06	5.53E-06	7.22E-06	5.54E-06	8.7335E-03
520538.06	4258294.38	43469.89892	0.16384	0.22374	0.16333	0.23448	8.71E-03	6.71E-06	8.00E-06	6.69E-06	8.05E-06	8.7349E-03
520119.09	4258352.44	43452.12641	0.35001	7.52194	0.36431	8.97237	8.70E-03	1.43E-05	2.69E-04	1.49E-05	3.08E-04	9.3082E-03
520103.98	4259016.84	43449.68644	10.19813	0.32883	8.70507	0.30578	8.70E-03	4.18E-04	1.18E-05	3.56E-04	1.05E-05	9.4976E-03
520168.22	4258292.6	43443.60929	0.29304	3.04177	0.30519	3.46802	8.70E-03	1.20E-05	1.09E-04	1.25E-05	1.19E-04	8.9525E-03
520178.04	4258282.63	43409.91815	0.28509	2.66505	0.29794	3.02255	8.69E-03	1.17E-05	9.53E-05	1.22E-05	1.04E-04	8.9164E-03
520385.52	4259032.79	43389.79048	0.48183	0.14473	0.4578	0.15416	8.69E-03	1.97E-05	5.18E-06	1.87E-05	5.29E-06	8.7383E-03
520486.01	4258212.02	43365.98544	0.17151	0.2863	0.17468	0.30431	8.68E-03	7.02E-06	1.02E-05	7.15E-06	1.04E-05	8.7195E-03
520403.96	4259019.23	43344.44813	0.43569	0.14225	0.41439	0.151	8.68E-03	1.78E-05	5.09E-06	1.70E-05	5.18E-06	8.7254E-03
520522.55	4258257.7	43325.5833	0.16507	0.2406	0.16503	0.25375	8.68E-03	6.76E-06	8.61E-06	6.76E-06	8.71E-06	8.7074E-03
520158.4	4258302.56	43304.74833	0.30099	3.51223	0.31246	4.0294	8.67E-03	1.23E-05	1.26E-04	1.28E-05	1.38E-04	8.9614E-03
520503.79	4258229.65	43304.1313	0.16811	0.26235	0.16986	0.27829	8.67E-03	6.88E-06	9.38E-06	6.95E-06	9.55E-06	8.7050E-03
520551.62	4258461.66	43289.0779	0.17697	0.19239	0.17382	0.20277	8.67E-03	7.25E-06	6.88E-06	7.12E-06	6.96E-06	8.6974E-03
520354.55	4258183.18	43276.10992	0.20167	0.59467	0.20714	0.63881	8.67E-03	8.26E-06	2.13E-05	8.48E-06	2.19E-05	8.7266E-03
520131.6	4259038.23	43256.93824	5.11861	0.3065	4.46134	0.28625	8.66E-03	2.10E-04	1.10E-05	1.83E-04	9.83E-06	9.0758E-03
520187.86	4258272.66	43191.60023	0.2771	2.35838	0.29065	2.66042	8.65E-03	1.13E-05	8.44E-05	1.19E-05	9.13E-05	8.8486E-03
520432.86	4258183.42	43144.68326	0.18174	0.37977	0.18694	0.40356	8.64E-03	7.44E-06	1.36E-05	7.65E-06	1.39E-05	8.6828E-03
520014.36	4258899.91	43114.96265	2.35795	0.41779	2.8591	0.4102	8.63E-03	9.65E-05	1.49E-05	1.17E-04	1.41E-05	8.8770E-03
520512.6	4258884.19	43102.44892	0.25341	0.13784	0.24291	0.14459	8.63E-03	1.04E-05	4.93E-06	9.95E-06	4.96E-06	8.6621E-03
520315.36	4258193.05	43070.07669	0.21436	0.76376	0.2221	0.82946	8.63E-03	8.78E-06	2.73E-05	9.09E-06	2.85E-05	8.6990E-03
520532.88	4258845.77	43068.62452	0.23023	0.13902	0.22099	0.14531	8.63E-03	9.43E-06	4.97E-06	9.05E-06	4.99E-06	8.6535E-03
520025.98	4258924.69	43026.58045	3.05766	0.38975	3.86782	0.38172	8.62E-03	1.25E-04	1.39E-05	1.58E-04	1.31E-05	8.9273E-03
520236.93	4258232.81	43020.85899	0.24786	1.40969	0.26208	1.56622	8.62E-03	1.01E-05	5.04E-05	1.07E-05	5.38E-05	8.7406E-03
520456.47	4258967.47	42981.15873	0.3319	0.1388	0.31622	0.14579	8.61E-03	1.36E-05	4.96E-06	1.29E-05	5.01E-06	8.6441E-03
520355.85	4259052.84	42973.71176	0.57108	0.14983	0.54124	0.1604	8.61E-03	2.34E-05	5.36E-06	2.22E-05	5.51E-06	8.6625E-03
520148.58	4258312.53	42939.95114	0.30883	4.11485	0.31988	4.74919	8.60E-03	1.26E-05	1.47E-04	1.31E-05	1.63E-04	8.9353E-03
520555.67	4258420.56	42930.4835	0.17117	0.19441	0.16873	0.20451	8.60E-03	7.01E-06	6.95E-06	6.91E-06	7.02E-06	8.6253E-03
520050.82	4258964.92	42918.25962	6.17462	0.35739	9.85291	0.34453	8.59E-03	2.53E-04	1.28E-05	4.03E-04	1.18E-05	9.2758E-03
520451.62	4258187.29	42887.1976	0.17746	0.34303	0.18221	0.3648	8.59E-03	7.27E-06	1.23E-05	7.46E-06	1.25E-05	8.6283E-03
520040.75	4258950.77	42884.96843	4.4938	0.36681	6.24023	0.35632	8.59E-03	1.84E-04	1.31E-05	2.56E-04	1.22E-05	9.0531E-03
520460.6	4258191.14	42880.82189	0.17568	0.32669	0.18011	0.34756	8.59E-03	7.19E-06	1.17E-05	7.37E-06	1.19E-05	8.6257E-03
520197.68	4258262.69	42878.35119	0.26929	2.10351	0.28329	2.3634	8.59E-03	1.10E-05	7.52E-05	1.16E-05	8.11E-05	8.7660E-03
520429.81	4258998.52	42864.16567	0.38036	0.1396	0.36225	0.14735	8.58E-03	1.56E-05	4.99E-06	1.48E-05	5.06E-06	8.6246E-03
519989.62	4258809.75	42855.98699	1.37431	0.58419	1.6053	0.56469	8.58E-03	5.63E-05	2.09E-05	6.57E-05	1.94E-05	8.7448E-03
519997.12	4258673.87	42822.60632	1.06341	1.28263	1.28075	1.17508	8.58E-03	4.35E-05	4.59E-05	5.24E-05	4.03E-05	8.7580E-03
520489.59	4258923.74	42820.33751	0.28263	0.13765	0.2703	0.14447	8.58E-03	1.16E-05	4.92E-06	1.11E-05	4.96E-06	8.6079E-03
520094.88	4259013.08	42814.87941	13.46122	0.33011	12.04709	0.30797	8.57E-03	5.51E-04	1.18E-05	4.93E-04	1.06E-05	9.6411E-03
520344.76	4258183.15	42806.24584	0.20368	0.6322	0.20962	0.6806	8.57E-03	8.34E-06	2.26E-05	8.58E-06	2.34E-05	8.6354E-03
520122.56	4259034.5	42785.73089	6.20198	0.31142	5.35437	0.28993	8.57E-03	2.54E-04	1.11E-05	2.19E-04	9.95E-06	9.0627E-03
520494.68	4258215.74	42778.1914	0.1691	0.27465	0.17178	0.29171	8.57E-03	6.92E-06	9.82E-06	7.03E-06	1.00E-05	8.6007E-03
520375.64	4259042.8	42771.97732	0.50931	0.14539	0.48363	0.15517	8.57E-03	2.09E-05	5.20E-06	1.98E-05	5.33E-06	8.6169E-03
520480.39	4258937.55	42769.17986	0.29543	0.13779	0.28215	0.14462	8.57E-03	1.21E-05	4.93E-06	1.16E-05	4.96E-06	8.5987E-03
520537.26	4258284.03	42731.80778	0.16279	0.22529	0.16218	0.23625	8.56E-03	6.67E-06	8.06E-06	6.64E-06	8.11E-06	8.5871E-03
520532.26	4258271.87	42703.26947	0.16313	0.23068	0.16263	0.24235	8.55E-03	6.68E-06	8.25E-06	6.66E-06	8.32E-06	8.5818E-03
520060.67	4258978.98	42702.92462	8.9141	0.34835	17.06479	0.33305	8.55E-03	3.65E-04	1.25E-05	6.99E-04	1.14E-05	9.6394E-03
520099.42	4258382.38	42695.03816	0.38577	14.08928	0.40806	16.00012	8.55E-03	1.58E-05	5.04E-04	1.67E-05	5.49E-04	9.6360E-03
520009.93	4258628.15	42693.51905	1.04484	1.90931	1.29384	1.69202	8.55E-03	4.28E-05	6.83E-05	5.30E-05	5.81E-05	8.7721E-03
520412.51	4259015.69	42692.72657	0.41648	0.14028	0.39607	0.14871	8.55E-03	1.71E-05	5.02E-06	1.62E-05	5.11E-06	8.5932E-03
520498.98	4258909.84	42685.49962	0.2704	0.13723	0.25879	0.14404	8.55E-03	1.11E-05	4.91E-06	1.06E-05	4.95E-06	8.5799E-03
520469.58	4258194.98	42684.93567	0.17366	0.31191	0.17779	0.33175	8.55E-03	7.11E-06	1.12E-05	7.28E-06	1.14E-05	8.5852E-03
520442.65	4258183.45	42682.331	0.17893	0.36057	0.184	0.38304	8.55E-03	7.33E-06	1.29E-05	7.53E-06	1.32E-05	8.5886E-03
520556.86	4258397.81	42672.93957	0.16836	0.19564	0.16624	0.20599	8.55E-03	6.89E-06	7.00E-06	6.81E-06	7.07E-06	8.5736E-03
520554.31	4258351.4	42656.17471	0.16439	0.2027	0.16371	0.2135	8.54E-03	6.73E-06	7.25E-06	6.70E-06	7.33E-06	8.5705E-03
520007.12	4258636.77	42654.40538	1.04702	1.75721	1.28953	1.56951	8.54E-03	4.29E-05	6.29E-05	5.28E-05	5.39E-05	8.7545E-03
520521.97	4258870.3	42651.57735	0.24278	0.13739	0.23282	0.14396	8.54E-03	9.94E-06	4.91E-06	9.53E-06	4.94E-06	8.5709E-03
519986.58	4258778.3	42608.06108	1.23437	0.67572	1.44379	0.64625	8.53E-03	5.05E-05	2.42E-05	5.91E-05	2.22E-05	8.6889E-03
520447.36	4258981.24	42600.01479	0.34785	0.13846	0.33141	0.14561	8.53E-03	1.42E-05	4.95E-06	1.36E-05	5.00E-06	8.5690E-03
520285.97	4258202.96	42597.55318	0.22447	0.94128	0.23486	1.03107	8.53E-03	9.19E-06	3.37E-05	9.62E-06	3.54E-05	8.6186E-03
520548.83	4258319.02	42587.4077	0.16273	0.21149	0.16246	0.22188	8.53E-03	6.66E-06	7.56E-06	6.65E-06	7.62E-06	8.5572E-03
520555.61	4258361.97	42585.58433	0.16504	0.20039	0.16401	0.2112	8.53E-03	6.76E-06	7.17E-06	6.72E-06	7.25E-06	8.5562E-03
520030.43	4258936.52	42563.13077	3.41153	0.37685	4.41023	0.36838	8.52E-03	1.40E-04	1.35E-05	1.81E-04	1.26E-05	8.8702E-03
520266.36	4258212.9	42559.53769	0.23263	1.09594	0.24486	1.20692	8.52E-03	9.52E-06	3.92E-05	1.00E-05	4.14E-05	8.6233E-03
520471.38	4258951.29	42555.8058	0.30868	0.13763	0.29443	0.14446	8.52E-03	1.26E-05	4.92E-06	1.21E-05	4.96E-06	8.5570E-03
520553.17	4258340.9	42523.12538	0.16359	0.20512	0.16321	0.21576	8.52E-03	6.70E-06	7.34E-06	6.68E-06	7.41E-06	8.5440E-03
519999.34	4258863.73	42491.90552	1.73319	0.46913	2.03908	0.459	8.51E-03	7.10E-05	1.68E-05	8.35E-05	1.58E-05	8.6966E-03
520207.5	4258252.72	42483.30854	0.26168	1.88899	0.27586	2.11581	8.51E-03	1.07E-05	6.76E-05	1.13E-05	7.26E-05	8.6701E-03
520019.81	4258599.01	42460.31741	1.02424	2.57719	1.2939	2.2103	8.50E-03	4.19E-05	9.22E-05	5.30E-05	7.59E-05	8.7662E-03
520138.76	4258322.5	42417.4221	0.31668	4.90542	0.32754	5.71974	8.49E-03	1.30E-05	1.75E-04	1.34E-05	1.96E-04	8.8929E-03
520508.59	4258895.85	42409.62596	0.25861	0.13677	0.24776	0.14351	8.49E-03	1.06E-05	4.89E-06	1.01E-05	4.93E-06	8.5237E-03
520570.6	4258741.78	42391.0287	0.18923	0.14637	0.18133	0.15236	8.49E-03	7.75E-06	5.24E-06	7.42E-06	5.23E-06	8.5150E-03
519986.12	4258753.09	42361.63704	1.1516	0.76942	1.35706	0.72804	8.48E-03	4.72E-05	2.75E-05	5.56E-05	2.50E-05	8.6387E-03
520478.56	4258198.82	42353.21008	0.17149	0.29818	0.17526	0.31701	8.48E-03	7.02E-06	1.07E-05	7.18E-06	1.09E-05	8.5176E-03
520113.52	4259030.77	42344.27309	7.76523	0.31542	6.63683	0.29323	8.48E-03	3.18E-04	1.13E-05	2.72E-04	1.01E-05	9.0910E-03
520574.35	4258708.88	42337.91911	0.18333	0.1504	0.17593	0.15686	8.48E-03	7.51E-06	5.38E-06	7.20E-06	5.39E-06	8.5042E-03
520512.53	4258233.39	42336.45448	0.16538	0.25243	0.16663	0.26733	8.48E-03	6.77E-06	9.03E-06	6.82E-06	9.18E-06	8.5103E-03
520521.88	4258247.4	42314.15139	0.16389	0.2418	0.16421	0.25537	8.47E-03	6.71E-06	8.65E-06	6.72E-06	8.77E-06	8.5048E-03
519993.85	4258844.06	42314.04217	1.54587	0.50425	1.80564	0.49156	8.47E-03	6.33E-05	1.80E-05	7.39E-05	1.69E-05	8.6461E-03
520334.97	4258183.12	42312.66726	0.20569	0.67299	0.21219	0.72656	8.47E-03	8.42E-06	2.41E-05	8.69E-06	2.49E-05	8.5398E-03
520305.57	4258193.02	42297.16935	0.21599	0.818	0.22466	0.89083	8.47E-03	8.84E-06	2.93E-05	9.20E-06	3.06E-05	8.5485E-03
520015.81	4258910.5	42288.20087	2.44266	0.40196	2.9759	0.3948	8.47E-03	1.00E-04	1.44E-05	1.22E-04	1.36E-05	8.7186E-03
520246.75	4258222.84	42204.82442	0.2403	1.29311	0.2539	1.43219	8.45E-03	9.84E-06	4.63E-05	1.04E-05	4.92E-05	8.5677E-03
520547.73	4258308.53	42196.52638	0.16188	0.21354	0.16145	0.22385	8.45E-03	6.63E-06	7.64E-06	6.61E-06	7.68E-06	8.4790E-03
520393.73	4258173.3	42195.00555	0.18869	0.47401	0.19356	0.50494	8.45E-03	7.73E-06	1.70E-05	7.93E-06	1.73E-05	8.5001E-03
520085.77	4259009.33	42173.64889	15.97974	0.33019	18.86667	0.30964	8.45E-03	6.54E-04	1.18E-05	7.72E-04	1.06E-05	9.8950E-03
520403.52	4258173.33	42151.86957	0.18629	0.44855	0.19124	0.47713	8.44E-03	7.63E-06	1.60E-05	7.83E-06	1.64E-05	8.4894E-03
520395.42	4259032.77	42151.31641	0.45651	0.14134	0.43396	0.15033	8.44E-03	1.87E-05	5.06E-06	1.78E-05	5.16E-06	8.4881E-03
520383.95	4258173.27	42129.03275	0.19098	0.50137	0.19585	0.53497	8.44E-03	7.82E-06	1.79E-05	8.02E-06	1.84E-05	8.4891E-03
520546.67	4258822.87	42094.27877	0.21601	0.13909	0.20739	0.14501	8.43E-03	8.84E-06	4.98E-06	8.49E-06	4.98E-06	8.4572E-03
520550.31	4258814.19	42064.0913	0.21215	0.13965	0.20366	0.1455	8.42E-03	8.69E-06	5.00E-06	8.34E-06	5.00E-06	8.4509E-03
520503.36	4258219.45	42063.51431	0.1666	0.26375	0.16877	0.27987	8.42E-03	6.82E-06	9.43E-06	6.91E-06	9.61E-06	8.4566E-03
520365.75	4259052.82	42061.92073	0.53894	0.14615	0.51132	0.15628	8.42E-03	2.21E-05	5.23E-06	2.09E-05	5.37E-06	8.4771E-03
520413.31	4258173.36	42061.45411	0.18391	0.42472	0.18889	0.45142	8.42E-03	7.53E-06	1.52E-05	7.73E-06	1.55E-05	8.4693E-03
520531.58	4258856.31	42043.34571	0.23238	0.13716	0.22308	0.14347	8.42E-03	9.51E-06	4.91E-06	9.13E-06	4.93E-06	8.4482E-03
520000.96	4258874.39	42029.99576	1.80198	0.44992	2.12131	0.44095	8.42E-03	7.38E-05	1.61E-05	8.69E-05	1.51E-05	8.6089E-03
520421.05	4259012.15	41986.19263	0.39834	0.13862	0.3792	0.1467	8.41E-03	1.63E-05	4.96E-06	1.55E-05	5.04E-06	8.4501E-03
520553.94	4258805.51	41984.57825	0.20835	0.14018	0.19998	0.14594	8.41E-03	8.53E-06	5.01E-06	8.19E-06	5.01E-06	8.4347E-03
520217.32	4258242.75	41967.98386	0.25416	1.70725	0.26837	1.90579	8.40E-03	1.04E-05	6.11E-05	1.10E-05	6.54E-05	8.5525E-03
520438.41	4258994.96	41964.44888	0.36424	0.13782	0.34705	0.14522	8.40E-03	1.49E-05	4.93E-06	1.42E-05	4.99E-06	8.4430E-03
520374.16	4258173.24	41940.20992	0.19315	0.53091	0.19815	0.56747	8.40E-03	7.91E-06	1.90E-05	8.11E-06	1.95E-05	8.4536E-03
520487.53	4258202.66	41909.89434	0.16921	0.2853	0.17256	0.30316	8.39E-03	6.93E-06	1.02E-05	7.07E-06	1.04E-05	8.4276E-03
520531.44	4258261.51	41899.47847	0.16212	0.23191	0.16175	0.24404	8.39E-03	6.64E-06	8.30E-06	6.62E-06	8.38E-06	8.4209E-03
520423.1	4258173.39	41885.53884	0.18147	0.40244	0.18644	0.42754	8.39E-03	7.43E-06	1.44E-05	7.63E-06	1.47E-05	8.4323E-03
520104.49	4259027.04	41865.32827	10.02281	0.3181	8.56897	0.29597	8.38E-03	4.10E-04	1.14E-05	3.51E-04	1.02E-05	9.1669E-03
520557.58	4258796.83	41847.9946	0.20461	0.14069	0.19636	0.14637	8.38E-03	8.38E-06	5.03E-06	8.04E-06	5.03E-06	8.4071E-03
520109.27	4258362.41	41827.92221	0.35706	9.93389	0.37374	11.78621	8.38E-03	1.46E-05	3.55E-04	1.53E-05	4.05E-04	9.1665E-03
520465.2	4258963.85	41801.94968	0.31839	0.13677	0.30357	0.14356	8.37E-03	1.30E-05	4.89E-06	1.24E-05	4.93E-06	8.4067E-03
519985.87	4258800.71	41765.02319	1.2726	0.60285	1.48146	0.58082	8.36E-03	5.21E-05	2.16E-05	6.07E-05	1.99E-05	8.5183E-03
520003.68	4258885.5	41754.95011	1.90885	0.4322	2.25712	0.4242	8.36E-03	7.82E-05	1.55E-05	9.24E-05	1.46E-05	8.5626E-03
520325.18	4258183.08	41741.42386	0.20756	0.71765	0.21477	0.77708	8.36E-03	8.50E-06	2.57E-05	8.79E-06	2.67E-05	8.4289E-03
520059.4	4258501.87	41712.54558	0.75297	13.19356	0.85982	7.96512	8.35E-03	3.08E-05	4.72E-04	3.52E-05	2.73E-04	9.1649E-03
520574.06	4258733.51	41710.59665	0.18604	0.14633	0.17833	0.15243	8.35E-03	7.62E-06	5.23E-06	7.30E-06	5.23E-06	8.3785E-03
520364.37	4258173.21	41704.0436	0.19531	0.56271	0.20051	0.60286	8.35E-03	8.00E-06	2.01E-05	8.21E-06	2.07E-05	8.4088E-03
520041.83	4258961.21	41693.11792	4.65112	0.35423	6.51307	0.3439	8.35E-03	1.90E-04	1.27E-05	2.67E-04	1.18E-05	8.8312E-03
519990.14	4258835.12	41675.40822	1.43809	0.51958	1.67193	0.50544	8.35E-03	5.89E-05	1.86E-05	6.85E-05	1.74E-05	8.5093E-03
520385.54	4259042.79	41661.38367	0.48198	0.14192	0.4579	0.15125	8.34E-03	1.97E-05	5.08E-06	1.87E-05	5.19E-06	8.3920E-03
520546.76	4258298.1	41630.84835	0.16089	0.21565	0.16036	0.22589	8.34E-03	6.59E-06	7.71E-06	6.57E-06	7.76E-06	8.3658E-03
520051.75	4258975.3	41630.7529	6.39395	0.34525	10.37462	0.33269	8.34E-03	2.62E-04	1.23E-05	4.25E-04	1.14E-05	9.0475E-03
520403.92	4259029.25	41627.70588	0.43614	0.13949	0.41484	0.14816	8.34E-03	1.79E-05	4.99E-06	1.70E-05	5.09E-06	8.3814E-03
520561.21	4258788.15	41625.82791	0.20089	0.14107	0.19273	0.14668	8.34E-03	8.23E-06	5.05E-06	7.89E-06	5.04E-06	8.3623E-03
520554.95	4258470.43	41620.72111	0.17588	0.18906	0.1724	0.19929	8.34E-03	7.20E-06	6.76E-06	7.06E-06	6.84E-06	8.3630E-03
519988.27	4258710.04	41583.77319	1.05141	0.97989	1.24161	0.91295	8.33E-03	4.30E-05	3.50E-05	5.08E-05	3.13E-05	8.4880E-03
520276.18	4258202.93	41559.35072	0.22541	1.01631	0.23682	1.11599	8.32E-03	9.23E-06	3.64E-05	9.70E-06	3.83E-05	8.4164E-03
520432.89	4258173.42	41556.72296	0.17887	0.38178	0.18386	0.40534	8.32E-03	7.32E-06	1.37E-05	7.53E-06	1.39E-05	8.3647E-03
520456.03	4258977.66	41518.47371	0.33344	0.13653	0.31784	0.14341	8.31E-03	1.37E-05	4.88E-06	1.30E-05	4.92E-06	8.3511E-03
520520.98	4258880.72	41495.82151	0.24456	0.13566	0.23464	0.14217	8.31E-03	1.00E-05	4.85E-06	9.61E-06	4.88E-06	8.3395E-03
520558.91	4258429.07	41491.55093	0.17037	0.19119	0.16776	0.20106	8.31E-03	6.98E-06	6.84E-06	6.87E-06	6.90E-06	8.3368E-03
520031.68	4258947.03	41469.97853	3.53135	0.36359	4.59422	0.35526	8.30E-03	1.45E-04	1.30E-05	1.88E-04	1.22E-05	8.6628E-03
520295.79	4258192.99	41454.71819	0.21739	0.87816	0.22705	0.95894	8.30E-03	8.90E-06	3.14E-05	9.30E-06	3.29E-05	8.3844E-03
520488.9	4258934.03	41425.24325	0.2842	0.13571	0.27183	0.14237	8.30E-03	1.16E-05	4.85E-06	1.11E-05	4.89E-06	8.3285E-03
520227.14	4258232.78	41373.46908	0.2468	1.55145	0.26086	1.72631	8.29E-03	1.01E-05	5.55E-05	1.07E-05	5.93E-05	8.4211E-03
520029.69	4258569.88	41369.99292	0.97141	3.62166	1.22564	2.94412	8.28E-03	3.98E-05	1.30E-04	5.02E-05	1.01E-04	8.6055E-03
520560.33	4258406.94	41357.44159	0.16761	0.19241	0.16528	0.20238	8.28E-03	6.86E-06	6.88E-06	6.77E-06	6.95E-06	8.3099E-03
520460.49	4258181.07	41357.4098	0.17325	0.32875	0.17778	0.34934	8.28E-03	7.09E-06	1.18E-05	7.28E-06	1.20E-05	8.3205E-03
520017.13	4258921.04	41355.50558	2.52212	0.38702	3.0873	0.38021	8.28E-03	1.03E-04	1.38E-05	1.26E-04	1.31E-05	8.5386E-03
520061.48	4258989.3	41350.52192	9.22683	0.33664	17.88657	0.3218	8.28E-03	3.78E-04	1.20E-05	7.32E-04	1.10E-05	9.4142E-03
519990.89	4258692.25	41349.9396	1.02802	1.09862	1.2199	1.01684	8.28E-03	4.21E-05	3.93E-05	4.99E-05	3.49E-05	8.4471E-03
520498.16	4258920.19	41348.28204	0.27211	0.13533	0.26038	0.142	8.28E-03	1.11E-05	4.84E-06	1.07E-05	4.87E-06	8.3121E-03
520354.58	4258173.18	41347.51692	0.19732	0.59722	0.2029	0.6413	8.28E-03	8.08E-06	2.14E-05	8.31E-06	2.20E-05	8.3402E-03
520496.51	4258206.51	41344.70121	0.16683	0.27326	0.16971	0.29018	8.28E-03	6.83E-06	9.77E-06	6.95E-06	9.96E-06	8.3134E-03
520564.85	4258779.46	41334.85846	0.19725	0.14147	0.18918	0.14701	8.28E-03	8.08E-06	5.06E-06	7.75E-06	5.05E-06	8.3038E-03
520095.45	4259023.31	41333.80452	13.2003	0.31939	11.77953	0.29811	8.28E-03	5.40E-04	1.14E-05	4.82E-04	1.02E-05	9.3221E-03
520256.57	4258212.87	41317.9534	0.23293	1.19117	0.24591	1.31466	8.27E-03	9.54E-06	4.26E-05	1.01E-05	4.51E-05	8.3818E-03
520479.82	4258947.79	41315.06533	0.29689	0.13576	0.28359	0.14242	8.27E-03	1.22E-05	4.86E-06	1.16E-05	4.89E-06	8.3074E-03
520521.27	4258237.13	41279.46132	0.16265	0.24305	0.1634	0.25695	8.27E-03	6.66E-06	8.69E-06	6.69E-06	8.82E-06	8.2976E-03
520577.85	4258700.54	41269.70862	0.18029	0.15033	0.17309	0.15669	8.26E-03	7.38E-06	5.38E-06	7.09E-06	5.38E-06	8.2900E-03
520451.58	4258177.26	41268.66687	0.17477	0.34527	0.1796	0.36656	8.26E-03	7.16E-06	1.23E-05	7.35E-06	1.26E-05	8.3041E-03
519997.12	4258664.6	41261.72075	1.01285	1.34793	1.21923	1.23075	8.26E-03	4.15E-05	4.82E-05	4.99E-05	4.23E-05	8.4451E-03
519985.46	4258727.38	41224.95594	1.06131	0.87791	1.24693	0.82313	8.26E-03	4.35E-05	3.14E-05	5.11E-05	2.83E-05	8.4100E-03
520469.39	4258184.89	41223.57698	0.17143	0.31386	0.17571	0.33351	8.26E-03	7.02E-06	1.12E-05	7.19E-06	1.14E-05	8.2925E-03
520541.49	4258842.21	41214.40314	0.22225	0.13675	0.21345	0.14278	8.25E-03	9.10E-06	4.89E-06	8.74E-06	4.90E-06	8.2814E-03
520429.6	4259008.61	41213.02244	0.3813	0.13691	0.3632	0.14464	8.25E-03	1.56E-05	4.90E-06	1.49E-05	4.97E-06	8.2938E-03
520512.04	4258223.17	41209.881	0.16401	0.25369	0.16569	0.26883	8.25E-03	6.72E-06	9.07E-06	6.78E-06	9.23E-06	8.2846E-03
520560.54	4258381.62	41195.92749	0.16492	0.19405	0.16309	0.20449	8.25E-03	6.75E-06	6.94E-06	6.68E-06	7.02E-06	8.2774E-03
520507.62	4258906.26	41159.93115	0.26043	0.13496	0.24948	0.14158	8.24E-03	1.07E-05	4.83E-06	1.02E-05	4.86E-06	8.2734E-03
520005.35	4258896.19	41159.23512	1.9829	0.41542	2.35263	0.40817	8.24E-03	8.12E-05	1.49E-05	9.63E-05	1.40E-05	8.4491E-03
520442.68	4258173.45	41118.2656	0.17619	0.36253	0.18115	0.38468	8.23E-03	7.21E-06	1.30E-05	7.42E-06	1.32E-05	8.2753E-03
520375.66	4259052.8	41076.99781	0.50934	0.14257	0.48352	0.15226	8.23E-03	2.09E-05	5.10E-06	1.98E-05	5.23E-06	8.2772E-03
519982.99	4258769.65	41073.91283	1.13897	0.69631	1.33055	0.66302	8.23E-03	4.66E-05	2.49E-05	5.45E-05	2.28E-05	8.3744E-03
520568.48	4258770.78	41072.51253	0.19379	0.14191	0.18584	0.14741	8.23E-03	7.93E-06	5.08E-06	7.61E-06	5.06E-06	8.2510E-03
520541.24	4258275.72	41066.97321	0.16013	0.22234	0.15949	0.23314	8.22E-03	6.56E-06	7.95E-06	6.53E-06	8.00E-06	8.2533E-03
520315.39	4258183.05	41058.17415	0.20919	0.76692	0.21726	0.83263	8.22E-03	8.57E-06	2.74E-05	8.90E-06	2.86E-05	8.2959E-03
520530.69	4258251.18	41047.57733	0.16105	0.233	0.16095	0.24558	8.22E-03	6.59E-06	8.33E-06	6.59E-06	8.43E-06	8.2503E-03
520412.42	4259025.73	41022.34123	0.41706	0.13754	0.39662	0.1459	8.22E-03	1.71E-05	4.92E-06	1.62E-05	5.01E-06	8.2585E-03
520447.02	4258991.39	41012.09173	0.34904	0.13603	0.33272	0.14312	8.21E-03	1.43E-05	4.87E-06	1.36E-05	4.91E-06	8.2509E-03
520530.41	4258866.8	40986.25642	0.23438	0.13523	0.22495	0.14154	8.21E-03	9.60E-06	4.84E-06	9.21E-06	4.86E-06	8.2366E-03
520545.88	4258287.72	40985.07222	0.15985	0.21745	0.15925	0.2277	8.21E-03	6.54E-06	7.78E-06	6.52E-06	7.82E-06	8.2365E-03
520478.3	4258188.7	40981.84086	0.16947	0.29984	0.17342	0.3186	8.21E-03	6.94E-06	1.07E-05	7.10E-06	1.09E-05	8.2429E-03
520021.28	4258932.74	40968.10955	2.76688	0.37392	3.43647	0.36701	8.20E-03	1.13E-04	1.34E-05	1.41E-04	1.26E-05	8.4844E-03

520049.48	4258521.31	40959.43353	0.81503	7.72475	0.95063	5.52178	8.20E-03	3.34E-05	2.76E-04	3.89E-05	1.90E-04	8.7409E-03
519986.43	4258826.18	40911.2484	1.33766	0.53542	1.54972	0.51958	8.19E-03	5.48E-05	1.92E-05	6.35E-05	1.78E-05	8.3482E-03
520344.79	4258173.15	40898.93969	0.19921	0.63476	0.20533	0.68323	8.19E-03	8.16E-06	2.27E-05	8.41E-06	2.35E-05	8.2533E-03
520517.31	4258892.25	40821.45872	0.24915	0.13452	0.23895	0.14103	8.18E-03	1.02E-05	4.81E-06	9.78E-06	4.84E-06	8.2047E-03
520178.07	4258272.63	40807.29882	0.27305	2.67629	0.28428	3.03088	8.17E-03	1.12E-05	9.57E-05	1.16E-05	1.04E-04	8.3948E-03
520168.25	4258282.6	40803.04554	0.28023	3.05343	0.29067	3.47826	8.17E-03	1.15E-05	1.09E-04	1.19E-05	1.19E-04	8.4234E-03
520236.96	4258222.81	40745.51455	0.23971	1.41635	0.2534	1.5719	8.16E-03	9.81E-06	5.07E-05	1.04E-05	5.40E-05	8.2847E-03
520086.42	4259019.59	40713.91338	15.69544	0.31936	18.13915	0.29961	8.15E-03	6.43E-04	1.14E-05	7.43E-04	1.03E-05	9.5606E-03
520187.89	4258262.66	40680.51168	0.26592	2.36821	0.27788	2.66899	8.15E-03	1.09E-05	8.47E-05	1.14E-05	9.16E-05	8.3454E-03
520572.12	4258762.1	40668.39376	0.19034	0.14216	0.18249	0.14769	8.14E-03	7.79E-06	5.08E-06	7.47E-06	5.07E-06	8.1698E-03
520158.43	4258292.56	40618.27312	0.28732	3.52511	0.29711	4.04013	8.13E-03	1.18E-05	1.26E-04	1.22E-05	1.39E-04	8.4231E-03
520505.49	4258210.35	40612.49689	0.1643	0.26225	0.16675	0.27815	8.13E-03	6.73E-06	9.38E-06	6.83E-06	9.55E-06	8.1657E-03
520487.21	4258192.51	40605.42822	0.16736	0.2869	0.17095	0.30475	8.13E-03	6.85E-06	1.03E-05	7.00E-06	1.05E-05	8.1664E-03
519982.12	4258791.66	40535.44661	1.17812	0.62175	1.36659	0.59687	8.12E-03	4.82E-05	2.22E-05	5.60E-05	2.05E-05	8.2647E-03
520286	4258192.96	40528.44019	0.21845	0.94539	0.22912	1.03491	8.12E-03	8.94E-06	3.38E-05	9.38E-06	3.55E-05	8.2040E-03
520042.84	4258971.62	40515.78958	4.8046	0.34232	6.78364	0.33217	8.11E-03	1.97E-04	1.22E-05	2.78E-04	1.14E-05	8.6120E-03
520119.12	4258342.44	40515.68692	0.33119	7.54537	0.34375	8.98191	8.11E-03	1.36E-05	2.70E-04	1.41E-05	3.08E-04	8.7197E-03
520395.44	4259042.77	40497.34957	0.45666	0.13861	0.43412	0.14751	8.11E-03	1.87E-05	4.96E-06	1.78E-05	5.06E-06	8.1566E-03
520006.88	4258906.81	40488.3594	2.05375	0.39969	2.44511	0.39302	8.11E-03	8.41E-05	1.43E-05	1.00E-04	1.35E-05	8.3203E-03
520393.77	4258163.3	40471.11143	0.18512	0.47618	0.18978	0.50694	8.10E-03	7.58E-06	1.70E-05	7.77E-06	1.74E-05	8.1547E-03
520197.71	4258252.69	40470.22217	0.25894	2.11199	0.27143	2.37202	8.10E-03	1.06E-05	7.55E-05	1.11E-05	8.14E-05	8.2834E-03
520403.55	4258163.33	40469.4465	0.1829	0.45072	0.18758	0.47908	8.10E-03	7.49E-06	1.61E-05	7.68E-06	1.64E-05	8.1523E-03
519982.5	4258744.34	40457.30199	1.06046	0.79075	1.24024	0.74582	8.10E-03	4.34E-05	2.83E-05	5.08E-05	2.56E-05	8.2502E-03
520335	4258173.12	40453.8013	0.20114	0.67553	0.20784	0.72945	8.10E-03	8.24E-06	2.42E-05	8.51E-06	2.50E-05	8.1674E-03
520413.34	4258163.36	40423.03986	0.18068	0.42683	0.18538	0.45328	8.10E-03	7.40E-06	1.53E-05	7.59E-06	1.56E-05	8.1411E-03
520266.39	4258202.9	40416.59914	0.22586	1.10102	0.23816	1.21128	8.09E-03	9.25E-06	3.94E-05	9.75E-06	4.16E-05	8.1939E-03
520464.69	4258974.07	40409.25496	0.31994	0.13464	0.30519	0.1413	8.09E-03	1.31E-05	4.82E-06	1.25E-05	4.85E-06	8.1278E-03
520032.84	4258957.5	40396.98045	3.64843	0.35112	4.77189	0.34291	8.09E-03	1.49E-04	1.26E-05	1.95E-04	1.18E-05	8.4591E-03
520540.33	4258265.31	40391.1348	0.15918	0.22367	0.1586	0.23486	8.09E-03	6.52E-06	8.00E-06	6.49E-06	8.06E-06	8.1180E-03
520438.15	4259005.07	40382.73363	0.36524	0.13524	0.34813	0.14263	8.09E-03	1.50E-05	4.84E-06	1.43E-05	4.90E-06	8.1261E-03
520383.98	4258163.27	40380.2316	0.18726	0.50357	0.19199	0.53707	8.09E-03	7.67E-06	1.80E-05	7.86E-06	1.84E-05	8.1387E-03
520052.62	4258985.65	40373.96967	6.60144	0.33383	10.91077	0.32156	8.09E-03	2.70E-04	1.19E-05	4.47E-04	1.10E-05	8.8254E-03
520420.91	4259022.22	40366.31466	0.39905	0.13594	0.37991	0.14397	8.08E-03	1.63E-05	4.86E-06	1.56E-05	4.94E-06	8.1256E-03
520540.11	4258852.78	40320.53528	0.22438	0.13501	0.21557	0.14105	8.07E-03	9.19E-06	4.83E-06	8.83E-06	4.84E-06	8.1024E-03
520423.13	4258163.39	40302.79239	0.17842	0.40444	0.18312	0.42931	8.07E-03	7.31E-06	1.45E-05	7.50E-06	1.47E-05	8.1152E-03
520305.61	4258183.02	40300.06263	0.2106	0.82135	0.21962	0.89401	8.07E-03	8.62E-06	2.94E-05	8.99E-06	3.07E-05	8.1483E-03
520148.61	4258302.53	40233.25463	0.29429	4.12913	0.30374	4.76045	8.06E-03	1.20E-05	1.48E-04	1.24E-05	1.63E-04	8.3929E-03
520520.72	4258226.88	40228.473	0.16136	0.24435	0.16258	0.25847	8.06E-03	6.61E-06	8.74E-06	6.66E-06	8.87E-06	8.0872E-03
520575.75	4258753.42	40182.79666	0.18696	0.1422	0.1792	0.14782	8.05E-03	7.65E-06	5.09E-06	7.34E-06	5.07E-06	8.0723E-03
520374.19	4258163.24	40172.16088	0.18928	0.53312	0.19422	0.56965	8.05E-03	7.75E-06	1.91E-05	7.95E-06	1.96E-05	8.0994E-03
520530.02	4258240.87	40138.93303	0.15992	0.23418	0.1602	0.24713	8.04E-03	6.55E-06	8.38E-06	6.56E-06	8.48E-06	8.0683E-03
520581.34	4258692.19	40137.92405	0.17736	0.15018	0.17028	0.15641	8.04E-03	7.26E-06	5.37E-06	6.97E-06	5.37E-06	8.0631E-03
520207.53	4258242.72	40137.49448	0.252	1.89707	0.2649	2.12313	8.04E-03	1.03E-05	6.79E-05	1.08E-05	7.29E-05	8.2000E-03
520496.11	4258196.32	40128.75426	0.16516	0.27467	0.16832	0.29165	8.04E-03	6.76E-06	9.82E-06	6.89E-06	1.00E-05	8.0698E-03
520558.29	4258479.19	40114.26465	0.17474	0.18577	0.17088	0.19583	8.03E-03	7.15E-06	6.64E-06	7.00E-06	6.72E-06	8.0609E-03
520556.51	4258312.29	40107.92628	0.1588	0.20577	0.1584	0.21571	8.03E-03	6.50E-06	7.36E-06	6.49E-06	7.41E-06	8.0599E-03
520580.99	4258716.98	40096.97801	0.17992	0.14623	0.17265	0.15242	8.03E-03	7.37E-06	5.23E-06	7.07E-06	5.23E-06	8.0549E-03
520561.7	4258344.55	40095.31178	0.16042	0.19789	0.15977	0.20821	8.03E-03	6.57E-06	7.08E-06	6.54E-06	7.15E-06	8.0570E-03
520488.27	4258944.29	40070.2866	0.28567	0.13377	0.27326	0.14026	8.02E-03	1.17E-05	4.78E-06	1.12E-05	4.82E-06	8.0571E-03
520009.89	4258618.45	40065.43	0.96947	1.99029	1.19408	1.75881	8.02E-03	3.97E-05	7.12E-05	4.89E-05	6.04E-05	8.2438E-03
520497.41	4258930.5	40048.47901	0.27368	0.13345	0.26187	0.13997	8.02E-03	1.12E-05	4.77E-06	1.07E-05	4.81E-06	8.0518E-03
520562.93	4258355.09	40045.88354	0.16108	0.19566	0.16009	0.20604	8.02E-03	6.60E-06	7.00E-06	6.55E-06	7.07E-06	8.0470E-03
520385.56	4259052.79	40034.11417	0.482	0.13919	0.4579	0.14843	8.02E-03	1.97E-05	4.98E-06	1.87E-05	5.10E-06	8.0659E-03
520432.92	4258163.42	40030.06677	0.176	0.38369	0.18074	0.40699	8.02E-03	7.21E-06	1.37E-05	7.40E-06	1.40E-05	8.0589E-03
520562.15	4258437.59	40027.61481	0.16951	0.18802	0.16671	0.19771	8.02E-03	6.94E-06	6.73E-06	6.83E-06	6.79E-06	8.0434E-03
519982.73	4258817.24	40019.02391	1.24365	0.55181	1.43772	0.5339	8.01E-03	5.09E-05	1.97E-05	5.89E-05	1.83E-05	8.1622E-03
520455.62	4258987.83	40017.41284	0.33474	0.13423	0.31925	0.14104	8.01E-03	1.37E-05	4.80E-06	1.31E-05	4.84E-06	8.0505E-03
520022.62	4258943.29	40010.20203	2.86096	0.36076	3.57112	0.35402	8.01E-03	1.17E-04	1.29E-05	1.46E-04	1.22E-05	8.3010E-03
520094.69	4259031.31	40005.31464	13.47248	0.31077	12.13057	0.29039	8.01E-03	5.52E-04	1.11E-05	4.97E-04	9.97E-06	9.0810E-03
520246.78	4258212.84	40005.07615	0.23268	1.29938	0.24599	1.43706	8.01E-03	9.53E-06	4.65E-05	1.01E-05	4.93E-05	8.1270E-03
520563.96	4258390.6	39995.01208	0.16419	0.19055	0.16206	0.20063	8.01E-03	6.72E-06	6.82E-06	6.64E-06	6.89E-06	8.0366E-03
520404.18	4259039.15	39992.08767	0.43578	0.13676	0.41455	0.14533	8.01E-03	1.78E-05	4.89E-06	1.70E-05	4.99E-06	8.0537E-03
520563.81	4258416.06	39989.08215	0.16681	0.18914	0.16429	0.1988	8.01E-03	6.83E-06	6.77E-06	6.73E-06	6.82E-06	8.0355E-03
520506.73	4258916.64	39926.20279	0.26213	0.13313	0.25107	0.13963	8.00E-03	1.07E-05	4.76E-06	1.03E-05	4.79E-06	8.0263E-03
520364.4	4258163.21	39918.15973	0.19128	0.56495	0.19653	0.60511	7.99E-03	7.83E-06	2.02E-05	8.05E-06	2.08E-05	8.0510E-03
520325.21	4258173.08	39892.23918	0.20284	0.72029	0.21029	0.78008	7.99E-03	8.31E-06	2.58E-05	8.61E-06	2.68E-05	8.0584E-03
519992.19	4258870.77	39842.27542	1.54782	0.44745	1.7981	0.43809	7.98E-03	6.34E-05	1.60E-05	7.36E-05	1.50E-05	8.1470E-03
520099.45	4258372.38	39788.57443	0.36281	14.14659	0.3829	15.72817	7.97E-03	1.49E-05	5.06E-04	1.57E-05	5.40E-04	9.0447E-03
520460.39	4258171.02	39781.43764	0.17063	0.33126	0.17534	0.35121	7.97E-03	6.99E-06	1.18E-05	7.18E-06	1.21E-05	8.0048E-03
520469.23	4258174.8	39771.6649	0.1691	0.31603	0.17353	0.33532	7.96E-03	6.92E-06	1.13E-05	7.11E-06	1.15E-05	8.0017E-03
520514.47	4258214.19	39769.54111	0.1617	0.2519	0.16369	0.26681	7.96E-03	6.62E-06	9.01E-06	6.70E-06	9.16E-06	7.9959E-03
520555.45	4258301.82	39757.91779	0.15795	0.2078	0.15743	0.21764	7.96E-03	6.47E-06	7.43E-06	6.45E-06	7.47E-06	7.9899E-03
520008.28	4258917.38	39746.54742	2.12129	0.38488	2.53432	0.3787	7.96E-03	8.69E-05	1.38E-05	1.04E-04	1.30E-05	8.1772E-03
520451.55	4258167.23	39727.10776	0.17207	0.34737	0.1769	0.36814	7.96E-03	7.05E-06	1.24E-05	7.24E-06	1.26E-05	7.9952E-03
520217.35	4258232.75	39701.44388	0.24514	1.71473	0.25829	1.91231	7.95E-03	1.00E-05	6.13E-05	1.06E-05	6.57E-05	8.0984E-03
520539.51	4258254.95	39686.08037	0.15821	0.22475	0.15779	0.23638	7.95E-03	6.48E-06	8.04E-06	6.46E-06	8.12E-06	7.9768E-03
520516.26	4258902.69	39673.68854	0.25098	0.13273	0.24065	0.13916	7.95E-03	1.03E-05	4.75E-06	9.85E-06	4.78E-06	7.9749E-03
520138.79	4258312.5	39672.38932	0.30117	4.92349	0.31061	5.72023	7.94E-03	1.23E-05	1.76E-04	1.27E-05	1.96E-04	8.3425E-03
520058.46	4258998.05	39661.11851	8.23962	0.32434	16.70518	0.31104	7.94E-03	3.37E-04	1.16E-05	6.84E-04	1.07E-05	8.9863E-03
520429.41	4259018.7	39650.47072	0.3821	0.13428	0.36403	0.14199	7.94E-03	1.56E-05	4.80E-06	1.49E-05	4.87E-06	7.9808E-03
520442.71	4258163.45	39637.77768	0.17346	0.36438	0.17824	0.38623	7.94E-03	7.10E-06	1.30E-05	7.30E-06	1.33E-05	7.9787E-03
519994.57	4258881.74	39632.31051	1.62697	0.42991	1.89366	0.42166	7.94E-03	6.66E-05	1.54E-05	7.75E-05	1.45E-05	8.1109E-03
519986.82	4258851.23	39619.41226	1.38887	0.47977	1.60753	0.46792	7.93E-03	5.69E-05	1.72E-05	6.58E-05	1.61E-05	8.0902E-03
520478.07	4258178.58	39619.0082	0.16736	0.30181	0.17149	0.32036	7.93E-03	6.85E-06	1.08E-05	7.02E-06	1.10E-05	7.9699E-03
520579.39	4258744.73	39558.10242	0.18365	0.14214	0.17601	0.14789	7.92E-03	7.52E-06	5.08E-06	7.21E-06	5.08E-06	7.9469E-03
520354.61	4258163.18	39546.88841	0.19312	0.59954	0.19885	0.6436	7.92E-03	7.91E-06	2.14E-05	8.14E-06	2.21E-05	7.9794E-03
519997.12	4258655.32	39527.39305	0.96057	1.41316	1.15572	1.28576	7.92E-03	3.93E-05	5.05E-05	4.73E-05	4.41E-05	8.0972E-03
520276.21	4258192.93	39522.89179	0.21913	1.0208	0.2307	1.11991	7.91E-03	8.97E-06	3.65E-05	9.45E-06	3.84E-05	8.0084E-03
520446.7	4259001.53	39503.00478	0.35011	0.13359	0.33392	0.14064	7.91E-03	1.43E-05	4.78E-06	1.37E-05	4.83E-06	7.9486E-03
520295.82	4258182.99	39484.00621	0.21177	0.88184	0.22176	0.9623	7.91E-03	8.67E-06	3.15E-05	9.08E-06	3.30E-05	7.9895E-03
520505.02	4258200.13	39474.69351	0.16277	0.26372	0.16556	0.27971	7.91E-03	6.66E-06	9.43E-06	6.78E-06	9.60E-06	7.9378E-03
520553.69	4258830.05	39463.8569	0.21096	0.13509	0.20269	0.14078	7.90E-03	8.64E-06	4.83E-06	8.30E-06	4.83E-06	7.9298E-03
520557.29	4258821.46	39442.21759	0.20729	0.13566	0.19917	0.14128	7.90E-03	8.49E-06	4.85E-06	8.15E-06	4.85E-06	7.9252E-03
519979.4	4258761	39407.78779	1.05021	0.71611	1.22391	0.67903	7.89E-03	4.30E-05	2.56E-05	5.01E-05	2.33E-05	8.0340E-03
520412.92	4259035.53	39406.5527	0.41625	0.13481	0.39595	0.14308	7.89E-03	1.70E-05	4.82E-06	1.62E-05	4.91E-06	7.9347E-03
520012.13	4258928.96	39404.40082	2.29563	0.37155	2.77029	0.36559	7.89E-03	9.40E-05	1.33E-05	1.13E-04	1.26E-05	8.1245E-03
520039.56	4258540.74	39386.33469	0.86413	5.20603	1.04037	4.01639	7.89E-03	3.54E-05	1.86E-04	4.26E-05	1.38E-04	8.2897E-03
520560.88	4258812.87	39379.08865	0.2037	0.13618	0.19569	0.14172	7.89E-03	8.34E-06	4.87E-06	8.01E-06	4.87E-06	7.9123E-03
520538.86	4258863.31	39373.81139	0.22637	0.13317	0.21747	0.13923	7.89E-03	9.27E-06	4.76E-06	8.90E-06	4.78E-06	7.9129E-03
520550.22	4258279.56	39368.76248	0.15714	0.21437	0.15647	0.22442	7.88E-03	6.43E-06	7.67E-06	6.41E-06	7.70E-06	7.9123E-03
520033.92	4258967.94	39357.84353	3.76285	0.33945	4.94539	0.33135	7.88E-03	1.54E-04	1.21E-05	2.02E-04	1.14E-05	8.2620E-03
520043.77	4258982	39355.30591	4.95041	0.33103	7.04842	0.32106	7.88E-03	2.03E-04	1.18E-05	2.89E-04	1.10E-05	8.3956E-03
520486.91	4258182.37	39327.97055	0.16545	0.28864	0.16924	0.30638	7.88E-03	6.77E-06	1.03E-05	6.93E-06	1.05E-05	7.9105E-03
520526.02	4258888.64	39287.5519	0.24019	0.13233	0.2306	0.13862	7.87E-03	9.83E-06	4.73E-06	9.44E-06	4.76E-06	7.8966E-03
520473.36	4258970.48	39279.21853	0.30718	0.1328	0.29333	0.13927	7.87E-03	1.26E-05	4.75E-06	1.20E-05	4.78E-06	7.9003E-03
520564.48	4258804.28	39267.95341	0.20015	0.13666	0.19224	0.14212	7.86E-03	8.19E-06	4.89E-06	7.87E-06	4.88E-06	7.8898E-03
520554.5	4258291.4	39258.62397	0.15699	0.20981	0.15639	0.21956	7.86E-03	6.43E-06	7.50E-06	6.40E-06	7.54E-06	7.8899E-03
520561.76	4258462.44	39257.58313	0.17169	0.18544	0.16835	0.19527	7.86E-03	7.03E-06	6.63E-06	6.89E-06	6.70E-06	7.8891E-03
520019.77	4258589.32	39250.58963	0.94386	2.67571	1.1862	2.28182	7.86E-03	3.86E-05	9.57E-05	4.86E-05	7.83E-05	8.1217E-03
520256.6	4258202.87	39223.083	0.22587	1.19669	0.23871	1.31906	7.85E-03	9.25E-06	4.28E-05	9.77E-06	4.53E-05	7.9621E-03
520315.43	4258173.05	39216.48298	0.20427	0.76972	0.21261	0.83566	7.85E-03	8.36E-06	2.75E-05	8.71E-06	2.87E-05	7.9269E-03
520529.4	4258230.59	39215.30576	0.15875	0.23538	0.15946	0.24862	7.85E-03	6.50E-06	8.42E-06	6.53E-06	8.54E-06	7.8834E-03
520227.17	4258222.78	39210.01456	0.23846	1.55801	0.25163	1.73243	7.85E-03	9.76E-06	5.57E-05	1.03E-05	5.95E-05	7.9876E-03
519996.34	4258892.47	39200.63374	1.69092	0.41327	1.97271	0.40592	7.85E-03	6.92E-05	1.48E-05	8.08E-05	1.39E-05	8.0292E-03
519978.37	4258782.62	39168.54224	1.08995	0.64058	1.25975	0.61261	7.84E-03	4.46E-05	2.29E-05	5.16E-05	2.10E-05	7.9842E-03
520344.82	4258163.15	39121.76994	0.1949	0.6371	0.20123	0.68569	7.83E-03	7.98E-06	2.28E-05	8.24E-06	2.35E-05	7.8972E-03
520568.08	4258795.69	39108.07238	0.19664	0.13709	0.18882	0.14248	7.83E-03	8.05E-06	4.90E-06	7.73E-06	4.89E-06	7.8575E-03
520023.85	4258953.79	39054.76647	2.95164	0.34837	3.70021	0.34178	7.82E-03	1.21E-04	1.25E-05	1.52E-04	1.17E-05	8.1178E-03
520109.3	4258352.41	39047.02963	0.33731	9.96295	0.35215	11.79272	7.82E-03	1.38E-05	3.56E-04	1.44E-05	4.05E-04	8.6091E-03
519983.15	4258842.38	39006.83023	1.29729	0.49359	1.49569	0.48042	7.81E-03	5.31E-05	1.77E-05	6.12E-05	1.65E-05	7.9602E-03
519979.02	4258808.3	39001.70129	1.15614	0.56839	1.33299	0.54817	7.81E-03	4.73E-05	2.03E-05	5.46E-05	1.88E-05	7.9517E-03
520464.23	4258984.27	38989.70893	0.32122	0.13241	0.30654	0.13898	7.81E-03	1.32E-05	4.74E-06	1.26E-05	4.77E-06	7.8434E-03
520567.38	4258399.59	38984.95814	0.16363	0.18816	0.1613	0.19783	7.81E-03	6.70E-06	6.73E-06	6.60E-06	6.79E-06	7.8341E-03
520583.02	4258736.05	38955.92287	0.18052	0.14219	0.17308	0.14804	7.80E-03	7.39E-06	5.09E-06	7.09E-06	5.08E-06	7.8261E-03
520395.46	4259052.77	38937.56038	0.4567	0.13596	0.43418	0.14478	7.80E-03	1.87E-05	4.86E-06	1.78E-05	4.97E-06	7.8441E-03
520495.74	4258186.15	38921.34536	0.1634	0.27639	0.16683	0.29331	7.79E-03	6.69E-06	9.89E-06	6.83E-06	1.01E-05	7.8280E-03
520538.76	4258244.61	38914.50589	0.15718	0.22586	0.15705	0.23788	7.79E-03	6.44E-06	8.08E-06	6.43E-06	8.17E-06	7.8223E-03
520393.8	4258153.3	38895.63801	0.18172	0.47801	0.18617	0.50886	7.79E-03	7.44E-06	1.71E-05	7.62E-06	1.75E-05	7.8390E-03
520437.91	4259015.18	38881.90904	0.36611	0.1327	0.34908	0.14007	7.79E-03	1.50E-05	4.75E-06	1.43E-05	4.81E-06	7.8255E-03
520403.59	4258153.33	38877.29144	0.17956	0.45265	0.18402	0.48084	7.79E-03	7.35E-06	1.62E-05	7.53E-06	1.65E-05	7.8333E-03
520567.71	4258374.57	38870.99606	0.16103	0.1903	0.15933	0.20032	7.78E-03	6.59E-06	6.81E-06	6.52E-06	6.88E-06	7.8112E-03
520523.44	4258218.03	38853.0012	0.15908	0.24217	0.16058	0.25614	7.78E-03	6.51E-06	8.66E-06	6.57E-06	8.79E-06	7.8114E-03
520413.37	4258153.36	38851.35997	0.17747	0.42881	0.18193	0.45498	7.78E-03	7.27E-06	1.53E-05	7.45E-06	1.56E-05	7.8262E-03
520549.22	4258269.12	38842.36126	0.15628	0.21578	0.15557	0.22615	7.78E-03	6.40E-06	7.72E-06	6.37E-06	7.76E-06	7.8070E-03
520128.97	4258322.47	38834.1716	0.30762	6.01225	0.31778	7.01049	7.78E-03	1.26E-05	2.15E-04	1.30E-05	2.41E-04	8.2584E-03
520084.79	4259031.32	38824.14846	14.49393	0.30653	19.95932	0.28818	7.78E-03	5.93E-04	1.10E-05	8.17E-04	9.89E-06	9.2066E-03
520571.67	4258787.1	38809.70012	0.19312	0.13741	0.18537	0.14273	7.77E-03	7.91E-06	4.91E-06	7.59E-06	4.90E-06	7.7975E-03
520496.72	4258940.8	38787.28299	0.27515	0.13158	0.26328	0.13794	7.77E-03	1.13E-05	4.71E-06	1.08E-05	4.74E-06	7.7992E-03
520384.01	4258153.27	38775.36665	0.18372	0.50542	0.18832	0.53908	7.77E-03	7.52E-06	1.81E-05	7.71E-06	1.85E-05	7.8171E-03
520421.66	4259031.91	38771.46908	0.39782	0.13317	0.37884	0.14112	7.76E-03	1.63E-05	4.76E-06	1.55E-05	4.84E-06	7.8059E-03
519981.79	4258718.53	38762.96747	0.96707	0.89782	1.12901	0.83992	7.76E-03	3.96E-05	3.21E-05	4.62E-05	2.88E-05	7.9096E-03
520423.16	4258153.39	38752.83883	0.17533	0.40644	0.1798	0.43092	7.76E-03	7.18E-06	1.45E-05	7.36E-06	1.48E-05	7.8047E-03
520505.92	4258926.98	38725.1791	0.26369	0.1313	0.25254	0.13767	7.76E-03	1.08E-05	4.70E-06	1.03E-05	4.73E-06	7.7858E-03
520049.35	4258994.29	38720.80873	5.92973	0.32156	9.0923	0.31069	7.75E-03	2.43E-04	1.15E-05	3.72E-04	1.07E-05	8.3916E-03
520513.92	4258203.94	38708.3466	0.16029	0.25334	0.16268	0.26835	7.75E-03	6.56E-06	9.06E-06	6.66E-06	9.21E-06	7.7834E-03
520335.03	4258163.12	38691.55196	0.1967	0.67793	0.20364	0.73204	7.75E-03	8.05E-06	2.42E-05	8.34E-06	2.51E-05	7.8143E-03
519997.95	4258903.12	38679.6867	1.75158	0.39768	2.04868	0.39106	7.75E-03	7.17E-05	1.42E-05	8.39E-05	1.34E-05	7.9294E-03
519984.55	4258701.08	38664.77567	0.94998	0.99898	1.11479	0.92922	7.74E-03	3.89E-05	3.57E-05	4.56E-05	3.19E-05	7.8953E-03
520548.63	4258849.26	38657.48888	0.21677	0.13289	0.2084	0.13867	7.74E-03	8.88E-06	4.75E-06	8.53E-06	4.76E-06	7.7686E-03
520236.99	4258212.81	38622.10907	0.23185	1.42292	0.24494	1.57686	7.73E-03	9.49E-06	5.09E-05	1.00E-05	5.41E-05	7.8592E-03
520286.03	4258182.96	38597.92616	0.21263	0.94933	0.22351	1.03844	7.73E-03	8.71E-06	3.40E-05	9.15E-06	3.57E-05	7.8172E-03
520567.28	4258425.19	38587.70937	0.16596	0.18587	0.16327	0.1953	7.73E-03	6.80E-06	6.65E-06	6.68E-06	6.70E-06	7.7545E-03
520455.25	4258997.99	38583.23564	0.33584	0.13192	0.32051	0.13867	7.73E-03	1.38E-05	4.72E-06	1.31E-05	4.76E-06	7.7632E-03
520575.27	4258778.51	38551.0871	0.18977	0.13779	0.1821	0.14306	7.72E-03	7.77E-06	4.93E-06	7.46E-06	4.91E-06	7.7454E-03
520013.55	4258939.54	38544.58323	2.36994	0.3584	2.87202	0.35269	7.72E-03	9.70E-05	1.28E-05	1.18E-04	1.21E-05	7.9586E-03
520515.3	4258913.09	38543.62035	0.25268	0.13095	0.24223	0.13727	7.72E-03	1.03E-05	4.68E-06	9.92E-06	4.71E-06	7.7485E-03
520432.95	4258153.42	38527.62402	0.17306	0.38562	0.1776	0.40853	7.72E-03	7.09E-06	1.38E-05	7.27E-06	1.40E-05	7.7579E-03
520374.22	4258153.24	38515.61572	0.18553	0.53509	0.19048	0.57166	7.71E-03	7.60E-06	1.91E-05	7.80E-06	1.96E-05	7.7674E-03
520178.1	4258262.63	38461.91739	0.26183	2.68611	0.27154	3.03946	7.70E-03	1.07E-05	9.61E-05	1.11E-05	1.04E-04	7.9248E-03
520404.14	4259049.17	38458.0622	0.43602	0.13412	0.41471	0.14262	7.70E-03	1.79E-05	4.80E-06	1.70E-05	4.90E-06	7.7463E-03
520305.64	4258173.02	38455.52033	0.20542	0.82451	0.21474	0.89711	7.70E-03	8.41E-06	2.95E-05	8.79E-06	3.08E-05	7.7787E-03
520266.42	4258192.9	38428.27237	0.21933	1.10585	0.2316	1.21529	7.70E-03	8.98E-06	3.96E-05	9.48E-06	4.17E-05	7.7955E-03
520187.92	4258252.66	38422.52915	0.25549	2.37638	0.2659	2.67823	7.69E-03	1.05E-05	8.50E-05	1.09E-05	9.19E-05	7.8929E-03
520537.74	4258873.78	38417.24379	0.22818	0.1314	0.21923	0.13745	7.69E-03	9.34E-06	4.70E-06	8.98E-06	4.72E-06	7.7213E-03
520059.31	4259008.4	38414.70477	8.54876	0.31385	18.05581	0.30092	7.69E-03	3.50E-04	1.12E-05	7.39E-04	1.03E-05	8.8039E-03
520168.28	4258272.6	38404.64816	0.26826	3.06444	0.27722	3.48699	7.69E-03	1.10E-05	1.10E-04	1.14E-05	1.20E-04	7.9427E-03
519978.87	4258735.6	38396.94986	0.97385	0.8101	1.13132	0.76206	7.69E-03	3.99E-05	2.90E-05	4.63E-05	2.62E-05	7.8308E-03
520504.58	4258189.93	38381.97786	0.16122	0.26512	0.16427	0.28118	7.69E-03	6.60E-06	9.48E-06	6.73E-06	9.65E-06	7.7190E-03
520460.3	4258160.97	38365.82975	0.16812	0.33322	0.17282	0.35275	7.68E-03	6.88E-06	1.19E-05	7.08E-06	1.21E-05	7.7213E-03
520469.07	4258164.72	38364.35308	0.1667	0.3181	0.17125	0.33693	7.68E-03	6.83E-06	1.14E-05	7.01E-06	1.16E-05	7.7198E-03
520059.36	4258492.17	38352.48537	0.68007	13.29831	0.76721	7.9772	7.68E-03	2.78E-05	4.76E-04	3.14E-05	2.74E-04	8.4894E-03
520451.52	4258157.21	38317.81348	0.16946	0.34924	0.17417	0.36965	7.67E-03	6.94E-06	1.25E-05	7.13E-06	1.27E-05	7.7129E-03
520034.92	4258978.34	38298.14453	3.87087	0.32835	5.11374	0.32035	7.67E-03	1.58E-04	1.17E-05	2.09E-04	1.10E-05	8.0603E-03
520578.87	4258769.92	38294.82086	0.18655	0.13818	0.179	0.14344	7.67E-03	7.64E-06	4.94E-06	7.33E-06	4.92E-06	7.6939E-03
519979.49	4258833.54	38287.31753	1.2118	0.50778	1.39257	0.49306	7.67E-03	4.96E-05	1.82E-05	5.70E-05	1.69E-05	7.8093E-03
520477.85	4258168.48	38286.36297	0.16517	0.30382	0.16946	0.32204	7.67E-03	6.76E-06	1.09E-05	6.94E-06	1.11E-05	7.7030E-03
520197.74	4258242.69	38260.61335	0.24915	2.11977	0.26021	2.37981	7.66E-03	1.02E-05	7.58E-05	1.07E-05	8.17E-05	7.8406E-03
520548.32	4258258.72	38259.37628	0.15539	0.21696	0.15474	0.22771	7.66E-03	6.36E-06	7.76E-06	6.34E-06	7.82E-06	7.6902E-03
520364.43	4258153.21	38246.86859	0.18738	0.56697	0.19273	0.60719	7.66E-03	7.67E-06	2.03E-05	7.89E-06	2.08E-05	7.7161E-03
520524.9	4258899.11	38238.74772	0.24202	0.13059	0.2323	0.13682	7.66E-03	9.91E-06	4.67E-06	9.51E-06	4.70E-06	7.6866E-03
520491.39	4258953.01	38224.45048	0.28232	0.13088	0.27011	0.13716	7.65E-03	1.16E-05	4.68E-06	1.11E-05	4.71E-06	7.6870E-03
520586.66	4258727.37	38215.58559	0.17742	0.14223	0.17023	0.14814	7.65E-03	7.26E-06	5.09E-06	6.97E-06	5.09E-06	7.6776E-03
520158.46	4258282.56	38209.31285	0.27467	3.53645	0.28297	4.05165	7.65E-03	1.12E-05	1.26E-04	1.16E-05	1.39E-04	7.9404E-03
520587.91	4258700.44	38193.33045	0.17418	0.14605	0.16727	0.15209	7.65E-03	7.13E-06	5.22E-06	6.85E-06	5.22E-06	7.6732E-03
520442.74	4258153.45	38180.00012	0.17067	0.36625	0.17529	0.38767	7.65E-03	6.99E-06	1.31E-05	7.18E-06	1.33E-05	7.6866E-03
520482.02	4258966.89	38164.61451	0.29509	0.13101	0.28223	0.13728	7.64E-03	1.21E-05	4.69E-06	1.16E-05	4.71E-06	7.6760E-03
520025	4258964.26	38136.96407	3.04125	0.33675	3.82451	0.33026	7.64E-03	1.25E-04	1.20E-05	1.57E-04	1.13E-05	7.9419E-03
520325.25	4258163.08	38135.06581	0.19821	0.7228	0.20595	0.78269	7.64E-03	8.12E-06	2.59E-05	8.43E-06	2.69E-05	7.7063E-03
520538.08	4258234.31	38113.90831	0.15611	0.22696	0.15636	0.23932	7.63E-03	6.39E-06	8.12E-06	6.40E-06	8.22E-06	7.6620E-03
520093.33	4259043.57	38113.57179	13.97094	0.2983	12.81594	0.27922	7.63E-03	5.72E-04	1.07E-05	5.25E-04	9.59E-06	8.7498E-03

520486.63	4258172.24	38092.19219	0.16348	0.2904	0.16744	0.30798	7.63E-03	6.69E-06	1.04E-05	6.86E-06	1.06E-05	7.6630E-03
519999.43	4258913.73	38084.07074	1.80954	0.38295	2.12193	0.37694	7.63E-03	7.41E-05	1.37E-05	8.69E-05	1.29E-05	7.8145E-03
520430.4	4259028.3	38076.54978	0.38052	0.13152	0.36266	0.13915	7.63E-03	1.56E-05	4.70E-06	1.48E-05	4.78E-06	7.6653E-03
520446.41	4259011.66	38067.20209	0.35106	0.1311	0.33493	0.13814	7.62E-03	1.44E-05	4.69E-06	1.37E-05	4.74E-06	7.6610E-03
520568.02	4258337.24	38037.34622	0.15697	0.19406	0.15638	0.20395	7.62E-03	6.43E-06	6.94E-06	6.40E-06	7.00E-06	7.6443E-03
520565.29	4258316.05	38001.62798	0.15572	0.19855	0.15534	0.20814	7.61E-03	6.38E-06	7.10E-06	6.36E-06	7.15E-06	7.6373E-03
520207.56	4258232.72	37984.84869	0.24283	1.90446	0.25445	2.12989	7.61E-03	9.94E-06	6.81E-05	1.04E-05	7.31E-05	7.7686E-03
520246.81	4258202.84	37970.36235	0.22538	1.30526	0.23826	1.4415	7.60E-03	9.23E-06	4.67E-05	9.76E-06	4.95E-05	7.7192E-03
520472.83	4258980.71	37944.49661	0.30849	0.13064	0.29465	0.137	7.60E-03	1.26E-05	4.67E-06	1.21E-05	4.70E-06	7.6330E-03
520412.82	4259045.58	37923.47428	0.41662	0.13229	0.39641	0.14048	7.59E-03	1.71E-05	4.73E-06	1.62E-05	4.82E-06	7.6375E-03
519987.12	4258683.15	37918.47876	0.91914	1.11524	1.08577	1.03049	7.59E-03	3.76E-05	3.99E-05	4.45E-05	3.54E-05	7.7511E-03
520522.83	4258207.76	37891.40378	0.15781	0.2435	0.15973	0.25763	7.59E-03	6.46E-06	8.71E-06	6.54E-06	8.84E-06	7.6188E-03
520532.42	4258221.88	37881.07897	0.15648	0.23297	0.15744	0.24608	7.59E-03	6.41E-06	8.33E-06	6.45E-06	8.45E-06	7.6158E-03
520582.47	4258761.33	37880.50228	0.18331	0.13828	0.17583	0.1436	7.59E-03	7.51E-06	4.95E-06	7.20E-06	4.93E-06	7.6107E-03
519975.31	4258799.36	37875.21781	1.07534	0.58491	1.23465	0.56226	7.59E-03	4.40E-05	2.09E-05	5.06E-05	1.93E-05	7.7198E-03
520354.64	4258153.18	37859.45642	0.18905	0.60164	0.19498	0.6457	7.58E-03	7.74E-06	2.15E-05	7.98E-06	2.22E-05	7.6413E-03
520148.64	4258292.53	37832.61276	0.28094	4.14101	0.28892	4.77688	7.58E-03	1.15E-05	1.48E-04	1.18E-05	1.64E-04	7.9119E-03
520547.31	4258859.81	37825.09363	0.21874	0.13116	0.21033	0.13696	7.57E-03	8.96E-06	4.69E-06	8.61E-06	4.70E-06	7.6020E-03
520564.14	4258305.55	37819.12907	0.15499	0.20053	0.15452	0.20999	7.57E-03	6.35E-06	7.17E-06	6.33E-06	7.21E-06	7.6009E-03
520565.05	4258471.07	37812.9771	0.17061	0.18233	0.16694	0.19202	7.57E-03	6.99E-06	6.52E-06	6.84E-06	6.59E-06	7.5995E-03
520534.74	4258885.03	37800.94639	0.23168	0.13022	0.22266	0.13627	7.57E-03	9.49E-06	4.66E-06	9.12E-06	4.68E-06	7.5981E-03
520002.98	4258925.19	37789.73882	1.93743	0.36951	2.28789	0.36397	7.57E-03	7.93E-05	1.32E-05	9.37E-05	1.25E-05	7.7666E-03
520570.81	4258408.58	37767.65948	0.16286	0.18512	0.16035	0.19447	7.56E-03	6.67E-06	6.62E-06	6.57E-06	6.68E-06	7.5900E-03
520495.41	4258175.99	37747.65884	0.16159	0.27806	0.16524	0.29487	7.56E-03	6.62E-06	9.95E-06	6.77E-06	1.01E-05	7.5929E-03
520040.25	4258990.54	37737.96897	4.489	0.31886	6.1445	0.31012	7.56E-03	1.84E-04	1.14E-05	2.52E-04	1.06E-05	8.0150E-03
520014.87	4258950.08	37716.69445	2.44483	0.34608	2.97336	0.34058	7.55E-03	1.00E-04	1.24E-05	1.22E-04	1.17E-05	7.7992E-03
520513.42	4258193.72	37691.30541	0.15887	0.25472	0.16159	0.26982	7.55E-03	6.50E-06	9.11E-06	6.62E-06	9.26E-06	7.5797E-03
519975.82	4258752.35	37674.07665	0.97052	0.73448	1.12468	0.6943	7.54E-03	3.97E-05	2.63E-05	4.60E-05	2.38E-05	7.6806E-03
519997.12	4258646.05	37670.77618	0.90804	1.47593	1.0903	1.33901	7.54E-03	3.72E-05	5.28E-05	4.46E-05	4.60E-05	7.7247E-03
520029.65	4258560.18	37664.87291	0.88365	3.71682	1.08974	3.02367	7.54E-03	3.62E-05	1.33E-04	4.46E-05	1.04E-04	7.8605E-03
520295.85	4258172.99	37653.6389	0.20636	0.8853	0.21659	0.96544	7.54E-03	8.45E-06	3.17E-05	8.87E-06	3.31E-05	7.6228E-03
519974.62	4258773.58	37646.11176	1.00602	0.65922	1.16047	0.62782	7.54E-03	4.12E-05	2.36E-05	4.75E-05	2.16E-05	7.6730E-03
520559.2	4258283.4	37639.78333	0.15419	0.20672	0.15354	0.21615	7.54E-03	6.31E-06	7.39E-06	6.29E-06	7.42E-06	7.5653E-03
520463.8	4258994.45	37633.35988	0.32238	0.13023	0.30785	0.13671	7.54E-03	1.32E-05	4.66E-06	1.26E-05	4.69E-06	7.5717E-03
520217.38	4258222.75	37629.37098	0.23661	1.72136	0.24862	1.91857	7.54E-03	9.69E-06	6.16E-05	1.02E-05	6.59E-05	7.6831E-03
520276.24	4258182.93	37624.43587	0.21305	1.0251	0.22469	1.12349	7.53E-03	8.72E-06	3.67E-05	9.20E-06	3.86E-05	7.6280E-03
520547.5	4258248.36	37619.84578	0.15445	0.21804	0.154	0.22916	7.53E-03	6.32E-06	7.80E-06	6.31E-06	7.87E-06	7.5622E-03
520505.17	4258937.3	37554.66005	0.26515	0.12949	0.25393	0.13572	7.52E-03	1.09E-05	4.63E-06	1.04E-05	4.66E-06	7.5514E-03
520050.28	4259004.67	37552.07346	6.13684	0.31126	9.53998	0.30062	7.52E-03	2.51E-04	1.11E-05	3.91E-04	1.03E-05	8.1836E-03
520062.25	4258475.37	37545.72844	0.59768	16.78882	0.66597	8.8469	7.52E-03	2.45E-05	6.01E-04	2.73E-05	3.04E-04	8.4750E-03
519985.47	4258877.99	37525.38714	1.40187	0.42743	1.61166	0.41878	7.51E-03	5.74E-05	1.53E-05	6.60E-05	1.44E-05	7.6680E-03
520563.12	4258295.09	37497.81958	0.15415	0.20247	0.15358	0.21181	7.51E-03	6.31E-06	7.24E-06	6.29E-06	7.27E-06	7.5366E-03
520315.46	4258163.05	37492.93392	0.1995	0.77236	0.2081	0.83851	7.51E-03	8.17E-06	2.76E-05	8.52E-06	2.88E-05	7.5816E-03
519975.82	4258824.69	37453.49251	1.13136	0.52231	1.29654	0.50577	7.50E-03	4.63E-05	1.87E-05	5.31E-05	1.74E-05	7.6360E-03
520344.85	4258153.15	37440.5907	0.19069	0.63929	0.19727	0.68788	7.50E-03	7.81E-06	2.29E-05	8.08E-06	2.36E-05	7.5604E-03
520514.42	4258923.46	37436.22402	0.25424	0.12918	0.2437	0.13539	7.50E-03	1.04E-05	4.62E-06	9.98E-06	4.65E-06	7.5268E-03
520590.3	4258718.69	37394.10021	0.17441	0.14214	0.16744	0.14807	7.49E-03	7.14E-06	5.08E-06	6.86E-06	5.08E-06	7.5128E-03
520009.85	4258608.75	37378.97896	0.90013	2.06276	1.10405	1.81954	7.49E-03	3.69E-05	7.38E-05	4.52E-05	6.25E-05	7.7040E-03
520413.41	4258143.36	37346.16876	0.17429	0.4306	0.17855	0.45649	7.48E-03	7.14E-06	1.54E-05	7.31E-06	1.57E-05	7.5246E-03
520393.83	4258143.3	37343.84389	0.17829	0.47981	0.18267	0.51053	7.48E-03	7.30E-06	1.72E-05	7.48E-06	1.75E-05	7.5281E-03
520403.62	4258143.33	37335.16456	0.17623	0.45448	0.18056	0.48241	7.48E-03	7.22E-06	1.63E-05	7.39E-06	1.66E-05	7.5243E-03
520421.51	4259041.98	37332.24407	0.39834	0.13062	0.37933	0.13851	7.48E-03	1.63E-05	4.67E-06	1.55E-05	4.76E-06	7.5176E-03
520439.14	4259024.68	37331.61377	0.36423	0.12993	0.34743	0.13723	7.48E-03	1.49E-05	4.65E-06	1.42E-05	4.71E-06	7.5147E-03
520586.06	4258752.74	37318.74602	0.1801	0.13824	0.17271	0.14367	7.47E-03	7.37E-06	4.94E-06	7.07E-06	4.93E-06	7.4979E-03
520504.19	4258179.75	37296.05973	0.15958	0.26658	0.16288	0.28262	7.47E-03	6.53E-06	9.54E-06	6.67E-06	9.70E-06	7.5015E-03
520256.63	4258192.87	37280.95946	0.21909	1.20189	0.23164	1.32307	7.47E-03	8.97E-06	4.30E-05	9.48E-06	4.54E-05	7.5729E-03
520138.82	4258302.5	37258.42225	0.287	4.9384	0.29512	5.73274	7.46E-03	1.18E-05	1.77E-04	1.21E-05	1.97E-04	7.8588E-03
520558.12	4258272.93	37248.62788	0.15341	0.20823	0.15264	0.21788	7.46E-03	6.28E-06	7.45E-06	6.25E-06	7.48E-06	7.4870E-03
519987.32	4258888.75	37245.49185	1.45789	0.41106	1.67806	0.40342	7.46E-03	5.97E-05	1.47E-05	6.87E-05	1.38E-05	7.6159E-03
520423.19	4258143.39	37244.51713	0.17222	0.40836	0.17652	0.43237	7.46E-03	7.05E-06	1.46E-05	7.23E-06	1.48E-05	7.5025E-03
520384.04	4258143.27	37236.77884	0.18022	0.50711	0.18479	0.54085	7.46E-03	7.38E-06	1.81E-05	7.57E-06	1.86E-05	7.5088E-03
520099.48	4258362.38	37230.91037	0.34229	14.18533	0.36026	15.79597	7.46E-03	1.40E-05	5.07E-04	1.48E-05	5.42E-04	8.5344E-03
520454.9	4259008.14	37216.5438	0.33685	0.12954	0.3216	0.13627	7.45E-03	1.38E-05	4.63E-06	1.32E-05	4.68E-06	7.4894E-03
520026.07	4258974.69	37204.43612	3.12707	0.32583	3.94511	0.31942	7.45E-03	1.28E-04	1.17E-05	1.62E-04	1.10E-05	7.7629E-03
520523.87	4258909.54	37202.07261	0.24371	0.12883	0.23386	0.13497	7.45E-03	9.98E-06	4.61E-06	9.58E-06	4.63E-06	7.4790E-03
519979.79	4258858.39	37177.70756	1.25695	0.45699	1.44149	0.44599	7.45E-03	5.15E-05	1.63E-05	5.90E-05	1.53E-05	7.5875E-03
520570.76	4258434.32	37160.63871	0.16504	0.18264	0.16217	0.19188	7.44E-03	6.76E-06	6.53E-06	6.64E-06	6.59E-06	7.4684E-03
520227.2	4258212.78	37152.37825	0.23035	1.56504	0.24268	1.73711	7.44E-03	9.43E-06	5.60E-05	9.94E-06	5.96E-05	7.5753E-03
520591.37	4258692.17	37151.56989	0.17143	0.14589	0.16463	0.1518	7.44E-03	7.02E-06	5.22E-06	6.74E-06	5.21E-06	7.4643E-03
520568.64	4258454.63	37129.91221	0.16763	0.18181	0.16438	0.19125	7.44E-03	6.86E-06	6.50E-06	6.73E-06	6.57E-06	7.4624E-03
520004.49	4258935.8	37107.55027	2.00189	0.35649	2.37177	0.35133	7.43E-03	8.20E-05	1.28E-05	9.71E-05	1.21E-05	7.6352E-03
520560.71	4258837.22	37072.11137	0.20604	0.13118	0.1981	0.13667	7.42E-03	8.44E-06	4.69E-06	8.11E-06	4.69E-06	7.4501E-03
520374.25	4258143.24	37072.04989	0.18211	0.53643	0.18697	0.57369	7.42E-03	7.46E-06	1.92E-05	7.66E-06	1.97E-05	7.4782E-03
520432.98	4258143.42	37066.70948	0.1701	0.38749	0.17446	0.40992	7.42E-03	6.96E-06	1.39E-05	7.14E-06	1.41E-05	7.4652E-03
520468.93	4258154.65	37066.04003	0.16436	0.31993	0.1689	0.3384	7.42E-03	6.73E-06	1.14E-05	6.92E-06	1.16E-05	7.4597E-03
520460.21	4258150.92	37058.83867	0.16567	0.33501	0.17026	0.35422	7.42E-03	6.78E-06	1.20E-05	6.97E-06	1.22E-05	7.4594E-03
520564.28	4258828.71	37056.2589	0.20257	0.13181	0.19479	0.13721	7.42E-03	8.29E-06	4.71E-06	7.98E-06	4.71E-06	7.4467E-03
520083.42	4259043.59	37018.32714	14.37839	0.2941	21.73969	0.27703	7.41E-03	5.89E-04	1.05E-05	8.90E-04	9.51E-06	8.9123E-03
520490.69	4258963.31	37013.9385	0.28375	0.129	0.27154	0.13514	7.41E-03	1.16E-05	4.61E-06	1.11E-05	4.64E-06	7.4445E-03
520335.07	4258153.12	37011.50578	0.19232	0.68021	0.19957	0.73427	7.41E-03	7.87E-06	2.43E-05	8.17E-06	2.52E-05	7.4776E-03
520500.12	4258949.4	37009.24783	0.27162	0.12874	0.26004	0.13489	7.41E-03	1.11E-05	4.60E-06	1.06E-05	4.63E-06	7.4426E-03
520567.84	4258820.2	37004.67434	0.19915	0.13231	0.19148	0.13764	7.41E-03	8.15E-06	4.73E-06	7.84E-06	4.73E-06	7.4361E-03
520477.66	4258158.38	37003.09354	0.16294	0.3057	0.16732	0.32354	7.41E-03	6.67E-06	1.09E-05	6.85E-06	1.11E-05	7.4459E-03
520531.73	4258211.57	36966.38478	0.15526	0.23434	0.15672	0.24756	7.40E-03	6.36E-06	8.38E-06	6.42E-06	8.50E-06	7.4327E-03
520522.26	4258197.5	36960.95306	0.15652	0.24479	0.1588	0.25905	7.40E-03	6.41E-06	8.76E-06	6.50E-06	8.89E-06	7.4325E-03
520546.12	4258870.31	36960.54334	0.22056	0.12935	0.21206	0.13516	7.40E-03	9.03E-06	4.63E-06	8.68E-06	4.64E-06	7.4288E-03
520053.78	4259013.71	36960.15181	6.95352	0.3046	11.70104	0.29347	7.40E-03	2.85E-04	1.09E-05	4.79E-04	1.01E-05	8.1865E-03
520451.49	4258147.18	36946.50794	0.16681	0.35106	0.17138	0.37105	7.40E-03	6.83E-06	1.26E-05	7.02E-06	1.27E-05	7.4382E-03
520546.75	4258238.02	36931.83013	0.15347	0.21912	0.15333	0.23059	7.40E-03	6.28E-06	7.84E-06	6.28E-06	7.92E-06	7.4244E-03
520571.4	4258811.69	36914.58753	0.19578	0.13276	0.1882	0.13803	7.39E-03	8.02E-06	4.75E-06	7.71E-06	4.74E-06	7.4179E-03
520481.44	4258977.14	36905.35144	0.29641	0.12898	0.28355	0.13514	7.39E-03	1.21E-05	4.61E-06	1.16E-05	4.64E-06	7.4238E-03
520486.38	4258162.11	36901.42144	0.16147	0.29209	0.16554	0.30946	7.39E-03	6.61E-06	1.04E-05	6.78E-06	1.06E-05	7.4245E-03
520016.08	4258960.58	36896.12842	2.5177	0.33449	3.07033	0.32915	7.39E-03	1.03E-04	1.20E-05	1.26E-04	1.13E-05	7.6410E-03
519989.02	4258899.44	36869.66475	1.51106	0.39573	1.74263	0.38891	7.38E-03	6.19E-05	1.42E-05	7.14E-05	1.34E-05	7.5444E-03
520533.54	4258895.53	36853.69395	0.2335	0.12854	0.22438	0.13455	7.38E-03	9.56E-06	4.60E-06	9.19E-06	4.62E-06	7.4084E-03
520541.4	4258225.72	36830.06956	0.15387	0.22428	0.1543	0.23656	7.38E-03	6.30E-06	8.02E-06	6.32E-06	8.12E-06	7.4045E-03
520286.06	4258172.96	36798.92487	0.20699	0.95308	0.21801	1.04168	7.37E-03	8.48E-06	3.41E-05	8.93E-06	3.58E-05	7.4567E-03
520093.34	4259053.57	36798.13068	13.89992	0.28916	12.78968	0.27086	7.37E-03	5.69E-04	1.03E-05	5.24E-04	9.30E-06	8.4818E-03
520557.14	4258262.49	36794.70173	0.1526	0.20949	0.1518	0.21945	7.37E-03	6.25E-06	7.49E-06	6.22E-06	7.53E-06	7.3961E-03
520574.96	4258803.19	36783.59665	0.19245	0.13322	0.18496	0.1384	7.37E-03	7.88E-06	4.77E-06	7.57E-06	4.75E-06	7.3914E-03
520442.77	4258143.45	36768.9607	0.16786	0.36803	0.17231	0.38897	7.36E-03	6.87E-06	1.32E-05	7.06E-06	1.34E-05	7.4039E-03
520589.66	4258744.15	36763.15981	0.17705	0.1382	0.1698	0.14375	7.36E-03	7.25E-06	4.94E-06	6.95E-06	4.94E-06	7.3864E-03
520305.67	4258163.02	36733.65246	0.20041	0.82749	0.20998	0.89998	7.36E-03	8.21E-06	2.96E-05	8.60E-06	3.09E-05	7.4337E-03
520512.96	4258183.51	36719.95302	0.15743	0.25601	0.16039	0.2712	7.35E-03	6.45E-06	9.16E-06	6.57E-06	9.31E-06	7.3852E-03
520031.14	4258986.78	36715.96918	3.53573	0.31636	4.55676	0.30938	7.35E-03	1.45E-04	1.13E-05	1.87E-04	1.06E-05	7.7062E-03
520430.19	4259038.39	36687.67501	0.38115	0.12906	0.36335	0.13665	7.35E-03	1.56E-05	4.62E-06	1.49E-05	4.69E-06	7.3870E-03
520364.46	4258143.21	36666.25703	0.18357	0.56881	0.18909	0.60904	7.34E-03	7.52E-06	2.03E-05	7.74E-06	2.09E-05	7.3994E-03
520472.35	4258990.91	36663.35954	0.30966	0.12853	0.29592	0.13479	7.34E-03	1.27E-05	4.60E-06	1.21E-05	4.63E-06	7.3764E-03
520041.24	4259000.94	36662.78451	4.63228	0.30871	6.37893	0.30011	7.34E-03	1.90E-04	1.10E-05	2.61E-04	1.03E-05	7.8144E-03
520237.02	4258202.81	36654.70058	0.22432	1.4291	0.23672	1.58129	7.34E-03	9.18E-06	5.11E-05	9.69E-06	5.43E-05	7.4649E-03
520495.1	4258165.85	36627.48183	0.15976	0.2796	0.16355	0.29628	7.34E-03	6.54E-06	1.00E-05	6.70E-06	1.02E-05	7.3686E-03
519987.12	4258673.87	36621.50038	0.88026	1.16534	1.03724	1.07484	7.33E-03	3.60E-05	4.17E-05	4.25E-05	3.69E-05	7.4910E-03
519971.61	4258790.42	36619.50343	0.99867	0.60154	1.14354	0.57611	7.33E-03	4.09E-05	2.15E-05	4.68E-05	1.98E-05	7.4626E-03
520578.53	4258794.68	36607.76583	0.18918	0.13367	0.18179	0.13878	7.33E-03	7.75E-06	4.78E-06	7.44E-06	4.76E-06	7.3559E-03
520109.33	4258342.41	36590.57424	0.31945	9.98845	0.33266	11.84693	7.33E-03	1.31E-05	3.57E-04	1.36E-05	4.07E-04	8.1185E-03
519976.16	4258849.63	36589.43558	1.17784	0.46952	1.34702	0.45727	7.33E-03	4.82E-05	1.68E-05	5.52E-05	1.57E-05	7.4634E-03
520266.45	4258182.9	36580.33458	0.21304	1.11042	0.22515	1.21897	7.33E-03	8.72E-06	3.97E-05	9.22E-06	4.18E-05	7.4252E-03
520447.88	4259021.06	36542.18831	0.3489	0.12835	0.33302	0.13532	7.32E-03	1.43E-05	4.59E-06	1.36E-05	4.65E-06	7.3552E-03
520129.01	4258312.47	36520.58074	0.29287	6.02615	0.3016	7.05287	7.31E-03	1.20E-05	2.16E-04	1.23E-05	2.42E-04	7.7958E-03
520568.33	4258479.69	36517.38266	0.16948	0.17925	0.16543	0.18876	7.31E-03	6.94E-06	6.41E-06	6.77E-06	6.48E-06	7.3397E-03
519972.15	4258815.84	36512.44585	1.05607	0.53702	1.20671	0.51844	7.31E-03	4.32E-05	1.92E-05	4.94E-05	1.78E-05	7.4418E-03
520593.93	4258710	36501.77592	0.17151	0.142	0.16471	0.14788	7.31E-03	7.02E-06	5.08E-06	6.74E-06	5.08E-06	7.3339E-03
520325.28	4258153.08	36469.21349	0.19368	0.72527	0.20172	0.78507	7.30E-03	7.93E-06	2.59E-05	8.26E-06	2.70E-05	7.3725E-03
519990.57	4258910.07	36410.27648	1.56148	0.38113	1.80398	0.37502	7.29E-03	6.39E-05	1.36E-05	7.39E-05	1.29E-05	7.4560E-03
520582.09	4258786.17	36386.11647	0.18597	0.13409	0.17868	0.13913	7.29E-03	7.61E-06	4.80E-06	7.32E-06	4.78E-06	7.3113E-03
520005.88	4258946.37	36385.09125	2.06374	0.3442	2.45218	0.33934	7.29E-03	8.45E-05	1.23E-05	1.00E-04	1.16E-05	7.4955E-03
520049.44	4258511.61	36364.17505	0.73225	7.76912	0.83922	5.59261	7.28E-03	3.00E-05	2.78E-04	3.44E-05	1.92E-04	7.8167E-03
520543.46	4258881.42	36360.81749	0.2236	0.12816	0.2151	0.13398	7.28E-03	9.16E-06	4.58E-06	8.81E-06	4.60E-06	7.3089E-03
520513.62	4258933.8	36349.13744	0.25566	0.12742	0.24504	0.1335	7.28E-03	1.05E-05	4.56E-06	1.00E-05	4.58E-06	7.3091E-03
520178.14	4258252.63	36339.57069	0.25137	2.69428	0.25967	3.04777	7.28E-03	1.03E-05	9.64E-05	1.06E-05	1.05E-04	7.4994E-03
520187.96	4258242.66	36335.29894	0.24562	2.38407	0.25465	2.68541	7.28E-03	1.01E-05	8.53E-05	1.04E-05	9.22E-05	7.4746E-03
520463.4	4259004.63	36334.20089	0.32342	0.128	0.30902	0.13444	7.28E-03	1.32E-05	4.58E-06	1.27E-05	4.62E-06	7.3115E-03
520555.76	4258856.31	36317.91984	0.21148	0.12912	0.20348	0.13468	7.27E-03	8.66E-06	4.62E-06	8.33E-06	4.62E-06	7.2994E-03
520556.25	4258252.1	36273.72237	0.15173	0.21061	0.15104	0.2209	7.26E-03	6.21E-06	7.53E-06	6.18E-06	7.58E-06	7.2918E-03
520354.67	4258143.18	36263.23952	0.18507	0.60358	0.19125	0.64755	7.26E-03	7.58E-06	2.16E-05	7.83E-06	2.22E-05	7.3214E-03
520503.82	4258169.58	36239.96143	0.1579	0.26805	0.16139	0.28401	7.26E-03	6.47E-06	9.59E-06	6.61E-06	9.75E-06	7.2900E-03
520168.32	4258262.6	36237.90039	0.25713	3.07377	0.26475	3.49526	7.26E-03	1.05E-05	1.10E-04	1.08E-05	1.20E-04	7.5084E-03
520593.26	4258735.56	36235.28018	0.17418	0.13829	0.16713	0.14392	7.26E-03	7.13E-06	4.95E-06	6.84E-06	4.94E-06	7.2805E-03
519975.25	4258726.86	36224.10129	0.89293	0.82688	1.03096	0.77652	7.25E-03	3.66E-05	2.96E-05	4.22E-05	2.67E-05	7.3894E-03
520197.78	4258232.69	36217.72564	0.23987	2.12702	0.24961	2.38616	7.25E-03	9.82E-06	7.61E-05	1.02E-05	8.19E-05	7.4311E-03
519978.13	4258709.69	36209.52903	0.88018	0.91397	1.02157	0.85402	7.25E-03	3.60E-05	3.27E-05	4.18E-05	2.93E-05	7.3913E-03
520522.93	4258919.94	36180.3681	0.24525	0.12712	0.23532	0.13316	7.25E-03	1.00E-05	4.55E-06	9.63E-06	4.57E-06	7.2744E-03
519993.84	4258921.41	36178.52297	1.65809	0.36773	1.92496	0.36223	7.25E-03	6.79E-05	1.32E-05	7.88E-05	1.24E-05	7.4175E-03
520531.1	4258201.28	36158.26239	0.15414	0.23546	0.15594	0.24894	7.24E-03	6.31E-06	8.42E-06	6.38E-06	8.55E-06	7.2708E-03
520585.65	4258777.66	36110.91993	0.18283	0.13444	0.17562	0.13945	7.23E-03	7.49E-06	4.81E-06	7.19E-06	4.79E-06	7.2560E-03
520019.73	4258579.62	36088.65605	0.87023	2.76919	1.08263	2.34707	7.23E-03	3.56E-05	9.91E-05	4.43E-05	8.06E-05	7.4868E-03
520246.84	4258192.84	36080.60981	0.21835	1.3108	0.23071	1.44547	7.23E-03	8.94E-06	4.69E-05	9.45E-06	4.96E-05	7.3405E-03
520017.21	4258971.04	36078.09097	2.58713	0.32358	3.16187	0.31836	7.23E-03	1.06E-04	1.16E-05	1.29E-04	1.09E-05	7.4830E-03
520521.74	4258187.26	36037.80293	0.15518	0.24608	0.15778	0.26042	7.22E-03	6.35E-06	8.80E-06	6.46E-06	8.94E-06	7.2476E-03
520540.64	4258215.38	36028.84644	0.15277	0.22562	0.15369	0.23807	7.22E-03	6.26E-06	8.07E-06	6.29E-06	8.17E-06	7.2441E-03
520158.5	4258272.56	36021.86501	0.26289	3.5467	0.26993	4.06069	7.21E-03	1.08E-05	1.27E-04	1.11E-05	1.39E-04	7.5020E-03
520207.59	4258222.72	36016.76785	0.23417	1.91088	0.24452	2.13639	7.21E-03	9.59E-06	6.83E-05	1.00E-05	7.33E-05	7.3741E-03
519970.87	4258764.54	35996.95028	0.92738	0.67682	1.06702	0.64213	7.21E-03	3.80E-05	2.42E-05	4.37E-05	2.20E-05	7.3368E-03
520438.87	4259034.79	35996.71584	0.36497	0.12754	0.34826	0.13481	7.21E-03	1.49E-05	4.56E-06	1.43E-05	4.63E-06	7.2472E-03
520574.07	4258319.81	35947.66848	0.1527	0.19153	0.15223	0.20084	7.20E-03	6.25E-06	6.85E-06	6.23E-06	6.90E-06	7.2252E-03
520295.88	4258162.99	35940.34052	0.2011	0.88861	0.21152	0.96829	7.20E-03	8.23E-06	3.18E-05	8.66E-06	3.32E-05	7.2795E-03
520568.17	4258287.24	35932.09354	0.15132	0.19932	0.15069	0.20829	7.20E-03	6.20E-06	7.13E-06	6.17E-06	7.15E-06	7.2225E-03
520413.44	4258133.36	35905.90353	0.17114	0.43224	0.17527	0.45783	7.19E-03	7.01E-06	1.55E-05	7.18E-06	1.57E-05	7.2360E-03
520532.44	4258905.99	35900.91635	0.23519	0.12684	0.22594	0.13279	7.19E-03	9.63E-06	4.54E-06	9.25E-06	4.56E-06	7.2176E-03
519972.52	4258840.87	35900.84839	1.10336	0.48234	1.25879	0.46862	7.19E-03	4.52E-05	1.73E-05	5.15E-05	1.61E-05	7.3197E-03
520499.35	4258959.72	35883.43833	0.27305	0.12697	0.26146	0.13297	7.19E-03	1.12E-05	4.54E-06	1.07E-05	4.56E-06	7.2171E-03
520572.84	4258309.27	35870.64313	0.15202	0.19362	0.15159	0.20273	7.18E-03	6.22E-06	6.93E-06	6.21E-06	6.96E-06	7.2099E-03
520403.65	4258133.33	35869.20453	0.17295	0.4561	0.17722	0.48378	7.18E-03	7.08E-06	1.63E-05	7.26E-06	1.66E-05	7.2306E-03
520344.89	4258143.15	35856.22009	0.18659	0.64128	0.19344	0.68979	7.18E-03	7.64E-06	2.29E-05	7.92E-06	2.37E-05	7.2429E-03
520276.27	4258172.93	35854.43384	0.20718	1.02919	0.21879	1.12673	7.18E-03	8.48E-06	3.68E-05	8.96E-06	3.87E-05	7.2733E-03
520469.73	4258144.98	35851.26256	0.16191	0.32005	0.16635	0.33817	7.18E-03	6.63E-06	1.14E-05	6.81E-06	1.16E-05	7.2162E-03
520490.04	4258973.58	35845.70358	0.28507	0.12712	0.2729	0.13313	7.18E-03	1.17E-05	4.55E-06	1.12E-05	4.57E-06	7.2106E-03
520315.49	4258153.05	35843.23007	0.19479	0.77503	0.20368	0.84097	7.18E-03	7.98E-06	2.77E-05	8.34E-06	2.89E-05	7.2510E-03
520423.23	4258133.39	35843.05081	0.16921	0.40996	0.17333	0.43366	7.18E-03	6.93E-06	1.47E-05	7.10E-06	1.49E-05	7.2216E-03
519972.23	4258743.7	35840.91702	0.89634	0.75093	1.03173	0.70835	7.18E-03	3.67E-05	2.69E-05	4.22E-05	2.43E-05	7.3078E-03
520508.85	4258945.78	35825.41495	0.26147	0.12664	0.25053	0.13266	7.17E-03	1.07E-05	4.53E-06	1.03E-05	4.55E-06	7.2046E-03
520393.86	4258133.3	35816.48946	0.17482	0.48156	0.17926	0.5119	7.17E-03	7.16E-06	1.72E-05	7.34E-06	1.76E-05	7.2220E-03
520460.76	4258141.14	35806.60332	0.16312	0.33559	0.16756	0.35441	7.17E-03	6.68E-06	1.20E-05	6.86E-06	1.22E-05	7.2085E-03
520478.71	4258148.82	35783.79551	0.16053	0.30549	0.1649	0.32291	7.17E-03	6.57E-06	1.09E-05	6.75E-06	1.11E-05	7.2015E-03
520589.21	4258769.15	35776.66224	0.17975	0.13468	0.17262	0.13971	7.16E-03	7.36E-06	4.82E-06	7.07E-06	4.80E-06	7.1888E-03
520053.8	4259023.71	35775.96672	6.98724	0.29497	11.74093	0.28429	7.16E-03	2.86E-04	1.06E-05	4.81E-04	9.76E-06	7.9517E-03
520571.88	4258463.14	35771.13416	0.16662	0.17887	0.16308	0.18818	7.16E-03	6.82E-06	6.40E-06	6.68E-06	6.46E-06	7.1900E-03
520083.44	4259053.59	35757.00821	16.44289	0.28508	21.61832	0.26872	7.16E-03	6.73E-04	1.02E-05	8.85E-04	9.23E-06	8.7386E-03
520512.54	4258173.31	35749.88844	0.15592	0.25731	0.15909	0.27251	7.16E-03	6.38E-06	9.20E-06	6.51E-06	9.36E-06	7.1909E-03
520384.07	4258133.27	35743.76439	0.17673	0.50876	0.18139	0.54238	7.16E-03	7.24E-06	1.82E-05	7.43E-06	1.86E-05	7.2097E-03
520032.21	4258997.21	35736.95246	3.64312	0.3063	4.70944	0.29942	7.16E-03	1.49E-04	1.10E-05	1.93E-04	1.03E-05	7.5200E-03
519980.84	4258692.11	35727.78477	0.85862	1.01263	0.99991	0.94177	7.15E-03	3.52E-05	3.62E-05	4.09E-05	3.23E-05	7.2996E-03
520487.69	4258152.66	35722.18044	0.15916	0.29145	0.16325	0.30847	7.15E-03	6.52E-06	1.04E-05	6.68E-06	1.06E-05	7.1881E-03
519997.12	4258636.77	35720.88891	0.8561	1.53462	1.02438	1.38951	7.15E-03	3.51E-05	5.49E-05	4.19E-05	4.77E-05	7.3332E-03
520456.62	4259017.44	35716.506	0.33443	0.1268	0.31945	0.13345	7.15E-03	1.37E-05	4.54E-06	1.31E-05	4.58E-06	7.1886E-03
520433.01	4258133.42	35714.30056	0.16725	0.38907	0.17138	0.41119	7.15E-03	6.85E-06	1.39E-05	7.02E-06	1.41E-05	7.1942E-03
520571.73	4258298.78	35701.66813	0.15129	0.19553	0.15078	0.20449	7.15E-03	6.19E-06	6.99E-06	6.17E-06	7.02E-06	7.1761E-03
520480.9	4258987.37	35691.4056	0.29762	0.12694	0.28478	0.13299	7.15E-03	1.22E-05	4.54E-06	1.17E-05	4.57E-06	7.1806E-03
520555.43	4258241.74	35690.4536	0.15082	0.21172	0.15037	0.22233	7.15E-03	6.18E-06	7.57E-06	6.16E-06	7.63E-06	7.1750E-03
520550.38	4258229.56	35671.9277	0.15119	0.2163	0.15121	0.22768	7.14E-03	6.19E-06	7.74E-06	6.19E-06	7.82E-06	7.1717E-03

520217.41	4258212.75	35661.03782	0.22834	1.72856	0.23934	1.92314	7.14E-03	9.35E-06	6.18E-05	9.80E-06	6.60E-05	7.2886E-03
520022.04	4258983.02	35660.93825	2.8712	0.31413	3.56282	0.30853	7.14E-03	1.18E-04	1.12E-05	1.46E-04	1.06E-05	7.4269E-03
520451.78	4258137.29	35656.2261	0.16416	0.35213	0.16855	0.37171	7.14E-03	6.72E-06	1.26E-05	6.90E-06	1.28E-05	7.1796E-03
520007.17	4258956.89	35655.82157	2.12382	0.33263	2.53022	0.328	7.14E-03	8.70E-05	1.19E-05	1.04E-04	1.13E-05	7.3543E-03
520148.68	4258282.53	35650.21635	0.26854	4.15199	0.27531	4.7883	7.14E-03	1.10E-05	1.49E-04	1.13E-05	1.64E-04	7.4746E-03
520567.01	4258276.73	35628.2362	0.15056	0.20101	0.14981	0.21004	7.14E-03	6.16E-06	7.19E-06	6.13E-06	7.21E-06	7.1617E-03
519995.42	4258932.06	35614.21961	1.71291	0.35478	1.99369	0.34977	7.13E-03	7.01E-05	1.27E-05	8.16E-05	1.20E-05	7.3087E-03
520043.88	4259013.73	35588.45923	5.02612	0.29792	7.08623	0.28918	7.13E-03	2.06E-04	1.07E-05	2.90E-04	9.93E-06	7.6436E-03
520119.19	4258322.44	35581.80445	0.29834	7.59149	0.30829	8.959	7.13E-03	1.22E-05	2.72E-04	1.26E-05	3.08E-04	7.7297E-03
519999.93	4258628.19	35572.95385	0.85311	1.64747	1.02443	1.48419	7.12E-03	3.49E-05	5.89E-05	4.19E-05	5.10E-05	7.3107E-03
520554.5	4258866.84	35552.52068	0.21329	0.12741	0.20524	0.13299	7.12E-03	8.73E-06	4.56E-06	8.40E-06	4.57E-06	7.1461E-03
520597.57	4258701.32	35542.86902	0.16868	0.14192	0.16205	0.14768	7.12E-03	6.91E-06	5.08E-06	6.63E-06	5.07E-06	7.1416E-03
520596.85	4258726.96	35537.25388	0.1713	0.13824	0.16446	0.14392	7.12E-03	7.01E-06	4.94E-06	6.73E-06	4.94E-06	7.1405E-03
520542.18	4258891.95	35516.12541	0.22539	0.12657	0.21686	0.13236	7.11E-03	9.23E-06	4.53E-06	8.88E-06	4.54E-06	7.1398E-03
520374.28	4258133.24	35501.76525	0.17836	0.53839	0.18349	0.57518	7.11E-03	7.30E-06	1.93E-05	7.51E-06	1.97E-05	7.1635E-03
520093.77	4259064.4	35489.46738	13.63833	0.27993	12.53511	0.26236	7.11E-03	5.58E-04	1.00E-05	5.13E-04	9.01E-06	8.1979E-03
520496.67	4258156.51	35486.91654	0.15753	0.27845	0.16136	0.29484	7.11E-03	6.45E-06	9.96E-06	6.61E-06	1.01E-05	7.1399E-03
519968.48	4258807	35486.2011	0.98676	0.55136	1.1211	0.53081	7.11E-03	4.04E-05	1.97E-05	4.59E-05	1.82E-05	7.2308E-03
520256.66	4258182.87	35479.25287	0.21257	1.20675	0.22473	1.32675	7.11E-03	8.70E-06	4.32E-05	9.20E-06	4.55E-05	7.2118E-03
520442.8	4258133.45	35471.57332	0.16515	0.36955	0.16938	0.39018	7.10E-03	6.76E-06	1.32E-05	6.94E-06	1.34E-05	7.1440E-03
520471.9	4259001.11	35433.15533	0.31073	0.12643	0.29712	0.13261	7.10E-03	1.27E-05	4.52E-06	1.22E-05	4.55E-06	7.1299E-03
520335.1	4258143.12	35426.79034	0.18805	0.6824	0.19561	0.73629	7.09E-03	7.70E-06	2.44E-05	8.01E-06	2.53E-05	7.1601E-03
520592.77	4258760.64	35377.72191	0.17675	0.13471	0.16968	0.13982	7.08E-03	7.24E-06	4.82E-06	6.95E-06	4.80E-06	7.1087E-03
520039.52	4258531.05	35349.10545	0.7784	5.2708	0.91542	4.08555	7.08E-03	3.19E-05	1.89E-04	3.75E-05	1.40E-04	7.4773E-03
519978.31	4258885.03	35307.23942	1.26855	0.40862	1.44431	0.40061	7.07E-03	5.19E-05	1.46E-05	5.91E-05	1.38E-05	7.2102E-03
520530.52	4258191.02	35288.73782	0.15287	0.23673	0.15507	0.25026	7.07E-03	6.26E-06	8.47E-06	6.35E-06	8.59E-06	7.0967E-03
520227.23	4258202.78	35275.71592	0.22268	1.57116	0.23408	1.74173	7.06E-03	9.12E-06	5.62E-05	9.58E-06	5.98E-05	7.1991E-03
520565.95	4258266.27	35273.31495	0.1498	0.20243	0.14898	0.21165	7.06E-03	6.13E-06	7.24E-06	6.10E-06	7.27E-06	7.0907E-03
520447.56	4259031.2	35261.50799	0.3497	0.12602	0.33396	0.13298	7.06E-03	1.43E-05	4.51E-06	1.37E-05	4.57E-06	7.0987E-03
520539.94	4258205.07	35245.61877	0.15166	0.22681	0.15303	0.23942	7.06E-03	6.21E-06	8.11E-06	6.27E-06	8.22E-06	7.0872E-03
519967.9	4258781.48	35226.05062	0.9253	0.61784	1.05795	0.5894	7.05E-03	3.79E-05	2.21E-05	4.33E-05	2.02E-05	7.1780E-03
520522.07	4258930.3	35174.58071	0.24664	0.12543	0.23664	0.13136	7.04E-03	1.01E-05	4.49E-06	9.69E-06	4.51E-06	7.0730E-03
520364.49	4258133.21	35170.36814	0.17986	0.57049	0.18558	0.61067	7.04E-03	7.36E-06	2.04E-05	7.60E-06	2.10E-05	7.0997E-03
520521.26	4258177.04	35168.43631	0.15384	0.24725	0.15666	0.2617	7.04E-03	6.30E-06	8.84E-06	6.41E-06	8.98E-06	7.0735E-03
519987.12	4258664.6	35154.70199	0.83913	1.21556	0.98833	1.11838	7.04E-03	3.44E-05	4.35E-05	4.05E-05	3.84E-05	7.1969E-03
520505.64	4258160.35	35125.64432	0.15573	0.26663	0.1593	0.28231	7.03E-03	6.38E-06	9.54E-06	6.52E-06	9.69E-06	7.0665E-03
519968.89	4258832.1	35119.68409	1.03361	0.4954	1.1763	0.48	7.03E-03	4.23E-05	1.77E-05	4.82E-05	1.65E-05	7.1579E-03
520286.09	4258162.96	35111.56714	0.20152	0.95668	0.21259	1.04457	7.03E-03	8.25E-06	3.42E-05	8.70E-06	3.59E-05	7.1186E-03
520305.7	4258153.02	35109.72263	0.19553	0.83037	0.20531	0.90253	7.03E-03	8.01E-06	2.97E-05	8.41E-06	3.10E-05	7.1083E-03
520138.86	4258292.5	35106.08594	0.27398	4.95029	0.28093	5.74981	7.03E-03	1.12E-05	1.77E-04	1.15E-05	1.97E-04	7.4277E-03
519980.09	4258895.75	35066.73686	1.31575	0.39356	1.49988	0.38645	7.02E-03	5.39E-05	1.41E-05	6.14E-05	1.33E-05	7.1652E-03
520549.55	4258219.19	35030.8955	0.15026	0.21735	0.15067	0.22906	7.02E-03	6.15E-06	7.77E-06	6.17E-06	7.86E-06	7.0434E-03
519996.89	4258942.66	35027.68928	1.76652	0.34258	2.06134	0.33797	7.01E-03	7.23E-05	1.23E-05	8.44E-05	1.16E-05	7.1954E-03
520099.51	4258352.38	34964.48815	0.32378	14.21948	0.33988	15.96441	7.00E-03	1.33E-05	5.09E-04	1.39E-05	5.48E-04	8.0860E-03
520552.17	4258877.81	34964.33822	0.21592	0.12614	0.20788	0.13174	7.00E-03	8.84E-06	4.51E-06	8.51E-06	4.52E-06	7.0285E-03
520531.44	4258916.42	34960.78408	0.23672	0.12515	0.22738	0.13102	7.00E-03	9.69E-06	4.48E-06	9.31E-06	4.50E-06	7.0294E-03
519972.59	4258865.13	34939.73014	1.14218	0.43619	1.29637	0.42605	7.00E-03	4.68E-05	1.56E-05	5.31E-05	1.46E-05	7.1272E-03
520008.36	4258967.38	34928.5309	2.18133	0.32173	2.60394	0.31729	6.99E-03	8.93E-05	1.15E-05	1.07E-04	1.09E-05	7.2132E-03
520596.34	4258752.14	34910.48656	0.17382	0.1347	0.16686	0.13992	6.99E-03	7.12E-06	4.82E-06	6.83E-06	4.80E-06	7.0149E-03
520325.31	4258143.08	34893.68678	0.18925	0.72766	0.1976	0.78717	6.99E-03	7.75E-06	2.60E-05	8.09E-06	2.70E-05	7.0568E-03
520567.74	4258844.38	34890.65845	0.20123	0.12752	0.19366	0.1328	6.99E-03	8.24E-06	4.56E-06	7.93E-06	4.56E-06	7.0126E-03
520571.27	4258835.94	34880.5251	0.19795	0.12807	0.19051	0.13328	6.99E-03	8.10E-06	4.58E-06	7.80E-06	4.58E-06	7.0104E-03
520564.99	4258255.84	34864.43396	0.149	0.20364	0.1482	0.21312	6.98E-03	6.10E-06	7.28E-06	6.07E-06	7.32E-06	7.0088E-03
520465.36	4259013.82	34864.05565	0.32079	0.12533	0.3067	0.13167	6.98E-03	1.31E-05	4.48E-06	1.26E-05	4.52E-06	7.0167E-03
520266.48	4258172.9	34858.05149	0.20697	1.11473	0.21882	1.2223	6.98E-03	8.47E-06	3.99E-05	8.96E-06	4.20E-05	7.0801E-03
520574.8	4258827.51	34839.02641	0.1947	0.12866	0.18741	0.13379	6.98E-03	7.97E-06	4.60E-06	7.67E-06	4.59E-06	7.0018E-03
520237.05	4258192.81	34826.56462	0.2171	1.43488	0.22874	1.58516	6.97E-03	8.89E-06	5.13E-05	9.37E-06	5.44E-05	7.0985E-03
520354.71	4258133.18	34820.99095	0.18134	0.60518	0.18771	0.64941	6.97E-03	7.42E-06	2.16E-05	7.69E-06	2.23E-05	7.0324E-03
520498.65	4258970.02	34786.56512	0.27435	0.12516	0.26277	0.13103	6.97E-03	1.12E-05	4.48E-06	1.08E-05	4.50E-06	6.9975E-03
520023.17	4258993.48	34778.22622	2.9549	0.30414	3.67183	0.29863	6.96E-03	1.21E-04	1.09E-05	1.50E-04	1.03E-05	7.2573E-03
520508.02	4258956.13	34777.05519	0.26288	0.12493	0.2519	0.13081	6.96E-03	1.08E-05	4.47E-06	1.03E-05	4.49E-06	6.9946E-03
520578.33	4258819.08	34763.4806	0.19149	0.12904	0.18426	0.13412	6.96E-03	7.84E-06	4.62E-06	7.54E-06	4.60E-06	6.9865E-03
519981.72	4258906.42	34735.82745	1.36061	0.37925	1.55312	0.37291	6.96E-03	5.57E-05	1.36E-05	6.36E-05	1.28E-05	7.1020E-03
520054.23	4259033.71	34715.59983	7.13321	0.28614	12.12279	0.27579	6.95E-03	2.92E-04	1.02E-05	4.96E-04	9.47E-06	7.7604E-03
520489.45	4258983.84	34708.16886	0.28627	0.12521	0.27415	0.13109	6.95E-03	1.17E-05	4.48E-06	1.12E-05	4.50E-06	6.9827E-03
520600.45	4258718.37	34686.27353	0.16841	0.13798	0.16173	0.14368	6.95E-03	6.90E-06	4.94E-06	6.62E-06	4.93E-06	6.9698E-03
520009.81	4258599.06	34680.56553	0.83797	2.13145	1.02482	1.87578	6.95E-03	3.43E-05	7.62E-05	4.20E-05	6.44E-05	7.1622E-03
520469.58	4258134.9	34671.47207	0.15959	0.32175	0.16391	0.33952	6.94E-03	6.53E-06	1.15E-05	6.71E-06	1.17E-05	6.9798E-03
520514.62	4258164.19	34671.36908	0.15382	0.25555	0.15707	0.27053	6.94E-03	6.30E-06	9.14E-06	6.43E-06	9.29E-06	6.9746E-03
520478.5	4258138.72	34642.18421	0.15834	0.3072	0.16266	0.32429	6.94E-03	6.48E-06	1.10E-05	6.66E-06	1.11E-05	6.9728E-03
520541.01	4258902.44	34640.47266	0.22708	0.12491	0.21841	0.13066	6.94E-03	9.30E-06	4.47E-06	8.94E-06	4.49E-06	6.9644E-03
520487.41	4258142.53	34606.63606	0.1571	0.29326	0.16122	0.30995	6.93E-03	6.43E-06	1.05E-05	6.60E-06	1.06E-05	6.9646E-03
520581.86	4258810.64	34592.64048	0.18826	0.12942	0.1811	0.13443	6.93E-03	7.71E-06	4.63E-06	7.41E-06	4.62E-06	6.9520E-03
519984.69	4258917.64	34589.21604	1.43502	0.36598	1.64352	0.36034	6.93E-03	5.88E-05	1.31E-05	6.73E-05	1.24E-05	7.0785E-03
520460.66	4258131.08	34582.06525	0.16064	0.33727	0.16492	0.3557	6.93E-03	6.58E-06	1.21E-05	6.75E-06	1.22E-05	6.9631E-03
520012.93	4258979.26	34573.43177	2.38653	0.31215	2.88087	0.30755	6.92E-03	9.77E-05	1.12E-05	1.18E-04	1.06E-05	7.1612E-03
520423.26	4258123.39	34552.6581	0.16634	0.41128	0.17026	0.43487	6.92E-03	6.81E-06	1.47E-05	6.97E-06	1.49E-05	6.9631E-03
520413.47	4258123.36	34549.10452	0.16807	0.43365	0.17212	0.45902	6.92E-03	6.88E-06	1.55E-05	7.05E-06	1.58E-05	6.9641E-03
520601.2	4258692.64	34531.60767	0.16595	0.14184	0.15943	0.14744	6.92E-03	6.79E-06	5.07E-06	6.53E-06	5.06E-06	6.9389E-03
520480.39	4258997.59	34529.93402	0.29872	0.12491	0.28596	0.13088	6.92E-03	1.22E-05	4.47E-06	1.17E-05	4.49E-06	6.9480E-03
520575.13	4258471.66	34515.14608	0.16556	0.17597	0.16169	0.18515	6.91E-03	6.78E-06	6.29E-06	6.62E-06	6.36E-06	6.9382E-03
520529.98	4258180.78	34513.32992	0.15169	0.23779	0.15413	0.2515	6.91E-03	6.21E-06	8.51E-06	6.31E-06	8.63E-06	6.9414E-03
520403.68	4258123.33	34508.28209	0.16981	0.45747	0.17405	0.48505	6.91E-03	6.95E-06	1.64E-05	7.13E-06	1.67E-05	6.9578E-03
520083.87	4259064.41	34497.15997	14.75429	0.27595	20.90457	0.26026	6.91E-03	6.04E-04	9.87E-06	8.56E-04	8.93E-06	8.3874E-03
520456.24	4259027.6	34494.96511	0.33532	0.12455	0.32047	0.13119	6.91E-03	1.37E-05	4.45E-06	1.31E-05	4.50E-06	6.9439E-03
520043.9	4259023.73	34493.42178	5.04856	0.28863	7.10193	0.28022	6.91E-03	2.07E-04	1.03E-05	2.91E-04	9.62E-06	7.4252E-03
520539.3	4258194.78	34492.67649	0.15056	0.22791	0.15231	0.24069	6.91E-03	6.16E-06	8.15E-06	6.24E-06	8.26E-06	6.9364E-03
520433.05	4258123.42	34455.35009	0.16449	0.39037	0.16839	0.41232	6.90E-03	6.73E-06	1.40E-05	6.89E-06	1.42E-05	6.9419E-03
520496.33	4258146.35	34441.52645	0.15565	0.28005	0.15955	0.29623	6.90E-03	6.37E-06	1.00E-05	6.53E-06	1.02E-05	6.9305E-03
520451.75	4258127.27	34437.32017	0.1616	0.35364	0.16577	0.37291	6.90E-03	6.62E-06	1.26E-05	6.79E-06	1.28E-05	6.9354E-03
520187.99	4258232.66	34415.9991	0.23632	2.3914	0.2441	2.69216	6.89E-03	9.68E-06	8.55E-05	9.99E-06	9.24E-05	7.0899E-03
520564.11	4258245.45	34406.75445	0.14819	0.20469	0.1475	0.21449	6.89E-03	6.07E-06	7.32E-06	6.04E-06	7.36E-06	6.9172E-03
520393.89	4258123.3	34401.60782	0.17149	0.483	0.17602	0.5131	6.89E-03	7.02E-06	1.73E-05	7.21E-06	1.76E-05	6.9385E-03
520344.92	4258133.15	34397.77248	0.18268	0.64306	0.18978	0.69169	6.89E-03	7.48E-06	2.30E-05	7.77E-06	2.37E-05	6.9506E-03
520178.17	4258242.63	34397.09198	0.24155	2.70194	0.2486	3.05586	6.89E-03	9.89E-06	9.66E-05	1.02E-05	1.05E-04	7.1101E-03
519998.25	4258953.21	34388.83808	1.81754	0.33103	2.12565	0.32675	6.89E-03	7.44E-05	1.18E-05	8.70E-05	1.12E-05	7.0713E-03
520129.04	4258302.47	34388.44548	0.27916	6.04277	0.28681	7.06575	6.89E-03	1.14E-05	2.16E-04	1.17E-05	2.43E-04	7.3686E-03
520599.9	4258743.63	34379.97448	0.17097	0.13472	0.16417	0.14003	6.89E-03	7.00E-06	4.82E-06	6.72E-06	4.81E-06	6.9084E-03
520197.81	4258222.69	34342.25139	0.23111	2.13369	0.23962	2.39238	6.88E-03	9.46E-06	7.63E-05	9.81E-06	8.21E-05	7.0552E-03
519968.81	4258856.03	34337.45934	1.06956	0.44823	1.21251	0.43679	6.88E-03	4.38E-05	1.60E-05	4.96E-05	1.50E-05	7.0010E-03
519964.81	4258798.15	34335.24087	0.91996	0.56598	1.04223	0.54303	6.88E-03	3.77E-05	2.02E-05	4.27E-05	1.86E-05	6.9953E-03
520295.91	4258152.99	34328.11068	0.19599	0.89179	0.20653	0.9708	6.87E-03	8.02E-06	3.19E-05	8.46E-06	3.33E-05	6.9564E-03
520246.87	4258182.84	34326.72262	0.21162	1.31594	0.22336	1.44902	6.87E-03	8.66E-06	4.71E-05	9.15E-06	4.97E-05	6.9890E-03
520588.93	4258793.77	34324.52412	0.18215	0.13036	0.17518	0.13521	6.87E-03	7.46E-06	4.66E-06	7.17E-06	4.64E-06	6.8979E-03
520548.78	4258208.85	34301.10759	0.1492	0.21862	0.1501	0.23045	6.87E-03	6.11E-06	7.82E-06	6.15E-06	7.91E-06	6.8973E-03
520093.79	4259074.4	34277.5253	13.54486	0.27165	12.4973	0.25478	6.86E-03	5.55E-04	9.72E-06	5.12E-04	8.75E-06	7.9493E-03
520384.1	4258123.27	34273.71355	0.1732	0.51037	0.17808	0.54355	6.86E-03	7.09E-06	1.83E-05	7.29E-06	1.87E-05	6.9151E-03
520168.35	4258252.6	34272.57464	0.24676	3.08215	0.25317	3.50454	6.86E-03	1.01E-05	1.10E-04	1.04E-05	1.20E-04	7.1146E-03
520315.52	4258143.05	34270.54781	0.19015	0.77769	0.19933	0.84307	6.86E-03	7.79E-06	2.78E-05	8.16E-06	2.89E-05	6.9359E-03
519967.12	4258755.49	34268.68906	0.85556	0.69275	0.9797	0.65548	6.86E-03	3.50E-05	2.48E-05	4.01E-05	2.25E-05	6.9852E-03
519965.26	4258823.34	34261.05871	0.96936	0.50834	1.09827	0.49125	6.86E-03	3.97E-05	1.82E-05	4.50E-05	1.69E-05	6.9809E-03
520442.83	4258123.45	34257.20785	0.16252	0.37085	0.16649	0.39129	6.86E-03	6.65E-06	1.33E-05	6.82E-06	1.34E-05	6.9006E-03
520577.15	4258291.09	34208.79956	0.14846	0.19222	0.14786	0.20082	6.85E-03	6.08E-06	6.88E-06	6.05E-06	6.89E-06	6.8767E-03
520276.3	4258162.93	34205.82558	0.20152	1.03303	0.21299	1.12969	6.85E-03	8.25E-06	3.70E-05	8.72E-06	3.88E-05	6.9429E-03
520550.82	4258888.38	34200.62453	0.21771	0.12457	0.20963	0.13016	6.85E-03	8.91E-06	4.46E-06	8.58E-06	4.47E-06	6.8756E-03
520562.88	4258863.37	34192.35613	0.20635	0.12547	0.1987	0.13083	6.85E-03	8.45E-06	4.49E-06	8.14E-06	4.49E-06	6.8730E-03
520029.6	4258550.48	34145.60819	0.80449	3.79827	0.97158	3.09311	6.84E-03	3.29E-05	1.36E-04	3.98E-05	1.06E-04	7.1529E-03
520207.63	4258212.72	34143.93513	0.22581	1.91803	0.23509	2.14055	6.84E-03	9.25E-06	6.86E-05	9.63E-06	7.35E-05	6.9988E-03
520505.24	4258150.16	34137.76433	0.154	0.26818	0.15769	0.2837	6.84E-03	6.31E-06	9.59E-06	6.46E-06	9.74E-06	6.8686E-03
519986.36	4258928.32	34133.56662	1.48307	0.35318	1.70185	0.3481	6.84E-03	6.07E-05	1.26E-05	6.97E-05	1.20E-05	6.9907E-03
520523.6	4258168.03	34110.39649	0.15178	0.24532	0.1547	0.25956	6.83E-03	6.21E-06	8.77E-06	6.33E-06	8.91E-06	6.8613E-03
520592.46	4258785.34	34095.4183	0.17915	0.13079	0.17229	0.13559	6.83E-03	7.34E-06	4.68E-06	7.05E-06	4.65E-06	6.8518E-03
520374.31	4258123.24	34035.77436	0.17474	0.53999	0.18013	0.57638	6.82E-03	7.15E-06	1.93E-05	7.38E-06	1.98E-05	6.8698E-03
520530.51	4258926.8	34034.01388	0.23811	0.12352	0.22871	0.12929	6.82E-03	9.75E-06	4.42E-06	9.36E-06	4.44E-06	6.8437E-03
520158.53	4258262.56	34028.75283	0.25192	3.5568	0.25786	4.06928	6.81E-03	1.03E-05	1.27E-04	1.06E-05	1.40E-04	7.1025E-03
520575.9	4258280.54	34025.79737	0.14778	0.194	0.14706	0.20257	6.81E-03	6.05E-06	6.94E-06	6.02E-06	6.95E-06	6.8401E-03
520581.53	4258312.99	33996.86927	0.14914	0.18688	0.14863	0.19575	6.81E-03	6.11E-06	6.68E-06	6.09E-06	6.72E-06	6.8339E-03
520474.1	4259010.2	33992.77608	0.30789	0.12386	0.29467	0.12992	6.81E-03	1.26E-05	4.43E-06	1.21E-05	4.46E-06	6.8411E-03
519971.62	4258718.12	33955.11386	0.81729	0.8406	0.93885	0.78869	6.80E-03	3.35E-05	3.01E-05	3.84E-05	2.71E-05	6.9290E-03
520558.45	4258223	33946.72451	0.14772	0.20965	0.14767	0.22055	6.80E-03	6.05E-06	7.50E-06	6.05E-06	7.57E-06	6.8255E-03
520335.13	4258133.12	33942.76126	0.18392	0.68442	0.19177	0.73812	6.80E-03	7.53E-06	2.45E-05	7.85E-06	2.53E-05	6.8627E-03
520580.35	4258302.47	33935.39188	0.14848	0.18882	0.14798	0.19749	6.80E-03	6.08E-06	6.75E-06	6.06E-06	6.78E-06	6.8217E-03
520604.05	4258709.78	33925.00415	0.16575	0.13801	0.15927	0.14361	6.79E-03	6.79E-06	4.94E-06	6.52E-06	4.93E-06	6.8171E-03
519968.64	4258735.05	33906.92706	0.82638	0.76513	0.94532	0.72085	6.79E-03	3.38E-05	2.74E-05	3.87E-05	2.47E-05	6.9150E-03
520585.36	4258369.19	33869.98038	0.15308	0.17871	0.15111	0.18786	6.78E-03	6.27E-06	6.39E-06	6.19E-06	6.45E-06	6.8082E-03
520217.45	4258202.75	33867.98077	0.22054	1.73453	0.23049	1.92751	6.78E-03	9.03E-06	6.20E-05	9.44E-06	6.62E-05	6.9292E-03
520595.99	4258776.9	33816.15415	0.17621	0.13107	0.16941	0.13586	6.77E-03	7.21E-06	4.69E-06	6.94E-06	4.66E-06	6.7956E-03
520256.69	4258172.87	33805.59689	0.2063	1.21128	0.21798	1.3301	6.77E-03	8.45E-06	4.33E-05	8.92E-06	4.57E-05	6.8764E-03
520364.52	4258123.21	33802.63428	0.17634	0.57188	0.18225	0.61226	6.77E-03	7.22E-06	2.05E-05	7.46E-06	2.10E-05	6.8256E-03
520603.46	4258735.12	33782.45153	0.16819	0.13467	0.16157	0.14006	6.77E-03	6.89E-06	4.82E-06	6.62E-06	4.81E-06	6.7885E-03
520538.7	4258184.51	33781.18872	0.14947	0.22893	0.15152	0.24191	6.77E-03	6.12E-06	8.19E-06	6.20E-06	8.30E-06	6.7940E-03
520539.94	4258912.89	33779.60874	0.22862	0.12326	0.21985	0.12896	6.76E-03	9.36E-06	4.41E-06	9.00E-06	4.43E-06	6.7920E-03
520014.13	4258989.75	33778.83036	2.4537	0.30224	2.96556	0.29775	6.76E-03	1.00E-04	1.08E-05	1.21E-04	1.02E-05	7.0076E-03
519964.19	4258772.54	33769.01993	0.8588	0.63287	0.97715	0.60201	6.76E-03	3.52E-05	2.26E-05	4.00E-05	2.07E-05	6.8812E-03
520062.83	4258443.35	33768.29501	0.46183	18.04345	0.50472	9.2422	6.76E-03	1.89E-05	6.45E-04	2.07E-05	3.17E-04	7.7648E-03
520574.77	4258270.04	33763.46233	0.14706	0.19556	0.14624	0.20418	6.76E-03	6.02E-06	6.99E-06	5.99E-06	7.01E-06	6.7876E-03
520514.16	4258153.98	33754.57384	0.15226	0.2568	0.15566	0.27171	6.76E-03	6.23E-06	9.19E-06	6.37E-06	9.33E-06	6.7909E-03
520507.25	4258966.46	33749.66877	0.26417	0.12322	0.25319	0.12896	6.76E-03	1.08E-05	4.41E-06	1.04E-05	4.43E-06	6.7888E-03
519999.51	4258963.73	33736.79197	1.86669	0.32011	2.18727	0.3161	6.76E-03	7.64E-05	1.14E-05	8.96E-05	1.09E-05	6.9445E-03
520497.99	4258980.3	33724.03205	0.27557	0.12333	0.26399	0.12908	6.75E-03	1.13E-05	4.41E-06	1.08E-05	4.43E-06	6.7846E-03
520464.92	4259024.01	33701.21413	0.32173	0.12313	0.30775	0.12946	6.75E-03	1.32E-05	4.40E-06	1.26E-05	4.44E-06	6.7838E-03
520148.71	4258272.53	33667.94546	0.25702	4.16281	0.26275	4.79977	6.74E-03	1.05E-05	1.49E-04	1.08E-05	1.65E-04	7.0774E-03
519965.04	4258846.93	33652.99072	1.00254	0.46035	1.13344	0.4475	6.74E-03	4.10E-05	1.65E-05	4.64E-05	1.54E-05	6.8588E-03
519987.9	4258938.95	33644.75699	1.52939	0.34107	1.75855	0.33647	6.74E-03	6.26E-05	1.22E-05	7.20E-05	1.16E-05	6.8962E-03
520516.68	4258952.54	33626.90036	0.25317	0.12295	0.24282	0.1287	6.73E-03	1.04E-05	4.40E-06	9.94E-06	4.42E-06	6.7634E-03
520548.08	4258198.54	33624.22733	0.14819	0.21966	0.14949	0.23168	6.73E-03	6.07E-06	7.86E-06	6.12E-06	7.95E-06	6.7617E-03
520488.89	4258994.07	33617.10341	0.28737	0.12331	0.27533	0.12908	6.73E-03	1.18E-05	4.41E-06	1.13E-05	4.43E-06	6.7642E-03
519974.46	4258700.84	33614.18833	0.80075	0.92585	0.92365	0.86503	6.73E-03	3.28E-05	3.31E-05	3.78E-05	2.97E-05	6.8651E-03
520560.89	4258874.2	33606.16564	0.20862	0.12414	0.20097	0.12952	6.73E-03	8.54E-06	4.44E-06	8.23E-06	4.45E-06	6.7558E-03
520053.72	4259043.64	33584.97671	7.04303	0.27724	11.77757	0.2674	6.73E-03	2.88E-04	9.92E-06	4.82E-04	9.18E-06	7.5155E-03
519987.12	4258655.32	33580.84032	0.79771	1.26428	0.93826	1.16076	6.73E-03	3.27E-05	4.52E-05	3.84E-05	3.98E-05	6.8812E-03
520305.73	4258143.02	33568.90827	0.19073	0.83318	0.2007	0.90469	6.72E-03	7.81E-06	2.98E-05	8.22E-06	3.11E-05	6.7995E-03
520286.12	4258152.96	33544.96678	0.19626	0.96002	0.20727	1.04728	6.72E-03	8.04E-06	3.43E-05	8.49E-06	3.60E-05	6.8047E-03
520227.27	4258192.78	33541.89303	0.21537	1.57659	0.22581	1.74577	6.72E-03	8.82E-06	5.64E-05	9.25E-06	5.99E-05	6.8516E-03
520478.3	4258128.62	33522.23634	0.15611	0.30888	0.16035	0.32557	6.71E-03	6.39E-06	1.10E-05	6.57E-06	1.12E-05	6.7485E-03
520044.33	4259033.73	33521.37011	5.13695	0.28013	7.24645	0.27194	6.71E-03	2.10E-04	1.00E-05	2.97E-04	9.34E-06	7.2395E-03
520487.15	4258132.41	33516.91597	0.15499	0.29503	0.15912	0.31133	6.71E-03	6.35E-06	1.06E-05	6.52E-06	1.07E-05	6.7463E-03
520469.44	4258124.83	33515.78755	0.15722	0.32339	0.16141	0.34074	6.71E-03	6.44E-06	1.16E-05	6.61E-06	1.17E-05	6.7483E-03
520526.31	4258938.55	33491.47279	0.2427	0.12263	0.23302	0.12836	6.71E-03	9.94E-06	4.39E-06	9.54E-06	4.41E-06	6.7354E-03
520599.52	4258768.47	33481.84563	0.17333	0.13123	0.1666	0.13606	6.71E-03	7.10E-06	4.69E-06	6.82E-06	4.67E-06	6.7285E-03
520532.58	4258171.88	33477.2947	0.14966	0.23567	0.15222	0.24918	6.70E-03	6.13E-06	8.43E-06	6.23E-06	8.55E-06	6.7336E-03
520354.74	4258123.18	33474.55223	0.17775	0.60656	0.1843	0.65115	6.70E-03	7.28E-06	2.17E-05	7.55E-06	2.24E-05	6.7626E-03
520119.22	4258312.44	33474.37609	0.2839	7.6162	0.2929	8.91623	6.70E-03	1.16E-05	2.72E-04	1.20E-05	3.06E-04	7.3058E-03
520003.83	4258975.5	33460.70894	2.02051	0.31038	2.3865	0.30644	6.70E-03	8.27E-05	1.11E-05	9.77E-05	1.05E-05	6.9030E-03
520573.73	4258259.58	33446.04991	0.14631	0.19689	0.14545	0.20568	6.70E-03	5.99E-06	7.04E-06	5.96E-06	7.06E-06	6.7241E-03
520549.58	4258898.9	33419.30885	0.21937	0.12301	0.21123	0.12857	6.69E-03	8.98E-06	4.40E-06	8.65E-06	4.41E-06	6.7191E-03
520460.58	4258121.03	33414.82387	0.15817	0.33879	0.16227	0.35685	6.69E-03	6.48E-06	1.21E-05	6.64E-06	1.23E-05	6.7293E-03
520578.37	4258480.18	33392.73087	0.16446	0.17322	0.16025	0.18221	6.69E-03	6.73E-06	6.20E-06	6.56E-06	6.26E-06	6.7131E-03
520325.34	4258133.09	33386.27435	0.18487	0.73	0.19354	0.78886	6.69E-03	7.57E-06	2.61E-05	7.92E-06	2.71E-05	6.7547E-03
520496.01	4258136.2	33382.44785	0.15367	0.28207	0.15766	0.29786	6.69E-03	6.29E-06	1.01E-05	6.46E-06	1.02E-05	6.7184E-03
520083.89	4259074.41	33348.62491	14.6463	0.26779	20.78701	0.25275	6.68E-03	6.00E-04	9.58E-06	8.51E-04	8.68E-06	8.1476E-03
519999.89	4258618.49	33312.79328	0.79882	1.70222	0.95529	1.53287	6.67E-03	3.27E-05	6.09E-05	3.91E-05	5.26E-05	6.8567E-03
519961.62	4258814.58	33309.64697	0.90858	0.52094	1.0236	0.50215	6.67E-03	3.72E-05	1.86E-05	4.19E-05	1.72E-05	6.7857E-03
520557.62	4258212.63	33304.31557	0.14674	0.21093	0.14717	0.22199	6.67E-03	6.01E-06	7.54E-06	6.03E-06	7.62E-06	6.6968E-03
520423.29	4258113.39	33294.74458	0.16346	0.41249	0.16728	0.43589	6.67E-03	6.69E-06	1.48E-05	6.85E-06	1.50E-05	6.7110E-03
520413.5	4258113.36	33283.10683	0.16512	0.43481	0.16911	0.46009	6.67E-03	6.76E-06	1.56E-05	6.92E-06	1.58E-05	6.7104E-03
520523.07	4258157.79	33278.81333	0.15037	0.2465	0.15348	0.26073	6.66E-03	6.16E-06	8.82E-06	6.28E-06	8.95E-06	6.6947E-03
519971.16	4258892.07	33277.73752	1.15451	0.3911	1.30356	0.38369	6.66E-03	4.73E-05	1.40E-05	5.34E-05	1.32E-05	6.7921E-03
520451.72	4258117.24	33269.03735	0.15906	0.355	0.163	0.374	6.66E-03	6.51E-06	1.27E-05	6.67E-06	1.28E-05	6.7013E-03
520266.51	4258162.9	33252.5359	0.20112	1.11878	0.21262	1.22532	6.66E-03	8.23E-06	4.00E-05	8.71E-06	4.21E-05	6.7583E-03

520403.71	4258113.33	33238.16089	0.16678	0.45861	0.17102	0.48619	6.66E-03	6.83E-06	1.64E-05	7.00E-06	1.67E-05	6.7033E-03
520433.08	4258113.42	33225.68413	0.16172	0.39159	0.16546	0.41331	6.65E-03	6.62E-06	1.40E-05	6.77E-06	1.42E-05	6.6955E-03
520568.33	4258237.24	33196.56255	0.14584	0.20172	0.14524	0.21137	6.65E-03	5.97E-06	7.22E-06	5.95E-06	7.26E-06	6.6745E-03
520138.89	4258282.5	33154.37817	0.26193	4.96207	0.26787	5.76707	6.64E-03	1.07E-05	1.77E-04	1.10E-05	1.98E-04	7.0368E-03
520504.87	4258139.99	33148.70165	0.15219	0.26995	0.156	0.28519	6.64E-03	6.23E-06	9.66E-06	6.39E-06	9.79E-06	6.6705E-03
520237.09	4258182.81	33142.34965	0.21022	1.43995	0.22105	1.58863	6.64E-03	8.61E-06	5.15E-05	9.05E-06	5.45E-05	6.7609E-03
519989.33	4258949.53	33135.8498	1.57406	0.32965	1.81347	0.32545	6.64E-03	6.44E-05	1.18E-05	7.43E-05	1.12E-05	6.7976E-03
520482.84	4259006.58	33127.4013	0.2957	0.1224	0.28336	0.12822	6.63E-03	1.21E-05	4.38E-06	1.16E-05	4.40E-06	6.6667E-03
520607.02	4258726.61	33120.50022	0.1655	0.13456	0.15905	0.13999	6.63E-03	6.78E-06	4.81E-06	6.51E-06	4.81E-06	6.6557E-03
520393.92	4258113.3	33098.82539	0.16832	0.48419	0.17294	0.51423	6.63E-03	6.89E-06	1.73E-05	7.08E-06	1.77E-05	6.6774E-03
520603.05	4258760.03	33090.22545	0.17053	0.13126	0.16387	0.13618	6.63E-03	6.98E-06	4.69E-06	6.71E-06	4.68E-06	6.6498E-03
520572.79	4258249.17	33083.33663	0.14555	0.19801	0.14473	0.20704	6.63E-03	5.96E-06	7.08E-06	5.93E-06	7.11E-06	6.6515E-03
519961.14	4258789.3	33078.23198	0.85658	0.58024	0.96832	0.5548	6.62E-03	3.51E-05	2.08E-05	3.96E-05	1.90E-05	6.7389E-03
519972.87	4258902.77	33068.49957	1.19487	0.37707	1.35028	0.3705	6.62E-03	4.89E-05	1.35E-05	5.53E-05	1.27E-05	6.7528E-03
520442.86	4258113.45	33067.26202	0.15987	0.37206	0.16365	0.39225	6.62E-03	6.55E-06	1.33E-05	6.70E-06	1.35E-05	6.6622E-03
520607.64	4258701.19	33051.19666	0.16313	0.13811	0.15684	0.14356	6.62E-03	6.68E-06	4.94E-06	6.42E-06	4.93E-06	6.6419E-03
520344.95	4258123.15	33034.57235	0.1789	0.64464	0.18623	0.69343	6.62E-03	7.32E-06	2.31E-05	7.63E-06	2.38E-05	6.6774E-03
520019.69	4258569.92	33028.88897	0.80331	2.84712	0.98169	2.41052	6.61E-03	3.29E-05	1.02E-04	4.02E-05	8.28E-05	6.8722E-03
520581.18	4258461.69	33026.14329	0.162	0.17331	0.15835	0.18218	6.61E-03	6.63E-06	6.20E-06	6.48E-06	6.25E-06	6.6395E-03
520588.66	4258377.86	33009.68514	0.15248	0.17592	0.1502	0.18479	6.61E-03	6.24E-06	6.29E-06	6.15E-06	6.34E-06	6.6357E-03
520063.93	4258432.91	33001.85004	0.43209	19.86185	0.47051	9.65784	6.61E-03	1.77E-05	7.10E-04	1.93E-05	3.32E-04	7.6880E-03
520049.4	4258501.91	32999.41635	0.66306	7.82166	0.74933	5.64922	6.61E-03	2.71E-05	2.80E-04	3.07E-05	1.94E-04	7.1401E-03
520547.42	4258188.24	32982.101	0.1472	0.22062	0.14883	0.23287	6.61E-03	6.03E-06	7.89E-06	6.09E-06	7.99E-06	6.6331E-03
520099.55	4258342.38	32945.5858	0.30696	14.25294	0.32149	15.95838	6.60E-03	1.26E-05	5.10E-04	1.32E-05	5.48E-04	7.6812E-03
519975.54	4258913.86	32943.15602	1.25224	0.36398	1.41802	0.35814	6.60E-03	5.13E-05	1.30E-05	5.81E-05	1.23E-05	6.7320E-03
520559.46	4258884.8	32936.57666	0.21038	0.12268	0.20277	0.12805	6.60E-03	8.61E-06	4.39E-06	8.30E-06	4.40E-06	6.6217E-03
520538.96	4258923.31	32922.6255	0.23	0.12165	0.22115	0.12727	6.59E-03	9.42E-06	4.35E-06	9.05E-06	4.37E-06	6.6204E-03
519965.56	4258872.3	32913.50494	1.04575	0.41632	1.17678	0.40699	6.59E-03	4.28E-05	1.49E-05	4.82E-05	1.40E-05	6.7112E-03
520384.13	4258113.27	32901.62792	0.16979	0.51169	0.1749	0.54451	6.59E-03	6.95E-06	1.83E-05	7.16E-06	1.87E-05	6.6401E-03
520574.77	4258851.53	32896.689	0.19655	0.12405	0.18936	0.12913	6.59E-03	8.05E-06	4.44E-06	7.75E-06	4.43E-06	6.6127E-03
520473.6	4259020.41	32890.61152	0.30888	0.12178	0.29578	0.12782	6.59E-03	1.26E-05	4.36E-06	1.21E-05	4.39E-06	6.6203E-03
519961.27	4258837.83	32881.34844	0.93991	0.47254	1.05885	0.45815	6.58E-03	3.85E-05	1.69E-05	4.34E-05	1.57E-05	6.6994E-03
520092.5	4259085.69	32860.31542	13.99496	0.2623	13.16474	0.2464	6.58E-03	5.73E-04	9.38E-06	5.39E-04	8.46E-06	7.7106E-03
520581.78	4258834.8	32854.27931	0.19034	0.12517	0.18343	0.13011	6.58E-03	7.79E-06	4.48E-06	7.51E-06	4.47E-06	6.6038E-03
520588.23	4258402.59	32851.08815	0.15465	0.17444	0.15194	0.18296	6.58E-03	6.33E-06	6.24E-06	6.22E-06	6.28E-06	6.6040E-03
520513.73	4258143.78	32844.6106	0.15061	0.25844	0.15415	0.27316	6.58E-03	6.17E-06	9.24E-06	6.31E-06	9.38E-06	6.6087E-03
520589.45	4258354.05	32826.55231	0.1501	0.17728	0.14849	0.18639	6.57E-03	6.15E-06	6.34E-06	6.08E-06	6.40E-06	6.5989E-03
520295.94	4258142.99	32823.42032	0.19104	0.89476	0.20163	0.97308	6.57E-03	7.82E-06	3.20E-05	8.26E-06	3.34E-05	6.6548E-03
520585.28	4258826.43	32793.13729	0.1873	0.12562	0.18047	0.1305	6.57E-03	7.67E-06	4.49E-06	7.39E-06	4.48E-06	6.5913E-03
520541.55	4258175.72	32778.14398	0.14748	0.22659	0.14964	0.23941	6.56E-03	6.04E-06	8.10E-06	6.13E-06	8.22E-06	6.5928E-03
520315.55	4258133.05	32774.58458	0.18559	0.78025	0.19503	0.84475	6.56E-03	7.60E-06	2.79E-05	7.99E-06	2.90E-05	6.6361E-03
520005.1	4258986.02	32754.29659	2.07543	0.30062	2.45611	0.29681	6.56E-03	8.50E-05	1.08E-05	1.01E-04	1.02E-05	6.7660E-03
520567.36	4258226.81	32754.21223	0.14508	0.20272	0.14474	0.21271	6.56E-03	5.94E-06	7.25E-06	5.93E-06	7.30E-06	6.5859E-03
520374.34	4258113.24	32741.87632	0.17141	0.54119	0.17698	0.5777	6.56E-03	7.02E-06	1.94E-05	7.25E-06	1.98E-05	6.6105E-03
519977.12	4258683.15	32741.09058	0.77385	1.02154	0.89796	0.94941	6.56E-03	3.17E-05	3.65E-05	3.68E-05	3.26E-05	6.6944E-03
520058.1	4258461.19	32738.39523	0.50816	12.63619	0.55853	7.66387	6.56E-03	2.08E-05	4.52E-04	2.29E-05	2.63E-04	7.3151E-03
520506.54	4258976.76	32731.79435	0.26534	0.1215	0.25437	0.12711	6.55E-03	1.09E-05	4.35E-06	1.04E-05	4.36E-06	6.5850E-03
520531.99	4258161.61	32713.23906	0.14839	0.23682	0.15117	0.25038	6.55E-03	6.08E-06	8.47E-06	6.19E-06	8.60E-06	6.5806E-03
520246.91	4258172.84	32709.68868	0.20519	1.32046	0.21624	1.45226	6.55E-03	8.40E-06	4.72E-05	8.85E-06	4.99E-05	6.6649E-03
520556.85	4258202.29	32695.71133	0.1458	0.21194	0.14665	0.2232	6.55E-03	5.97E-06	7.58E-06	6.00E-06	7.66E-06	6.5750E-03
520497.39	4258990.55	32694.07824	0.27665	0.12152	0.26513	0.12715	6.55E-03	1.13E-05	4.35E-06	1.09E-05	4.37E-06	6.5783E-03
520276.33	4258152.93	32687.27995	0.19611	1.03649	0.20731	1.1326	6.55E-03	8.03E-06	3.71E-05	8.49E-06	3.89E-05	6.6385E-03
520188.02	4258222.66	32663.1605	0.22759	2.39755	0.23421	2.69893	6.54E-03	9.32E-06	8.58E-05	9.59E-06	9.27E-05	6.7386E-03
520515.86	4258962.89	32653.16147	0.25442	0.12132	0.24405	0.12693	6.54E-03	1.04E-05	4.34E-06	9.99E-06	4.36E-06	6.5683E-03
520588.78	4258818.06	32643.84059	0.18422	0.12587	0.17741	0.13071	6.54E-03	7.54E-06	4.50E-06	7.26E-06	4.49E-06	6.5612E-03
520606.58	4258751.6	32638.75295	0.16779	0.13125	0.16124	0.13627	6.54E-03	6.87E-06	4.69E-06	6.60E-06	4.68E-06	6.5592E-03
520548.45	4258909.37	32629.56327	0.22089	0.12142	0.21266	0.12694	6.53E-03	9.04E-06	4.34E-06	8.71E-06	4.36E-06	6.5610E-03
520178.2	4258232.63	32626.78859	0.23236	2.70823	0.23826	3.06413	6.53E-03	9.51E-06	9.69E-05	9.76E-06	1.05E-04	6.7553E-03
519977.29	4258924.58	32609.04867	1.2946	0.35141	1.46809	0.34617	6.53E-03	5.30E-05	1.26E-05	6.01E-05	1.19E-05	6.6680E-03
520197.84	4258212.69	32589.05939	0.22276	2.14049	0.23019	2.39715	6.53E-03	9.12E-06	7.66E-05	9.42E-06	8.23E-05	6.7038E-03
520525.35	4258948.96	32559.66817	0.24404	0.12106	0.23432	0.12667	6.52E-03	9.99E-06	4.33E-06	9.59E-06	4.35E-06	6.5488E-03
519990.66	4258960.07	32552.76768	1.61672	0.31875	1.86574	0.3149	6.52E-03	6.62E-05	1.14E-05	7.64E-05	1.08E-05	6.6839E-03
520335.16	4258123.12	32545.83285	0.1799	0.68629	0.18802	0.73972	6.52E-03	7.37E-06	2.45E-05	7.70E-06	2.54E-05	6.5828E-03
520053.74	4259053.64	32542.44544	7.08229	0.26904	11.85116	0.25957	6.52E-03	2.90E-04	9.62E-06	4.85E-04	8.91E-06	7.3108E-03
520586.13	4258294.93	32511.30218	0.14565	0.18537	0.14504	0.19371	6.51E-03	5.96E-06	6.63E-06	5.94E-06	6.65E-06	6.5360E-03
520364.56	4258113.21	32494.73252	0.17287	0.57311	0.179	0.61356	6.51E-03	7.08E-06	2.05E-05	7.33E-06	2.11E-05	6.5635E-03
519963.37	4258746.45	32481.24864	0.79004	0.70647	0.89865	0.66762	6.50E-03	3.23E-05	2.53E-05	3.68E-05	2.29E-05	6.6221E-03
520168.38	4258242.6	32471.40524	0.23705	3.08983	0.2424	3.51282	6.50E-03	9.71E-06	1.11E-04	9.92E-06	1.21E-04	6.7536E-03
520129.07	4258292.47	32470.72519	0.26654	6.05791	0.27323	7.08338	6.50E-03	1.09E-05	2.17E-04	1.12E-05	2.43E-04	6.9847E-03
520043.82	4259043.65	32454.85322	5.08094	0.27154	7.11513	0.26374	6.50E-03	2.08E-04	9.71E-06	2.91E-04	9.05E-06	7.0177E-03
520109.4	4258322.41	32446.66255	0.28827	10.04247	0.29897	11.82327	6.50E-03	1.18E-05	3.59E-04	1.22E-05	4.06E-04	7.2870E-03
520522.58	4258147.57	32437.09263	0.14889	0.24786	0.15216	0.262	6.50E-03	6.10E-06	8.87E-06	6.23E-06	8.99E-06	6.5262E-03
520207.66	4258202.72	32433.04942	0.21793	1.92423	0.22614	2.14493	6.50E-03	8.92E-06	6.88E-05	9.26E-06	7.36E-05	6.6558E-03
520584.79	4258284.34	32428.20931	0.14504	0.18726	0.14434	0.19547	6.49E-03	5.94E-06	6.70E-06	5.91E-06	6.71E-06	6.5194E-03
520535.04	4258934.94	32397.85056	0.23408	0.12072	0.22499	0.1263	6.49E-03	9.58E-06	4.32E-06	9.21E-06	4.34E-06	6.5156E-03
520610.59	4258718.1	32371.18091	0.16285	0.13434	0.15654	0.13976	6.48E-03	6.67E-06	4.81E-06	6.41E-06	4.80E-06	6.5055E-03
520595.79	4258801.33	32356.25933	0.17832	0.12669	0.17166	0.13138	6.48E-03	7.30E-06	4.53E-06	7.03E-06	4.51E-06	6.5032E-03
519961.82	4258863.29	32351.42892	0.98312	0.42712	1.10382	0.41666	6.48E-03	4.03E-05	1.53E-05	4.52E-05	1.43E-05	6.5938E-03
519994.72	4258971.74	32324.60661	1.73404	0.30891	2.01348	0.3053	6.47E-03	7.10E-05	1.10E-05	8.24E-05	1.05E-05	6.6484E-03
520569.61	4258870.59	32305.87407	0.20164	0.12218	0.19439	0.12735	6.47E-03	8.26E-06	4.37E-06	7.96E-06	4.37E-06	6.4946E-03
520566.46	4258216.42	32265.69377	0.14427	0.20369	0.14428	0.21398	6.46E-03	5.91E-06	7.29E-06	5.91E-06	7.35E-06	6.4881E-03
519978.91	4258935.24	32264.74106	1.33665	0.33956	1.51855	0.33484	6.46E-03	5.47E-05	1.21E-05	6.22E-05	1.15E-05	6.6020E-03
520583.58	4258273.81	32264.55492	0.14438	0.18892	0.14357	0.19708	6.46E-03	5.91E-06	6.76E-06	5.88E-06	6.77E-06	6.4867E-03
519957.99	4258805.82	32255.06124	0.85013	0.53373	0.95462	0.51293	6.46E-03	3.48E-05	1.91E-05	3.91E-05	1.76E-05	6.5701E-03
520588.97	4258306.16	32252.37029	0.14577	0.18224	0.14515	0.19076	6.46E-03	5.97E-06	6.52E-06	5.94E-06	6.55E-06	6.4840E-03
520256.73	4258162.87	32241.22881	0.20026	1.21542	0.21139	1.33291	6.46E-03	8.20E-06	4.35E-05	8.66E-06	4.58E-05	6.5628E-03
520558.15	4258895.35	32231.56585	0.21202	0.12116	0.20436	0.12652	6.45E-03	8.68E-06	4.33E-06	8.37E-06	4.34E-06	6.4805E-03
520491.58	4259002.97	32226.13509	0.28424	0.12072	0.27244	0.12635	6.45E-03	1.16E-05	4.32E-06	1.12E-05	4.34E-06	6.4852E-03
520590.23	4258316.71	32224.54009	0.14636	0.18024	0.14563	0.18897	6.45E-03	5.99E-06	6.45E-06	5.96E-06	6.49E-06	6.4783E-03
520158.56	4258252.57	32223.71944	0.24172	3.56535	0.24668	4.07895	6.45E-03	9.90E-06	1.28E-04	1.01E-05	1.40E-04	6.7408E-03
520599.29	4258792.96	32221.33439	0.17552	0.12712	0.16893	0.13174	6.45E-03	7.19E-06	4.55E-06	6.92E-06	4.52E-06	6.4759E-03
520217.48	4258192.75	32215.15415	0.21315	1.73998	0.22205	1.93184	6.45E-03	8.73E-06	6.22E-05	9.09E-06	6.63E-05	6.5979E-03
519960.48	4258763.6	32194.06734	0.79502	0.64671	0.90144	0.61361	6.45E-03	3.26E-05	2.31E-05	3.69E-05	2.11E-05	6.5610E-03
520354.77	4258113.18	32140.77593	0.1741	0.60803	0.18093	0.65245	6.44E-03	7.13E-06	2.17E-05	7.41E-06	2.24E-05	6.4953E-03
520305.76	4258133.02	32128.48256	0.1861	0.83579	0.19617	0.90664	6.43E-03	7.62E-06	2.99E-05	8.03E-06	3.11E-05	6.5108E-03
520556.14	4258191.98	32126.732	0.1449	0.21283	0.1461	0.22434	6.43E-03	5.93E-06	7.61E-06	5.98E-06	7.70E-06	6.4610E-03
520591.96	4258386.53	32126.37063	0.15183	0.17333	0.14932	0.18188	6.43E-03	6.22E-06	6.20E-06	6.11E-06	6.24E-06	6.4585E-03
520610.12	4258743.17	32125.26936	0.16512	0.13119	0.15872	0.1363	6.43E-03	6.76E-06	4.69E-06	6.50E-06	4.68E-06	6.4562E-03
520611.24	4258692.6	32117.66086	0.16054	0.13808	0.15438	0.14336	6.43E-03	6.57E-06	4.94E-06	6.32E-06	4.92E-06	6.4548E-03
520540.9	4258165.43	32081.95113	0.14633	0.22769	0.14876	0.2406	6.42E-03	5.99E-06	8.14E-06	6.09E-06	8.26E-06	6.4533E-03
520482.29	4259016.82	32081.43552	0.29671	0.12041	0.28447	0.12618	6.42E-03	1.21E-05	4.31E-06	1.16E-05	4.33E-06	6.4572E-03
520286.15	4258142.96	32067.56982	0.19113	0.96322	0.20202	1.04961	6.42E-03	7.83E-06	3.45E-05	8.27E-06	3.60E-05	6.5086E-03
520582.48	4258263.33	32050.59516	0.1437	0.19032	0.1428	0.19856	6.42E-03	5.88E-06	6.81E-06	5.85E-06	6.82E-06	6.4439E-03
520592.92	4258363.18	32019.37044	0.14953	0.17438	0.14755	0.18324	6.41E-03	6.12E-06	6.24E-06	6.04E-06	6.29E-06	6.4370E-03
520009.77	4258589.36	32014.54136	0.78119	2.20028	0.95204	1.92767	6.41E-03	3.20E-05	7.87E-05	3.90E-05	6.62E-05	6.6272E-03
519957.49	4258828.73	32009.46943	0.88024	0.48485	0.98874	0.46868	6.41E-03	3.60E-05	1.73E-05	4.05E-05	1.61E-05	6.5203E-03
520550.53	4258179.56	32008.92671	0.14523	0.2181	0.14699	0.23022	6.41E-03	5.95E-06	7.80E-06	6.02E-06	7.90E-06	6.4379E-03
520082.6	4259085.7	31994.17233	14.69285	0.25847	22.56179	0.24438	6.41E-03	6.02E-04	9.25E-06	9.24E-04	8.39E-06	7.9503E-03
520602.8	4258784.59	31989.46305	0.17271	0.1274	0.16617	0.132	6.41E-03	7.07E-06	4.56E-06	6.80E-06	4.53E-06	6.4293E-03
520325.37	4258123.09	31972.43202	0.18062	0.73213	0.18956	0.79031	6.40E-03	7.40E-06	2.62E-05	7.76E-06	2.71E-05	6.4714E-03
520531.44	4258151.36	31937.51567	0.14704	0.23809	0.15003	0.2516	6.40E-03	6.02E-06	8.52E-06	6.14E-06	8.64E-06	6.4252E-03
520064.67	4258422.61	31935.28788	0.40487	21.21994	0.43947	9.91515	6.40E-03	1.66E-05	7.59E-04	1.80E-05	3.40E-04	7.5295E-03
519987.12	4258646.05	31929.97772	0.75698	1.30981	0.88771	1.20129	6.39E-03	3.10E-05	4.69E-05	3.63E-05	4.12E-05	6.5498E-03
520227.3	4258182.78	31928.9116	0.20839	1.58174	0.21789	1.74948	6.39E-03	8.53E-06	5.66E-05	8.92E-06	6.01E-05	6.5283E-03
520577.31	4258241.09	31915.76491	0.14319	0.19495	0.1424	0.20382	6.39E-03	5.86E-06	6.97E-06	5.83E-06	7.00E-06	6.4172E-03
519965.06	4258726.4	31899.80057	0.76094	0.77682	0.86586	0.73155	6.39E-03	3.12E-05	2.78E-05	3.55E-05	2.51E-05	6.5079E-03
520148.74	4258262.53	31855.61639	0.24629	4.17347	0.25114	4.80852	6.38E-03	1.01E-05	1.49E-04	1.03E-05	1.65E-04	6.7142E-03
520039.48	4258521.35	31854.61498	0.70501	5.32347	0.8131	4.14493	6.38E-03	2.89E-05	1.90E-04	3.33E-05	1.42E-04	6.7742E-03
520547.41	4258919.81	31843.13576	0.22228	0.11985	0.21397	0.12531	6.38E-03	9.10E-06	4.29E-06	8.76E-06	4.30E-06	6.4035E-03
519980.41	4258945.85	31838.57757	1.37607	0.32825	1.56584	0.32399	6.38E-03	5.63E-05	1.17E-05	6.41E-05	1.11E-05	6.5194E-03
520591.56	4258411.35	31829.52838	0.15389	0.17172	0.15101	0.18003	6.37E-03	6.30E-06	6.14E-06	6.18E-06	6.18E-06	6.3991E-03
520584.66	4258470.82	31814.54817	0.16088	0.17043	0.1569	0.17915	6.37E-03	6.59E-06	6.10E-06	6.42E-06	6.15E-06	6.3966E-03
520581.47	4258252.88	31767.8999	0.14297	0.19155	0.14207	0.19993	6.36E-03	5.85E-06	6.85E-06	5.82E-06	6.86E-06	6.3873E-03
520092.52	4259095.69	31764.86042	13.92233	0.25481	13.11874	0.23955	6.36E-03	5.70E-04	9.11E-06	5.37E-04	8.22E-06	7.4859E-03
520266.55	4258152.9	31762.23995	0.1955	1.1224	0.20655	1.22803	6.36E-03	8.00E-06	4.01E-05	8.46E-06	4.22E-05	6.4596E-03
519957.47	4258780.46	31747.74165	0.7977	0.59335	0.89795	0.56586	6.36E-03	3.27E-05	2.12E-05	3.68E-05	1.94E-05	6.4680E-03
520565.63	4258206.05	31740.88508	0.14341	0.20464	0.14382	0.21517	6.36E-03	5.87E-06	7.32E-06	5.89E-06	7.39E-06	6.3830E-03
520505.88	4258987.04	31739.74378	0.26639	0.11976	0.25545	0.12525	6.36E-03	1.09E-05	4.28E-06	1.05E-05	4.30E-06	6.3863E-03
520344.98	4258113.15	31715.66721	0.17514	0.64619	0.18273	0.69481	6.35E-03	7.17E-06	2.31E-05	7.48E-06	2.39E-05	6.4131E-03
520568.1	4258881.22	31712.53887	0.20338	0.12084	0.19621	0.126	6.35E-03	8.33E-06	4.32E-06	8.03E-06	4.33E-06	6.3759E-03
519958.09	4258854.28	31706.7313	0.92404	0.43815	1.03555	0.42636	6.35E-03	3.78E-05	1.57E-05	4.24E-05	1.46E-05	6.4602E-03
519996.06	4258982.29	31705.13852	1.78063	0.29923	2.07202	0.29581	6.35E-03	7.29E-05	1.07E-05	8.48E-05	1.02E-05	6.5280E-03
520515.09	4258973.22	31704.2651	0.25556	0.11968	0.2452	0.12516	6.35E-03	1.05E-05	4.28E-06	1.00E-05	4.30E-06	6.3783E-03
519968	4258709.38	31650.04219	0.74783	0.851	0.8549	0.79838	6.34E-03	3.06E-05	3.04E-05	3.50E-05	2.74E-05	6.4618E-03
520524.46	4258959.33	31646.80486	0.24526	0.1195	0.23551	0.12498	6.34E-03	1.00E-05	4.27E-06	9.64E-06	4.29E-06	6.3660E-03
520614.15	4258709.59	31621.31942	0.16033	0.13433	0.15419	0.13965	6.33E-03	6.56E-06	4.80E-06	6.31E-06	4.79E-06	6.3551E-03
520119.25	4258302.44	31619.70295	0.27075	7.6361	0.27879	8.93373	6.33E-03	1.11E-05	2.73E-04	1.14E-05	3.07E-04	6.9346E-03
520237.12	4258172.81	31583.94638	0.20366	1.44462	0.21364	1.59203	6.33E-03	8.34E-06	5.17E-05	8.75E-06	5.47E-05	6.4485E-03
520054.17	4259063.64	31582.28473	7.21075	0.26145	12.25302	0.25224	6.32E-03	2.95E-04	9.35E-06	5.02E-04	8.66E-06	7.1397E-03
520576.26	4258230.63	31562.40375	0.1425	0.19598	0.1419	0.20517	6.32E-03	5.83E-06	7.01E-06	5.81E-06	7.04E-06	6.3465E-03
520534.01	4258945.37	31515.63945	0.23537	0.1192	0.22623	0.12467	6.31E-03	9.64E-06	4.26E-06	9.26E-06	4.28E-06	6.3389E-03
520556.96	4258905.85	31512.34601	0.21353	0.11963	0.2058	0.12497	6.31E-03	8.74E-06	4.28E-06	8.43E-06	4.29E-06	6.3365E-03
519977.12	4258673.87	31495.96201	0.74121	1.06119	0.85902	0.98478	6.31E-03	3.03E-05	3.80E-05	3.52E-05	3.38E-05	6.4448E-03
520043.84	4259053.65	31481.61187	5.10533	0.26359	7.14471	0.25607	6.30E-03	2.09E-04	9.43E-06	2.93E-04	8.79E-06	6.8244E-03
520295.97	4258132.99	31427.93502	0.18629	0.89749	0.19681	0.97525	6.29E-03	7.63E-06	3.21E-05	8.06E-06	3.35E-05	6.3751E-03
520315.58	4258123.05	31419.84279	0.1813	0.78243	0.19087	0.84655	6.29E-03	7.42E-06	2.80E-05	7.82E-06	2.91E-05	6.3645E-03
519964.02	4258899.11	31416.81936	1.05613	0.37474	1.18381	0.36788	6.29E-03	4.32E-05	1.34E-05	4.85E-05	1.26E-05	6.4094E-03
520609.8	4258767.86	31387.2034	0.16728	0.1278	0.16089	0.13246	6.29E-03	6.85E-06	4.57E-06	6.59E-06	4.55E-06	6.3083E-03
520540.3	4258155.15	31381.80987	0.14513	0.22878	0.14778	0.2417	6.28E-03	5.94E-06	8.18E-06	6.05E-06	8.30E-06	6.3131E-03
520138.92	4258272.5	31377.7961	0.25076	4.97316	0.25583	5.78257	6.28E-03	1.03E-05	1.78E-04	1.05E-05	1.99E-04	6.6810E-03
520549.82	4258169.24	31374.51428	0.14419	0.21918	0.14625	0.23141	6.28E-03	5.90E-06	7.84E-06	5.99E-06	7.94E-06	6.3109E-03
519981.81	4258956.42	31362.51426	1.41395	0.3175	1.61138	0.31363	6.28E-03	5.79E-05	1.14E-05	6.60E-05	1.08E-05	6.4268E-03
520500.32	4258999.35	31333.05873	0.27333	0.11898	0.26209	0.12445	6.27E-03	1.12E-05	4.26E-06	1.07E-05	4.27E-06	6.3053E-03
520543.77	4258931.32	31327.55692	0.22589	0.11885	0.21735	0.12428	6.27E-03	9.25E-06	4.25E-06	8.90E-06	4.27E-06	6.3004E-03
519966.39	4258910.09	31318.00888	1.10074	0.36172	1.23486	0.35568	6.27E-03	4.51E-05	1.29E-05	5.06E-05	1.22E-05	6.3926E-03
520490.97	4259013.22	31241.41052	0.28527	0.11885	0.27357	0.12442	6.26E-03	1.17E-05	4.25E-06	1.12E-05	4.27E-06	6.2879E-03
520564.86	4258195.71	31228.59453	0.14257	0.20549	0.14335	0.21628	6.25E-03	5.84E-06	7.35E-06	5.87E-06	7.43E-06	6.2804E-03
520276.36	4258142.93	31228.06758	0.19077	1.03997	0.20168	1.13476	6.25E-03	7.81E-06	3.72E-05	8.26E-06	3.90E-05	6.3461E-03
520335.19	4258113.12	31220.79746	0.17596	0.68804	0.18434	0.74106	6.25E-03	7.20E-06	2.46E-05	7.55E-06	2.54E-05	6.3172E-03
520595.27	4258395.2	31220.12456	0.15113	0.17072	0.14842	0.179	6.25E-03	6.19E-06	6.11E-06	6.08E-06	6.15E-06	6.2768E-03
520246.94	4258162.84	31206.53256	0.19904	1.3247	0.20934	1.45537	6.25E-03	8.15E-06	4.74E-05	8.57E-06	5.00E-05	6.3636E-03
520596.4	4258372.31	31182.00059	0.1489	0.17158	0.14661	0.18014	6.24E-03	6.10E-06	6.14E-06	6.00E-06	6.18E-06	6.2690E-03
520559.51	4258183.4	31176.31814	0.14294	0.21017	0.14427	0.22159	6.24E-03	5.85E-06	7.52E-06	5.91E-06	7.61E-06	6.2704E-03
520575.3	4258220.2	31174.40693	0.14178	0.19689	0.14144	0.20641	6.24E-03	5.81E-06	7.04E-06	5.79E-06	7.09E-06	6.2688E-03
519985.62	4258967.99	31171.96545	1.50532	0.30762	1.72374	0.30409	6.24E-03	6.16E-05	1.10E-05	7.06E-05	1.04E-05	6.3963E-03
520591.34	4258436.63	31167.89581	0.15573	0.16968	0.1525	0.17799	6.24E-03	6.38E-06	6.07E-06	6.24E-06	6.11E-06	6.2666E-03
520596.62	4258347.02	31156.0985	0.14672	0.17329	0.14515	0.1821	6.24E-03	6.01E-06	6.20E-06	5.94E-06	6.25E-06	6.2638E-03
519968.23	4258920.84	31154.28214	1.14045	0.34959	1.28131	0.34418	6.24E-03	4.67E-05	1.25E-05	5.25E-05	1.18E-05	6.3625E-03
519954.36	4258797.06	31113.23476	0.79465	0.54636	0.89	0.52341	6.23E-03	3.25E-05	1.95E-05	3.64E-05	1.80E-05	6.3373E-03
520566.72	4258891.8	31080.32205	0.20502	0.11936	0.19781	0.12453	6.22E-03	8.39E-06	4.27E-06	8.10E-06	4.28E-06	6.2493E-03
520581.97	4258858.28	31069.59369	0.19184	0.12088	0.1851	0.12576	6.22E-03	7.85E-06	4.32E-06	7.58E-06	4.32E-06	6.2462E-03
519953.72	4258819.63	31062.04939	0.82459	0.49675	0.92182	0.47888	6.22E-03	3.38E-05	1.78E-05	3.77E-05	1.64E-05	6.3263E-03
520585.61	4258849.58	31061.21186	0.18875	0.12129	0.18207	0.12612	6.22E-03	7.73E-06	4.34E-06	7.45E-06	4.33E-06	6.2443E-03
519958.53	4258879.46	31054.88308	0.96144	0.39792	1.07441	0.38929	6.22E-03	3.94E-05	1.42E-05	4.40E-05	1.34E-05	6.3301E-03
519999.85	4258608.79	31034.71824	0.74881	1.75384	0.89451	1.57714	6.22E-03	3.07E-05	6.27E-05	3.66E-05	5.41E-05	6.3993E-03
520589.25	4258840.88	31029.38857	0.18567	0.12187	0.17913	0.12662	6.21E-03	7.60E-06	4.36E-06	7.33E-06	4.35E-06	6.2377E-03
519970.79	4258692	31025.01047	0.72853	0.93336	0.83507	0.87257	6.21E-03	2.98E-05	3.34E-05	3.42E-05	3.00E-05	6.3405E-03
520188.05	4258212.66	31022.83081	0.2193	2.40407	0.22493	2.70385	6.21E-03	8.98E-06	8.60E-05	9.21E-06	9.28E-05	6.4097E-03
520613.31	4258759.49	31002.55702	0.16464	0.12786	0.15835	0.13259	6.21E-03	6.74E-06	4.57E-06	6.48E-06	4.55E-06	6.2310E-03
520049.36	4258492.22	30988.29517	0.60538	7.88068	0.6765	5.67725	6.21E-03	2.48E-05	2.82E-04	2.77E-05	1.95E-04	6.7351E-03
520178.23	4258222.63	30981.3012	0.22368	2.71463	0.2286	3.07054	6.20E-03	9.16E-06	9.71E-05	9.36E-06	1.05E-04	6.4255E-03
519954.35	4258845.28	30975.28595	0.86806	0.44927	0.97096	0.43596	6.20E-03	3.55E-05	1.61E-05	3.98E-05	1.50E-05	6.3096E-03
520197.87	4258202.69	30975.20199	0.21488	2.14652	0.22131	2.40153	6.20E-03	8.80E-06	7.68E-05	9.06E-06	8.24E-05	6.3803E-03
520592.9	4258832.17	30970.54652	0.18263	0.12236	0.17619	0.12705	6.20E-03	7.48E-06	4.38E-06	7.21E-06	4.36E-06	6.2257E-03
520082.62	4259095.7	30954.8127	14.59472	0.25113	22.42507	0.2376	6.20E-03	5.98E-04	8.98E-06	9.18E-04	8.16E-06	7.7320E-03
520617.18	4258726.3	30930.02034	0.16	0.13102	0.15393	0.1362	6.19E-03	6.55E-06	4.69E-06	6.30E-06	4.68E-06	6.2164E-03
520029.56	4258540.79	30924.54814	0.73396	3.8691	0.86901	3.15498	6.19E-03	3.01E-05	1.38E-04	3.56E-05	1.08E-04	6.5054E-03
520593.68	4258288.15	30888.30243	0.14239	0.18063	0.14164	0.18864	6.19E-03	5.83E-06	6.46E-06	5.80E-06	6.48E-06	6.2104E-03
520596.54	4258823.47	30885.67939	0.17966	0.12274	0.17326	0.12737	6.19E-03	7.36E-06	4.39E-06	7.09E-06	4.37E-06	6.2085E-03
520595.11	4258298.77	30875.8885	0.14291	0.17865	0.1422	0.18684	6.18E-03	5.85E-06	6.39E-06	5.82E-06	6.41E-06	6.2078E-03

519969.92	4258931.53	30860.23905	1.17707	0.33783	1.32387	0.33298	6.18E-03	4.82E-05	1.21E-05	5.42E-05	1.14E-05	6.3061E-03
520207.69	4258192.72	30856.11684	0.21047	1.92969	0.21768	2.14903	6.18E-03	8.62E-06	6.90E-05	8.91E-06	7.38E-05	6.3397E-03
520168.41	4258232.6	30832.86998	0.22799	3.09585	0.23237	3.52199	6.17E-03	9.33E-06	1.11E-04	9.51E-06	1.21E-04	6.4252E-03
520592.39	4258277.58	30824.58883	0.1418	0.18238	0.14096	0.19027	6.17E-03	5.81E-06	6.52E-06	5.77E-06	6.53E-06	6.1977E-03
520305.79	4258123.02	30811.33793	0.18169	0.83807	0.19175	0.90866	6.17E-03	7.44E-06	3.00E-05	7.85E-06	3.12E-05	6.2469E-03
520617.71	4258701.09	30801.21817	0.15785	0.13437	0.15188	0.13954	6.17E-03	6.46E-06	4.81E-06	6.22E-06	4.79E-06	6.1906E-03
520256.76	4258152.87	30797.56408	0.1945	1.21921	0.20499	1.33579	6.17E-03	7.96E-06	4.36E-05	8.39E-06	4.59E-05	6.2735E-03
520555.86	4258916.31	30793.62712	0.21491	0.1181	0.20711	0.12339	6.17E-03	8.80E-06	4.22E-06	8.48E-06	4.24E-06	6.1926E-03
520594.9	4258420.11	30788.66838	0.15308	0.16901	0.15004	0.17715	6.17E-03	6.27E-06	6.05E-06	6.14E-06	6.08E-06	6.1904E-03
520514.38	4258983.52	30776.1757	0.25658	0.11803	0.24623	0.12339	6.16E-03	1.05E-05	4.22E-06	1.01E-05	4.24E-06	6.1924E-03
520523.64	4258969.68	30760.06364	0.24638	0.11793	0.23663	0.12329	6.16E-03	1.01E-05	4.22E-06	9.69E-06	4.23E-06	6.1883E-03
520549.16	4258158.95	30749.78604	0.14312	0.22016	0.14543	0.23248	6.16E-03	5.86E-06	7.87E-06	5.95E-06	7.98E-06	6.1857E-03
520574.41	4258209.81	30748.08572	0.14102	0.19775	0.14102	0.20757	6.16E-03	5.77E-06	7.07E-06	5.77E-06	7.13E-06	6.1835E-03
520129.1	4258282.47	30738.19044	0.2549	6.07117	0.26074	7.10685	6.16E-03	1.04E-05	2.17E-04	1.07E-05	2.44E-04	6.6380E-03
520588.13	4258479.95	30737.68809	0.15972	0.16765	0.15539	0.17618	6.16E-03	6.54E-06	6.00E-06	6.36E-06	6.05E-06	6.1806E-03
520600.18	4258814.77	30732.76992	0.17666	0.12304	0.17029	0.12761	6.15E-03	7.23E-06	4.40E-06	6.97E-06	4.38E-06	6.1776E-03
520286.18	4258132.96	30695.77106	0.18621	0.96613	0.19687	1.0518	6.15E-03	7.62E-06	3.46E-05	8.06E-06	3.61E-05	6.2336E-03
520591.22	4258267.07	30693.47424	0.14117	0.1839	0.14023	0.19177	6.15E-03	5.78E-06	6.58E-06	5.74E-06	6.58E-06	6.1715E-03
520217.51	4258182.75	30679.15479	0.20611	1.74496	0.21402	1.93564	6.14E-03	8.44E-06	6.24E-05	8.76E-06	6.65E-05	6.2900E-03
520533.07	4258955.77	30673.40377	0.23659	0.1177	0.22742	0.12306	6.14E-03	9.69E-06	4.21E-06	9.31E-06	4.22E-06	6.1702E-03
520092.95	4259106.51	30670.84015	13.6661	0.24724	12.84313	0.23256	6.14E-03	5.60E-04	8.84E-06	5.26E-04	7.98E-06	7.2445E-03
520325.4	4258113.09	30666.78816	0.17655	0.73403	0.18567	0.7917	6.14E-03	7.23E-06	2.63E-05	7.60E-06	2.72E-05	6.2097E-03
520586.29	4258244.93	30654.73088	0.14063	0.1884	0.13968	0.19664	6.14E-03	5.76E-06	6.74E-06	5.72E-06	6.75E-06	6.1640E-03
519987.03	4258978.56	30637.52506	1.54638	0.29786	1.77303	0.29461	6.14E-03	6.33E-05	1.07E-05	7.26E-05	1.01E-05	6.2923E-03
520558.74	4258173.06	30619.89608	0.14201	0.21114	0.14367	0.22272	6.13E-03	5.81E-06	7.55E-06	5.88E-06	7.65E-06	6.1589E-03
520054.19	4259073.64	30617.15219	7.26964	0.25393	12.32973	0.24508	6.13E-03	2.98E-04	9.08E-06	5.05E-04	8.41E-06	6.9515E-03
519959.62	4258737.41	30612.00119	0.7284	0.71781	0.82353	0.67811	6.13E-03	2.98E-05	2.57E-05	3.37E-05	2.33E-05	6.2430E-03
520109.43	4258312.41	30608.24031	0.27444	10.07957	0.28436	11.60779	6.13E-03	1.12E-05	3.61E-04	1.16E-05	3.99E-04	6.9116E-03
520597.59	4258309.85	30596.69156	0.14309	0.17586	0.14229	0.18423	6.13E-03	5.86E-06	6.29E-06	5.83E-06	6.32E-06	6.1517E-03
520044.27	4259063.65	30585.63122	5.19516	0.25622	7.29918	0.24889	6.13E-03	2.13E-04	9.16E-06	2.99E-04	8.54E-06	6.6545E-03
520158.59	4258242.57	30565.13552	0.23218	3.57342	0.2363	4.08724	6.12E-03	9.51E-06	1.28E-04	9.68E-06	1.40E-04	6.4084E-03
520603.83	4258806.07	30552.04285	0.17371	0.1234	0.1674	0.1279	6.12E-03	7.11E-06	4.41E-06	6.85E-06	4.39E-06	6.1412E-03
519971.49	4258942.17	30535.43802	1.21249	0.32673	1.36552	0.32236	6.12E-03	4.96E-05	1.17E-05	5.59E-05	1.11E-05	6.2434E-03
519956.78	4258754.66	30535.33731	0.73503	0.65879	0.83063	0.62401	6.12E-03	3.01E-05	2.36E-05	3.40E-05	2.14E-05	6.2242E-03
519954.83	4258870.54	30524.50358	0.90651	0.40769	1.01069	0.39803	6.11E-03	3.71E-05	1.46E-05	4.14E-05	1.37E-05	6.2197E-03
520576.74	4258877.65	30523.4699	0.19672	0.11902	0.18992	0.12398	6.11E-03	8.05E-06	4.26E-06	7.78E-06	4.26E-06	6.1371E-03
520052.25	4258475.41	30515.15909	0.53939	9.10304	0.5953	6.26001	6.11E-03	2.21E-05	3.26E-04	2.44E-05	2.15E-04	6.6981E-03
520542.68	4258941.78	30503.6001	0.22714	0.11737	0.21855	0.1227	6.11E-03	9.30E-06	4.20E-06	8.95E-06	4.21E-06	6.1354E-03
520590.14	4258256.59	30502.96004	0.14051	0.18522	0.13951	0.19315	6.11E-03	5.75E-06	6.63E-06	5.71E-06	6.63E-06	6.1334E-03
520598.92	4258320.43	30472.73617	0.14355	0.17409	0.14261	0.18261	6.10E-03	5.88E-06	6.23E-06	5.84E-06	6.27E-06	6.1268E-03
520227.33	4258172.78	30442.84493	0.20176	1.58622	0.21031	1.75311	6.10E-03	8.26E-06	5.67E-05	8.61E-06	6.02E-05	6.2304E-03
520565.46	4258902.33	30430.93096	0.20651	0.11789	0.19926	0.12305	6.09E-03	8.46E-06	4.22E-06	8.16E-06	4.22E-06	6.1193E-03
520600.05	4258356.04	30418.15247	0.14617	0.17048	0.14424	0.17908	6.09E-03	5.98E-06	6.10E-06	5.91E-06	6.15E-06	6.1158E-03
520499.65	4259009.63	30417.18262	0.27439	0.11722	0.26322	0.12261	6.09E-03	1.12E-05	4.19E-06	1.08E-05	4.21E-06	6.1219E-03
520607.47	4258797.37	30415.33493	0.17092	0.12383	0.16468	0.12826	6.09E-03	7.00E-06	4.43E-06	6.74E-06	4.40E-06	6.1137E-03
520585.17	4258234.44	30382.81778	0.13998	0.18948	0.13915	0.19798	6.08E-03	5.73E-06	6.78E-06	5.70E-06	6.80E-06	6.1096E-03
520509.06	4258995.73	30360.36059	0.26283	0.11726	0.2522	0.12258	6.08E-03	1.08E-05	4.19E-06	1.03E-05	4.21E-06	6.1096E-03
519953.81	4258771.61	30337.46751	0.74219	0.60534	0.83205	0.57615	6.08E-03	3.04E-05	2.17E-05	3.41E-05	1.98E-05	6.1814E-03
520266.58	4258142.9	30326.54785	0.18996	1.12609	0.20056	1.22988	6.07E-03	7.78E-06	4.03E-05	8.21E-06	4.22E-05	6.1718E-03
520599.87	4258381.43	30326.09101	0.14824	0.16891	0.14568	0.17717	6.07E-03	6.07E-06	6.04E-06	5.96E-06	6.08E-06	6.0974E-03
520552.5	4258927.71	30318.18825	0.21814	0.11706	0.21013	0.12233	6.07E-03	8.93E-06	4.19E-06	8.60E-06	4.20E-06	6.0976E-03
520591.33	4258462.49	30315.10218	0.15729	0.16733	0.15347	0.17575	6.07E-03	6.44E-06	5.99E-06	6.28E-06	6.03E-06	6.0958E-03
520598.57	4258403.87	30297.38456	0.15041	0.16815	0.14753	0.1762	6.07E-03	6.16E-06	6.01E-06	6.04E-06	6.05E-06	6.0917E-03
520573.59	4258199.44	30296.99871	0.14024	0.19857	0.14061	0.20865	6.07E-03	5.74E-06	7.10E-06	5.76E-06	7.16E-06	6.0932E-03
520568.49	4258187.24	30283.54534	0.14058	0.20276	0.14151	0.21345	6.06E-03	5.76E-06	7.25E-06	5.79E-06	7.33E-06	6.0908E-03
520620.71	4258717.86	30251.49003	0.15754	0.13083	0.1516	0.13598	6.06E-03	6.45E-06	4.68E-06	6.21E-06	4.67E-06	6.0803E-03
520148.77	4258252.53	30222.6557	0.23636	4.18129	0.24039	4.82252	6.05E-03	9.68E-06	1.50E-04	9.84E-06	1.66E-04	6.3871E-03
519987.12	4258636.77	30218.75801	0.71727	1.35169	0.83822	1.23935	6.05E-03	2.94E-05	4.83E-05	3.43E-05	4.25E-05	6.2063E-03
519950.62	4258836.27	30170.00035	0.81552	0.46031	0.90954	0.44539	6.04E-03	3.34E-05	1.65E-05	3.72E-05	1.53E-05	6.1443E-03
519977.12	4258664.6	30164.16001	0.70839	1.09964	0.81929	1.01926	6.04E-03	2.90E-05	3.93E-05	3.35E-05	3.50E-05	6.1777E-03
520315.61	4258113.05	30155.39261	0.17715	0.78441	0.18677	0.84821	6.04E-03	7.25E-06	2.81E-05	7.65E-06	2.91E-05	6.1111E-03
520237.15	4258162.81	30148.99683	0.19744	1.44869	0.20653	1.59543	6.04E-03	8.08E-06	5.18E-05	8.46E-06	5.48E-05	6.1609E-03
519972.95	4258952.77	30148.38168	1.24635	0.31613	1.40542	0.31218	6.04E-03	5.10E-05	1.13E-05	5.75E-05	1.07E-05	6.1682E-03
520296	4258122.99	30137.57729	0.18174	0.89991	0.19209	0.97737	6.04E-03	7.44E-06	3.22E-05	7.86E-06	3.36E-05	6.1165E-03
520019.65	4258560.22	30132.39171	0.74116	2.91354	0.89039	2.46801	6.03E-03	3.03E-05	1.04E-04	3.65E-05	8.47E-05	6.2902E-03
520611.11	4258788.66	30106.58231	0.168	0.12399	0.16179	0.1284	6.03E-03	6.88E-06	4.43E-06	6.62E-06	4.41E-06	6.0516E-03
520620.31	4258742.75	30075.77263	0.15958	0.12775	0.15355	0.13267	6.02E-03	6.53E-06	4.57E-06	6.29E-06	4.55E-06	6.0450E-03
520584.14	4258223.98	30062.73988	0.13931	0.19044	0.13868	0.19922	6.02E-03	5.70E-06	6.81E-06	5.68E-06	6.84E-06	6.0455E-03
520558.02	4258162.74	30062.37317	0.14105	0.21205	0.14299	0.22377	6.02E-03	5.78E-06	7.58E-06	5.85E-06	7.68E-06	6.0473E-03
519949.95	4258810.54	30018.36199	0.77142	0.50845	0.85933	0.48876	6.01E-03	3.16E-05	1.82E-05	3.52E-05	1.68E-05	6.1133E-03
519976.51	4258964.23	30005.55781	1.31869	0.30637	1.49266	0.30281	6.01E-03	5.40E-05	1.10E-05	6.11E-05	1.04E-05	6.1455E-03
519989.93	4258628.23	29971.5234	0.71459	1.43795	0.83758	1.31416	6.00E-03	2.93E-05	5.14E-05	3.43E-05	4.51E-05	6.1623E-03
520575.29	4258888.25	29966.06145	0.19833	0.11762	0.19154	0.12259	6.00E-03	8.12E-06	4.21E-06	7.84E-06	4.21E-06	6.0255E-03
520119.28	4258292.44	29950.23357	0.25867	7.65376	0.26582	8.97114	6.00E-03	1.06E-05	2.74E-04	1.09E-05	3.08E-04	6.6012E-03
520621.27	4258692.58	29940.50118	0.15543	0.13437	0.14957	0.13937	6.00E-03	6.36E-06	4.81E-06	6.12E-06	4.78E-06	6.0181E-03
519951.13	4258861.61	29918.10723	0.85428	0.41773	0.95082	0.40681	5.99E-03	3.50E-05	1.49E-05	3.89E-05	1.40E-05	6.0943E-03
520083.05	4259106.53	29908.15166	16.4484	0.24371	21.66329	0.23068	5.99E-03	6.73E-04	8.72E-06	8.87E-04	7.92E-06	7.5666E-03
520522.88	4258980	29890.10105	0.24738	0.11636	0.23763	0.1216	5.99E-03	1.01E-05	4.16E-06	9.73E-06	4.17E-06	6.0141E-03
519950.72	4258788.29	29885.57995	0.742	0.55807	0.82879	0.53323	5.98E-03	3.04E-05	2.00E-05	3.39E-05	1.83E-05	6.0876E-03
520276.4	4258132.93	29885.52907	0.18568	1.04297	0.19619	1.13684	5.98E-03	7.60E-06	3.73E-05	8.03E-06	3.90E-05	6.0770E-03
520614.76	4258779.96	29877.46678	0.16532	0.12425	0.15916	0.12867	5.98E-03	6.77E-06	4.44E-06	6.52E-06	4.42E-06	6.0055E-03
520532.19	4258966.14	29850.63075	0.2377	0.11621	0.22852	0.12146	5.98E-03	9.73E-06	4.16E-06	9.36E-06	4.17E-06	6.0054E-03
519961.47	4258717.75	29841.8968	0.69994	0.78579	0.79296	0.7401	5.98E-03	2.87E-05	2.81E-05	3.25E-05	2.54E-05	6.0909E-03
520246.97	4258152.84	29818.0898	0.19318	1.32843	0.20268	1.45842	5.97E-03	7.91E-06	4.75E-05	8.30E-06	5.01E-05	6.0853E-03
520567.65	4258176.87	29799.73794	0.13976	0.20367	0.14104	0.21457	5.97E-03	5.72E-06	7.28E-06	5.77E-06	7.37E-06	5.9940E-03
520564.31	4258912.81	29772.73555	0.20788	0.11641	0.20056	0.12153	5.96E-03	8.51E-06	4.16E-06	8.21E-06	4.17E-06	5.9875E-03
519957.25	4258906.31	29764.15638	0.97511	0.35929	1.08573	0.35302	5.96E-03	3.99E-05	1.29E-05	4.45E-05	1.21E-05	6.0700E-03
520138.95	4258262.5	29751.17817	0.24035	4.98416	0.2447	5.7949	5.96E-03	9.84E-06	1.78E-04	1.00E-05	1.99E-04	6.3552E-03
520598.23	4258428.87	29743.27097	0.15223	0.16637	0.14903	0.17438	5.96E-03	6.23E-06	5.95E-06	6.10E-06	5.99E-06	5.9808E-03
520583.19	4258213.56	29716.0298	0.13862	0.19127	0.13827	0.20036	5.95E-03	5.68E-06	6.84E-06	5.66E-06	6.88E-06	5.9761E-03
520541.67	4258952.2	29694.63264	0.22826	0.1159	0.21964	0.12113	5.95E-03	9.35E-06	4.15E-06	8.99E-06	4.16E-06	5.9734E-03
520044.28	4259073.65	29679.73824	5.23124	0.24893	7.32551	0.24186	5.94E-03	2.14E-04	8.90E-06	3.00E-04	8.30E-06	6.4751E-03
520092.96	4259116.51	29678.54192	13.58657	0.24045	12.80452	0.22633	5.94E-03	5.56E-04	8.60E-06	5.24E-04	7.77E-06	7.0405E-03
519959.16	4258917.1	29659.89015	1.01005	0.34735	1.12566	0.34178	5.94E-03	4.14E-05	1.24E-05	4.61E-05	1.17E-05	6.0514E-03
520603.49	4258365.06	29653.60479	0.14558	0.16758	0.1433	0.17595	5.94E-03	5.96E-06	5.99E-06	5.87E-06	6.04E-06	5.9624E-03
520603.8	4258340	29614.43984	0.14345	0.16943	0.14192	0.17794	5.93E-03	5.87E-06	6.06E-06	5.81E-06	6.11E-06	5.9545E-03
520618.4	4258771.26	29596.68579	0.16269	0.12441	0.1566	0.12888	5.93E-03	6.66E-06	4.45E-06	6.41E-06	4.42E-06	5.9491E-03
520305.82	4258113.02	29563.1387	0.17739	0.84021	0.18738	0.91035	5.92E-03	7.26E-06	3.01E-05	7.67E-06	3.13E-05	5.9967E-03
519977.99	4258974.83	29555.105	1.35489	0.29677	1.53587	0.29352	5.92E-03	5.55E-05	1.06E-05	6.29E-05	1.01E-05	6.0579E-03
520551.34	4258938.19	29543.76146	0.21937	0.11561	0.21131	0.12081	5.92E-03	8.98E-06	4.14E-06	8.65E-06	4.15E-06	5.9425E-03
520623.82	4258734.39	29531.60268	0.15715	0.12764	0.15127	0.13261	5.91E-03	6.43E-06	4.57E-06	6.19E-06	4.55E-06	5.9359E-03
520065.62	4258402.25	29530.95626	0.35818	23.24203	0.38646	10.34739	5.91E-03	1.47E-05	8.31E-04	1.58E-05	3.55E-04	7.1310E-03
520624.24	4258709.43	29502.75622	0.15513	0.1307	0.14932	0.13577	5.91E-03	6.35E-06	4.67E-06	6.11E-06	4.66E-06	5.9301E-03
520508.34	4259006.03	29497.6433	0.2639	0.1156	0.2533	0.12083	5.91E-03	1.08E-05	4.13E-06	1.04E-05	4.15E-06	5.9368E-03
520188.08	4258202.66	29492.04914	0.21142	2.41065	0.21623	2.7072	5.91E-03	8.66E-06	8.62E-05	8.85E-06	9.29E-05	6.1029E-03
520099.61	4258322.38	29483.01474	0.27754	14.34204	0.2896	15.74337	5.90E-03	1.14E-05	5.13E-04	1.19E-05	5.40E-04	6.9811E-03
520197.9	4258192.69	29481.31525	0.20742	2.15197	0.21294	2.40538	5.90E-03	8.49E-06	7.70E-05	8.72E-06	8.26E-05	6.0808E-03
519960.94	4258927.82	29479.74552	1.04359	0.33595	1.16411	0.33097	5.90E-03	4.27E-05	1.20E-05	4.77E-05	1.14E-05	6.0175E-03
520517.8	4258992.11	29460.68813	0.25295	0.11558	0.24291	0.12077	5.90E-03	1.04E-05	4.13E-06	9.95E-06	4.15E-06	5.9285E-03
520603.35	4258390.56	29449.06011	0.14752	0.16631	0.14476	0.17428	5.90E-03	6.04E-06	5.95E-06	5.93E-06	5.98E-06	5.9215E-03
520178.26	4258212.63	29448.61668	0.21547	2.72122	0.21958	3.07519	5.90E-03	8.82E-06	9.73E-05	8.99E-06	1.06E-04	6.1182E-03
520009.73	4258579.66	29423.37035	0.72809	2.26632	0.88089	1.97516	5.89E-03	2.98E-05	8.11E-05	3.61E-05	6.78E-05	6.1072E-03
520256.79	4258142.87	29420.22081	0.18888	1.22288	0.19873	1.33782	5.89E-03	7.73E-06	4.37E-05	8.14E-06	4.59E-05	5.9973E-03
520595.26	4258248.77	29419.45348	0.13814	0.18202	0.13705	0.18978	5.89E-03	5.66E-06	6.51E-06	5.61E-06	6.52E-06	5.9159E-03
520286.22	4258122.96	29417.13699	0.18147	0.96868	0.19181	1.05373	5.89E-03	7.43E-06	3.46E-05	7.85E-06	3.62E-05	5.9773E-03
520207.72	4258182.72	29401.4435	0.20342	1.93439	0.20968	2.15295	5.89E-03	8.33E-06	6.92E-05	8.59E-06	7.39E-05	6.0481E-03
520588.99	4258865.44	29397.64856	0.18737	0.11776	0.18105	0.12246	5.89E-03	7.67E-06	4.21E-06	7.41E-06	4.20E-06	5.9108E-03
520052.9	4259085.75	29383.67035	6.97461	0.24471	11.40432	0.23647	5.88E-03	2.86E-04	8.75E-06	4.67E-04	8.12E-06	6.6539E-03
520592.6	4258856.82	29383.4287	0.18445	0.11816	0.17817	0.1228	5.88E-03	7.55E-06	4.23E-06	7.30E-06	4.22E-06	5.9077E-03
520573.97	4258898.8	29378.97059	0.19981	0.11619	0.19298	0.12116	5.88E-03	8.18E-06	4.16E-06	7.90E-06	4.16E-06	5.9079E-03
520601.21	4258281.36	29370.46162	0.13921	0.17611	0.13836	0.18376	5.88E-03	5.70E-06	6.30E-06	5.67E-06	6.31E-06	5.9058E-03
520601.87	4258412.54	29358.62034	0.14964	0.16561	0.1466	0.17348	5.88E-03	6.13E-06	5.92E-06	6.00E-06	5.96E-06	5.9035E-03
520577.46	4258191.09	29357.795	0.13822	0.1958	0.13875	0.20575	5.88E-03	5.66E-06	7.00E-06	5.68E-06	7.06E-06	5.9047E-03
520596.21	4258848.19	29355.35933	0.18155	0.11851	0.17529	0.12311	5.88E-03	7.43E-06	4.24E-06	7.18E-06	4.23E-06	5.9019E-03
520602.58	4258291.96	29350.57298	0.13973	0.17427	0.13892	0.18209	5.88E-03	5.72E-06	6.23E-06	5.69E-06	6.25E-06	5.9017E-03
519951.5	4258886.61	29347.9946	0.88734	0.38086	0.98587	0.37282	5.88E-03	3.63E-05	1.36E-05	4.04E-05	1.28E-05	5.9805E-03
519964.37	4258700.63	29347.31749	0.68451	0.85785	0.77825	0.80535	5.88E-03	2.80E-05	3.07E-05	3.19E-05	2.76E-05	5.9954E-03
520582.31	4258203.17	29340.82602	0.13791	0.19205	0.13789	0.20143	5.88E-03	5.65E-06	6.87E-06	5.65E-06	6.92E-06	5.9010E-03
520561.23	4258924.1	29339.01898	0.21076	0.11532	0.20325	0.12043	5.88E-03	8.63E-06	4.12E-06	8.32E-06	4.13E-06	5.9007E-03
520599.96	4258270.81	29329.30853	0.13866	0.1777	0.1377	0.18526	5.87E-03	5.68E-06	6.36E-06	5.64E-06	6.36E-06	5.8976E-03
520599.83	4258839.56	29306.02753	0.17867	0.11904	0.17253	0.12357	5.87E-03	7.32E-06	4.26E-06	7.06E-06	4.24E-06	5.8918E-03
520566.87	4258166.53	29300.67302	0.13889	0.20458	0.14049	0.21563	5.87E-03	5.69E-06	7.32E-06	5.75E-06	7.40E-06	5.8940E-03
520168.44	4258222.6	29294.07765	0.2194	3.10316	0.22303	3.52711	5.87E-03	8.98E-06	1.11E-04	9.13E-06	1.21E-04	6.1167E-03
519946.88	4258827.26	29284.18096	0.76567	0.47115	0.85116	0.45457	5.86E-03	3.13E-05	1.69E-05	3.48E-05	1.56E-05	5.9632E-03
520594.75	4258471.48	29260.49266	0.1562	0.1647	0.15207	0.17297	5.86E-03	6.40E-06	5.89E-06	6.23E-06	5.94E-06	5.8843E-03
520217.54	4258172.75	29252.7208	0.19941	1.74942	0.20639	1.93903	5.86E-03	8.16E-06	6.26E-05	8.45E-06	6.66E-05	6.0040E-03
520604.08	4258302.61	29246.65554	0.14019	0.17215	0.13933	0.18019	5.86E-03	5.74E-06	6.16E-06	5.70E-06	6.19E-06	5.8808E-03
520622.04	4258762.56	29242.38329	0.1601	0.12445	0.15409	0.129	5.86E-03	6.56E-06	4.45E-06	6.31E-06	4.43E-06	5.8779E-03
520603.44	4258830.94	29234.93289	0.17581	0.11954	0.16979	0.12401	5.85E-03	7.20E-06	4.28E-06	6.95E-06	4.26E-06	5.8774E-03
519947.43	4258852.69	29234.07246	0.8046	0.42785	0.89429	0.41549	5.85E-03	3.29E-05	1.53E-05	3.66E-05	1.43E-05	5.9536E-03
519962.58	4258938.49	29233.36053	1.07559	0.32504	1.20094	0.32057	5.85E-03	4.40E-05	1.16E-05	4.92E-05	1.10E-05	5.9702E-03
520598.82	4258260.31	29228.69255	0.13807	0.17907	0.13701	0.18663	5.85E-03	5.65E-06	6.41E-06	5.61E-06	6.41E-06	5.8775E-03
520594.07	4258238.25	29223.46303	0.13755	0.18318	0.1365	0.19113	5.85E-03	5.63E-06	6.55E-06	5.59E-06	6.56E-06	5.8767E-03
520129.13	4258272.47	29153.08279	0.2441	6.08444	0.24922	7.12524	5.84E-03	9.99E-06	2.18E-04	1.02E-05	2.45E-04	6.3207E-03
520607.05	4258822.31	29139.53497	0.17302	0.11993	0.16704	0.12433	5.84E-03	7.08E-06	4.29E-06	6.84E-06	4.27E-06	5.8581E-03
520158.62	4258232.57	29058.60602	0.2233	3.57944	0.22663	4.09779	5.82E-03	9.14E-06	1.28E-04	9.28E-06	1.41E-04	6.1065E-03
520227.36	4258162.78	29057.64762	0.19544	1.59025	0.20308	1.7563	5.82E-03	8.00E-06	5.69E-05	8.31E-06	6.03E-05	5.9527E-03
520531.37	4258976.48	29048.00529	0.23873	0.11473	0.22955	0.11985	5.82E-03	9.77E-06	4.10E-06	9.40E-06	4.11E-06	5.8447E-03
520039.44	4258511.65	29019.39447	0.64214	5.37061	0.72914	4.19689	5.81E-03	2.63E-05	1.92E-04	2.99E-05	1.44E-04	6.2039E-03
520610.66	4258813.69	29016.18715	0.17026	0.12027	0.16431	0.1246	5.81E-03	6.97E-06	4.30E-06	6.73E-06	4.28E-06	5.8332E-03
520109.46	4258302.41	29009.13892	0.26191	10.10691	0.27092	11.62608	5.81E-03	1.07E-05	3.62E-04	1.11E-05	3.99E-04	6.5919E-03
520266.61	4258132.9	29002.78723	0.18468	1.12933	0.19474	1.23172	5.81E-03	7.56E-06	4.04E-05	7.97E-06	4.23E-05	5.9064E-03
520592.98	4258227.77	28986.01123	0.13694	0.18416	0.13602	0.19236	5.80E-03	5.61E-06	6.59E-06	5.57E-06	6.60E-06	5.8292E-03
520606.21	4258313.54	28977.89824	0.1404	0.1698	0.13939	0.178	5.80E-03	5.75E-06	6.07E-06	5.71E-06	6.11E-06	5.8269E-03
520083.06	4259116.53	28967.40832	16.33531	0.23706	21.55386	0.22453	5.80E-03	6.69E-04	8.48E-06	8.83E-04	7.71E-06	7.3686E-03
520627.32	4258726.02	28940.04019	0.15478	0.12748	0.14903	0.13245	5.80E-03	6.34E-06	4.56E-06	6.10E-06	4.55E-06	5.8172E-03
520607.19	4258348.92	28935.58028	0.14292	0.16679	0.14104	0.17512	5.79E-03	5.85E-06	5.97E-06	5.77E-06	6.01E-06	5.8183E-03
519964.1	4258949.11	28932.39317	1.10618	0.31462	1.23628	0.31059	5.79E-03	4.53E-05	1.13E-05	5.06E-05	1.07E-05	5.9119E-03
520576.57	4258180.69	28922.74549	0.13745	0.19667	0.13836	0.20684	5.79E-03	5.63E-06	7.03E-06	5.67E-06	7.10E-06	5.8176E-03
520540.74	4258962.6	28921.49215	0.22932	0.11445	0.22067	0.11958	5.79E-03	9.39E-06	4.09E-06	9.04E-06	4.11E-06	5.8185E-03
520296.04	4258112.99	28897.20856	0.17725	0.90222	0.1874	0.97889	5.79E-03	7.26E-06	3.23E-05	7.67E-06	3.36E-05	5.8679E-03
519946.17	4258801.44	28893.55938	0.72093	0.51974	0.80046	0.49826	5.79E-03	2.95E-05	1.86E-05	3.28E-05	1.71E-05	5.8843E-03
520583.87	4258884.7	28885.58714	0.19192	0.11593	0.18553	0.1207	5.78E-03	7.86E-06	4.15E-06	7.60E-06	4.14E-06	5.8085E-03
520606.92	4258374.08	28877.14645	0.14495	0.16519	0.1424	0.17325	5.78E-03	5.93E-06	5.91E-06	5.83E-06	5.95E-06	5.8067E-03
519953.07	4258745.73	28864.5328	0.68119	0.6686	0.76523	0.63326	5.78E-03	2.79E-05	2.39E-05	3.13E-05	2.17E-05	5.8854E-03
519947.83	4258877.77	28845.80534	0.83886	0.38967	0.92957	0.3807	5.78E-03	3.43E-05	1.39E-05	3.81E-05	1.31E-05	5.8762E-03
520614.27	4258805.06	28841.99709	0.16751	0.12056	0.16159	0.12483	5.78E-03	6.86E-06	4.31E-06	6.62E-06	4.29E-06	5.7981E-03
520625.69	4258753.86	28840.64258	0.15758	0.12448	0.1517	0.12913	5.78E-03	6.45E-06	4.45E-06	6.21E-06	4.43E-06	5.7973E-03
519950.14	4258762.77	28837.07037	0.6891	0.61595	0.77055	0.58537	5.78E-03	2.82E-05	2.20E-05	3.15E-05	2.01E-05	5.8769E-03
519967.41	4258960.47	28831.85946	1.1643	0.30501	1.30499	0.30138	5.77E-03	4.77E-05	1.09E-05	5.34E-05	1.03E-05	5.8963E-03
520237.18	4258152.81	28809.71837	0.19148	1.45231	0.1997	1.59845	5.77E-03	7.84E-06	5.19E-05	8.18E-06	5.49E-05	5.8924E-03
520094.86	4259127.17	28787.90651	12.75847	0.23408	11.81464	0.22027	5.77E-03	5.22E-04	8.37E-06	4.84E-04	7.56E-06	6.7872E-03
520550.28	4258948.64	28781.49519	0.22044	0.11417	0.21234	0.11928	5.76E-03	9.03E-06	4.08E-06	8.69E-06	4.09E-06	5.7898E-03
520572.76	4258909.31	28779.2717	0.20117	0.11475	0.19428	0.1197	5.76E-03	8.24E-06	4.10E-06	7.95E-06	4.11E-06	5.7878E-03
519999.81	4258599.1	28774.77115	0.70345	1.80416	0.83963	1.61848	5.76E-03	2.88E-05	6.45E-05	3.44E-05	5.56E-05	5.9458E-03
520627.77	4258700.99	28765.41899	0.15284	0.13073	0.14715	0.13564	5.76E-03	6.26E-06	4.68E-06	6.02E-06	4.66E-06	5.7823E-03
519977.12	4258655.32	28756.28996	0.67561	1.13623	0.7794	1.05236	5.76E-03	2.77E-05	4.06E-05	3.19E-05	3.61E-05	5.8952E-03
520055.4	4258436.43	28750.06725	0.41385	10.83102	0.44849	7.09331	5.76E-03	1.69E-05	3.87E-04	1.84E-05	2.44E-04	6.4238E-03
520148.8	4258242.53	28718.59763	0.22708	4.1891	0.2304	4.83399	5.75E-03	9.30E-06	1.50E-04	9.43E-06	1.66E-04	6.0858E-03
520591.97	4258217.32	28717.18287	0.13632	0.18498	0.1356	0.19349	5.75E-03	5.58E-06	6.62E-06	5.55E-06	6.64E-06	5.7754E-03
520601.57	4258437.63	28702.60098	0.15134	0.16376	0.14795	0.17166	5.75E-03	6.20E-06	5.86E-06	6.06E-06	5.89E-06	5.7721E-03
519955.87	4258728.36	28688.81598	0.67091	0.72668	0.75449	0.68678	5.75E-03	2.75E-05	2.60E-05	3.09E-05	2.36E-05	5.8533E-03
520517.02	4259002.44	28683.16101	0.25412	0.11406	0.24412	0.11914	5.74E-03	1.04E-05	4.08E-06	1.00E-05	4.09E-06	5.7728E-03
520617.88	4258796.43	28634.69433	0.16481	0.12085	0.15893	0.12508	5.73E-03	6.75E-06	4.32E-06	6.51E-06	4.29E-06	5.7564E-03
520276.43	4258122.93	28628.7912	0.18077	1.04576	0.19081	1.13877	5.73E-03	7.40E-06	3.74E-05	7.81E-06	3.91E-05	5.8250E-03
520526.54	4258988.49	28624.73371	0.24372	0.11396	0.23427	0.11902	5.73E-03	9.98E-06	4.08E-06	9.59E-06	4.09E-06	5.7602E-03
520560.01	4258934.61	28617.53577	0.21199	0.1139	0.20442	0.11896	5.73E-03	8.68E-06	4.07E-06	8.37E-06	4.08E-06	5.7563E-03
519947.09	4258779.53	28605.11767	0.69296	0.56842	0.77061	0.54228	5.73E-03	2.84E-05	2.03E-05	3.16E-05	1.86E-05	5.8274E-03
520606.82	4258399.69	28556.56477	0.14677	0.16376	0.14383	0.17149	5.72E-03	6.01E-06	5.86E-06	5.89E-06	5.89E-06	5.7425E-03
520043	4259085.77	28514.32982	5.0542	0.24002	6.9801	0.23343	5.71E-03	2.07E-04	8.59E-06	2.86E-04	8.01E-06	6.2197E-03

520052.91	4259095.75	28506.06325	7.03898	0.23793	11.46657	0.23001	5.71E-03	2.88E-04	8.51E-06	4.69E-04	7.90E-06	6.4828E-03
520247	4258142.84	28499.1456	0.18749	1.33201	0.19623	1.46067	5.71E-03	7.68E-06	4.76E-05	8.03E-06	5.01E-05	5.8208E-03
519943.73	4258843.77	28481.80603	0.75773	0.43783	0.84016	0.42397	5.70E-03	3.10E-05	1.57E-05	3.44E-05	1.46E-05	5.7995E-03
520575.73	4258170.32	28481.16013	0.13666	0.19752	0.13792	0.20788	5.70E-03	5.60E-06	7.07E-06	5.65E-06	7.14E-06	5.7292E-03
519968.96	4258971.1	28462.60928	1.19671	0.29556	1.34319	0.29226	5.70E-03	4.90E-05	1.06E-05	5.50E-05	1.00E-05	5.8246E-03
520621.5	4258787.81	28444.66187	0.16222	0.12114	0.15639	0.12534	5.70E-03	6.64E-06	4.33E-06	6.40E-06	4.30E-06	5.7181E-03
520586.44	4258194.93	28432.6273	0.1359	0.18918	0.136	0.19847	5.69E-03	5.56E-06	6.77E-06	5.57E-06	6.81E-06	5.7187E-03
519967.12	4258683.15	28430.92084	0.66159	0.93715	0.75594	0.87606	5.69E-03	2.71E-05	3.35E-05	3.10E-05	3.01E-05	5.8153E-03
520119.31	4258282.44	28417.51476	0.24746	7.67211	0.25389	8.99117	5.69E-03	1.01E-05	2.74E-04	1.04E-05	3.09E-04	6.2946E-03
520605.17	4258421.21	28408.84953	0.14884	0.16306	0.14564	0.17079	5.69E-03	6.09E-06	5.83E-06	5.96E-06	5.86E-06	5.7130E-03
520591.03	4258206.91	28403.96514	0.13565	0.18577	0.13523	0.19457	5.69E-03	5.55E-06	6.64E-06	5.54E-06	6.68E-06	5.7127E-03
520582.48	4258895.28	28362.25321	0.1934	0.11455	0.18699	0.11933	5.68E-03	7.92E-06	4.10E-06	7.66E-06	4.10E-06	5.7037E-03
520569.96	4258920.48	28360.18034	0.20372	0.11362	0.19668	0.11858	5.68E-03	8.34E-06	4.06E-06	8.05E-06	4.07E-06	5.7040E-03
519943.15	4258818.26	28329.46027	0.71866	0.48146	0.79565	0.46335	5.67E-03	2.94E-05	1.72E-05	3.26E-05	1.59E-05	5.7685E-03
520629.33	4258745.15	28322.19506	0.15505	0.1243	0.14929	0.12904	5.67E-03	6.35E-06	4.45E-06	6.11E-06	4.43E-06	5.6932E-03
520598.18	4258480.46	28318.75977	0.15507	0.16216	0.15061	0.17023	5.67E-03	6.35E-06	5.80E-06	6.17E-06	5.84E-06	5.6954E-03
519944.16	4258868.92	28276.81311	0.79249	0.39879	0.87663	0.38865	5.66E-03	3.24E-05	1.43E-05	3.59E-05	1.33E-05	5.7588E-03
520138.98	4258252.5	28242.72671	0.23061	4.9968	0.2344	5.7973	5.66E-03	9.44E-06	1.79E-04	9.60E-06	1.99E-04	6.0528E-03
520610.59	4258357.85	28242.26534	0.14235	0.16418	0.14014	0.17229	5.66E-03	5.83E-06	5.87E-06	5.74E-06	5.91E-06	5.6793E-03
519950.1	4258913.35	28183.23467	0.89965	0.34498	0.99588	0.33918	5.64E-03	3.68E-05	1.23E-05	4.08E-05	1.16E-05	5.7457E-03
520539.87	4258972.96	28183.00633	0.23036	0.11305	0.2217	0.11806	5.64E-03	9.43E-06	4.04E-06	9.08E-06	4.05E-06	5.6706E-03
520625.11	4258779.18	28180.6478	0.15968	0.12133	0.1539	0.12556	5.64E-03	6.54E-06	4.34E-06	6.30E-06	4.31E-06	5.6650E-03
520286.25	4258112.96	28168.93268	0.17673	0.97142	0.18677	1.05492	5.64E-03	7.24E-06	3.47E-05	7.65E-06	3.62E-05	5.7271E-03
520604.24	4258252.61	28162.2107	0.13566	0.17589	0.13451	0.18321	5.64E-03	5.55E-06	6.29E-06	5.51E-06	6.29E-06	5.6635E-03
520256.82	4258132.87	28150.53498	0.18353	1.22607	0.19269	1.33991	5.64E-03	7.51E-06	4.39E-05	7.89E-06	4.60E-05	5.7428E-03
520084.96	4259127.18	28140.38529	15.52793	0.23098	19.02608	0.21864	5.64E-03	6.36E-04	8.26E-06	7.79E-04	7.51E-06	7.0660E-03
520197.93	4258182.69	28100.50236	0.20038	2.1567	0.20506	2.40895	5.63E-03	8.20E-06	7.71E-05	8.40E-06	8.27E-05	5.8040E-03
520188.11	4258192.66	28099.73112	0.20406	2.41554	0.20806	2.71161	5.63E-03	8.36E-06	8.64E-05	8.52E-06	9.31E-05	5.8237E-03
519951.95	4258924.11	28093.21584	0.93018	0.33381	1.03038	0.32868	5.63E-03	3.81E-05	1.19E-05	4.22E-05	1.13E-05	5.7295E-03
520029.52	4258531.09	28085.34454	0.67132	3.92845	0.78019	3.20825	5.62E-03	2.75E-05	1.41E-04	3.19E-05	1.10E-04	5.9346E-03
520610.36	4258383.1	28082.16998	0.14426	0.16275	0.1415	0.17052	5.62E-03	5.91E-06	5.82E-06	5.79E-06	5.85E-06	5.6472E-03
520585.48	4258184.51	28064.15133	0.13521	0.18999	0.13569	0.19954	5.62E-03	5.54E-06	6.80E-06	5.56E-06	6.85E-06	5.6450E-03
520549.29	4258959.06	28050.02133	0.22144	0.11276	0.2133	0.11777	5.62E-03	9.07E-06	4.03E-06	8.73E-06	4.04E-06	5.6433E-03
520602.98	4258242.06	28048.07024	0.13513	0.1771	0.13395	0.18456	5.62E-03	5.53E-06	6.33E-06	5.48E-06	6.34E-06	5.6407E-03
520207.75	4258172.72	28045.99523	0.19672	1.93869	0.2021	2.15627	5.62E-03	8.05E-06	6.93E-05	8.27E-06	7.40E-05	5.7763E-03
519989.89	4258618.53	28036.40424	0.67422	1.47729	0.78852	1.35068	5.61E-03	2.76E-05	5.28E-05	3.23E-05	4.64E-05	5.7738E-03
520178.29	4258202.63	28015.28992	0.20768	2.72821	0.21112	3.07762	5.61E-03	8.50E-06	9.76E-05	8.64E-06	1.06E-04	5.8308E-03
520608.71	4258274.55	27971.33122	0.13616	0.17174	0.1352	0.17904	5.60E-03	5.57E-06	6.14E-06	5.54E-06	6.15E-06	5.6250E-03
520631.3	4258692.56	27969.62689	0.15058	0.13073	0.14498	0.13547	5.60E-03	6.17E-06	4.68E-06	5.94E-06	4.65E-06	5.6227E-03
520607.5	4258264.02	27944.95626	0.13563	0.17318	0.13456	0.1804	5.60E-03	5.55E-06	6.19E-06	5.51E-06	6.19E-06	5.6198E-03
520610.02	4258285.13	27936.61329	0.13665	0.17014	0.13576	0.17759	5.59E-03	5.60E-06	6.09E-06	5.56E-06	6.10E-06	5.6180E-03
519953.66	4258934.81	27933.87065	0.95938	0.32313	1.06346	0.31856	5.59E-03	3.93E-05	1.16E-05	4.35E-05	1.09E-05	5.6995E-03
520601.46	4258463.23	27932.8972	0.15277	0.1617	0.1488	0.1697	5.59E-03	6.26E-06	5.78E-06	6.09E-06	5.83E-06	5.6179E-03
520099.64	4258312.38	27931.524	0.2645	14.38467	0.27573	15.31853	5.59E-03	1.08E-05	5.15E-04	1.13E-05	5.26E-04	6.6562E-03
520217.57	4258162.75	27928.62509	0.19304	1.75331	0.19915	1.94212	5.59E-03	7.90E-06	6.27E-05	8.15E-06	6.67E-05	5.7385E-03
520558.88	4258945.08	27924.11751	0.21311	0.11253	0.20549	0.11751	5.59E-03	8.73E-06	4.03E-06	8.41E-06	4.03E-06	5.6174E-03
520094.88	4259137.17	27891.188	12.66773	0.22792	11.77934	0.21461	5.59E-03	5.19E-04	8.15E-06	4.82E-04	7.37E-06	6.6021E-03
520168.47	4258212.6	27876.75029	0.21133	3.1097	0.21431	3.53184	5.58E-03	8.65E-06	1.11E-04	8.77E-06	1.21E-04	5.8326E-03
520601.82	4258231.55	27876.01049	0.13455	0.17819	0.13344	0.18583	5.58E-03	5.51E-06	6.37E-06	5.46E-06	6.38E-06	5.6063E-03
520628.72	4258770.56	27867.10616	0.15717	0.12141	0.15146	0.1257	5.58E-03	6.44E-06	4.34E-06	6.20E-06	4.32E-06	5.6021E-03
520525.7	4258998.84	27861.99259	0.24477	0.11247	0.23532	0.11743	5.58E-03	1.00E-05	4.02E-06	9.63E-06	4.03E-06	5.6075E-03
520596.02	4258872.6	27853.51096	0.183	0.11472	0.17706	0.11925	5.58E-03	7.49E-06	4.10E-06	7.25E-06	4.09E-06	5.6010E-03
520611.47	4258295.76	27841.53692	0.13709	0.16826	0.13618	0.17591	5.58E-03	5.61E-06	6.02E-06	5.58E-06	6.04E-06	5.5989E-03
520599.6	4258864.04	27839.56553	0.18024	0.11513	0.17432	0.1196	5.58E-03	7.38E-06	4.12E-06	7.14E-06	4.11E-06	5.5980E-03
520535.28	4258984.87	27815.13624	0.235	0.11235	0.2261	0.1173	5.57E-03	9.62E-06	4.02E-06	9.26E-06	4.03E-06	5.5973E-03
520581.2	4258905.82	27813.78359	0.19476	0.11312	0.18827	0.11791	5.57E-03	7.97E-06	4.05E-06	7.71E-06	4.05E-06	5.5939E-03
520603.18	4258855.48	27813.06286	0.1775	0.11547	0.1716	0.1199	5.57E-03	7.27E-06	4.13E-06	7.03E-06	4.12E-06	5.5925E-03
520632.97	4258736.45	27781.71358	0.15262	0.12419	0.14701	0.12897	5.56E-03	6.25E-06	4.44E-06	6.02E-06	4.43E-06	5.5848E-03
519957.88	4258709.1	27781.67634	0.644	0.79196	0.72629	0.74641	5.56E-03	2.64E-05	2.83E-05	2.97E-05	2.56E-05	5.6737E-03
520050.29	4258455.9	27771.76966	0.45467	8.40345	0.49504	5.95118	5.56E-03	1.86E-05	3.01E-04	2.03E-05	2.04E-04	6.1055E-03
520266.64	4258122.9	27769.36693	0.17961	1.13225	0.18908	1.23339	5.56E-03	7.35E-06	4.05E-05	7.74E-06	4.23E-05	5.6591E-03
520606.77	4258846.93	27769.32782	0.17475	0.11584	0.16891	0.12022	5.56E-03	7.15E-06	4.14E-06	6.92E-06	4.13E-06	5.5835E-03
519944.31	4258893.39	27758.40357	0.82017	0.3652	0.90607	0.35769	5.56E-03	3.36E-05	1.31E-05	3.71E-05	1.23E-05	5.6550E-03
520227.39	4258152.78	27737.51884	0.18931	1.59437	0.19614	1.75823	5.55E-03	7.75E-06	5.70E-05	8.03E-06	6.04E-05	5.6880E-03
520568.67	4258931.02	27733.69225	0.20499	0.11226	0.19788	0.11717	5.55E-03	8.39E-06	4.02E-06	8.10E-06	4.02E-06	5.5786E-03
519955.25	4258945.46	27716.32044	0.98738	0.31291	1.09527	0.30882	5.55E-03	4.04E-05	1.12E-05	4.48E-05	1.06E-05	5.6576E-03
520610.35	4258838.37	27710.39394	0.17205	0.11639	0.16634	0.12071	5.55E-03	7.04E-06	4.16E-06	6.81E-06	4.14E-06	5.5715E-03
520129.16	4258262.47	27697.99358	0.23404	6.09769	0.23856	7.13881	5.55E-03	9.58E-06	2.18E-04	9.77E-06	2.45E-04	6.0294E-03
519942.4	4258792.34	27696.22017	0.67329	0.53008	0.74507	0.50712	5.55E-03	2.76E-05	1.90E-05	3.05E-05	1.74E-05	5.6410E-03
520053.34	4259105.75	27694.86895	7.23313	0.23162	11.83937	0.22392	5.55E-03	2.96E-04	8.28E-06	4.85E-04	7.69E-06	6.3432E-03
520043.01	4259095.77	27688.06454	5.09162	0.23346	7.00506	0.2271	5.54E-03	2.08E-04	8.35E-06	2.87E-04	7.80E-06	6.0563E-03
520600.74	4258221.08	27682.22474	0.13399	0.17902	0.13301	0.18695	5.54E-03	5.49E-06	6.40E-06	5.45E-06	6.42E-06	5.5675E-03
520584.59	4258174.11	27676.41057	0.13448	0.19078	0.13533	0.20055	5.54E-03	5.51E-06	6.82E-06	5.54E-06	6.89E-06	5.5673E-03
520613.06	4258306.46	27673.04476	0.13747	0.16623	0.13644	0.17408	5.54E-03	5.63E-06	5.95E-06	5.59E-06	5.98E-06	5.5650E-03
519940.03	4258834.84	27663.95346	0.71342	0.44753	0.78843	0.4322	5.54E-03	2.92E-05	1.60E-05	3.23E-05	1.48E-05	5.6324E-03
519958.3	4258956.71	27652.91168	1.03445	0.30348	1.14996	0.29979	5.54E-03	4.24E-05	1.09E-05	4.71E-05	1.03E-05	5.6485E-03
520610.3	4258408.81	27646.01308	0.14598	0.16118	0.14288	0.16873	5.54E-03	5.98E-06	5.77E-06	5.85E-06	5.79E-06	5.5599E-03
520158.65	4258222.57	27636.98135	0.21487	3.58758	0.21764	4.10158	5.53E-03	8.80E-06	1.28E-04	8.91E-06	1.41E-04	5.8215E-03
519940.49	4258860.07	27635.17538	0.74811	0.40804	0.82671	0.39653	5.53E-03	3.06E-05	1.46E-05	3.38E-05	1.36E-05	5.6270E-03
520613.93	4258829.81	27630.67172	0.16938	0.11684	0.16374	0.12108	5.53E-03	6.94E-06	4.18E-06	6.70E-06	4.16E-06	5.5554E-03
520614.34	4258341.83	27566.58129	0.13979	0.16307	0.13795	0.17115	5.52E-03	5.72E-06	5.83E-06	5.65E-06	5.88E-06	5.5437E-03
520634.33	4258709.28	27564.87933	0.15016	0.12722	0.14467	0.13203	5.52E-03	6.15E-06	4.55E-06	5.92E-06	4.53E-06	5.5414E-03
520109.49	4258292.41	27563.92643	0.25039	10.13268	0.25855	11.69529	5.52E-03	1.03E-05	3.62E-04	1.06E-05	4.02E-04	6.3048E-03
520237.21	4258142.81	27537.48385	0.18571	1.45586	0.19313	1.60058	5.51E-03	7.60E-06	5.21E-05	7.91E-06	5.49E-05	5.6373E-03
520613.99	4258366.77	27530.23864	0.14176	0.16155	0.13923	0.16942	5.51E-03	5.80E-06	5.78E-06	5.70E-06	5.82E-06	5.5364E-03
520617.51	4258821.26	27526.94163	0.16675	0.11722	0.16117	0.12139	5.51E-03	6.83E-06	4.19E-06	6.60E-06	4.17E-06	5.5344E-03
520595.42	4258198.77	27516.13011	0.13363	0.18284	0.13331	0.19155	5.51E-03	5.47E-06	6.54E-06	5.46E-06	6.58E-06	5.5345E-03
520632.33	4258761.93	27506.56169	0.15473	0.12139	0.14909	0.12578	5.51E-03	6.34E-06	4.34E-06	6.10E-06	4.32E-06	5.5297E-03
520019.6	4258550.53	27459.82534	0.68419	2.97292	0.80953	2.51846	5.50E-03	2.80E-05	1.06E-04	3.31E-05	8.65E-05	5.7532E-03
520608.47	4258429.88	27458.23525	0.148	0.16054	0.14464	0.16817	5.50E-03	6.06E-06	5.74E-06	5.92E-06	5.77E-06	5.5224E-03
520057.08	4258415.76	27448.96678	0.36667	11.88426	0.39541	7.52444	5.50E-03	1.50E-05	4.25E-04	1.62E-05	2.58E-04	6.2116E-03
520599.75	4258210.64	27437.19612	0.13339	0.17981	0.13263	0.18802	5.49E-03	5.46E-06	6.43E-06	5.43E-06	6.45E-06	5.5185E-03
520578.69	4258916.87	27406.65312	0.19699	0.11197	0.19038	0.11677	5.49E-03	8.07E-06	4.01E-06	7.79E-06	4.01E-06	5.5124E-03
520276.46	4258112.93	27402.68904	0.17588	1.04859	0.18549	1.13968	5.49E-03	7.20E-06	3.75E-05	7.59E-06	3.91E-05	5.5792E-03
520621.1	4258812.7	27396.93169	0.16416	0.11755	0.1586	0.12166	5.49E-03	6.72E-06	4.20E-06	6.49E-06	4.18E-06	5.5082E-03
520590.99	4258891.76	27365.80788	0.18728	0.1129	0.18121	0.11751	5.48E-03	7.67E-06	4.04E-06	7.42E-06	4.03E-06	5.5035E-03
519959.92	4258967.37	27361.92278	1.06385	0.29419	1.18396	0.29085	5.48E-03	4.36E-05	1.05E-05	4.85E-05	9.99E-06	5.5921E-03
520548.37	4258969.45	27354.25117	0.22244	0.1114	0.21427	0.11631	5.48E-03	9.11E-06	3.98E-06	8.77E-06	3.99E-06	5.5039E-03
520148.83	4258232.53	27319.36723	0.21835	4.1977	0.22112	4.84025	5.47E-03	8.94E-06	1.50E-04	9.05E-06	1.66E-04	5.8054E-03
519939.41	4258809.25	27297.74038	0.6738	0.49127	0.7433	0.47172	5.47E-03	2.76E-05	1.76E-05	3.04E-05	1.62E-05	5.5585E-03
519977.12	4258646.05	27291.23633	0.64282	1.16867	0.7375	1.08375	5.47E-03	2.63E-05	4.18E-05	3.02E-05	3.72E-05	5.6010E-03
519967.12	4258673.87	27285.32447	0.63489	0.96834	0.72391	0.9046	5.46E-03	2.60E-05	3.46E-05	2.96E-05	3.11E-05	5.5856E-03
520613.79	4258392.11	27274.69901	0.14355	0.16034	0.1406	0.16787	5.46E-03	5.88E-06	5.74E-06	5.76E-06	5.76E-06	5.4853E-03
520084.98	4259137.18	27268.55673	15.37999	0.22491	18.93128	0.21303	5.46E-03	6.30E-04	8.04E-06	7.75E-04	7.31E-06	6.8811E-03
519943.46	4258770.77	27265.29979	0.64668	0.57743	0.71605	0.55047	5.46E-03	2.65E-05	2.07E-05	2.93E-05	1.89E-05	5.5556E-03
520247.03	4258132.84	27261.20776	0.18202	1.33526	0.19002	1.46246	5.46E-03	7.45E-06	4.78E-05	7.78E-06	5.02E-05	5.5726E-03
519940.52	4258884.25	27259.08204	0.77518	0.37372	0.8546	0.36522	5.46E-03	3.17E-05	1.34E-05	3.50E-05	1.25E-05	5.5516E-03
520636.62	4258727.75	27252.83194	0.15032	0.12418	0.14488	0.12894	5.46E-03	6.15E-06	4.44E-06	5.93E-06	4.43E-06	5.4787E-03
519946.47	4258753.92	27243.4916	0.6377	0.62485	0.71251	0.59313	5.46E-03	2.61E-05	2.23E-05	2.92E-05	2.04E-05	5.5539E-03
520624.68	4258804.14	27239.18476	0.16161	0.11785	0.15608	0.1219	5.46E-03	6.62E-06	4.22E-06	6.39E-06	4.18E-06	5.4764E-03
520557.84	4258955.52	27224.22289	0.21404	0.11114	0.20637	0.11603	5.45E-03	8.76E-06	3.98E-06	8.45E-06	3.98E-06	5.4772E-03
520594.4	4258188.32	27208.81692	0.133	0.18362	0.13304	0.19261	5.45E-03	5.45E-06	6.57E-06	5.45E-06	6.61E-06	5.4730E-03
519949.36	4258736.79	27142.21194	0.63057	0.67632	0.70474	0.64095	5.44E-03	2.58E-05	2.42E-05	2.89E-05	2.20E-05	5.5365E-03
520635.94	4258753.3	27098.16987	0.15234	0.12131	0.14681	0.12579	5.43E-03	6.24E-06	4.34E-06	6.01E-06	4.32E-06	5.4477E-03
520534.39	4258995.25	27088.61155	0.23599	0.11092	0.22707	0.11577	5.42E-03	9.66E-06	3.97E-06	9.30E-06	3.97E-06	5.4518E-03
520567.49	4258941.52	27082.24116	0.20609	0.11091	0.19892	0.11576	5.42E-03	8.44E-06	3.97E-06	8.14E-06	3.97E-06	5.4481E-03
519960.75	4258691.89	27068.38764	0.62655	0.86139	0.70889	0.8093	5.42E-03	2.57E-05	3.08E-05	2.90E-05	2.78E-05	5.5341E-03
520628.26	4258795.59	27048.53939	0.15911	0.11812	0.15361	0.12214	5.42E-03	6.51E-06	4.22E-06	6.29E-06	4.19E-06	5.4381E-03
520119.34	4258272.44	27031.18079	0.23713	7.68679	0.24286	9.04061	5.41E-03	9.71E-06	2.75E-04	9.94E-06	3.10E-04	6.0183E-03
520604.84	4258472.09	27006.86845	0.1517	0.15928	0.14744	0.16713	5.41E-03	6.21E-06	5.70E-06	6.04E-06	5.74E-06	5.4322E-03
520544.02	4258981.26	26991.85409	0.22659	0.1107	0.21819	0.11554	5.41E-03	9.28E-06	3.96E-06	8.93E-06	3.97E-06	5.4316E-03
520009.69	4258569.96	26980.96469	0.67937	2.32234	0.81052	2.02174	5.40E-03	2.78E-05	8.31E-05	3.32E-05	6.94E-05	5.6168E-03
520095.31	4259147.99	26975.83372	12.42387	0.22163	11.55381	0.20878	5.40E-03	5.09E-04	7.93E-06	4.73E-04	7.17E-06	6.3991E-03
520256.85	4258122.87	26962.40632	0.17839	1.22892	0.18685	1.34172	5.40E-03	7.30E-06	4.40E-05	7.65E-06	4.61E-05	5.5046E-03
519936.82	4258851.23	26933.1338	0.70616	0.41706	0.77868	0.40417	5.39E-03	2.89E-05	1.49E-05	3.19E-05	1.39E-05	5.4833E-03
520043.44	4259105.77	26924.54648	5.20521	0.22732	7.14831	0.22113	5.39E-03	2.13E-04	8.13E-06	2.93E-04	7.59E-06	5.9135E-03
520617.71	4258350.66	26924.30707	0.13923	0.16064	0.13707	0.16852	5.39E-03	5.70E-06	5.75E-06	5.61E-06	5.79E-06	5.4148E-03
520637.83	4258700.92	26918.43397	0.14806	0.12728	0.14267	0.13193	5.39E-03	6.06E-06	4.55E-06	5.84E-06	4.53E-06	5.4118E-03
520613.22	4258256.46	26898.23935	0.13318	0.17007	0.13203	0.17702	5.39E-03	5.45E-06	6.08E-06	5.41E-06	6.08E-06	5.4098E-03
520593.45	4258177.9	26882.95095	0.13236	0.18435	0.13276	0.19361	5.38E-03	5.42E-06	6.59E-06	5.44E-06	6.65E-06	5.4078E-03
520139.01	4258242.5	26877.61037	0.22159	5.00612	0.22482	5.80904	5.38E-03	9.07E-06	1.79E-04	9.21E-06	1.99E-04	5.7794E-03
520589.65	4258902.32	26874.58234	0.18862	0.11154	0.1825	0.11616	5.38E-03	7.72E-06	3.99E-06	7.47E-06	3.99E-06	5.4052E-03
520053.36	4259115.75	26867.38762	7.31064	0.22539	11.90904	0.21798	5.38E-03	2.99E-04	8.06E-06	4.88E-04	7.48E-06	6.1830E-03
520611.88	4258245.87	26863.19484	0.13272	0.17131	0.13148	0.17833	5.38E-03	5.43E-06	6.13E-06	5.38E-06	6.12E-06	5.4028E-03
520577.34	4258927.43	26855.53143	0.19827	0.11064	0.19158	0.1154	5.38E-03	8.12E-06	3.96E-06	7.84E-06	3.96E-06	5.4021E-03
520039.4	4258501.95	26844.93713	0.58784	5.41337	0.65921	4.24396	5.38E-03	2.41E-05	1.94E-04	2.70E-05	1.46E-04	5.7665E-03
520631.84	4258787.03	26822.2246	0.15665	0.11834	0.15119	0.12236	5.37E-03	6.41E-06	4.23E-06	6.19E-06	4.20E-06	5.3926E-03
520197.96	4258172.69	26815.868	0.1937	2.16097	0.19763	2.41194	5.37E-03	7.93E-06	7.73E-05	8.09E-06	8.28E-05	5.5464E-03
520188.14	4258182.66	26807.67916	0.1971	2.41987	0.20038	2.71551	5.37E-03	8.07E-06	8.66E-05	8.20E-06	9.32E-05	5.5647E-03
520617.39	4258375.69	26806.6119	0.14112	0.15912	0.13834	0.16673	5.37E-03	5.78E-06	5.69E-06	5.66E-06	5.72E-06	5.3912E-03
520207.78	4258162.72	26783.87106	0.19035	1.9425	0.19495	2.15911	5.36E-03	7.79E-06	6.95E-05	7.98E-06	7.41E-05	5.5232E-03
519936.33	4258825.92	26778.66908	0.67124	0.45685	0.73933	0.44009	5.36E-03	2.75E-05	1.63E-05	3.03E-05	1.51E-05	5.4520E-03
520610.66	4258235.33	26759.58735	0.13219	0.17247	0.13096	0.17962	5.36E-03	5.41E-06	6.17E-06	5.36E-06	6.17E-06	5.3821E-03
519952.12	4258719.32	26734.78615	0.61744	0.7331	0.69152	0.69332	5.35E-03	2.53E-05	2.62E-05	2.83E-05	2.38E-05	5.4576E-03
520613.77	4258417.94	26726.20483	0.14516	0.15857	0.1419	0.16599	5.35E-03	5.94E-06	5.67E-06	5.81E-06	5.70E-06	5.3754E-03
520608.24	4258455.15	26724.92555	0.14944	0.1587	0.14559	0.16643	5.35E-03	6.12E-06	5.68E-06	5.96E-06	5.71E-06	5.3755E-03
519942.96	4258920.4	26720.8677	0.83299	0.33143	0.91714	0.32608	5.35E-03	3.41E-05	1.19E-05	3.76E-05	1.12E-05	5.4459E-03
520178.32	4258192.63	26704.01499	0.20038	2.73362	0.2032	3.08093	5.35E-03	8.20E-06	9.78E-05	8.32E-06	1.06E-04	5.5679E-03
519936.73	4258875.11	26693.74822	0.7323	0.38237	0.80588	0.37271	5.35E-03	3.00E-05	1.37E-05	3.30E-05	1.28E-05	5.4352E-03
520217.6	4258152.75	26664.75217	0.18689	1.75744	0.19224	1.94364	5.34E-03	7.65E-06	6.29E-05	7.87E-06	6.67E-05	5.4851E-03
520616.18	4258267.74	26659.45235	0.13319	0.16765	0.13215	0.17459	5.34E-03	5.45E-06	6.00E-06	5.41E-06	5.99E-06	5.3618E-03
519944.74	4258931.13	26643.82248	0.85984	0.32103	0.94728	0.31632	5.34E-03	3.52E-05	1.15E-05	3.88E-05	1.09E-05	5.4321E-03
520640.26	4258719.05	26636.25577	0.14804	0.12411	0.14275	0.1288	5.33E-03	6.06E-06	4.44E-06	5.84E-06	4.42E-06	5.3550E-03
520617.45	4258278.29	26625.82391	0.13367	0.16614	0.1327	0.17322	5.33E-03	5.47E-06	5.94E-06	5.43E-06	5.95E-06	5.3550E-03
520609.52	4258224.83	26624.10938	0.13167	0.17339	0.1305	0.18075	5.33E-03	5.39E-06	6.20E-06	5.34E-06	6.21E-06	5.3550E-03
520639.55	4258744.68	26614.86961	0.14999	0.12117	0.14459	0.12572	5.33E-03	6.14E-06	4.33E-06	5.92E-06	4.32E-06	5.3507E-03
520266.67	4258112.9	26612.30041	0.17473	1.13486	0.18359	1.23477	5.33E-03	7.15E-06	4.06E-05	7.52E-06	4.24E-05	5.4271E-03
520046.63	4258464.79	26585.29349	0.4697	7.19013	0.51282	5.29979	5.32E-03	1.92E-05	2.57E-04	2.10E-05	1.82E-04	5.8034E-03
520168.5	4258202.6	26574.48811	0.20378	3.11499	0.20615	3.53715	5.32E-03	8.34E-06	1.11E-04	8.44E-06	1.21E-04	5.5715E-03
520099.67	4258302.38	26570.75636	0.25267	14.43189	0.26294	15.36141	5.32E-03	1.03E-05	5.16E-04	1.08E-05	5.27E-04	6.3858E-03
520604.4	4258202.61	26569.47034	0.13135	0.17683	0.13066	0.18496	5.32E-03	5.38E-06	6.32E-06	5.35E-06	6.35E-06	5.3443E-03
519999.77	4258589.4	26569.0798	0.6616	1.85436	0.78751	1.65747	5.32E-03	2.71E-05	6.63E-05	3.22E-05	5.69E-05	5.5034E-03
520556.87	4258965.93	26563.78057	0.21497	0.10981	0.20726	0.11461	5.32E-03	8.80E-06	3.93E-06	8.49E-06	3.93E-06	5.3449E-03
520635.43	4258778.47	26550.13762	0.15423	0.11833	0.14877	0.1224	5.32E-03	6.31E-06	4.23E-06	6.09E-06	4.20E-06	5.3379E-03
520618.84	4258288.9	26533.64836	0.1341	0.16448	0.13314	0.17174	5.31E-03	5.49E-06	5.88E-06	5.45E-06	5.90E-06	5.3364E-03
520227.42	4258142.78	26525.06327	0.18352	1.59768	0.18956	1.76041	5.31E-03	7.51E-06	5.71E-05	7.76E-06	6.04E-05	5.4449E-03
520611.77	4258438.55	26520.66105	0.14712	0.15806	0.14358	0.16562	5.31E-03	6.02E-06	5.65E-06	5.88E-06	5.69E-06	5.3344E-03
519946.4	4258941.81	26505.50513	0.88562	0.31106	0.97629	0.30687	5.31E-03	3.63E-05	1.11E-05	4.00E-05	1.05E-05	5.4060E-03
520587.42	4258913.25	26479.51258	0.19056	0.11035	0.18434	0.11499	5.30E-03	7.80E-06	3.95E-06	7.55E-06	3.95E-06	5.3261E-03
519949.19	4258952.95	26474.50172	0.92413	0.30174	1.02017	0.29801	5.30E-03	3.78E-05	1.08E-05	4.18E-05	1.02E-05	5.4025E-03
520617.22	4258401.13	26452.33033	0.1428	0.15793	0.1397	0.16526	5.30E-03	5.85E-06	5.65E-06	5.72E-06	5.67E-06	5.3203E-03
520608.47	4258214.37	26449.35374	0.13112	0.17416	0.1301	0.18179	5.30E-03	5.37E-06	6.23E-06	5.33E-06	6.24E-06	5.3200E-03
520566.39	4258951.98	26440.08956	0.20706	0.10959	0.19984	0.11436	5.29E-03	8.48E-06	3.92E-06	8.18E-06	3.93E-06	5.3195E-03
519938.63	4258783.24	26437.40809	0.62836	0.53918	0.69293	0.51521	5.29E-03	2.57E-05	1.93E-05	2.84E-05	1.77E-05	5.3855E-03
520606.6	4258871.25	26419.03051	0.1761	0.11222	0.17056	0.11653	5.29E-03	7.21E-06	4.01E-06	6.98E-06	4.00E-06	5.3130E-03
520085.41	4259148.01	26390.22001	16.47279	0.21875	18.38497	0.20727	5.29E-03	6.74E-04	7.82E-06	7.53E-04	7.12E-06	6.7272E-03
520610.16	4258862.76	26389.34695	0.1735	0.1126	0.16798	0.11686	5.28E-03	7.10E-06	4.03E-06	6.88E-06	4.01E-06	5.3068E-03
520620.36	4258299.57	26387.38926	0.13447	0.16266	0.13343	0.17013	5.28E-03	5.51E-06	5.82E-06	5.46E-06	5.84E-06	5.3071E-03
520063.61	4258383.1	26380.1825	0.31685	18.89278	0.3399	9.72538	5.28E-03	1.30E-05	6.76E-04	1.39E-05	3.34E-04	6.3195E-03
520129.19	4258252.47	26357.99834	0.22468	6.11096	0.22868	7.1475	5.28E-03	9.20E-06	2.19E-04	9.36E-06	2.45E-04	5.7611E-03
520613.72	4258854.27	26350.3729	0.17092	0.11295	0.16543	0.11717	5.28E-03	7.00E-06	4.04E-06	6.77E-06	4.02E-06	5.2989E-03
520543.07	4258991.65	26342.1278	0.22769	0.10939	0.21926	0.11413	5.28E-03	9.32E-06	3.91E-06	8.98E-06	3.92E-06	5.3015E-03
520158.68	4258212.57	26339.75288	0.20702	3.59369	0.20923	4.10779	5.27E-03	8.48E-06	1.29E-04	8.57E-06	1.41E-04	5.5615E-03
520237.24	4258132.81	26326.77289	0.18012	1.45929	0.18681	1.60169	5.27E-03	7.37E-06	5.22E-05	7.65E-06	5.50E-05	5.3945E-03
520603.31	4258192.14	26324.66473	0.13079	0.17761	0.13042	0.18603	5.27E-03	5.36E-06	6.35E-06	5.34E-06	6.39E-06	5.2953E-03
519937.28	4258900.55	26312.35916	0.76255	0.35017	0.83794	0.34318	5.27E-03	3.12E-05	1.25E-05	3.43E-05	1.18E-05	5.3592E-03
520617.27	4258845.77	26299.65714	0.16836	0.11335	0.16292	0.11752	5.27E-03	6.89E-06	4.05E-06	6.67E-06	4.03E-06	5.2885E-03
520621.07	4258359.5	26276.0081	0.13865	0.1583	0.1362	0.16593	5.26E-03	5.68E-06	5.66E-06	5.58E-06	5.70E-06	5.2847E-03
519950.89	4258963.64	26260.22523	0.95105	0.29267	1.051	0.2893	5.26E-03	3.89E-05	1.05E-05	4.30E-05	9.93E-06	5.3613E-03
520576.09	4258937.95	26252.0077	0.19937	0.10933	0.19262	0.11404	5.26E-03	8.16E-06	3.91E-06	7.89E-06	3.92E-06	5.2812E-03

520109.52	4258282.41	26236.21276	0.23973	10.15774	0.24714	11.75557	5.25E-03	9.82E-06	3.63E-04	1.01E-05	4.04E-04	6.0410E-03
520620.83	4258837.28	26230.64942	0.1658	0.11381	0.16047	0.11791	5.25E-03	6.79E-06	4.07E-06	6.57E-06	4.05E-06	5.2745E-03
520552.76	4258977.64	26216.3725	0.21871	0.10911	0.21079	0.11385	5.25E-03	8.95E-06	3.90E-06	8.63E-06	3.91E-06	5.2756E-03
519935.68	4258800.24	26206.34413	0.63136	0.50032	0.69399	0.47959	5.25E-03	2.59E-05	1.79E-05	2.84E-05	1.65E-05	5.3368E-03
520639.01	4258769.92	26190.85145	0.15182	0.11828	0.14642	0.12243	5.25E-03	6.22E-06	4.23E-06	6.00E-06	4.20E-06	5.2657E-03
520641.33	4258692.55	26181.68131	0.14593	0.12729	0.14062	0.13177	5.24E-03	5.97E-06	4.55E-06	5.76E-06	4.52E-06	5.2640E-03
520608.22	4258480.96	26180.95342	0.15061	0.15697	0.14606	0.16462	5.24E-03	6.17E-06	5.61E-06	5.98E-06	5.65E-06	5.2665E-03
519933.15	4258842.38	26173.25517	0.66643	0.4258	0.73265	0.41156	5.24E-03	2.73E-05	1.52E-05	3.00E-05	1.41E-05	5.3282E-03
520095.33	4259157.99	26143.8389	12.33657	0.21597	11.51765	0.20358	5.24E-03	5.05E-04	7.72E-06	4.72E-04	6.99E-06	6.2271E-03
520624.38	4258828.79	26143.57436	0.16331	0.11414	0.158	0.11819	5.24E-03	6.69E-06	4.08E-06	6.47E-06	4.06E-06	5.2569E-03
520643.17	4258736.05	26142.53598	0.14776	0.12124	0.14255	0.12579	5.24E-03	6.05E-06	4.34E-06	5.84E-06	4.32E-06	5.2559E-03
520043.46	4259115.77	26127.53376	5.24457	0.22125	7.17551	0.21528	5.23E-03	2.15E-04	7.91E-06	2.94E-04	7.39E-06	5.7562E-03
520247.06	4258122.84	26119.54325	0.17683	1.33794	0.18406	1.46439	5.23E-03	7.24E-06	4.79E-05	7.54E-06	5.03E-05	5.3437E-03
519989.85	4258608.84	26111.20312	0.6371	1.51554	0.74521	1.38437	5.23E-03	2.61E-05	5.42E-05	3.05E-05	4.75E-05	5.3875E-03
520055.26	4259127.23	26076.2879	7.91443	0.21933	13.65884	0.21194	5.22E-03	3.24E-04	7.85E-06	5.59E-04	7.28E-06	6.1206E-03
520620.78	4258384.62	26074.73393	0.14043	0.15699	0.13749	0.16433	5.22E-03	5.75E-06	5.62E-06	5.63E-06	5.64E-06	5.2445E-03
519967.12	4258664.6	26069.13946	0.60798	0.99823	0.69188	0.93199	5.22E-03	2.49E-05	3.57E-05	2.83E-05	3.20E-05	5.3416E-03
519932.94	4258865.97	26061.02349	0.6913	0.39106	0.75969	0.38009	5.22E-03	2.83E-05	1.40E-05	3.11E-05	1.30E-05	5.3055E-03
520602.3	4258181.69	26056.68456	0.13021	0.1783	0.13018	0.18702	5.22E-03	5.33E-06	6.38E-06	5.33E-06	6.42E-06	5.2417E-03
520627.94	4258820.29	26034.20002	0.16083	0.11451	0.15557	0.11848	5.21E-03	6.59E-06	4.10E-06	6.37E-06	4.07E-06	5.2348E-03
520148.86	4258222.53	26029.34724	0.21018	4.20561	0.21247	4.84596	5.21E-03	8.61E-06	1.50E-04	8.70E-06	1.66E-04	5.5468E-03
520586	4258923.84	25993.60261	0.19186	0.10907	0.18557	0.11368	5.21E-03	7.86E-06	3.90E-06	7.60E-06	3.90E-06	5.2288E-03
520643.91	4258710.34	25992.23429	0.14584	0.12409	0.14067	0.12866	5.21E-03	5.97E-06	4.44E-06	5.76E-06	4.42E-06	5.2259E-03
520598.1	4258898.82	25963.70019	0.18275	0.11	0.17697	0.11445	5.20E-03	7.48E-06	3.93E-06	7.25E-06	3.93E-06	5.2222E-03
520631.5	4258811.8	25900.16578	0.15839	0.11485	0.15317	0.11876	5.19E-03	6.49E-06	4.11E-06	6.27E-06	4.08E-06	5.2078E-03
520642.59	4258761.36	25894.41089	0.1496	0.11836	0.14431	0.1226	5.19E-03	6.13E-06	4.23E-06	5.91E-06	4.21E-06	5.2062E-03
519939.82	4258762.01	25854.67519	0.60233	0.58525	0.66561	0.55764	5.18E-03	2.47E-05	2.09E-05	2.73E-05	1.91E-05	5.2697E-03
520256.88	4258112.87	25843.47367	0.17344	1.23147	0.1812	1.34313	5.18E-03	7.10E-06	4.40E-05	7.42E-06	4.61E-05	5.2802E-03
519933.52	4258891.5	25837.87121	0.72212	0.35804	0.7924	0.35007	5.17E-03	2.96E-05	1.28E-05	3.24E-05	1.20E-05	5.2612E-03
519932.63	4258817	25834.67934	0.6313	0.46541	0.69247	0.44751	5.17E-03	2.58E-05	1.66E-05	2.84E-05	1.54E-05	5.2600E-03
520611.58	4258463.91	25826.45038	0.14843	0.15633	0.14432	0.16394	5.17E-03	6.08E-06	5.59E-06	5.91E-06	5.63E-06	5.1953E-03
520565.36	4258962.41	25805.72147	0.20791	0.10827	0.20063	0.11296	5.17E-03	8.51E-06	3.87E-06	8.21E-06	3.88E-06	5.1924E-03
520617.25	4258427.06	25803.36852	0.1443	0.15597	0.14086	0.16331	5.17E-03	5.91E-06	5.58E-06	5.77E-06	5.61E-06	5.1903E-03
519977.12	4258636.77	25776.8955	0.61172	1.1995	0.7	1.11302	5.16E-03	2.50E-05	4.29E-05	2.87E-05	3.82E-05	5.2970E-03
519954.29	4258700.45	25758.59544	0.59322	0.79508	0.66501	0.7504	5.16E-03	2.43E-05	2.84E-05	2.72E-05	2.58E-05	5.2642E-03
520635.05	4258803.31	25739.6893	0.15599	0.11517	0.15082	0.11902	5.15E-03	6.39E-06	4.12E-06	6.18E-06	4.09E-06	5.1755E-03
520119.37	4258262.44	25732.71182	0.22745	7.70584	0.23266	9.04117	5.15E-03	9.31E-06	2.76E-04	9.53E-06	3.10E-04	5.7582E-03
520029.48	4258521.39	25713.45453	0.61609	3.97682	0.70406	3.25444	5.15E-03	2.52E-05	1.42E-04	2.88E-05	1.12E-04	5.4575E-03
519942.8	4258745.07	25702.12254	0.59329	0.63163	0.65944	0.60008	5.15E-03	2.43E-05	2.26E-05	2.70E-05	2.06E-05	5.2417E-03
520624.83	4258343.51	25700.07873	0.13623	0.15716	0.13411	0.16481	5.15E-03	5.58E-06	5.62E-06	5.49E-06	5.66E-06	5.1691E-03
520620.79	4258249.68	25660.77268	0.13029	0.1659	0.12908	0.17251	5.14E-03	5.33E-06	5.93E-06	5.29E-06	5.92E-06	5.1614E-03
520574.94	4258948.44	25645.84751	0.2003	0.10802	0.19349	0.11267	5.14E-03	8.20E-06	3.86E-06	7.92E-06	3.87E-06	5.1598E-03
520619.5	4258239.12	25637.30293	0.12984	0.16703	0.12856	0.17373	5.13E-03	5.32E-06	5.97E-06	5.26E-06	5.96E-06	5.1567E-03
520622.2	4258260.3	25628.31896	0.13069	0.16458	0.1296	0.17118	5.13E-03	5.35E-06	5.89E-06	5.31E-06	5.88E-06	5.1548E-03
520139.04	4258232.5	25627.03687	0.21318	5.01367	0.2159	5.82424	5.13E-03	8.73E-06	1.79E-04	8.84E-06	2.00E-04	5.5290E-03
520625.51	4258319.42	25625.67419	0.13431	0.15816	0.13281	0.16579	5.13E-03	5.50E-06	5.66E-06	5.44E-06	5.69E-06	5.1542E-03
520197.99	4258162.69	25621.2753	0.18737	2.16468	0.19063	2.41454	5.13E-03	7.67E-06	7.74E-05	7.81E-06	8.29E-05	5.3068E-03
520624.44	4258368.34	25616.98366	0.13804	0.15602	0.13533	0.1634	5.13E-03	5.65E-06	5.58E-06	5.54E-06	5.61E-06	5.1525E-03
520620.66	4258410.15	25615.82311	0.14202	0.15547	0.13877	0.16266	5.13E-03	5.81E-06	5.56E-06	5.68E-06	5.58E-06	5.1526E-03
520551.75	4258988.06	25609.92361	0.2198	0.10786	0.21183	0.1125	5.13E-03	9.00E-06	3.86E-06	8.67E-06	3.86E-06	5.1541E-03
520188.17	4258172.66	25605.20002	0.19051	2.42372	0.19317	2.71882	5.13E-03	7.80E-06	8.67E-05	7.91E-06	9.33E-05	5.3235E-03
520646.78	4258727.42	25602.55578	0.14553	0.12127	0.14051	0.12577	5.13E-03	5.96E-06	4.34E-06	5.75E-06	4.32E-06	5.1476E-03
520613.37	4258206.46	25600.10261	0.12906	0.17121	0.12809	0.17875	5.13E-03	5.28E-06	6.12E-06	5.24E-06	6.14E-06	5.1496E-03
520085.43	4259158.01	25591.79397	16.40962	0.21316	18.29117	0.2021	5.13E-03	6.72E-04	7.62E-06	7.49E-04	6.94E-06	6.5605E-03
520596.15	4258909.64	25577.70311	0.18441	0.1088	0.17856	0.11327	5.12E-03	7.55E-06	3.89E-06	7.31E-06	3.89E-06	5.1449E-03
520207.81	4258152.72	25575.853	0.18419	1.94677	0.18815	2.15986	5.12E-03	7.54E-06	6.96E-05	7.70E-06	7.42E-05	5.2809E-03
520618.3	4258228.59	25560.0225	0.12936	0.16803	0.12808	0.17488	5.12E-03	5.30E-06	6.01E-06	5.24E-06	6.00E-06	5.1413E-03
520638.61	4258794.82	25546.36443	0.15364	0.11539	0.14849	0.11922	5.12E-03	6.29E-06	4.13E-06	6.08E-06	4.09E-06	5.1366E-03
520039.36	4258492.26	25512.17175	0.5417	5.45468	0.60135	4.27519	5.11E-03	2.22E-05	1.95E-04	2.46E-05	1.47E-04	5.4978E-03
520217.63	4258142.75	25511.03479	0.18111	1.76051	0.18572	1.94583	5.11E-03	7.42E-06	6.30E-05	7.60E-06	6.68E-05	5.2537E-03
520042.98	4258473.67	25501.90201	0.48518	6.2486	0.53192	4.74921	5.11E-03	1.99E-05	2.24E-04	2.18E-05	1.63E-04	5.5353E-03
520646.17	4258752.8	25501.63933	0.14736	0.1184	0.14222	0.1227	5.11E-03	6.03E-06	4.24E-06	5.82E-06	4.21E-06	5.1274E-03
520178.35	4258182.63	25495.533	0.19353	2.73799	0.19577	3.08464	5.11E-03	7.92E-06	9.79E-05	8.02E-06	1.06E-04	5.3256E-03
520561.49	4258974.02	25467.23512	0.21125	0.10755	0.20378	0.11218	5.10E-03	8.65E-06	3.85E-06	8.34E-06	3.85E-06	5.1249E-03
520617.19	4258218.1	25448.23359	0.12887	0.16882	0.12766	0.17591	5.10E-03	5.28E-06	6.04E-06	5.23E-06	6.04E-06	5.1189E-03
520584.7	4258934.39	25441.95837	0.19295	0.10778	0.18659	0.11236	5.10E-03	7.90E-06	3.86E-06	7.64E-06	3.86E-06	5.1184E-03
520064.11	4258372.91	25425.2137	0.30089	19.68454	0.32213	9.93187	5.09E-03	1.23E-05	7.04E-04	1.32E-05	3.41E-04	6.1623E-03
520612.23	4258195.95	25417.13734	0.12856	0.17194	0.12784	0.17979	5.09E-03	5.26E-06	6.15E-06	5.23E-06	6.17E-06	5.1129E-03
520624.86	4258271.45	25409.95069	0.1308	0.16225	0.12975	0.16898	5.09E-03	5.36E-06	5.80E-06	5.31E-06	5.80E-06	5.1110E-03
519945.66	4258727.85	25399.92897	0.58354	0.682	0.64922	0.64699	5.09E-03	2.39E-05	2.44E-05	2.66E-05	2.22E-05	5.1838E-03
520045.36	4259127.25	25386.86661	5.60187	0.21537	7.80977	0.20939	5.08E-03	2.29E-04	7.70E-06	3.20E-04	7.19E-06	5.6481E-03
520227.45	4258132.78	25383.72452	0.17798	1.6007	0.18327	1.76192	5.08E-03	7.29E-06	5.73E-05	7.50E-06	6.05E-05	5.2160E-03
519929.15	4258856.83	25370.04645	0.6525	0.39951	0.71532	0.38725	5.08E-03	2.67E-05	1.43E-05	2.93E-05	1.33E-05	5.1643E-03
519935.82	4258927.45	25367.50145	0.77384	0.31869	0.84786	0.31375	5.08E-03	3.17E-05	1.14E-05	3.47E-05	1.08E-05	5.1688E-03
520168.53	4258192.6	25360.03364	0.19663	3.12028	0.19851	3.54089	5.08E-03	8.05E-06	1.12E-04	8.13E-06	1.22E-04	5.3280E-03
519929.49	4258833.54	25356.69185	0.62867	0.43413	0.68887	0.41865	5.08E-03	2.57E-05	1.55E-05	2.82E-05	1.44E-05	5.1619E-03
520055.28	4259137.23	25356.10449	7.98042	0.21378	13.76745	0.20664	5.08E-03	3.27E-04	7.65E-06	5.64E-04	7.09E-06	5.9831E-03
520095.34	4259167.99	25347.08696	12.22931	0.21055	11.4864	0.19859	5.08E-03	5.01E-04	7.53E-06	4.70E-04	6.82E-06	6.0615E-03
520624.18	4258393.54	25327.03218	0.13971	0.15473	0.13662	0.16186	5.07E-03	5.72E-06	5.53E-06	5.59E-06	5.56E-06	5.0945E-03
520099.7	4258292.38	25322.1174	0.24174	14.47958	0.25116	15.42029	5.07E-03	9.90E-06	5.18E-04	1.03E-05	5.29E-04	6.1386E-03
520626.19	4258282.04	25320.25051	0.13122	0.16073	0.1302	0.16763	5.07E-03	5.37E-06	5.75E-06	5.33E-06	5.75E-06	5.0929E-03
520642.16	4258786.32	25320.02337	0.15134	0.1155	0.1462	0.11935	5.07E-03	6.20E-06	4.13E-06	5.99E-06	4.10E-06	5.0911E-03
519929.76	4258882.44	25306.97459	0.68369	0.36591	0.74878	0.35686	5.07E-03	2.80E-05	1.31E-05	3.07E-05	1.23E-05	5.1521E-03
520647.55	4258701.64	25304.4457	0.14369	0.12409	0.13861	0.12849	5.07E-03	5.88E-06	4.44E-06	5.68E-06	4.41E-06	5.0880E-03
519937.54	4258938.15	25302.75208	0.79763	0.30901	0.87448	0.30467	5.07E-03	3.27E-05	1.11E-05	3.58E-05	1.05E-05	5.1572E-03
519940.09	4258949.2	25302.73606	0.82951	0.29987	0.91045	0.29605	5.07E-03	3.40E-05	1.07E-05	3.73E-05	1.02E-05	5.1593E-03
520237.27	4258122.81	25228.63696	0.17489	1.46182	0.18082	1.60356	5.05E-03	7.16E-06	5.23E-05	7.40E-06	5.51E-05	5.1743E-03
520611.16	4258185.48	25204.28491	0.12803	0.17262	0.12763	0.18077	5.05E-03	5.24E-06	6.17E-06	5.23E-06	6.21E-06	5.0704E-03
520627.65	4258292.67	25187.60335	0.1316	0.15903	0.13051	0.16615	5.04E-03	5.39E-06	5.69E-06	5.34E-06	5.70E-06	5.0663E-03
519941.85	4258959.92	25158.33892	0.8542	0.29095	0.9383	0.28755	5.04E-03	3.50E-05	1.04E-05	3.84E-05	9.87E-06	5.1320E-03
520594.67	4258920.26	25139.08736	0.18571	0.10755	0.17979	0.11202	5.03E-03	7.60E-06	3.85E-06	7.36E-06	3.85E-06	5.0571E-03
520158.71	4258202.57	25136.49035	0.19962	3.5994	0.20137	4.113	5.03E-03	8.17E-06	1.29E-04	8.24E-06	1.41E-04	5.3203E-03
519934.85	4258774.14	25130.72929	0.58619	0.54676	0.6438	0.52235	5.03E-03	2.40E-05	1.96E-05	2.64E-05	1.79E-05	5.1206E-03
520129.22	4258242.47	25129.41088	0.21596	6.12265	0.2195	7.16076	5.03E-03	8.84E-06	2.19E-04	8.99E-06	2.46E-04	5.5152E-03
520628.17	4258352.27	25110.41188	0.13569	0.15482	0.13325	0.16227	5.03E-03	5.56E-06	5.54E-06	5.46E-06	5.57E-06	5.0508E-03
520613.61	4258878.45	25095.14855	0.17207	0.10938	0.16681	0.11354	5.03E-03	7.05E-06	3.91E-06	6.83E-06	3.90E-06	5.0473E-03
520610.08	4258886.89	25093.87732	0.17459	0.10893	0.16922	0.11316	5.03E-03	7.15E-06	3.90E-06	6.93E-06	3.88E-06	5.0472E-03
520019.56	4258540.83	25079.88416	0.63263	3.02761	0.73768	2.56388	5.02E-03	2.59E-05	1.08E-04	3.02E-05	8.80E-05	5.2750E-03
520617.14	4258870.02	25079.15045	0.16958	0.1098	0.1644	0.11391	5.02E-03	6.94E-06	3.93E-06	6.73E-06	3.91E-06	5.0440E-03
520649.76	4258744.25	25065.4676	0.14517	0.11837	0.14019	0.1227	5.02E-03	5.94E-06	4.23E-06	5.74E-06	4.21E-06	5.0398E-03
520573.86	4258958.89	25060.86971	0.20115	0.10674	0.19428	0.11132	5.02E-03	8.24E-06	3.82E-06	7.95E-06	3.82E-06	5.0426E-03
519931.94	4258791.23	25053.74825	0.59102	0.50842	0.64768	0.48681	5.02E-03	2.42E-05	1.82E-05	2.65E-05	1.67E-05	5.1030E-03
520247.09	4258112.84	25044.22778	0.17184	1.34028	0.17834	1.46587	5.02E-03	7.04E-06	4.79E-05	7.30E-06	5.03E-05	5.1281E-03
520620.68	4258861.59	25036.79454	0.16713	0.11014	0.16196	0.11421	5.01E-03	6.84E-06	3.94E-06	6.63E-06	3.92E-06	5.0353E-03
520650.39	4258718.8	25022.01253	0.1434	0.12117	0.13849	0.12559	5.01E-03	5.87E-06	4.33E-06	5.67E-06	4.31E-06	5.0312E-03
520109.55	4258272.41	25015.16374	0.22984	10.18168	0.23659	11.81758	5.01E-03	9.41E-06	3.64E-04	9.69E-06	4.06E-04	5.7986E-03
520614.91	4258472.67	25010.46701	0.1474	0.15404	0.14302	0.16151	5.01E-03	6.04E-06	5.51E-06	5.86E-06	5.54E-06	5.0316E-03
520624.21	4258853.15	24990.60063	0.16471	0.11047	0.15956	0.1145	5.00E-03	6.74E-06	3.95E-06	6.53E-06	3.93E-06	5.0259E-03
519930.24	4258907.71	24973.60378	0.71111	0.33597	0.7774	0.32949	5.00E-03	2.91E-05	1.20E-05	3.18E-05	1.13E-05	5.0856E-03
520645.72	4258777.83	24959.52114	0.14894	0.11531	0.14379	0.11925	5.00E-03	6.10E-06	4.12E-06	5.89E-06	4.09E-06	5.0187E-03
520627.8	4258377.18	24948.3264	0.1374	0.15381	0.13448	0.16094	5.00E-03	5.63E-06	5.50E-06	5.51E-06	5.53E-06	5.0184E-03
520048.09	4258429.46	24926.58895	0.3737	7.68649	0.402	5.63349	4.99E-03	1.53E-05	2.75E-04	1.65E-05	1.93E-04	5.4920E-03
520620.72	4258436.19	24895.70684	0.14339	0.15353	0.13978	0.16078	4.99E-03	5.87E-06	5.49E-06	5.72E-06	5.52E-06	5.0083E-03
520583.48	4258944.9	24894.1607	0.19393	0.10653	0.1875	0.11106	4.99E-03	7.94E-06	3.81E-06	7.68E-06	3.81E-06	5.0086E-03
520560.44	4258984.46	24880.70023	0.21222	0.10632	0.20468	0.11086	4.98E-03	8.69E-06	3.80E-06	8.38E-06	3.81E-06	5.0074E-03
520631.27	4258836.28	24857.624	0.1599	0.11124	0.15488	0.11515	4.98E-03	6.55E-06	3.98E-06	6.34E-06	3.95E-06	4.9989E-03
520148.89	4258212.53	24834.37366	0.2025	4.21308	0.2044	4.85041	4.97E-03	8.29E-06	1.51E-04	8.37E-06	1.67E-04	5.3073E-03
519957.12	4258683.15	24832.72823	0.57349	0.86143	0.64606	0.80998	4.97E-03	2.35E-05	3.08E-05	2.65E-05	2.78E-05	5.0816E-03
519928.93	4258808.07	24831.65265	0.59318	0.47342	0.64844	0.45453	4.97E-03	2.43E-05	1.69E-05	2.65E-05	1.56E-05	5.0563E-03
519967.12	4258655.32	24827.07198	0.58213	1.02509	0.6592	0.9583	4.97E-03	2.38E-05	3.67E-05	2.70E-05	3.29E-05	5.0924E-03
520085.44	4259168.01	24826.1237	16.35577	0.20779	18.20768	0.19713	4.97E-03	6.70E-04	7.43E-06	7.45E-04	6.77E-06	6.4011E-03
519948.37	4258710.28	24785.83095	0.56826	0.73706	0.63402	0.69765	4.96E-03	2.33E-05	2.64E-05	2.60E-05	2.40E-05	5.0632E-03
520624.09	4258419.17	24775.38042	0.1412	0.15307	0.1378	0.16015	4.96E-03	5.78E-06	5.48E-06	5.64E-06	5.50E-06	4.9840E-03
520618.37	4258455.89	24753.761	0.14525	0.15334	0.14127	0.16073	4.96E-03	5.95E-06	5.48E-06	5.78E-06	5.52E-06	4.9800E-03
520570.23	4258970.4	24725.99414	0.2041	0.10599	0.19705	0.11052	4.95E-03	8.36E-06	3.79E-06	8.07E-06	3.79E-06	4.9757E-03
520634.8	4258827.85	24724.33141	0.15748	0.11145	0.15246	0.11531	4.95E-03	6.45E-06	3.99E-06	6.24E-06	3.96E-06	4.9720E-03
519926.01	4258873.38	24720.75305	0.64709	0.37373	0.70722	0.36353	4.95E-03	2.65E-05	1.34E-05	2.90E-05	1.25E-05	5.0320E-03
520045.38	4259137.25	24713.72123	5.64302	0.21001	7.85107	0.2042	4.95E-03	2.31E-04	7.51E-06	3.21E-04	7.01E-06	5.5163E-03
520009.65	4258560.27	24709.80679	0.63378	2.3707	0.74578	2.06469	4.95E-03	2.59E-05	8.48E-05	3.05E-05	7.09E-05	5.1606E-03
520604.88	4258906.02	24702.69683	0.17853	0.10728	0.17301	0.11159	4.95E-03	7.31E-06	3.84E-06	7.08E-06	3.83E-06	4.9691E-03
520593.3	4258930.83	24684.22782	0.18686	0.10631	0.18087	0.11075	4.94E-03	7.65E-06	3.80E-06	7.41E-06	3.80E-06	4.9660E-03
520055.71	4259147.23	24661.89529	8.13276	0.2086	14.31301	0.20162	4.94E-03	3.33E-04	7.46E-06	5.86E-04	6.92E-06	5.8723E-03
520649.28	4258769.34	24655.61212	0.14673	0.1153	0.14164	0.11931	4.94E-03	6.01E-06	4.12E-06	5.80E-06	4.10E-06	4.9577E-03
520638.33	4258819.41	24640.16403	0.15519	0.11183	0.15022	0.11562	4.93E-03	6.35E-06	4.00E-06	6.15E-06	3.97E-06	4.9550E-03
520622.35	4258210.3	24627.19276	0.1268	0.16582	0.1256	0.17282	4.93E-03	5.19E-06	5.93E-06	5.14E-06	5.93E-06	4.9541E-03
519925.35	4258847.69	24619.03331	0.61555	0.40764	0.67284	0.39412	4.93E-03	2.52E-05	1.46E-05	2.75E-05	1.35E-05	5.0112E-03
520653.34	4258735.69	24591.55001	0.14304	0.11831	0.13822	0.12265	4.92E-03	5.86E-06	4.23E-06	5.66E-06	4.21E-06	4.9448E-03
520651.19	4258692.94	24588.43318	0.1416	0.12394	0.13654	0.1282	4.92E-03	5.80E-06	4.43E-06	5.59E-06	4.40E-06	4.9444E-03
520095.36	4259177.99	24577.28283	12.18774	0.20529	11.44472	0.19376	4.92E-03	4.99E-04	7.34E-06	4.69E-04	6.65E-06	5.9035E-03
520119.4	4258252.44	24576.50676	0.21855	7.71638	0.22316	9.11469	4.92E-03	8.95E-06	2.76E-04	9.14E-06	3.13E-04	5.5288E-03
520627.58	4258402.46	24567.64966	0.13897	0.15243	0.13573	0.1594	4.92E-03	5.69E-06	5.45E-06	5.56E-06	5.47E-06	4.9422E-03
520039.32	4258482.56	24550.56962	0.50121	5.49239	0.55201	4.28891	4.92E-03	2.05E-05	1.96E-04	2.26E-05	1.47E-04	5.3034E-03
519926.52	4258898.73	24528.45038	0.67477	0.34333	0.73685	0.33587	4.91E-03	2.76E-05	1.23E-05	3.02E-05	1.15E-05	4.9938E-03
520054.1	4258397.01	24527.51633	0.32208	10.06846	0.34506	6.87415	4.91E-03	1.32E-05	3.60E-04	1.41E-05	2.36E-04	5.5354E-03
520628.33	4258242.9	24516.09981	0.12751	0.16182	0.12624	0.16813	4.91E-03	5.22E-06	5.79E-06	5.17E-06	5.77E-06	4.9316E-03
520641.86	4258810.98	24515.61659	0.15293	0.11224	0.14802	0.11596	4.91E-03	6.26E-06	4.01E-06	6.06E-06	3.98E-06	4.9299E-03
520631.5	4258361.03	24506.0456	0.1351	0.15263	0.1324	0.15984	4.91E-03	5.53E-06	5.46E-06	5.42E-06	5.49E-06	4.9296E-03
520627.08	4258232.35	24495.32882	0.12707	0.16287	0.12575	0.16927	4.91E-03	5.20E-06	5.83E-06	5.15E-06	5.81E-06	4.9275E-03
520629.7	4258253.5	24491.86012	0.12792	0.16056	0.12673	0.16688	4.90E-03	5.24E-06	5.74E-06	5.19E-06	5.73E-06	4.9267E-03
520064.53	4258362.75	24490.46865	0.28621	20.35148	0.30587	10.05851	4.90E-03	1.17E-05	7.28E-04	1.25E-05	3.45E-04	6.0021E-03
520632.69	4258312.41	24490.39673	0.13147	0.15461	0.12997	0.16196	4.90E-03	5.38E-06	5.53E-06	5.32E-06	5.56E-06	4.9263E-03
520621.14	4258199.77	24490.1549	0.12632	0.16663	0.12534	0.1739	4.90E-03	5.17E-06	5.96E-06	5.13E-06	5.97E-06	4.9267E-03
520198.02	4258152.69	24485.54687	0.18128	2.1687	0.18401	2.41506	4.90E-03	7.42E-06	7.76E-05	7.53E-06	8.29E-05	5.0790E-03
519925.82	4258824.69	24483.28352	0.59261	0.44191	0.64715	0.42536	4.90E-03	2.43E-05	1.58E-05	2.65E-05	1.46E-05	4.9843E-03
520207.84	4258142.72	24482.09181	0.17845	1.94957	0.18175	2.16205	4.90E-03	7.31E-06	6.97E-05	7.44E-06	7.42E-05	5.0616E-03
520632.46	4258337.68	24480.25348	0.13324	0.15341	0.13113	0.1608	4.90E-03	5.46E-06	5.49E-06	5.37E-06	5.52E-06	4.9243E-03
520188.2	4258162.66	24474.44245	0.18424	2.42769	0.18637	2.72072	4.90E-03	7.54E-06	8.68E-05	7.63E-06	9.34E-05	5.0968E-03
519999.73	4258579.7	24461.43823	0.62241	1.90211	0.73561	1.69457	4.90E-03	2.55E-05	6.80E-05	3.01E-05	5.82E-05	5.0806E-03
520139.07	4258222.5	24457.3604	0.20526	5.02259	0.20759	5.83078	4.90E-03	8.40E-06	1.80E-04	8.50E-06	2.00E-04	5.2947E-03
520625.91	4258221.84	24444.63378	0.12663	0.16371	0.12531	0.17031	4.90E-03	5.18E-06	5.86E-06	5.13E-06	5.85E-06	4.9174E-03
520217.66	4258132.75	24437.7424	0.17562	1.76298	0.17954	1.9479	4.89E-03	7.19E-06	6.31E-05	7.35E-06	6.69E-05	5.0385E-03
520652.83	4258760.84	24412.07286	0.14473	0.11546	0.13977	0.11954	4.89E-03	5.93E-06	4.13E-06	5.72E-06	4.10E-06	4.9087E-03
520654	4258710.17	24409.35378	0.14132	0.12112	0.13651	0.12541	4.89E-03	5.79E-06	4.33E-06	5.59E-06	4.31E-06	4.9083E-03
520631.17	4258264.14	24406.40295	0.12828	0.15917	0.12719	0.16555	4.89E-03	5.25E-06	5.69E-06	5.21E-06	5.68E-06	4.9096E-03
519936.19	4258753.25	24375.86386	0.55938	0.59161	0.61827	0.56342	4.88E-03	2.29E-05	2.12E-05	2.53E-05	1.93E-05	4.9703E-03
520178.39	4258172.63	24366.56221	0.18703	2.74183	0.18879	3.08667	4.88E-03	7.66E-06	9.81E-05	7.73E-06	1.06E-04	5.0992E-03
520645.4	4258802.55	24350.97148	0.15066	0.11253	0.1458	0.1162	4.88E-03	6.17E-06	4.03E-06	5.97E-06	3.99E-06	4.8968E-03
520582.36	4258955.37	24346.01731	0.19476	0.10528	0.18826	0.10975	4.88E-03	7.97E-06	3.77E-06	7.71E-06	3.77E-06	4.8988E-03
520620.02	4258189.27	24337.4922	0.12586	0.16726	0.12513	0.17484	4.87E-03	5.15E-06	5.98E-06	5.12E-06	6.00E-06	4.8962E-03
520227.48	4258122.78	24330.08958	0.17273	1.60303	0.17731	1.76366	4.87E-03	7.07E-06	5.73E-05	7.26E-06	6.05E-05	5.0047E-03
520603.33	4258916.67	24309.04856	0.17982	0.10609	0.17425	0.1104	4.87E-03	7.36E-06	3.79E-06	7.13E-06	3.79E-06	4.8903E-03
520618.25	4258481.43	24278.904	0.14633	0.15181	0.14168	0.15909	4.86E-03	5.99E-06	5.43E-06	5.80E-06	5.46E-06	4.8849E-03
520631.17	4258386.02	24266.86702	0.13672	0.15161	0.13363	0.15854	4.86E-03	5.60E-06	5.42E-06	5.47E-06	5.44E-06	4.8817E-03
520168.57	4258182.6	24233.64043	0.1899	3.12452	0.19134	3.54364	4.85E-03	7.78E-06	1.12E-04	7.83E-06	1.22E-04	5.1021E-03
519989.81	4258599.14	24220.22366	0.60273	1.55402	0.70523	1.41582	4.85E-03	2.47E-05	5.56E-05	2.89E-05	4.86E-05	5.0082E-03
520633.54	4258275.17	24204.50464	0.12845	0.157	0.12735	0.16359	4.85E-03	5.26E-06	5.62E-06	5.21E-06	5.62E-06	4.8690E-03
520237.3	4258112.81	24202.22634	0.1699	1.46386	0.1751	1.6052	4.85E-03	6.96E-06	5.24E-05	7.17E-06	5.51E-05	4.9684E-03
520569.12	4258980.87	24186.63084	0.20508	0.10482	0.19795	0.10927	4.84E-03	8.40E-06	3.75E-06	8.10E-06	3.75E-06	4.8677E-03
520043.36	4258448.48	24185.20678	0.40703	6.40089	0.43972	4.88744	4.84E-03	1.67E-05	2.29E-04	1.80E-05	1.68E-04	5.2748E-03
520099.73	4258282.38	24182.80639	0.23165	14.52717	0.24028	15.60521	4.84E-03	9.48E-06	5.20E-04	9.84E-06	5.36E-04	5.9176E-03
520592.03	4258941.36	24171.1186	0.18785	0.10508	0.18177	0.10949	4.84E-03	7.69E-06	3.76E-06	7.44E-06	3.76E-06	4.8632E-03
520648.93	4258794.11	24157.83601	0.14846	0.1127	0.1436	0.11637	4.84E-03	6.08E-06	4.03E-06	5.88E-06	4.00E-06	4.8579E-03
519939.13	4258736.23	24150.29045	0.55213	0.63652	0.61026	0.60564	4.84E-03	2.26E-05	2.28E-05	2.50E-05	2.08E-05	4.9276E-03
519930.98	4258945.44	24139.45444	0.74757	0.29781	0.81629	0.29382	4.83E-03	3.06E-05	1.07E-05	3.34E-05	1.01E-05	4.9190E-03
519928.69	4258934.5	24114.86169	0.72116	0.30679	0.78675	0.30219	4.83E-03	2.95E-05	1.10E-05	3.22E-05	1.04E-05	4.9124E-03
520085.46	4259178.01	24088.43505	16.27538	0.20264	18.11618	0.19236	4.82E-03	6.66E-04	7.25E-06	7.42E-04	6.60E-06	6.2460E-03
520656.92	4258727.13	24079.82293	0.14098	0.11824	0.13628	0.12253	4.82E-03	5.77E-06	4.23E-06	5.58E-06	4.21E-06	4.8421E-03
519922.25	4258864.32	24078.12065	0.61215	0.38136	0.66732	0.36999	4.82E-03	2.51E-05	1.36E-05	2.73E-05	1.27E-05	4.9007E-03
520634.94	4258285.78	24071.76332	0.12881	0.15548	0.12769	0.16226	4.82E-03	5.27E-06	5.56E-06	5.23E-06	5.57E-06	4.8423E-03
519932.82	4258956.19	24063.93367	0.7705	0.28909	0.84191	0.2856	4.82E-03	3.15E-05	1.03E-05	3.45E-05	9.80E-06	4.9053E-03

520045.81	4259147.25	24058.55565	5.72878	0.20501	8.04072	0.19931	4.82E-03	2.35E-04	7.33E-06	3.29E-04	6.84E-06	5.3960E-03
520656.39	4258752.35	24032.84248	0.14262	0.11551	0.13782	0.11964	4.81E-03	5.84E-06	4.13E-06	5.64E-06	4.11E-06	4.8326E-03
519922.79	4258889.74	24028.62931	0.64009	0.35055	0.69779	0.34207	4.81E-03	2.62E-05	1.25E-05	2.86E-05	1.17E-05	4.8911E-03
520158.75	4258192.57	24016.95309	0.19265	3.60439	0.19402	4.11604	4.81E-03	7.89E-06	1.29E-04	7.94E-06	1.41E-04	5.0958E-03
520578.97	4258966.78	24007.33836	0.19732	0.10448	0.19064	0.1089	4.81E-03	8.08E-06	3.74E-06	7.81E-06	3.74E-06	4.8312E-03
520129.25	4258232.47	24002.65574	0.20783	6.13214	0.21093	7.18204	4.81E-03	8.51E-06	2.19E-04	8.64E-06	2.47E-04	5.2899E-03
520049.63	4258408.85	23979.504	0.33415	8.19372	0.35782	5.94987	4.80E-03	1.37E-05	2.93E-04	1.47E-05	2.04E-04	5.3279E-03
520055.72	4259157.23	23962.05873	8.186	0.20341	14.40907	0.19667	4.80E-03	3.35E-04	7.28E-06	5.90E-04	6.75E-06	5.7379E-03
520621.67	4258464.56	23956.65913	0.14427	0.15115	0.14005	0.15842	4.80E-03	5.91E-06	5.41E-06	5.73E-06	5.44E-06	4.8201E-03
520627.53	4258428.19	23937.11718	0.14035	0.15067	0.13679	0.15767	4.79E-03	5.75E-06	5.39E-06	5.60E-06	5.41E-06	4.8159E-03
520652.46	4258785.68	23931.79361	0.1463	0.11275	0.14145	0.11646	4.79E-03	5.99E-06	4.03E-06	5.79E-06	4.00E-06	4.8125E-03
520635.94	4258346.8	23908.87399	0.1327	0.15104	0.13024	0.15825	4.79E-03	5.43E-06	5.40E-06	5.33E-06	5.43E-06	4.8097E-03
520601.91	4258927.27	23899.05878	0.18099	0.10489	0.17534	0.10919	4.79E-03	7.41E-06	3.75E-06	7.18E-06	3.75E-06	4.8082E-03
520634.84	4258369.79	23890.23928	0.13447	0.15059	0.13157	0.15754	4.78E-03	5.51E-06	5.39E-06	5.39E-06	5.41E-06	4.8060E-03
520054.92	4258386.69	23886.61801	0.30613	10.47884	0.32744	7.09565	4.78E-03	1.25E-05	3.75E-04	1.34E-05	2.44E-04	5.4280E-03
520109.58	4258262.41	23874.45137	0.22059	10.20896	0.22682	11.8116	4.78E-03	9.03E-06	3.65E-04	9.29E-06	4.06E-04	5.5702E-03
520617.26	4258893.69	23866.47322	0.1704	0.10624	0.16529	0.11032	4.78E-03	6.98E-06	3.80E-06	6.77E-06	3.79E-06	4.8009E-03
519979.89	4258618.58	23865.46296	0.57997	1.298	0.66666	1.20137	4.78E-03	2.37E-05	4.64E-05	2.73E-05	4.12E-05	4.9181E-03
520620.91	4258884.98	23863.0545	0.16792	0.10666	0.16291	0.11069	4.78E-03	6.88E-06	3.82E-06	6.67E-06	3.80E-06	4.8001E-03
519928.21	4258782.23	23861.37885	0.55314	0.51518	0.60415	0.49321	4.78E-03	2.26E-05	1.84E-05	2.47E-05	1.69E-05	4.8613E-03
520095.38	4259187.99	23848.69627	12.09062	0.20029	11.40588	0.18916	4.78E-03	4.95E-04	7.16E-06	4.67E-04	6.49E-06	5.7517E-03
520624.55	4258876.26	23848.48276	0.16547	0.10709	0.16054	0.11106	4.78E-03	6.78E-06	3.83E-06	6.57E-06	3.81E-06	4.7970E-03
520029.44	4258511.69	23831.3498	0.56745	4.01668	0.63926	3.29541	4.77E-03	2.32E-05	1.44E-04	2.62E-05	1.13E-04	5.0788E-03
520628.2	4258867.55	23817.37588	0.16304	0.10749	0.15818	0.11141	4.77E-03	6.68E-06	3.84E-06	6.48E-06	3.82E-06	4.7906E-03
519921.56	4258838.55	23813.31155	0.5804	0.41533	0.6325	0.40068	4.77E-03	2.38E-05	1.49E-05	2.59E-05	1.38E-05	4.8472E-03
520630.98	4258411.39	23799.74963	0.1382	0.15013	0.13482	0.15698	4.77E-03	5.66E-06	5.37E-06	5.52E-06	5.39E-06	4.7882E-03
519931.08	4258765.04	23781.9357	0.54647	0.55303	0.59837	0.52853	4.76E-03	2.24E-05	1.98E-05	2.45E-05	1.81E-05	4.8475E-03
519925.23	4258799.15	23776.26634	0.55693	0.48058	0.60712	0.46098	4.76E-03	2.28E-05	1.72E-05	2.49E-05	1.58E-05	4.8422E-03
519957.12	4258673.87	23774.04112	0.55108	0.88625	0.61977	0.83301	4.76E-03	2.26E-05	3.17E-05	2.54E-05	2.86E-05	4.8693E-03
519950.71	4258691.8	23771.34985	0.54647	0.79541	0.60925	0.75182	4.76E-03	2.24E-05	2.85E-05	2.49E-05	2.58E-05	4.8621E-03
520657.61	4258701.55	23767.39848	0.1393	0.12099	0.13453	0.12514	4.76E-03	5.70E-06	4.33E-06	5.51E-06	4.30E-06	4.7796E-03
520631.85	4258858.83	23766.97207	0.16065	0.10781	0.1558	0.11169	4.76E-03	6.58E-06	3.86E-06	6.38E-06	3.83E-06	4.7803E-03
519923.21	4258914.86	23736.79121	0.66493	0.32283	0.72381	0.31675	4.75E-03	2.72E-05	1.15E-05	2.96E-05	1.09E-05	4.8329E-03
520148.93	4258202.53	23730.70544	0.19531	4.21888	0.19684	4.85442	4.75E-03	8.00E-06	1.51E-04	8.06E-06	1.67E-04	5.0860E-03
520635.5	4258850.12	23711.04891	0.15827	0.10816	0.15346	0.11199	4.75E-03	6.48E-06	3.87E-06	6.28E-06	3.84E-06	4.7689E-03
520590.85	4258951.86	23659.68137	0.1887	0.10387	0.18254	0.10822	4.74E-03	7.73E-06	3.72E-06	7.47E-06	3.72E-06	4.7608E-03
520639.15	4258841.4	23640.93291	0.15591	0.10856	0.15117	0.11233	4.73E-03	6.38E-06	3.88E-06	6.19E-06	3.86E-06	4.7547E-03
520631.33	4258214.14	23638.11284	0.12453	0.16075	0.1232	0.16723	4.73E-03	5.10E-06	5.75E-06	5.04E-06	5.74E-06	4.7555E-03
519941.95	4258718.91	23634.55212	0.53931	0.68578	0.5983	0.65103	4.73E-03	2.21E-05	2.45E-05	2.45E-05	2.24E-05	4.8266E-03
520659.94	4258743.86	23618.66812	0.14057	0.11546	0.13592	0.11962	4.73E-03	5.76E-06	4.13E-06	5.57E-06	4.11E-06	4.7495E-03
520064.89	4258352.61	23582.61859	0.27271	20.91151	0.29095	10.16797	4.72E-03	1.12E-05	7.48E-04	1.19E-05	3.49E-04	5.8429E-03
520634.53	4258394.85	23577.00431	0.13601	0.14943	0.13279	0.15619	4.72E-03	5.57E-06	5.34E-06	5.44E-06	5.36E-06	4.7433E-03
520630.06	4258203.59	23569.0063	0.12413	0.16152	0.12292	0.16826	4.72E-03	5.08E-06	5.78E-06	5.03E-06	5.78E-06	4.7417E-03
519922.15	4258815.84	23560.72294	0.55832	0.44895	0.60757	0.43161	4.72E-03	2.29E-05	1.61E-05	2.49E-05	1.48E-05	4.7970E-03
520642.8	4258832.68	23553.50163	0.15358	0.10889	0.14887	0.11259	4.72E-03	6.29E-06	3.89E-06	6.10E-06	3.87E-06	4.7371E-03
520660.51	4258718.58	23533.67206	0.13897	0.11817	0.13438	0.12236	4.71E-03	5.69E-06	4.23E-06	5.50E-06	4.20E-06	4.7326E-03
520577.8	4258977.27	23506.04596	0.19828	0.10335	0.19151	0.1077	4.71E-03	8.12E-06	3.70E-06	7.84E-06	3.70E-06	4.7308E-03
520612	4258913.08	23501.46164	0.17417	0.10466	0.16891	0.10881	4.71E-03	7.13E-06	3.74E-06	6.92E-06	3.74E-06	4.7280E-03
519919.07	4258880.76	23479.78503	0.60704	0.35768	0.66041	0.34812	4.70E-03	2.49E-05	1.28E-05	2.70E-05	1.20E-05	4.7788E-03
520600.58	4258937.82	23479.40125	0.18204	0.10371	0.1763	0.10799	4.70E-03	7.45E-06	3.71E-06	7.22E-06	3.71E-06	4.7242E-03
520207.88	4258132.72	23466.83534	0.17301	1.9515	0.17571	2.16402	4.70E-03	7.08E-06	6.98E-05	7.19E-06	7.43E-05	4.8579E-03
520628.88	4258193.07	23464.91045	0.12371	0.16217	0.12269	0.16921	4.70E-03	5.07E-06	5.80E-06	5.02E-06	5.81E-06	4.7209E-03
520635.85	4258236.11	23458.98373	0.12485	0.15781	0.12349	0.16389	4.70E-03	5.11E-06	5.64E-06	5.06E-06	5.63E-06	4.7194E-03
520198.06	4258142.69	23454.57795	0.17561	2.17096	0.17779	2.41705	4.70E-03	7.19E-06	7.77E-05	7.28E-06	8.30E-05	4.8722E-03
520119.43	4258242.44	23454.04248	0.21009	7.73703	0.21436	9.08695	4.70E-03	8.60E-06	2.77E-04	8.78E-06	3.12E-04	5.3031E-03
519967.12	4258646.05	23448.27507	0.55411	1.04994	0.62504	0.98265	4.70E-03	2.27E-05	3.76E-05	2.56E-05	3.37E-05	4.8154E-03
520646.45	4258823.97	23446.13559	0.15128	0.1092	0.1466	0.11284	4.70E-03	6.19E-06	3.91E-06	6.00E-06	3.87E-06	4.7154E-03
520634.63	4258225.57	23445.70361	0.12442	0.15877	0.12304	0.16494	4.70E-03	5.09E-06	5.68E-06	5.04E-06	5.66E-06	4.7168E-03
520639.88	4258305.41	23431.57207	0.12871	0.15131	0.12722	0.15835	4.69E-03	5.27E-06	5.41E-06	5.21E-06	5.44E-06	4.7138E-03
520637.17	4258246.68	23428.78758	0.12524	0.15669	0.12396	0.16274	4.69E-03	5.13E-06	5.60E-06	5.08E-06	5.59E-06	4.7133E-03
520217.7	4258122.75	23417.25371	0.17034	1.76529	0.17365	1.94858	4.69E-03	6.97E-06	6.31E-05	7.11E-06	6.69E-05	4.8337E-03
520188.24	4258152.66	23415.15872	0.17828	2.43115	0.17996	2.72115	4.69E-03	7.30E-06	8.70E-05	7.37E-06	9.34E-05	4.8843E-03
520045.82	4259157.25	23392.01788	5.78934	0.1999	8.0689	0.1944	4.68E-03	2.37E-04	7.15E-06	3.30E-04	6.67E-06	5.2658E-03
519918.5	4258855.26	23383.66091	0.57885	0.38871	0.62932	0.37622	4.68E-03	2.37E-05	1.39E-05	2.58E-05	1.29E-05	4.7592E-03
520085.48	4259188.01	23378.47815	16.19473	0.1977	18.02497	0.18778	4.68E-03	6.63E-04	7.07E-06	7.38E-04	6.45E-06	6.0965E-03
520139.11	4258212.5	23375.36212	0.19784	5.02977	0.19983	5.83576	4.68E-03	8.10E-06	1.80E-04	8.18E-06	2.00E-04	5.0778E-03
520227.52	4258112.78	23347.50697	0.16773	1.60466	0.17165	1.76506	4.68E-03	6.87E-06	5.74E-05	7.03E-06	6.06E-05	4.8075E-03
520638.6	4258257.31	23344.28834	0.12558	0.15541	0.1244	0.1615	4.68E-03	5.14E-06	5.56E-06	5.09E-06	5.54E-06	4.6964E-03
520587.71	4258963.16	23338.3425	0.19099	0.10306	0.18467	0.10737	4.67E-03	7.82E-06	3.69E-06	7.56E-06	3.69E-06	4.6966E-03
520639.41	4258355.93	23322.97248	0.13211	0.14877	0.12936	0.15575	4.67E-03	5.41E-06	5.32E-06	5.30E-06	5.35E-06	4.6921E-03
520650.1	4258815.25	23316.32291	0.14901	0.10949	0.14435	0.11307	4.67E-03	6.10E-06	3.92E-06	5.91E-06	3.88E-06	4.6892E-03
519919.51	4258905.94	23315.0329	0.63215	0.32951	0.68711	0.32253	4.67E-03	2.59E-05	1.18E-05	2.81E-05	1.11E-05	4.7460E-03
520178.42	4258162.63	23310.2344	0.18087	2.74569	0.18221	3.08811	4.67E-03	7.41E-06	9.82E-05	7.46E-06	1.06E-04	4.8873E-03
520659.52	4258768.81	23297.36592	0.14199	0.11254	0.13722	0.11641	4.67E-03	5.81E-06	4.03E-06	5.62E-06	4.00E-06	4.6851E-03
520055.74	4259167.23	23282.08738	8.30476	0.19836	14.50856	0.19186	4.66E-03	3.40E-04	7.10E-06	5.94E-04	6.59E-06	5.6103E-03
520638.18	4258378.55	23269.19934	0.13382	0.1485	0.13075	0.15524	4.66E-03	5.48E-06	5.31E-06	5.35E-06	5.33E-06	4.6814E-03
520624.97	4258473.23	23231.3259	0.14326	0.14903	0.13879	0.15615	4.65E-03	5.87E-06	5.33E-06	5.68E-06	5.36E-06	4.6746E-03
520640.15	4258267.98	23224.05388	0.1259	0.15394	0.12478	0.16016	4.65E-03	5.15E-06	5.51E-06	5.11E-06	5.50E-06	4.6722E-03
520039.85	4258457.01	23223.5358	0.41853	5.66527	0.45334	4.42804	4.65E-03	1.71E-05	2.03E-04	1.86E-05	1.52E-04	5.0412E-03
520055.59	4258376.43	23199.71239	0.29136	10.82716	0.31116	7.27638	4.65E-03	1.19E-05	3.87E-04	1.27E-05	2.50E-04	5.3078E-03
520168.6	4258172.6	23170.79373	0.1835	3.12981	0.1846	3.54394	4.64E-03	7.51E-06	1.12E-04	7.56E-06	1.22E-04	4.8890E-03
520663.5	4258735.36	23165.31515	0.13858	0.11535	0.13405	0.1195	4.64E-03	5.67E-06	4.13E-06	5.49E-06	4.10E-06	4.6586E-03
520653.75	4258806.54	23161.23668	0.14679	0.10984	0.14219	0.11336	4.64E-03	6.01E-06	3.93E-06	5.82E-06	3.89E-06	4.6580E-03
520610.51	4258923.7	23132.32818	0.17533	0.10351	0.17001	0.10767	4.63E-03	7.18E-06	3.70E-06	6.96E-06	3.70E-06	4.6541E-03
520630.96	4258437.21	23117.84318	0.13946	0.14839	0.13574	0.15532	4.63E-03	5.71E-06	5.31E-06	5.56E-06	5.33E-06	4.6516E-03
520099.76	4258272.38	23114.46709	0.22224	14.5729	0.23022	15.63921	4.63E-03	9.10E-06	5.21E-04	9.43E-06	5.37E-04	5.7057E-03
520661.22	4258692.92	23101.89752	0.13736	0.12073	0.13255	0.12476	4.63E-03	5.62E-06	4.32E-06	5.43E-06	4.28E-06	4.6461E-03
520663.05	4258760.37	23046.75285	0.14009	0.11265	0.13545	0.11659	4.62E-03	5.74E-06	4.03E-06	5.55E-06	4.00E-06	4.6347E-03
520599.35	4258948.34	23031.11502	0.18295	0.10255	0.17713	0.10678	4.61E-03	7.49E-06	3.67E-06	7.25E-06	3.67E-06	4.6344E-03
520634.38	4258420.31	23030.79356	0.13739	0.14788	0.13388	0.15465	4.61E-03	5.63E-06	5.29E-06	5.48E-06	5.31E-06	4.6339E-03
520642.21	4258278.88	23019.32858	0.12609	0.15208	0.12494	0.1585	4.61E-03	5.16E-06	5.44E-06	5.12E-06	5.44E-06	4.6311E-03
520019.52	4258531.13	23005.26402	0.58549	3.07551	0.67301	2.60592	4.61E-03	2.40E-05	1.10E-04	2.76E-05	8.95E-05	4.8581E-03
520094.86	4259199.84	23004.63348	12.10895	0.19453	11.59905	0.1839	4.61E-03	4.96E-04	6.96E-06	4.75E-04	6.31E-06	5.5910E-03
519921.88	4258941.68	22991.56255	0.67611	0.2957	0.73513	0.29139	4.60E-03	2.77E-05	1.06E-05	3.01E-05	1.00E-05	4.6827E-03
519923.78	4258952.46	22977.75188	0.69736	0.28716	0.7587	0.28345	4.60E-03	2.86E-05	1.03E-05	3.11E-05	9.73E-06	4.6812E-03
520657.4	4258797.82	22976.58277	0.1446	0.11003	0.14002	0.11354	4.60E-03	5.92E-06	3.94E-06	5.73E-06	3.90E-06	4.6209E-03
520664.09	4258710.02	22960.30826	0.13701	0.1181	0.1325	0.12216	4.60E-03	5.61E-06	4.22E-06	5.43E-06	4.19E-06	4.6176E-03
520158.78	4258182.57	22957.32893	0.18603	3.61134	0.18711	4.11445	4.60E-03	7.62E-06	1.29E-04	7.66E-06	1.41E-04	4.8832E-03
519917.77	4258829.41	22954.30457	0.54688	0.42243	0.59423	0.40684	4.60E-03	2.24E-05	1.51E-05	2.43E-05	1.40E-05	4.6727E-03
520129.29	4258222.47	22952.70116	0.20021	6.14098	0.20295	7.19255	4.60E-03	8.20E-06	2.20E-04	8.31E-06	2.47E-04	5.0797E-03
520643.29	4258314.37	22936.25512	0.12823	0.1491	0.12649	0.1561	4.59E-03	5.25E-06	5.33E-06	5.18E-06	5.36E-06	4.6144E-03
519932.56	4258744.48	22933.19194	0.52127	0.5962	0.57447	0.56825	4.59E-03	2.13E-05	2.13E-05	2.35E-05	1.95E-05	4.6784E-03
520643.02	4258339.53	22894.76208	0.1299	0.14792	0.12751	0.1549	4.58E-03	5.32E-06	5.29E-06	5.22E-06	5.32E-06	4.6061E-03
519944.62	4258701.24	22891.14518	0.52384	0.73815	0.58109	0.69978	4.58E-03	2.14E-05	2.64E-05	2.38E-05	2.40E-05	4.6799E-03
519915.34	4258871.78	22882.31903	0.5755	0.36453	0.62433	0.35395	4.58E-03	2.36E-05	1.30E-05	2.56E-05	1.22E-05	4.6568E-03
520637.9	4258403.69	22875.89102	0.13528	0.14724	0.13193	0.15387	4.58E-03	5.54E-06	5.27E-06	5.40E-06	5.28E-06	4.6027E-03
520586.48	4258973.68	22859.6558	0.19188	0.10194	0.18545	0.10619	4.58E-03	7.86E-06	3.65E-06	7.59E-06	3.65E-06	4.6007E-03
519915.82	4258897.03	22847.78384	0.60084	0.33616	0.652	0.32821	4.58E-03	2.46E-05	1.20E-05	2.67E-05	1.13E-05	4.6502E-03
520109.62	4258252.41	22839.28243	0.21205	10.22686	0.21773	11.89476	4.57E-03	8.68E-06	3.66E-04	8.91E-06	4.08E-04	5.3656E-03
520661.05	4258789.11	22759.51189	0.14247	0.11009	0.1379	0.11364	4.56E-03	5.83E-06	3.94E-06	5.65E-06	3.90E-06	4.5772E-03
520609.13	4258934.28	22750.83403	0.17638	0.10237	0.17098	0.10651	4.56E-03	7.22E-06	3.66E-06	7.00E-06	3.66E-06	4.5777E-03
520642.89	4258365.05	22730.29148	0.13146	0.1468	0.12852	0.15352	4.55E-03	5.38E-06	5.25E-06	5.26E-06	5.27E-06	4.5732E-03
520624.29	4258900.84	22728.92019	0.1664	0.10365	0.16152	0.1076	4.55E-03	6.81E-06	3.71E-06	6.61E-06	3.69E-06	4.5726E-03
520627.91	4258892.19	22722.89265	0.16406	0.10404	0.15926	0.10793	4.55E-03	6.72E-06	3.72E-06	6.52E-06	3.71E-06	4.5712E-03
520045.84	4259167.25	22722.2932	5.83543	0.19496	8.09977	0.18965	4.55E-03	2.39E-04	6.97E-06	3.32E-04	6.51E-06	5.1345E-03
520631.53	4258883.54	22707.31096	0.16174	0.10444	0.15702	0.10828	4.55E-03	6.62E-06	3.74E-06	6.43E-06	3.72E-06	4.5680E-03
520148.96	4258192.53	22702.01557	0.18853	4.22502	0.18976	4.85807	4.55E-03	7.72E-06	1.51E-04	7.77E-06	1.67E-04	4.8798E-03
520596.45	4258959.54	22697.16735	0.18495	0.10168	0.17895	0.10589	4.55E-03	7.57E-06	3.64E-06	7.33E-06	3.64E-06	4.5676E-03
519957.12	4258664.6	22684.43285	0.52919	0.90952	0.59369	0.85506	4.54E-03	2.17E-05	3.25E-05	2.43E-05	2.94E-05	4.6507E-03
520666.58	4258751.94	22682.96868	0.13811	0.11269	0.13363	0.11666	4.54E-03	5.65E-06	4.03E-06	5.47E-06	4.01E-06	4.5617E-03
519921.53	4258790.23	22682.78212	0.52272	0.48657	0.56813	0.4667	4.54E-03	2.14E-05	1.74E-05	2.33E-05	1.60E-05	4.6206E-03
520635.15	4258874.89	22682.54032	0.15943	0.10484	0.15479	0.10863	4.54E-03	6.53E-06	3.75E-06	6.34E-06	3.73E-06	4.5628E-03
520667.06	4258726.87	22680.44043	0.13666	0.11515	0.1322	0.11926	4.54E-03	5.60E-06	4.12E-06	5.41E-06	4.09E-06	4.5613E-03
520009.61	4258550.57	22660.34989	0.5914	2.41549	0.68775	2.10303	4.54E-03	2.42E-05	8.64E-05	2.82E-05	7.22E-05	4.7490E-03
520638.98	4258207.4	22642.89764	0.12195	0.15663	0.12058	0.16289	4.53E-03	4.99E-06	5.60E-06	4.94E-06	5.59E-06	4.5557E-03
520638.77	4258866.24	22642.40584	0.15715	0.1052	0.15256	0.10894	4.53E-03	6.43E-06	3.76E-06	6.25E-06	3.74E-06	4.5546E-03
520641.51	4258387.31	22639.89524	0.13315	0.14641	0.12994	0.15298	4.53E-03	5.45E-06	5.24E-06	5.32E-06	5.25E-06	4.5552E-03
520640.31	4258217.98	22638.61406	0.12225	0.15587	0.12087	0.16186	4.53E-03	5.01E-06	5.58E-06	4.95E-06	5.56E-06	4.5548E-03
519914.74	4258846.2	22633.51397	0.54687	0.3957	0.59318	0.38216	4.53E-03	2.24E-05	1.42E-05	2.43E-05	1.31E-05	4.6066E-03
519924.47	4258773.22	22632.01581	0.5174	0.52067	0.56341	0.49873	4.53E-03	2.12E-05	1.86E-05	2.31E-05	1.71E-05	4.6124E-03
520055.76	4259177.23	22624.27858	8.37566	0.19355	14.61722	0.18727	4.53E-03	3.43E-04	6.92E-06	5.98E-04	6.43E-06	5.4856E-03
520637.74	4258196.86	22600.652	0.12159	0.15726	0.12033	0.16382	4.53E-03	4.98E-06	5.62E-06	4.93E-06	5.62E-06	4.5472E-03
519918.48	4258807	22590.30133	0.5256	0.45524	0.57041	0.43735	4.52E-03	2.15E-05	1.63E-05	2.34E-05	1.50E-05	4.6002E-03
520642.4	4258857.59	22588.68168	0.15489	0.10543	0.15029	0.10914	4.52E-03	6.34E-06	3.77E-06	6.15E-06	3.75E-06	4.5437E-03
519916.17	4258922	22588.48017	0.62325	0.31049	0.67579	0.30476	4.52E-03	2.55E-05	1.11E-05	2.77E-05	1.05E-05	4.5984E-03
520628.28	4258481.9	22579.9256	0.14222	0.14702	0.13752	0.15394	4.52E-03	5.82E-06	5.26E-06	5.63E-06	5.28E-06	4.5439E-03
520084.96	4259199.85	22561.86465	16.23762	0.19199	18.48339	0.18254	4.52E-03	6.65E-04	6.87E-06	7.57E-04	6.27E-06	5.9531E-03
519935.46	4258727.38	22550.45274	0.51237	0.64005	0.56496	0.60942	4.52E-03	2.10E-05	2.29E-05	2.31E-05	2.09E-05	4.6040E-03
520646.02	4258848.94	22508.05849	0.15262	0.10573	0.14805	0.10939	4.51E-03	6.25E-06	3.78E-06	6.06E-06	3.76E-06	4.5274E-03
520056.13	4258366.21	22491.27721	0.27764	11.12471	0.29615	7.41828	4.50E-03	1.14E-05	3.98E-04	1.21E-05	2.55E-04	5.1803E-03
519999.69	4258570	22491.02055	0.58548	1.94363	0.68423	1.72989	4.50E-03	2.40E-05	6.95E-05	2.80E-05	5.94E-05	4.6850E-03
520207.91	4258122.72	22486.90932	0.16773	1.95411	0.16995	2.16398	4.50E-03	6.87E-06	6.99E-05	6.96E-06	7.43E-05	4.6613E-03
520198.09	4258132.69	22485.08716	0.17021	2.17317	0.1719	2.41859	4.50E-03	6.97E-06	7.77E-05	7.04E-06	8.30E-05	4.6777E-03
520664.69	4258780.39	22470.71961	0.14033	0.10998	0.13576	0.1136	4.50E-03	5.75E-06	3.93E-06	5.56E-06	3.90E-06	4.5192E-03
520217.73	4258112.75	22469.35682	0.16533	1.7671	0.16808	1.94961	4.50E-03	6.77E-06	6.32E-05	6.88E-06	6.69E-05	4.6436E-03
520649.64	4258840.29	22455.16805	0.15042	0.10626	0.14598	0.10984	4.50E-03	6.16E-06	3.80E-06	5.98E-06	3.77E-06	4.5167E-03
520643.35	4258229.3	22448.93518	0.12222	0.154	0.12083	0.1598	4.50E-03	5.00E-06	5.51E-06	4.95E-06	5.49E-06	4.5167E-03
520119.47	4258232.44	22442.70689	0.20227	7.74917	0.20614	9.10789	4.49E-03	8.28E-06	2.77E-04	8.44E-06	3.13E-04	5.1010E-03
520188.27	4258142.66	22435.78345	0.17266	2.43379	0.17392	2.72261	4.49E-03	7.07E-06	8.71E-05	7.12E-06	9.35E-05	4.6878E-03
520631.15	4258463.57	22414.17939	0.14045	0.14668	0.13619	0.15363	4.49E-03	5.75E-06	5.25E-06	5.58E-06	5.27E-06	4.5106E-03
520644.63	4258239.86	22413.22265	0.12259	0.15298	0.12127	0.15873	4.49E-03	5.02E-06	5.47E-06	4.97E-06	5.45E-06	4.5095E-03
520029.4	4258502	22405.19666	0.52468	4.05088	0.58428	3.33118	4.49E-03	2.15E-05	1.45E-04	2.39E-05	1.14E-04	4.7916E-03
520647.06	4258298.41	22399.85274	0.12595	0.14828	0.12455	0.15492	4.49E-03	5.16E-06	5.30E-06	5.10E-06	5.32E-06	4.5068E-03
519989.77	4258589.44	22391.05145	0.57069	1.59211	0.66639	1.44582	4.48E-03	2.34E-05	5.69E-05	2.73E-05	4.96E-05	4.6413E-03
520619.12	4258920.14	22387.75169	0.16992	0.10213	0.16487	0.10614	4.48E-03	6.96E-06	3.65E-06	6.75E-06	3.64E-06	4.5045E-03
519927.31	4258755.94	22383.97815	0.50852	0.55816	0.55652	0.53352	4.48E-03	2.08E-05	2.00E-05	2.28E-05	1.83E-05	4.5646E-03
520139.14	4258202.5	22366.00542	0.19086	5.03777	0.19256	5.83952	4.48E-03	7.81E-06	1.80E-04	7.88E-06	2.00E-04	4.8755E-03
520653.26	4258831.64	22365.78403	0.14822	0.10662	0.14384	0.11013	4.48E-03	6.07E-06	3.81E-06	5.89E-06	3.78E-06	4.4986E-03
520667.67	4258701.46	22361.5786	0.13512	0.11794	0.13062	0.12187	4.48E-03	5.53E-06	4.22E-06	5.35E-06	4.18E-06	4.4975E-03
520607.85	4258944.82	22359.06363	0.17733	0.10125	0.17183	0.10537	4.48E-03	7.26E-06	3.62E-06	7.04E-06	3.62E-06	4.4992E-03
520094.88	4259209.84	22340.17167	12.01625	0.18995	11.54891	0.17967	4.47E-03	4.92E-04	6.79E-06	4.73E-04	6.17E-06	5.4517E-03
519912.12	4258888.12	22331.39948	0.57078	0.3427	0.61826	0.33373	4.47E-03	2.34E-05	1.23E-05	2.53E-05	1.15E-05	4.5446E-03
520646.01	4258250.47	22330.31344	0.12293	0.1518	0.1217	0.15758	4.47E-03	5.03E-06	5.43E-06	4.98E-06	5.41E-06	4.4928E-03
520178.45	4258152.63	22325.66205	0.17504	2.74891	0.17602	3.08917	4.47E-03	7.17E-06	9.83E-05	7.21E-06	1.06E-04	4.6898E-03
520036.34	4258465.54	22305.19546	0.43028	5.0577	0.46772	4.02895	4.47E-03	1.76E-05	1.81E-04	1.92E-05	1.38E-04	4.8229E-03
520063.14	4258343.35	22294.95143	0.25853	17.72939	0.27538	9.49938	4.46E-03	1.06E-05	6.34E-04	1.13E-05	3.26E-04	5.4470E-03
520670.12	4258743.5	22284.22167	0.13619	0.11261	0.13183	0.11659	4.46E-03	5.58E-06	4.03E-06	5.40E-06	4.00E-06	4.4817E-03
520637.77	4258429.23	22270.87058	0.13655	0.14568	0.13291	0.15238	4.46E-03	5.59E-06	5.21E-06	5.44E-06	5.23E-06	4.4815E-03
520656.88	4258822.99	22254.58227	0.14608	0.10684	0.14168	0.11029	4.46E-03	5.98E-06	3.82E-06	5.80E-06	3.79E-06	4.4762E-03
520595.17	4258970.08	22252.4573	0.18583	0.10059	0.17972	0.10474	4.46E-03	7.61E-06	3.60E-06	7.36E-06	3.60E-06	4.4785E-03
519979.85	4258608.88	22236.97671	0.55146	1.32736	0.6343	1.2277	4.45E-03	2.26E-05	4.75E-05	2.60E-05	4.21E-05	4.5914E-03
519911.62	4258862.8	22236.72401	0.54535	0.37112	0.58996	0.35955	4.45E-03	2.23E-05	1.33E-05	2.42E-05	1.23E-05	4.5253E-03
519967.12	4258636.77	22236.26939	0.53208	1.07388	0.60001	1.00578	4.45E-03	2.18E-05	3.84E-05	2.46E-05	3.45E-05	4.5724E-03
520647.51	4258261.12	22207.33431	0.12322	0.15046	0.12207	0.15634	4.45E-03	5.05E-06	5.38E-06	5.00E-06	5.37E-06	4.4681E-03
519912.5	4258913.15	22189.78586	0.5936	0.3166	0.64259	0.31003	4.44E-03	2.43E-05	1.13E-05	2.63E-05	1.06E-05	4.5164E-03
520168.63	4258162.6	22181.16998	0.17745	3.13431	0.17825	3.54362	4.44E-03	7.27E-06	1.12E-04	7.30E-06	1.22E-04	4.6904E-03
520670.61	4258718.38	22169.63714	0.13477	0.11513	0.13041	0.11913	4.44E-03	5.52E-06	4.12E-06	5.34E-06	4.09E-06	4.4588E-03
520668.34	4258771.68	22141.62622	0.1382	0.10986	0.13369	0.11356	4.43E-03	5.66E-06	3.93E-06	5.47E-06	3.90E-06	4.4531E-03
520099.8	4258262.38	22127.29528	0.21349	14.61157	0.22087	15.68769	4.43E-03	8.74E-06	5.23E-04	9.04E-06	5.39E-04	5.5103E-03
520045.86	4259177.25	22113.01952	5.87577	0.19034	8.13971	0.18519	4.43E-03	2.41E-04	6.81E-06	3.33E-04	6.36E-06	5.0155E-03
520660.51	4258814.34	22111.17503	0.14393	0.10703	0.13953	0.11044	4.43E-03	5.89E-06	3.83E-06	5.71E-06	3.79E-06	4.4473E-03
520605.19	4258955.93	22072.07856	0.17914	0.10036	0.17347	0.10445	4.42E-03	7.33E-06	3.59E-06	7.10E-06	3.59E-06	4.4418E-03
520649.13	4258271.83	22048.50142	0.12348	0.14897	0.12235	0.15501	4.42E-03	5.06E-06	5.33E-06	5.01E-06	5.32E-06	4.4362E-03
519913.98	4258820.27	22047.54135	0.51496	0.42878	0.55801	0.41253	4.42E-03	2.11E-05	1.53E-05	2.28E-05	1.42E-05	4.4888E-03
520617.68	4258930.74	22040.98457	0.17096	0.10103	0.16583	0.10504	4.41E-03	7.00E-06	3.61E-06	6.79E-06	3.61E-06	4.4350E-03
520055.77	4259187.23	22005.07425	8.43678	0.18896	14.7269	0.18289	4.41E-03	3.45E-04	6.76E-06	6.03E-04	6.28E-06	5.3683E-03
520045.22	4258400.68	21996.90603	0.3101	6.8756	0.33054	5.24635	4.41E-03	1.27E-05	2.46E-04	1.35E-05	1.80E-04	4.8575E-03
520158.81	4258172.57	21984.34144	0.17982	3.61595	0.18061	4.11612	4.40E-03	7.36E-06	1.29E-04	7.39E-06	1.41E-04	4.6881E-03
520129.32	4258212.47	21965.22566	0.19301	6.15272	0.19548	7.19041	4.40E-03	7.90E-06	2.20E-04	8.00E-06	2.47E-04	4.8817E-03
520664.13	4258805.69	21964.66357	0.14186	0.10734	0.13751	0.11071	4.40E-03	5.81E-06	3.84E-06	5.63E-06	3.80E-06	4.4178E-03

520650.45	4258307.3	21950.3704	0.12551	0.14602	0.12386	0.15268	4.40E-03	5.14E-06	5.22E-06	5.07E-06	5.24E-06	4.4165E-03
520084.98	4259209.85	21920.88291	16.0936	0.18749	18.37711	0.17836	4.39E-03	6.59E-04	6.71E-06	7.52E-04	6.12E-06	5.8142E-03
520040.84	4258422.46	21916.90013	0.33981	5.89923	0.36327	4.61787	4.39E-03	1.39E-05	2.11E-04	1.49E-05	1.59E-04	4.7875E-03
519914.74	4258948.73	21904.55547	0.63321	0.2851	0.68615	0.28105	4.39E-03	2.59E-05	1.02E-05	2.81E-05	9.65E-06	4.4606E-03
519938.24	4258709.97	21902.41614	0.49892	0.68741	0.55147	0.65321	4.39E-03	2.04E-05	2.46E-05	2.26E-05	2.24E-05	4.4763E-03
520109.65	4258242.41	21859.06159	0.204	10.25357	0.20927	11.87741	4.38E-03	8.35E-06	3.67E-04	8.57E-06	4.08E-04	5.1690E-03
520671.99	4258762.96	21858.35334	0.13628	0.10986	0.13187	0.11364	4.38E-03	5.58E-06	3.93E-06	5.40E-06	3.90E-06	4.3962E-03
519910.98	4258837.14	21838.90512	0.51646	0.40206	0.55867	0.3877	4.37E-03	2.11E-05	1.44E-05	2.29E-05	1.33E-05	4.4453E-03
520673.65	4258735.07	21816.69491	0.13428	0.11229	0.12997	0.11628	4.37E-03	5.50E-06	4.02E-06	5.32E-06	3.99E-06	4.3879E-03
519947.12	4258683.15	21806.38265	0.50295	0.79367	0.55946	0.75043	4.37E-03	2.06E-05	2.84E-05	2.29E-05	2.58E-05	4.4647E-03
520667.75	4258797.04	21779.9798	0.13981	0.10748	0.13547	0.11085	4.36E-03	5.72E-06	3.84E-06	5.55E-06	3.81E-06	4.3807E-03
519908.43	4258879.21	21774.47485	0.54216	0.34896	0.58575	0.33904	4.36E-03	2.22E-05	1.25E-05	2.40E-05	1.16E-05	4.4309E-03
519908.83	4258904.31	21748.91201	0.56513	0.3227	0.61077	0.31521	4.36E-03	2.31E-05	1.15E-05	2.50E-05	1.08E-05	4.4260E-03
520671.25	4258692.91	21734.91315	0.13327	0.11758	0.12871	0.12141	4.35E-03	5.46E-06	4.21E-06	5.27E-06	4.17E-06	4.3718E-03
520148.99	4258182.53	21734.13692	0.18211	4.23212	0.18311	4.85666	4.35E-03	7.46E-06	1.51E-04	7.50E-06	1.67E-04	4.6856E-03
520646.59	4258200.65	21722.36263	0.11947	0.15263	0.11806	0.15872	4.35E-03	4.89E-06	5.46E-06	4.83E-06	5.45E-06	4.3708E-03
520634.62	4258472.69	21715.82923	0.13941	0.1446	0.13492	0.1514	4.35E-03	5.71E-06	5.17E-06	5.52E-06	5.20E-06	4.3705E-03
520647.89	4258211.22	21701.97585	0.11974	0.15196	0.11831	0.15775	4.35E-03	4.90E-06	5.44E-06	4.84E-06	5.42E-06	4.3667E-03
520616.34	4258941.3	21683.79938	0.1719	0.09993	0.16667	0.10392	4.34E-03	7.04E-06	3.57E-06	6.82E-06	3.57E-06	4.3635E-03
520603.85	4258966.49	21678.15081	0.18004	0.0993	0.17423	0.10334	4.34E-03	7.37E-06	3.55E-06	7.13E-06	3.55E-06	4.3630E-03
520649.28	4258221.83	21675.52869	0.12007	0.15108	0.11863	0.15671	4.34E-03	4.92E-06	5.40E-06	4.86E-06	5.38E-06	4.3614E-03
520095.31	4259220.66	21667.64588	11.78707	0.18528	11.30752	0.17533	4.34E-03	4.83E-04	6.63E-06	4.63E-04	6.02E-06	5.2975E-03
520631.32	4258907.99	21666.69247	0.16249	0.10113	0.15778	0.10496	4.34E-03	6.65E-06	3.62E-06	6.46E-06	3.60E-06	4.3594E-03
520634.91	4258899.4	21661.92698	0.16028	0.10151	0.15565	0.10528	4.34E-03	6.56E-06	3.63E-06	6.37E-06	3.61E-06	4.3583E-03
520638.51	4258890.81	21645.0008	0.15807	0.10188	0.15352	0.1056	4.33E-03	6.47E-06	3.64E-06	6.29E-06	3.63E-06	4.3547E-03
520674.17	4258709.89	21632.43669	0.13291	0.11512	0.12864	0.11897	4.33E-03	5.44E-06	4.12E-06	5.27E-06	4.08E-06	4.3511E-03
520642.11	4258882.22	21621.48989	0.15588	0.10226	0.15141	0.10593	4.33E-03	6.38E-06	3.66E-06	6.20E-06	3.64E-06	4.3499E-03
520046.24	4258390.27	21609.27118	0.29544	7.13838	0.31452	5.41589	4.33E-03	1.21E-05	2.55E-04	1.29E-05	1.86E-04	4.7938E-03
520645.7	4258873.63	21587.55408	0.15371	0.10262	0.1493	0.10624	4.32E-03	6.29E-06	3.67E-06	6.11E-06	3.65E-06	4.3429E-03
520637.83	4258455.25	21584.3424	0.13757	0.14404	0.13347	0.15081	4.32E-03	5.63E-06	5.15E-06	5.46E-06	5.18E-06	4.3440E-03
519914.81	4258798.15	21583.16131	0.49454	0.46059	0.53538	0.44248	4.32E-03	2.02E-05	1.65E-05	2.19E-05	1.52E-05	4.3962E-03
520207.94	4258112.72	21581.23858	0.16276	1.95586	0.16451	2.16442	4.32E-03	6.66E-06	7.00E-05	6.74E-06	7.43E-05	4.4796E-03
519957.12	4258655.32	21579.40761	0.50808	0.93077	0.56808	0.87603	4.32E-03	2.08E-05	3.33E-05	2.33E-05	3.01E-05	4.4290E-03
520198.12	4258122.69	21572.26872	0.16505	2.17512	0.16632	2.4193	4.32E-03	6.76E-06	7.78E-05	6.81E-06	8.31E-05	4.4946E-03
519917.82	4258781.3	21558.25079	0.49044	0.4914	0.53146	0.47164	4.32E-03	2.01E-05	1.76E-05	2.18E-05	1.62E-05	4.3929E-03
520675.64	4258754.24	21552.55334	0.13441	0.10992	0.13014	0.11373	4.32E-03	5.50E-06	3.93E-06	5.33E-06	3.90E-06	4.3349E-03
519907.89	4258853.81	21544.04826	0.51639	0.37739	0.55721	0.36493	4.31E-03	2.11E-05	1.35E-05	2.28E-05	1.25E-05	4.3845E-03
520649.3	4258865.04	21543.46457	0.15157	0.10289	0.14718	0.10648	4.31E-03	6.21E-06	3.68E-06	6.03E-06	3.66E-06	4.3339E-03
520045.87	4259187.25	21536.31597	5.898	0.18593	8.17959	0.18093	4.31E-03	2.41E-04	6.65E-06	3.35E-04	6.21E-06	4.9022E-03
520063.58	4258333.18	21534.87008	0.24735	18.29936	0.26303	9.6878	4.31E-03	1.01E-05	6.55E-04	1.08E-05	3.33E-04	5.3207E-03
520671.37	4258788.38	21532.57284	0.13776	0.10741	0.13341	0.11084	4.31E-03	5.64E-06	3.84E-06	5.46E-06	3.81E-06	4.3309E-03
520188.3	4258132.66	21528.64559	0.16736	2.43547	0.16822	2.72473	4.31E-03	6.85E-06	8.71E-05	6.89E-06	9.35E-05	4.5058E-03
520641.17	4258438.16	21528.23171	0.13568	0.14354	0.13188	0.15018	4.31E-03	5.56E-06	5.13E-06	5.40E-06	5.16E-06	4.3326E-03
519928.92	4258735.72	21524.73295	0.48705	0.5992	0.53411	0.57204	4.31E-03	1.99E-05	2.14E-05	2.19E-05	1.96E-05	4.3935E-03
519909	4258928.82	21509.18344	0.58455	0.29913	0.63157	0.29367	4.31E-03	2.39E-05	1.07E-05	2.59E-05	1.01E-05	4.3781E-03
520653.83	4258316.18	21508.93212	0.12508	0.14383	0.12311	0.15047	4.31E-03	5.12E-06	5.14E-06	5.04E-06	5.17E-06	4.3279E-03
520119.5	4258222.44	21504.06249	0.19495	7.762	0.19845	9.13619	4.31E-03	7.98E-06	2.78E-04	8.13E-06	3.14E-04	4.9139E-03
520652.9	4258856.44	21488.47926	0.14942	0.10317	0.14506	0.10672	4.30E-03	6.12E-06	3.69E-06	5.94E-06	3.66E-06	4.3228E-03
520032.83	4258474.07	21478.54246	0.44214	4.54755	0.48265	3.67788	4.30E-03	1.81E-05	1.63E-04	1.98E-05	1.26E-04	4.6282E-03
520652.07	4258233.03	21471.25971	0.12005	0.14934	0.11867	0.15485	4.30E-03	4.92E-06	5.34E-06	4.86E-06	5.32E-06	4.3203E-03
520654.25	4258291.42	21459.16066	0.12334	0.1451	0.12195	0.15142	4.30E-03	5.05E-06	5.19E-06	4.99E-06	5.20E-06	4.3179E-03
520029.36	4258492.3	21456.00994	0.48734	4.0818	0.53773	3.35986	4.30E-03	2.00E-05	1.46E-04	2.20E-05	1.15E-04	4.6002E-03
520656.5	4258847.85	21427.75959	0.14731	0.10363	0.14306	0.1071	4.29E-03	6.03E-06	3.71E-06	5.86E-06	3.68E-06	4.3105E-03
520139.17	4258192.5	21423.74751	0.18428	5.04568	0.18574	5.8407	4.29E-03	7.55E-06	1.80E-04	7.60E-06	2.01E-04	4.6865E-03
520178.48	4258142.63	21413.88246	0.16955	2.75115	0.17018	3.0912	4.29E-03	6.94E-06	9.84E-05	6.97E-06	1.06E-04	4.5069E-03
520613.93	4258952.31	21406.69531	0.17348	0.09907	0.16812	0.10305	4.29E-03	7.10E-06	3.54E-06	6.88E-06	3.54E-06	4.3081E-03
520653.41	4258243.62	21391.93252	0.12038	0.14826	0.11909	0.15378	4.28E-03	4.93E-06	5.30E-06	4.88E-06	5.28E-06	4.3044E-03
519920.74	4258764.21	21378.58328	0.48382	0.52504	0.52567	0.50332	4.28E-03	1.98E-05	1.88E-05	2.15E-05	1.73E-05	4.3587E-03
520677.18	4258726.64	21365.75251	0.13246	0.11222	0.12826	0.11614	4.28E-03	5.42E-06	4.01E-06	5.25E-06	3.99E-06	4.2975E-03
520660.09	4258839.26	21355.18312	0.1452	0.10405	0.14105	0.10744	4.28E-03	5.95E-06	3.72E-06	5.78E-06	3.69E-06	4.2958E-03
520626.23	4258927.2	21347.25164	0.16577	0.09967	0.16086	0.10355	4.28E-03	6.79E-06	3.57E-06	6.59E-06	3.55E-06	4.2956E-03
520036.38	4258441.17	21312.87662	0.36748	5.1098	0.39463	4.09337	4.27E-03	1.50E-05	1.83E-04	1.62E-05	1.41E-04	4.6227E-03
520019.48	4258521.43	21312.1974	0.54311	3.11741	0.61576	2.64249	4.27E-03	2.22E-05	1.12E-04	2.52E-05	9.07E-05	4.5177E-03
520654.85	4258254.25	21287.27911	0.12069	0.14701	0.11947	0.15264	4.26E-03	4.94E-06	5.26E-06	4.89E-06	5.24E-06	4.2834E-03
520674.99	4258779.73	21278.33961	0.13578	0.10739	0.13149	0.11089	4.26E-03	5.56E-06	3.84E-06	5.38E-06	3.81E-06	4.2799E-03
520085.41	4259220.68	21274.03973	15.74677	0.18291	17.82027	0.17407	4.26E-03	6.45E-04	6.54E-06	7.30E-04	5.98E-06	5.6473E-03
519905.17	4258895.46	21266.79744	0.53782	0.32873	0.58031	0.32029	4.26E-03	2.20E-05	1.18E-05	2.38E-05	1.10E-05	4.3275E-03
520168.66	4258152.6	21260.04375	0.17174	3.13782	0.17227	3.54327	4.26E-03	7.03E-06	1.12E-04	7.05E-06	1.22E-04	4.5056E-03
520663.69	4258830.67	21259.57254	0.14314	0.10435	0.13901	0.10767	4.26E-03	5.86E-06	3.73E-06	5.69E-06	3.70E-06	4.2765E-03
520055.26	4259199.9	21237.40478	8.3029	0.18328	14.25239	0.1775	4.25E-03	3.40E-04	6.56E-06	5.84E-04	6.09E-06	5.1892E-03
520099.83	4258252.38	21206.84799	0.20533	14.65645	0.21217	15.72365	4.25E-03	8.41E-06	5.24E-04	8.69E-06	5.40E-04	5.3281E-03
519904.73	4258870.3	21171.6787	0.51471	0.35488	0.55452	0.3441	4.24E-03	2.11E-05	1.27E-05	2.27E-05	1.18E-05	4.3082E-03
520679.29	4258745.53	21167.35049	0.1325	0.1099	0.12839	0.11372	4.24E-03	5.43E-06	3.93E-06	5.26E-06	3.90E-06	4.2576E-03
520656.41	4258264.93	21144.38484	0.12097	0.14563	0.11976	0.15141	4.23E-03	4.95E-06	5.21E-06	4.90E-06	5.20E-06	4.2547E-03
520667.29	4258822.08	21144.16031	0.14113	0.10449	0.13696	0.10777	4.23E-03	5.78E-06	3.74E-06	5.61E-06	3.70E-06	4.2532E-03
520047.06	4258379.95	21139.65758	0.2817	7.35746	0.29957	5.55724	4.23E-03	1.15E-05	2.63E-04	1.23E-05	1.91E-04	4.7113E-03
519905.23	4258919.72	21116.96492	0.55669	0.30497	0.60048	0.29867	4.23E-03	2.28E-05	1.09E-05	2.46E-05	1.03E-05	4.2975E-03
519910.19	4258811.13	21106.0122	0.48483	0.43419	0.52373	0.41766	4.23E-03	1.99E-05	1.55E-05	2.14E-05	1.43E-05	4.2979E-03
520638.09	4258481.82	21090.89776	0.13835	0.14258	0.13364	0.14919	4.22E-03	5.66E-06	5.10E-06	5.47E-06	5.12E-06	4.2451E-03
520677.72	4258701.39	21074.3778	0.13113	0.11497	0.12687	0.1187	4.22E-03	5.37E-06	4.11E-06	5.19E-06	4.08E-06	4.2392E-03
520158.84	4258162.57	21071.20597	0.17393	3.62043	0.1745	4.11545	4.22E-03	7.12E-06	1.29E-04	7.14E-06	1.41E-04	4.5048E-03
520095.33	4259230.66	21057.33166	11.72894	0.18105	11.2421	0.17142	4.22E-03	4.80E-04	6.48E-06	4.60E-04	5.89E-06	5.1699E-03
520129.35	4258202.47	21054.06771	0.18628	6.16192	0.18848	7.19834	4.22E-03	7.63E-06	2.20E-04	7.72E-06	2.47E-04	4.6992E-03
520657.61	4258300.24	21052.4063	0.12295	0.14289	0.12131	0.14929	4.22E-03	5.03E-06	5.11E-06	4.97E-06	5.13E-06	4.2363E-03
520612.53	4258962.89	21047.85431	0.1744	0.09802	0.16888	0.10196	4.22E-03	7.14E-06	3.51E-06	6.91E-06	3.50E-06	4.2362E-03
519940.87	4258692.19	21026.70548	0.48269	0.73699	0.53331	0.69943	4.21E-03	1.98E-05	2.64E-05	2.18E-05	2.40E-05	4.3029E-03
520624.84	4258937.78	21023.17104	0.1667	0.09861	0.16169	0.10248	4.21E-03	6.83E-06	3.53E-06	6.62E-06	3.52E-06	4.2307E-03
519907.23	4258828.09	21005.69672	0.48758	0.4077	0.52597	0.39282	4.21E-03	2.00E-05	1.46E-05	2.15E-05	1.35E-05	4.2762E-03
520678.62	4258771.08	21000.63915	0.13386	0.10734	0.12964	0.11091	4.21E-03	5.48E-06	3.84E-06	5.31E-06	3.81E-06	4.2241E-03
520670.88	4258813.49	20983.85832	0.13909	0.10465	0.13492	0.1079	4.20E-03	5.69E-06	3.74E-06	5.52E-06	3.70E-06	4.2210E-03
519931.79	4258718.53	20969.0141	0.47566	0.64186	0.52312	0.61159	4.20E-03	1.95E-05	2.30E-05	2.14E-05	2.10E-05	4.2842E-03
519923.53	4258746.84	20968.54431	0.47286	0.56176	0.51725	0.53714	4.20E-03	1.94E-05	2.01E-05	2.12E-05	1.84E-05	4.2783E-03
520109.68	4258232.41	20963.87994	0.19654	10.27337	0.20136	11.9517	4.20E-03	8.05E-06	3.67E-04	8.24E-06	4.10E-04	4.9924E-03
520656.94	4258350.21	20938.84714	0.12605	0.14094	0.12322	0.14726	4.19E-03	5.16E-06	5.04E-06	5.05E-06	5.06E-06	4.2136E-03
520653.31	4258392.43	20901.49855	0.1294	0.14064	0.12604	0.14682	4.19E-03	5.30E-06	5.03E-06	5.16E-06	5.04E-06	4.2063E-03
520641.26	4258464.26	20897.25349	0.13659	0.14207	0.13228	0.14871	4.18E-03	5.59E-06	5.08E-06	5.42E-06	5.11E-06	4.2062E-03
520009.56	4258540.87	20866.49543	0.55231	2.45583	0.63502	2.13794	4.18E-03	2.26E-05	8.78E-05	2.60E-05	7.34E-05	4.3887E-03
520674.48	4258804.9	20852.55573	0.13716	0.10488	0.13302	0.1081	4.18E-03	5.62E-06	3.75E-06	5.45E-06	3.71E-06	4.1945E-03
520655.45	4258204.44	20845.08248	0.11737	0.14816	0.11585	0.15381	4.17E-03	4.81E-06	5.30E-06	4.74E-06	5.28E-06	4.1946E-03
519947.12	4258673.87	20842.58495	0.48421	0.81349	0.53777	0.76919	4.17E-03	1.98E-05	2.91E-05	2.20E-05	2.64E-05	4.2714E-03
520149.02	4258172.53	20837.37993	0.17607	4.23751	0.17685	4.85736	4.17E-03	7.21E-06	1.52E-04	7.24E-06	1.67E-04	4.5057E-03
520656.81	4258215.03	20811.30406	0.11767	0.14736	0.11615	0.15283	4.17E-03	4.82E-06	5.27E-06	4.76E-06	5.25E-06	4.1878E-03
519904.17	4258844.83	20808.95654	0.48874	0.38316	0.52614	0.36998	4.17E-03	2.00E-05	1.37E-05	2.15E-05	1.27E-05	4.2352E-03
520063.96	4258323.03	20793.6551	0.23693	18.78887	0.25158	9.82144	4.16E-03	9.70E-06	6.72E-04	1.03E-05	3.37E-04	5.1934E-03
520045.36	4259199.92	20784.36055	5.85024	0.18034	8.03087	0.17558	4.16E-03	2.40E-04	6.45E-06	3.29E-04	6.03E-06	4.7432E-03
520029.32	4258482.6	20768.00252	0.45428	4.11072	0.49767	3.37868	4.16E-03	1.86E-05	1.47E-04	2.04E-05	1.16E-04	4.4611E-03
520622.67	4258948.69	20754.61656	0.16807	0.0977	0.16292	0.10157	4.16E-03	6.88E-06	3.49E-06	6.67E-06	3.49E-06	4.1769E-03
520682.94	4258736.81	20750.97498	0.13067	0.10973	0.12665	0.11354	4.16E-03	5.35E-06	3.92E-06	5.19E-06	3.90E-06	4.1740E-03
520658.26	4258225.67	20745.5361	0.11795	0.14641	0.11648	0.15178	4.15E-03	4.83E-06	5.24E-06	4.77E-06	5.21E-06	4.1746E-03
519901.5	4258886.61	20743.64558	0.51165	0.33448	0.55083	0.32515	4.15E-03	2.09E-05	1.20E-05	2.26E-05	1.12E-05	4.2208E-03
520198.15	4258112.69	20710.70292	0.16013	2.17684	0.16104	2.41905	4.15E-03	6.56E-06	7.79E-05	6.59E-06	8.30E-05	4.3217E-03
520682.24	4258762.43	20699.24892	0.13201	0.10727	0.12789	0.11091	4.15E-03	5.41E-06	3.84E-06	5.24E-06	3.81E-06	4.1636E-03
520656.79	4258375.69	20698.62791	0.12743	0.13995	0.12422	0.14606	4.15E-03	5.22E-06	5.01E-06	5.09E-06	5.01E-06	4.1655E-03
519999.65	4258560.31	20695.50058	0.55058	1.98023	0.63651	1.76235	4.14E-03	2.25E-05	7.08E-05	2.61E-05	6.05E-05	4.3245E-03
519901.45	4258910.62	20682.46033	0.5299	0.31075	0.57056	0.30357	4.14E-03	2.17E-05	1.11E-05	2.34E-05	1.04E-05	4.2085E-03
520638.35	4258915.13	20677.68898	0.15866	0.09872	0.15407	0.10242	4.14E-03	6.50E-06	3.53E-06	6.31E-06	3.52E-06	4.1608E-03
520085.43	4259230.68	20675.7744	15.79691	0.17873	17.66177	0.17018	4.14E-03	6.47E-04	6.39E-06	7.23E-04	5.84E-06	5.5228E-03
519989.73	4258579.74	20674.37442	0.54068	1.62784	0.62715	1.47508	4.14E-03	2.21E-05	5.82E-05	2.57E-05	5.06E-05	4.2970E-03
520188.33	4258122.66	20672.90001	0.16231	2.43701	0.16282	2.72582	4.14E-03	6.65E-06	8.72E-05	6.67E-06	9.36E-05	4.3341E-03
520641.92	4258906.59	20672.10396	0.15656	0.09908	0.15206	0.10273	4.14E-03	6.41E-06	3.54E-06	6.23E-06	3.53E-06	4.1596E-03
520678.08	4258796.31	20667.84733	0.13523	0.10498	0.13112	0.10822	4.14E-03	5.54E-06	3.75E-06	5.37E-06	3.72E-06	4.1574E-03
520055.28	4259209.9	20666.86716	8.32508	0.17911	14.36016	0.17351	4.14E-03	3.41E-04	6.41E-06	5.88E-04	5.96E-06	5.0800E-03
519979.81	4258599.18	20656.42493	0.52484	1.35722	0.60391	1.2525	4.14E-03	2.15E-05	4.85E-05	2.47E-05	4.30E-05	4.2745E-03
520645.5	4258898.06	20656.14146	0.15446	0.09944	0.15005	0.10304	4.14E-03	6.32E-06	3.56E-06	6.14E-06	3.54E-06	4.1562E-03
520660.97	4258309.06	20648.18784	0.12254	0.14075	0.1206	0.14717	4.14E-03	5.02E-06	5.03E-06	4.94E-06	5.05E-06	4.1551E-03
520649.07	4258889.52	20635.82308	0.15239	0.09981	0.14806	0.10336	4.13E-03	6.24E-06	3.57E-06	6.06E-06	3.55E-06	4.1520E-03
520047.74	4258369.68	20632.10161	0.26897	7.54648	0.28579	5.67799	4.13E-03	1.10E-05	2.70E-04	1.17E-05	1.95E-04	4.6194E-03
520119.53	4258212.44	20618.41027	0.18804	7.77724	0.19126	9.13248	4.13E-03	7.70E-06	2.78E-04	7.83E-06	3.14E-04	4.7364E-03
520652.65	4258880.99	20607.97794	0.15031	0.10018	0.14607	0.10368	4.13E-03	6.15E-06	3.58E-06	5.98E-06	3.56E-06	4.1463E-03
520661.58	4258284.79	20584.51992	0.12084	0.14186	0.11942	0.14794	4.12E-03	4.95E-06	5.07E-06	4.89E-06	5.08E-06	4.1423E-03
520178.51	4258132.63	20567.69602	0.16438	2.75241	0.16468	3.09419	4.12E-03	6.73E-06	9.84E-05	6.74E-06	1.06E-04	4.3371E-03
520656.22	4258872.46	20566.31483	0.14828	0.10047	0.14407	0.10394	4.12E-03	6.07E-06	3.59E-06	5.90E-06	3.57E-06	4.1378E-03
520054.26	4258347.01	20563.43368	0.25083	10.03674	0.26679	6.94661	4.12E-03	1.03E-05	3.59E-04	1.09E-05	2.38E-04	4.7368E-03
519911.14	4258789.3	20557.36981	0.46546	0.46481	0.50223	0.44693	4.12E-03	1.91E-05	1.66E-05	2.06E-05	1.53E-05	4.1885E-03
520660.79	4258236.77	20553.36257	0.11801	0.14477	0.11659	0.15013	4.12E-03	4.83E-06	5.18E-06	4.77E-06	5.15E-06	4.1360E-03
520139.2	4258182.5	20542.31207	0.17807	5.05349	0.17933	5.83902	4.11E-03	7.29E-06	1.81E-04	7.34E-06	2.00E-04	4.5097E-03
519901.03	4258861.38	20528.6378	0.48836	0.36049	0.52475	0.34896	4.11E-03	2.00E-05	1.29E-05	2.15E-05	1.20E-05	4.1775E-03
519969.89	4258618.62	20527.1137	0.5065	1.15231	0.57411	1.0773	4.11E-03	2.07E-05	4.12E-05	2.35E-05	3.70E-05	4.2333E-03
520659.79	4258863.92	20521.40625	0.14625	0.10076	0.14209	0.10419	4.11E-03	5.99E-06	3.60E-06	5.82E-06	3.58E-06	4.1287E-03
520032.97	4258449.47	20520.88354	0.37658	4.61742	0.40539	3.75703	4.11E-03	1.54E-05	1.65E-04	1.66E-05	1.29E-04	4.4357E-03
519901.96	4258935.97	20515.18549	0.55024	0.2883	0.59299	0.28306	4.11E-03	2.25E-05	1.03E-05	2.43E-05	9.72E-06	4.1753E-03
520681.28	4258692.9	20497.21156	0.1294	0.1147	0.1251	0.11832	4.10E-03	5.30E-06	4.10E-06	5.12E-06	4.06E-06	4.1234E-03
520095.34	4259240.66	20471.17866	11.68977	0.17698	11.17173	0.16766	4.10E-03	4.79E-04	6.33E-06	4.57E-04	5.76E-06	5.0478E-03
520663.37	4258855.39	20466.87288	0.14423	0.10117	0.14016	0.10453	4.10E-03	5.91E-06	3.62E-06	5.74E-06	3.59E-06	4.1176E-03
519957.12	4258646.05	20452.06007	0.48759	0.95035	0.54413	0.89559	4.10E-03	2.00E-05	3.40E-05	2.23E-05	3.07E-05	4.2028E-03
520662.19	4258247.38	20451.52988	0.11831	0.14362	0.11697	0.14906	4.10E-03	4.84E-06	5.14E-06	4.79E-06	5.12E-06	4.1156E-03
520681.67	4258787.72	20445.50447	0.13334	0.10498	0.12925	0.10828	4.09E-03	5.46E-06	3.75E-06	5.29E-06	3.72E-06	4.1127E-03
520660.35	4258359.17	20434.42235	0.12545	0.13905	0.12243	0.14516	4.09E-03	5.14E-06	4.97E-06	5.01E-06	4.98E-06	4.1124E-03
520621.22	4258959.3	20428.11653	0.16897	0.09671	0.16369	0.10054	4.09E-03	6.92E-06	3.46E-06	6.70E-06	3.45E-06	4.1115E-03
520684.24	4258709.77	20414.33128	0.12899	0.11225	0.12496	0.11591	4.09E-03	5.28E-06	4.02E-06	5.12E-06	3.98E-06	4.1066E-03
520168.69	4258142.6	20410.62146	0.16638	3.13997	0.16664	3.54552	4.09E-03	6.81E-06	1.12E-04	6.82E-06	1.22E-04	4.3352E-03
519914.12	4258772.38	20409.17189	0.45995	0.49531	0.49751	0.47577	4.09E-03	1.88E-05	1.77E-05	2.04E-05	1.63E-05	4.1605E-03
520666.94	4258846.85	20404.50429	0.14222	0.10154	0.13824	0.10483	4.09E-03	5.82E-06	3.63E-06	5.66E-06	3.60E-06	4.1050E-03
520685.86	4258753.78	20393.37171	0.13023	0.10727	0.12624	0.11094	4.08E-03	5.33E-06	3.84E-06	5.17E-06	3.81E-06	4.1022E-03
520633.34	4258934.27	20378.36431	0.16171	0.0973	0.15689	0.10105	4.08E-03	6.62E-06	3.48E-06	6.42E-06	3.47E-06	4.1010E-03
520099.86	4258242.38	20345.04431	0.19768	14.70342	0.20406	15.68575	4.07E-03	8.09E-06	5.26E-04	8.36E-06	5.39E-04	5.1552E-03
520670.51	4258838.32	20324.96019	0.14026	0.10185	0.13632	0.10507	4.07E-03	5.74E-06	3.64E-06	5.58E-06	3.61E-06	4.0889E-03
520663.69	4258258.03	20317.88214	0.11859	0.14235	0.11728	0.14792	4.07E-03	4.86E-06	5.09E-06	4.80E-06	5.08E-06	4.0888E-03
520686.59	4258728.1	20307.29609	0.12887	0.10963	0.12494	0.11336	4.07E-03	5.28E-06	3.92E-06	5.12E-06	3.89E-06	4.0850E-03
520644.69	4258473.28	20272.84284	0.13557	0.14025	0.13109	0.14671	4.06E-03	5.55E-06	5.02E-06	5.37E-06	5.04E-06	4.0809E-03
520656.79	4258401.56	20269.14633	0.12865	0.13867	0.1252	0.14474	4.06E-03	5.27E-06	4.96E-06	5.13E-06	4.97E-06	4.0795E-03
520045.38	4259209.92	20240.89581	5.87893	0.17626	8.07374	0.17164	4.05E-03	2.41E-04	6.30E-06	3.31E-04	5.89E-06	4.6370E-03
519934.53	4258701.03	20236.26888	0.4625	0.68657	0.50822	0.65358	4.05E-03	1.89E-05	2.46E-05	2.08E-05	2.24E-05	4.1393E-03
520664.33	4258317.88	20231.73792	0.12209	0.13872	0.11983	0.14508	4.05E-03	5.00E-06	4.96E-06	4.91E-06	4.98E-06	4.0715E-03
520674.09	4258829.78	20225.13151	0.13833	0.10209	0.13439	0.10525	4.05E-03	5.66E-06	3.65E-06	5.50E-06	3.61E-06	4.0688E-03
520158.87	4258152.57	20219.45916	0.16838	3.62397	0.16873	4.11477	4.05E-03	6.89E-06	1.30E-04	6.91E-06	1.41E-04	4.3339E-03
519897.68	4258901.52	20207.2529	0.50417	0.31645	0.54197	0.30835	4.05E-03	2.06E-05	1.13E-05	2.22E-05	1.06E-05	4.1115E-03
520665.05	4258293.92	20201.71223	0.12049	0.1396	0.1188	0.1458	4.05E-03	4.93E-06	4.99E-06	4.86E-06	5.01E-06	4.0655E-03
520129.38	4258192.47	20192.34757	0.17991	6.17362	0.18191	7.18863	4.04E-03	7.37E-06	2.21E-04	7.45E-06	2.47E-04	4.5262E-03
519897.83	4258877.77	20183.31123	0.48662	0.33987	0.52244	0.32976	4.04E-03	1.99E-05	1.22E-05	2.14E-05	1.13E-05	4.1068E-03
520685.27	4258779.13	20174.96377	0.13145	0.1049	0.12741	0.10827	4.04E-03	5.38E-06	3.75E-06	5.22E-06	3.72E-06	4.0584E-03
520647.97	4258456	20148.48562	0.13382	0.1396	0.1297	0.14606	4.04E-03	5.48E-06	4.99E-06	5.31E-06	5.01E-06	4.0558E-03
519898.22	4258926.94	20144.90772	0.52489	0.29366	0.56462	0.28764	4.03E-03	2.15E-05	1.05E-05	2.31E-05	9.87E-06	4.0993E-03
519903.47	4258819.03	20139.85292	0.46024	0.41248	0.49486	0.39744	4.03E-03	1.88E-05	1.48E-05	2.03E-05	1.36E-05	4.1008E-03
520660.23	4258384.72	20136.6087	0.12676	0.13798	0.12343	0.14396	4.03E-03	5.19E-06	4.94E-06	5.05E-06	4.94E-06	4.0528E-03
519906.4	4258801.98	20136.39137	0.45643	0.43863	0.49142	0.4222	4.03E-03	1.87E-05	1.57E-05	2.01E-05	1.45E-05	4.1016E-03
520055.71	4259219.9	20133.91703	8.47172	0.17521	14.95748	0.16973	4.03E-03	3.47E-04	6.27E-06	6.12E-04	5.83E-06	5.0035E-03
520663.98	4258342.85	20127.78447	0.1235	0.13802	0.12071	0.14418	4.03E-03	5.06E-06	4.94E-06	4.94E-06	4.95E-06	4.0507E-03
520631.41	4258945.07	20117.60027	0.16289	0.09636	0.15793	0.10011	4.03E-03	6.67E-06	3.45E-06	6.47E-06	3.44E-06	4.0488E-03
520109.71	4258222.41	20117.44065	0.18949	10.29732	0.19397	11.94461	4.03E-03	7.76E-06	3.68E-04	7.94E-06	4.10E-04	4.8229E-03
520677.66	4258821.25	20110.51796	0.13641	0.10221	0.13245	0.10533	4.03E-03	5.59E-06	3.66E-06	5.42E-06	3.62E-06	4.0457E-03
520085.44	4259240.68	20108.86279	15.71945	0.17473	17.48792	0.16646	4.03E-03	6.44E-04	6.25E-06	7.16E-04	5.71E-06	5.3987E-03
519917	4258755.21	20105.52742	0.45214	0.52833	0.49067	0.50683	4.03E-03	1.85E-05	1.89E-05	2.01E-05	1.74E-05	4.1013E-03
520048.31	4258359.46	20097.79486	0.25715	7.71063	0.27305	5.78155	4.02E-03	1.05E-05	2.76E-04	1.12E-05	1.98E-04	4.5209E-03
520064.3	4258312.91	20084.78507	0.22726	19.23788	0.24096	9.97406	4.02E-03	9.30E-06	6.88E-04	9.87E-06	3.42E-04	5.0720E-03
519925.29	4258726.96	20081.78069	0.45375	0.60104	0.4966	0.57417	4.02E-03	1.86E-05	2.15E-05	2.03E-05	1.97E-05	4.1018E-03
519900.44	4258835.85	20035.39242	0.46233	0.38824	0.49652	0.3746	4.01E-03	1.89E-05	1.39E-05	2.03E-05	1.29E-05	4.0784E-03
520019.44	4258511.74	20029.22996	0.50527	3.15246	0.56563	2.67421	4.01E-03	2.07E-05	1.13E-04	2.32E-05	9.18E-05	4.2595E-03
520689.48	4258745.13	20026.33313	0.12845	0.10726	0.12461	0.11092	4.01E-03	5.26E-06	3.84E-06	5.10E-06	3.81E-06	4.0286E-03
520149.05	4258162.53	20000.16386	0.17037	4.24204	0.17096	4.858	4.01E-03	6.98E-06	1.52E-04	7.00E-06	1.67E-04	4.3378E-03

520664.31	4258208.23	19999.23357	0.11534	0.14378	0.11374	0.14911	4.01E-03	4.72E-06	5.14E-06	4.66E-06	5.12E-06	4.0248E-03
520681.23	4258812.71	19969.67304	0.13453	0.1024	0.13058	0.10549	4.00E-03	5.51E-06	3.66E-06	5.35E-06	3.62E-06	4.0173E-03
520054.84	4258336.79	19963.55788	0.24036	10.30052	0.25539	7.09594	4.00E-03	9.84E-06	3.68E-04	1.05E-05	2.44E-04	4.6303E-03
520665.72	4258218.85	19938.13237	0.11563	0.1429	0.11405	0.14813	3.99E-03	4.73E-06	5.11E-06	4.67E-06	5.09E-06	4.0125E-03
520663.76	4258368.13	19929.14063	0.12484	0.13717	0.12166	0.1431	3.99E-03	5.11E-06	4.91E-06	4.98E-06	4.91E-06	4.0110E-03
520684.84	4258684.41	19907.5946	0.1277	0.11448	0.12338	0.11801	3.99E-03	5.23E-06	4.09E-06	5.05E-06	4.05E-06	4.0052E-03
520095.36	4259250.66	19905.24901	11.69115	0.17304	11.0871	0.16403	3.99E-03	4.79E-04	6.19E-06	4.54E-04	5.63E-06	4.9308E-03
520688.87	4258770.54	19893.29917	0.12963	0.1048	0.12567	0.10825	3.98E-03	5.31E-06	3.75E-06	5.15E-06	3.72E-06	4.0018E-03
520687.77	4258701.33	19892.43439	0.12729	0.11218	0.12329	0.1157	3.98E-03	5.21E-06	4.01E-06	5.05E-06	3.97E-06	4.0020E-03
519947.12	4258664.6	19862.53455	0.46604	0.83188	0.51656	0.78703	3.98E-03	1.91E-05	2.98E-05	2.12E-05	2.70E-05	4.0747E-03
520667.24	4258229.51	19859.70174	0.11593	0.14183	0.11439	0.14707	3.98E-03	4.75E-06	5.07E-06	4.68E-06	5.05E-06	3.9967E-03
520188.36	4258112.66	19854.56096	0.15745	2.43901	0.15771	2.72446	3.98E-03	6.45E-06	8.72E-05	6.46E-06	9.35E-05	4.1698E-03
519897.34	4258852.47	19849.95687	0.4632	0.36565	0.49644	0.35352	3.98E-03	1.90E-05	1.31E-05	2.03E-05	1.21E-05	4.0397E-03
520690.24	4258719.38	19839.74301	0.12712	0.10958	0.12327	0.1132	3.97E-03	5.20E-06	3.92E-06	5.05E-06	3.89E-06	3.9912E-03
520629.9	4258955.7	19822.08149	0.16379	0.09537	0.15868	0.09911	3.97E-03	6.71E-06	3.41E-06	6.50E-06	3.40E-06	3.9897E-03
520668.53	4258303.05	19804.98978	0.12007	0.13738	0.11808	0.14362	3.97E-03	4.92E-06	4.91E-06	4.83E-06	4.93E-06	3.9858E-03
520684.81	4258804.18	19796.43829	0.13266	0.1025	0.12873	0.1056	3.96E-03	5.43E-06	3.67E-06	5.27E-06	3.63E-06	3.9825E-03
520668.77	4258277.8	19796.2655	0.11849	0.13874	0.11699	0.14463	3.96E-03	4.85E-06	4.96E-06	4.79E-06	4.97E-06	3.9840E-03
520119.56	4258202.44	19792.77796	0.18156	7.79141	0.18451	9.1313	3.96E-03	7.43E-06	2.79E-04	7.55E-06	3.13E-04	4.5709E-03
520178.54	4258122.63	19770.45398	0.15945	2.75337	0.15947	3.09617	3.96E-03	6.53E-06	9.85E-05	6.53E-06	1.06E-04	4.1771E-03
520645.39	4258922.27	19752.40743	0.15491	0.09637	0.15038	0.09995	3.96E-03	6.34E-06	3.45E-06	6.16E-06	3.43E-06	3.9751E-03
520648.94	4258913.78	19746.26371	0.15291	0.09672	0.14849	0.10026	3.95E-03	6.26E-06	3.46E-06	6.08E-06	3.44E-06	3.9737E-03
519894.48	4258917.91	19738.25108	0.50055	0.29893	0.53727	0.2921	3.95E-03	2.05E-05	1.07E-05	2.20E-05	1.00E-05	4.0161E-03
520652.49	4258905.3	19732.55642	0.15093	0.09708	0.14661	0.10057	3.95E-03	6.18E-06	3.47E-06	6.00E-06	3.45E-06	3.9708E-03
520139.23	4258172.5	19732.20315	0.17226	5.05745	0.1733	5.84905	3.95E-03	7.05E-06	1.81E-04	7.10E-06	2.01E-04	4.3475E-03
520045.81	4259219.92	19730.08532	5.98326	0.17245	8.27515	0.16793	3.95E-03	2.45E-04	6.17E-06	3.39E-04	5.77E-06	4.5470E-03
520036.34	4258404.35	19727.09991	0.29839	5.13151	0.31683	4.15242	3.95E-03	1.22E-05	1.84E-04	1.30E-05	1.43E-04	4.3019E-03
520656.04	4258896.82	19713.73734	0.14895	0.09744	0.14472	0.10088	3.95E-03	6.10E-06	3.49E-06	5.93E-06	3.46E-06	3.9669E-03
520648.13	4258482.3	19711.298	0.13454	0.13846	0.12989	0.14472	3.95E-03	5.51E-06	4.95E-06	5.32E-06	4.97E-06	3.9682E-03
519893.91	4258892.43	19695.57417	0.47962	0.32181	0.5143	0.31289	3.94E-03	1.96E-05	1.15E-05	2.11E-05	1.07E-05	4.0073E-03
520659.59	4258888.33	19689.24808	0.14699	0.0978	0.14285	0.10119	3.94E-03	6.02E-06	3.50E-06	5.85E-06	3.47E-06	3.9619E-03
520669.52	4258240.5	19683.25469	0.11605	0.14026	0.11455	0.14559	3.94E-03	4.75E-06	5.02E-06	4.69E-06	5.00E-06	3.9613E-03
520684.89	4258674.93	19668.31814	0.12727	0.11517	0.1228	0.11872	3.94E-03	5.21E-06	4.12E-06	5.03E-06	4.08E-06	3.9573E-03
520667.37	4258351.74	19666.19584	0.12293	0.13621	0.11993	0.14216	3.94E-03	5.03E-06	4.87E-06	4.91E-06	4.88E-06	3.9581E-03
520663.15	4258879.85	19659.28056	0.14502	0.09816	0.14099	0.1015	3.94E-03	5.94E-06	3.51E-06	5.77E-06	3.48E-06	3.9557E-03
520660.26	4258410.69	19636.75726	0.12787	0.13671	0.12435	0.14269	3.93E-03	5.24E-06	4.89E-06	5.09E-06	4.90E-06	3.9526E-03
520693.1	4258736.48	19632.33065	0.1267	0.10724	0.12299	0.11084	3.93E-03	5.19E-06	3.84E-06	5.04E-06	3.81E-06	3.9495E-03
520168.72	4258132.6	19625.39065	0.16133	3.1407	0.16133	3.55034	3.93E-03	6.61E-06	1.12E-04	6.61E-06	1.22E-04	4.1777E-03
520692.46	4258761.95	19623.05703	0.12792	0.10477	0.12407	0.10827	3.93E-03	5.24E-06	3.75E-06	5.08E-06	3.72E-06	3.9476E-03
520666.7	4258871.37	19612.97495	0.14311	0.0984	0.13909	0.10171	3.93E-03	5.86E-06	3.52E-06	5.69E-06	3.49E-06	3.9463E-03
520055.72	4259229.9	19602.9869	8.55555	0.17129	15.13791	0.16599	3.93E-03	3.50E-04	6.13E-06	6.20E-04	5.70E-06	4.9077E-03
519919.76	4258737.74	19592.64565	0.44084	0.56397	0.48107	0.53973	3.92E-03	1.80E-05	2.02E-05	1.97E-05	1.85E-05	4.0001E-03
520688.38	4258795.64	19592.12583	0.13082	0.10252	0.1269	0.10565	3.92E-03	5.36E-06	3.67E-06	5.20E-06	3.63E-06	3.9414E-03
519894.16	4258868.92	19585.11416	0.46259	0.3449	0.4953	0.33414	3.92E-03	1.89E-05	1.23E-05	2.03E-05	1.15E-05	3.9852E-03
520670.25	4258862.89	19565.61031	0.1412	0.09873	0.13724	0.10199	3.92E-03	5.78E-06	3.53E-06	5.62E-06	3.50E-06	3.9367E-03
520663.67	4258393.76	19564.01361	0.12606	0.13604	0.12264	0.14192	3.92E-03	5.16E-06	4.87E-06	5.02E-06	4.87E-06	3.9379E-03
520085.46	4259250.68	19563.18816	15.66186	0.17087	17.2853	0.16287	3.92E-03	6.41E-04	6.11E-06	7.08E-04	5.59E-06	5.2785E-03
520099.89	4258232.38	19556.62523	0.19058	14.7417	0.19647	15.88256	3.92E-03	7.80E-06	5.27E-04	8.04E-06	5.45E-04	5.0049E-03
520670.97	4258251.13	19553.14054	0.11631	0.13909	0.11486	0.14453	3.92E-03	4.76E-06	4.98E-06	4.70E-06	4.96E-06	3.9352E-03
520037.55	4258393.86	19538.64378	0.28501	5.32387	0.30216	4.28954	3.91E-03	1.17E-05	1.90E-04	1.24E-05	1.47E-04	4.2746E-03
520651.36	4258464.93	19528.33809	0.13286	0.13779	0.12857	0.1441	3.91E-03	5.44E-06	4.93E-06	5.26E-06	4.95E-06	3.9314E-03
520673.8	4258854.4	19509.32005	0.13929	0.09907	0.13541	0.10227	3.91E-03	5.70E-06	3.54E-06	5.54E-06	3.51E-06	3.9253E-03
519907.47	4258780.46	19505.3606	0.43782	0.46825	0.47147	0.45066	3.91E-03	1.79E-05	1.67E-05	1.93E-05	1.55E-05	3.9757E-03
520640.15	4258941.45	19496.06371	0.15792	0.09506	0.15313	0.0987	3.90E-03	6.47E-06	3.40E-06	6.27E-06	3.39E-06	3.9239E-03
520033.64	4258415.45	19491.94429	0.31093	4.74342	0.33078	3.87537	3.90E-03	1.27E-05	1.70E-04	1.35E-05	1.33E-04	4.2325E-03
519928.13	4258709.69	19453.45345	0.44275	0.64164	0.48445	0.61235	3.90E-03	1.81E-05	2.30E-05	1.98E-05	2.10E-05	3.9778E-03
520677.35	4258845.92	19441.29684	0.13742	0.09936	0.13358	0.10249	3.89E-03	5.63E-06	3.55E-06	5.47E-06	3.52E-06	3.9116E-03
520158.9	4258142.57	19433.11661	0.16316	3.62597	0.1633	4.11823	3.89E-03	6.68E-06	1.30E-04	6.69E-06	1.41E-04	4.1762E-03
520672.21	4258286.85	19430.20256	0.11812	0.13654	0.1164	0.14255	3.89E-03	4.84E-06	4.88E-06	4.77E-06	4.89E-06	3.9105E-03
520684.94	4258665.44	19424.75725	0.12689	0.11597	0.12232	0.11957	3.89E-03	5.20E-06	4.15E-06	5.01E-06	4.10E-06	3.9085E-03
520658.19	4258431.12	19419.22395	0.12936	0.13651	0.12564	0.14263	3.89E-03	5.30E-06	4.88E-06	5.14E-06	4.90E-06	3.9092E-03
520667.17	4258377.09	19411.3212	0.1242	0.13531	0.1209	0.1411	3.89E-03	5.09E-06	4.84E-06	4.95E-06	4.84E-06	3.9071E-03
520129.41	4258182.47	19395.00844	0.17393	6.18218	0.17573	7.19121	3.88E-03	7.12E-06	2.21E-04	7.20E-06	2.47E-04	4.3664E-03
520064.6	4258302.8	19394.15944	0.21821	19.6311	0.23109	10.05715	3.88E-03	8.93E-06	7.02E-04	9.46E-06	3.45E-04	4.9498E-03
520672	4258312.17	19392.08647	0.11961	0.13532	0.11731	0.1415	3.88E-03	4.90E-06	4.84E-06	4.80E-06	4.86E-06	3.9029E-03
520691.95	4258787.11	19390.06791	0.12906	0.10254	0.12519	0.10572	3.88E-03	5.28E-06	3.67E-06	5.13E-06	3.63E-06	3.9008E-03
520055.34	4258326.6	19367.21491	0.23057	10.52954	0.24474	7.22773	3.88E-03	9.44E-06	3.77E-04	1.00E-05	2.48E-04	4.5228E-03
520671.05	4258335.53	19361.86318	0.12102	0.13516	0.11827	0.14115	3.88E-03	4.96E-06	4.83E-06	4.84E-06	4.85E-06	3.8970E-03
520680.9	4258837.44	19359.72192	0.13557	0.09961	0.13176	0.10268	3.88E-03	5.55E-06	3.56E-06	5.39E-06	3.53E-06	3.8951E-03
520095.38	4259260.66	19358.52312	11.70573	0.16925	10.99748	0.16052	3.88E-03	4.79E-04	6.05E-06	4.50E-04	5.51E-06	4.8179E-03
520691.3	4258692.9	19354.67302	0.12565	0.11199	0.12163	0.1154	3.88E-03	5.14E-06	4.01E-06	4.98E-06	3.96E-06	3.8941E-03
520693.89	4258710.67	19351.05602	0.1254	0.10958	0.12162	0.11305	3.88E-03	5.13E-06	3.92E-06	4.98E-06	3.88E-06	3.8932E-03
520109.74	4258212.41	19336.88921	0.18292	10.31592	0.18703	12.0048	3.87E-03	7.49E-06	3.69E-04	7.66E-06	4.12E-04	4.6687E-03
520009.52	4258531.17	19329.75075	0.51618	2.49318	0.58698	2.17029	3.87E-03	2.11E-05	8.92E-05	2.40E-05	7.45E-05	4.0799E-03
519957.12	4258636.77	19323.0011	0.46813	0.96858	0.52212	0.91391	3.87E-03	1.92E-05	3.46E-05	2.14E-05	3.14E-05	3.9763E-03
520696.06	4258753.36	19322.50101	0.12624	0.10479	0.12253	0.10831	3.87E-03	5.17E-06	3.75E-06	5.02E-06	3.72E-06	3.8872E-03
519890.73	4258908.88	19293.22798	0.47707	0.30406	0.51097	0.29643	3.86E-03	1.95E-05	1.09E-05	2.09E-05	1.02E-05	3.9252E-03
520684.46	4258828.95	19261.73554	0.13373	0.09984	0.12994	0.10285	3.86E-03	5.48E-06	3.57E-06	5.32E-06	3.53E-06	3.8753E-03
519937.12	4258683.15	19248.48916	0.44561	0.73301	0.49006	0.69676	3.85E-03	1.82E-05	2.62E-05	2.01E-05	2.39E-05	3.9432E-03
519910.42	4258763.46	19246.14786	0.43124	0.49829	0.46591	0.47901	3.85E-03	1.77E-05	1.78E-05	1.91E-05	1.64E-05	3.9253E-03
519899.71	4258809.97	19244.22131	0.43426	0.41646	0.4656	0.40152	3.85E-03	1.78E-05	1.49E-05	1.91E-05	1.38E-05	3.9194E-03
520038.53	4258383.47	19238.82263	0.27226	5.48569	0.28829	4.40686	3.85E-03	1.11E-05	1.96E-04	1.18E-05	1.51E-04	4.2233E-03
519896.72	4258826.87	19233.91479	0.43731	0.39258	0.46844	0.37879	3.85E-03	1.79E-05	1.40E-05	1.92E-05	1.30E-05	3.9160E-03
520638.58	4258952.11	19229.02908	0.15881	0.09413	0.15389	0.09776	3.85E-03	6.50E-06	3.37E-06	6.30E-06	3.36E-06	3.8704E-03
520045.82	4259229.92	19219.90283	6.01483	0.16865	8.32552	0.16426	3.85E-03	2.46E-04	6.03E-06	3.41E-04	5.64E-06	4.4479E-03
520149.08	4258152.53	19215.42744	0.16497	4.24599	0.1654	4.85748	3.85E-03	6.75E-06	1.52E-04	6.77E-06	1.67E-04	4.1803E-03
520696.73	4258727.83	19212.1974	0.12501	0.10715	0.12138	0.11068	3.85E-03	5.12E-06	3.83E-06	4.97E-06	3.80E-06	3.8652E-03
520670.75	4258360.62	19200.19455	0.12234	0.13442	0.11918	0.14019	3.85E-03	5.01E-06	4.81E-06	4.88E-06	4.81E-06	3.8646E-03
520673.17	4258212.02	19169.57905	0.11336	0.13953	0.1117	0.1446	3.84E-03	4.64E-06	4.99E-06	4.57E-06	4.96E-06	3.8581E-03
519969.85	4258608.92	19151.39117	0.48405	1.1755	0.54914	1.09825	3.84E-03	1.98E-05	4.20E-05	2.25E-05	3.77E-05	3.9574E-03
520685	4258655.96	19145.55574	0.12649	0.11671	0.12184	0.12039	3.83E-03	5.18E-06	4.17E-06	4.99E-06	4.13E-06	3.8526E-03
519890.13	4258883.33	19145.14707	0.45602	0.32685	0.48771	0.31722	3.83E-03	1.87E-05	1.17E-05	2.00E-05	1.09E-05	3.8953E-03
519979.77	4258589.48	19142.73486	0.49963	1.387	0.57406	1.27613	3.83E-03	2.05E-05	4.96E-05	2.35E-05	4.38E-05	3.9710E-03
519902.61	4258792.84	19141.82873	0.42954	0.44217	0.4612	0.42607	3.83E-03	1.76E-05	1.58E-05	1.89E-05	1.46E-05	3.9003E-03
520695.53	4258778.57	19141.16317	0.1273	0.10246	0.1235	0.10572	3.83E-03	5.21E-06	3.66E-06	5.06E-06	3.63E-06	3.8508E-03
520688.01	4258820.47	19134.31536	0.13191	0.1	0.12813	0.10298	3.83E-03	5.40E-06	3.58E-06	5.25E-06	3.54E-06	3.8497E-03
519893.64	4258843.56	19134.30818	0.43909	0.37023	0.46953	0.35773	3.83E-03	1.80E-05	1.32E-05	1.92E-05	1.23E-05	3.8946E-03
519999.61	4258550.61	19101.93836	0.51793	2.01437	0.59321	1.79191	3.83E-03	2.12E-05	7.21E-05	2.43E-05	6.15E-05	4.0045E-03
520055.74	4259239.9	19091.77945	8.60538	0.16754	15.38308	0.1624	3.82E-03	3.52E-04	5.99E-06	6.30E-04	5.58E-06	4.8171E-03
520674.64	4258222.66	19087.97445	0.11364	0.13856	0.11202	0.14362	3.82E-03	4.65E-06	4.96E-06	4.59E-06	4.93E-06	3.8418E-03
519989.69	4258570.05	19084.88471	0.51192	1.65962	0.58831	1.50242	3.82E-03	2.10E-05	5.94E-05	2.41E-05	5.16E-05	3.9780E-03
520675.95	4258270.8	19050.94863	0.11619	0.13568	0.11463	0.1414	3.82E-03	4.76E-06	4.85E-06	4.69E-06	4.85E-06	3.8344E-03
520675.66	4258295.9	19048.73604	0.11771	0.13437	0.11572	0.14043	3.81E-03	4.82E-06	4.81E-06	4.74E-06	4.82E-06	3.8340E-03
520019.4	4258502.04	19045.97721	0.47115	3.18109	0.52164	2.70255	3.81E-03	1.93E-05	1.14E-04	2.14E-05	9.28E-05	4.0614E-03
520085.48	4259260.68	19035.45382	15.64757	0.16714	17.07409	0.15939	3.81E-03	6.41E-04	5.98E-06	6.99E-04	5.47E-06	5.1633E-03
520026.15	4258466.06	19029.41185	0.39509	3.83016	0.42781	3.19431	3.81E-03	1.62E-05	1.37E-04	1.75E-05	1.10E-04	4.0913E-03
520663.74	4258419.81	19012.33298	0.12708	0.13473	0.12347	0.14067	3.81E-03	5.20E-06	4.82E-06	5.06E-06	4.83E-06	3.8274E-03
520119.59	4258192.44	19006.37974	0.17539	7.81034	0.17817	9.08187	3.81E-03	7.18E-06	2.79E-04	7.30E-06	3.12E-04	4.4119E-03
520178.57	4258112.63	19004.65954	0.1547	2.75524	0.15453	3.09456	3.81E-03	6.33E-06	9.86E-05	6.33E-06	1.06E-04	4.0234E-03
520676.22	4258233.35	19001.07453	0.11395	0.13731	0.11234	0.14251	3.81E-03	4.67E-06	4.91E-06	4.60E-06	4.89E-06	3.8243E-03
520691.56	4258811.99	18987.37156	0.13013	0.10014	0.12636	0.1031	3.80E-03	5.33E-06	3.58E-06	5.17E-06	3.54E-06	3.8201E-03
520667.11	4258402.8	18983.26977	0.12532	0.13415	0.12184	0.13994	3.80E-03	5.13E-06	4.80E-06	4.99E-06	4.80E-06	3.8214E-03
520029.38	4258433.94	18978.01154	0.33424	4.21109	0.35718	3.49151	3.80E-03	1.37E-05	1.51E-04	1.46E-05	1.20E-04	4.0994E-03
520699.66	4258744.77	18972.29863	0.12455	0.10481	0.12099	0.10829	3.80E-03	5.10E-06	3.75E-06	4.95E-06	3.72E-06	3.8170E-03
520654.76	4258473.85	18960.98497	0.13187	0.13605	0.12743	0.14219	3.80E-03	5.40E-06	4.87E-06	5.22E-06	4.88E-06	3.8176E-03
520139.26	4258162.5	18960.71709	0.16672	5.06368	0.16762	5.8466	3.80E-03	6.83E-06	1.81E-04	6.86E-06	2.01E-04	4.1927E-03
519890.49	4258860.07	18953.33508	0.43956	0.3495	0.46941	0.33826	3.80E-03	1.80E-05	1.25E-05	1.92E-05	1.16E-05	3.8570E-03
520045.38	4258350.68	18937.74456	0.24313	6.88366	0.25759	5.31291	3.79E-03	9.95E-06	2.46E-04	1.05E-05	1.82E-04	4.2417E-03
520674.4	4258344.35	18935.74323	0.12047	0.13343	0.11752	0.13922	3.79E-03	4.93E-06	4.77E-06	4.81E-06	4.78E-06	3.8114E-03
520652.54	4258929.11	18890.85357	0.15118	0.09415	0.14668	0.09763	3.78E-03	6.19E-06	3.37E-06	6.01E-06	3.35E-06	3.8021E-03
520670.58	4258386.05	18886.16444	0.12353	0.13347	0.12015	0.13914	3.78E-03	5.06E-06	4.77E-06	4.92E-06	4.78E-06	3.8017E-03
520656.2	4258920.38	18882.56718	0.14921	0.09448	0.14483	0.09791	3.78E-03	6.11E-06	3.38E-06	5.93E-06	3.36E-06	3.8003E-03
520699.1	4258770.04	18880.56364	0.12561	0.10238	0.12189	0.10571	3.78E-03	5.14E-06	3.66E-06	4.99E-06	3.63E-06	3.7985E-03
520168.75	4258122.6	18879.40497	0.15652	3.1416	0.15629	3.55243	3.78E-03	6.41E-06	1.12E-04	6.40E-06	1.22E-04	4.0280E-03
519947.12	4258655.32	18873.88321	0.44857	0.84872	0.49621	0.80389	3.78E-03	1.84E-05	3.04E-05	2.03E-05	2.76E-05	3.8764E-03
520659.85	4258911.66	18868.32107	0.14726	0.09483	0.14299	0.09821	3.78E-03	6.03E-06	3.39E-06	5.85E-06	3.37E-06	3.7973E-03
520039.34	4258373.15	18866.58445	0.2603	5.62352	0.27536	4.506	3.78E-03	1.07E-05	2.01E-04	1.13E-05	1.55E-04	4.1561E-03
520663.5	4258902.93	18848.38071	0.14533	0.09518	0.14115	0.09851	3.77E-03	5.95E-06	3.40E-06	5.78E-06	3.38E-06	3.7932E-03
520658.09	4258456.72	18847.87469	0.13022	0.13531	0.1261	0.14147	3.77E-03	5.33E-06	4.84E-06	5.16E-06	4.86E-06	3.7947E-03
520685.05	4258646.48	18847.50972	0.12611	0.11731	0.1214	0.12111	3.77E-03	5.16E-06	4.20E-06	4.97E-06	4.16E-06	3.7930E-03
520697.54	4258701.95	18843.71066	0.12373	0.10948	0.11997	0.11281	3.77E-03	5.07E-06	3.92E-06	4.91E-06	3.87E-06	3.7915E-03
520099.92	4258222.38	18823.11626	0.18393	14.77425	0.18935	16.12868	3.77E-03	7.53E-06	5.28E-04	7.75E-06	5.54E-04	4.8670E-03
520695.11	4258803.51	18822.46452	0.12838	0.10022	0.12463	0.10319	3.77E-03	5.26E-06	3.58E-06	5.10E-06	3.54E-06	3.7869E-03
520678.24	4258244.23	18822.1073	0.11408	0.13592	0.11251	0.14121	3.77E-03	4.67E-06	4.86E-06	4.61E-06	4.85E-06	3.7884E-03
520667.16	4258894.21	18821.67527	0.14339	0.09554	0.13932	0.09882	3.77E-03	5.87E-06	3.42E-06	5.70E-06	3.39E-06	3.7877E-03
519886.99	4258899.85	18814.42376	0.45457	0.30896	0.4857	0.30059	3.77E-03	1.86E-05	1.11E-05	1.99E-05	1.03E-05	3.8277E-03
519913.27	4258746.2	18811.91833	0.42187	0.53069	0.45807	0.50911	3.77E-03	1.73E-05	1.90E-05	1.88E-05	1.75E-05	3.8398E-03
520661.53	4258439.88	18808.76278	0.12853	0.13462	0.12467	0.14069	3.77E-03	5.26E-06	4.82E-06	5.10E-06	4.83E-06	3.7867E-03
520694.84	4258684.46	18803.57535	0.12405	0.11171	0.11999	0.11504	3.77E-03	5.08E-06	4.00E-06	4.91E-06	3.95E-06	3.7836E-03
520670.81	4258885.48	18793.27012	0.14147	0.0959	0.1375	0.09913	3.76E-03	5.79E-06	3.43E-06	5.63E-06	3.40E-06	3.7819E-03
520055.77	4258316.43	18779.4655	0.2214	10.72754	0.2348	7.3244	3.76E-03	9.07E-06	3.84E-04	9.61E-06	2.51E-04	4.4147E-03
520700.35	4258719.18	18772.0444	0.12336	0.10709	0.1198	0.11049	3.76E-03	5.05E-06	3.83E-06	4.91E-06	3.79E-06	3.7769E-03
520674.46	4258876.76	18755.45101	0.13957	0.09623	0.13568	0.09942	3.76E-03	5.71E-06	3.44E-06	5.56E-06	3.41E-06	3.7742E-03
520045.84	4259239.92	18728.14155	6.03691	0.16501	8.39069	0.16073	3.75E-03	2.47E-04	5.90E-06	3.44E-04	5.52E-06	4.3527E-03
520096.39	4259273.23	18727.14007	11.41923	0.16484	10.49985	0.15637	3.75E-03	4.68E-04	5.90E-06	4.30E-04	5.37E-06	4.6591E-03
520674.14	4258369.51	18720.35024	0.12171	0.13267	0.11845	0.13828	3.75E-03	4.98E-06	4.75E-06	4.85E-06	4.75E-06	3.7683E-03
520678.12	4258868.03	18707.94563	0.1377	0.09649	0.13385	0.09963	3.75E-03	5.64E-06	3.45E-06	5.48E-06	3.42E-06	3.7645E-03
520158.93	4258132.57	18701.84298	0.15823	3.62666	0.15817	4.12419	3.75E-03	6.48E-06	1.30E-04	6.48E-06	1.42E-04	4.0296E-03
520679.37	4258279.79	18688.06887	0.1158	0.13366	0.11407	0.13946	3.74E-03	4.74E-06	4.78E-06	4.67E-06	4.79E-06	3.7615E-03
519921.65	4258718.2	18683.61573	0.4235	0.60123	0.46175	0.57501	3.74E-03	1.73E-05	2.15E-05	1.89E-05	1.97E-05	3.8191E-03
520679.11	4258304.95	18660.145	0.11725	0.13242	0.11499	0.13843	3.74E-03	4.80E-06	4.74E-06	4.71E-06	4.75E-06	3.7559E-03
520681.77	4258859.31	18654.70531	0.13583	0.09678	0.13204	0.09987	3.74E-03	5.56E-06	3.46E-06	5.41E-06	3.43E-06	3.7537E-03
520129.44	4258172.47	18650.06812	0.16829	6.18924	0.16991	7.19675	3.73E-03	6.89E-06	2.21E-04	6.96E-06	2.47E-04	4.2172E-03
520647.27	4258948.51	18649.24994	0.15403	0.09289	0.14926	0.09641	3.73E-03	6.31E-06	3.32E-06	6.11E-06	3.31E-06	3.7538E-03
520698.66	4258795.02	18646.01942	0.12668	0.10026	0.12297	0.10327	3.73E-03	5.19E-06	3.59E-06	5.03E-06	3.55E-06	3.7515E-03
520702.67	4258761.5	18637.92262	0.12403	0.10238	0.12043	0.10574	3.73E-03	5.08E-06	3.66E-06	4.93E-06	3.63E-06	3.7498E-03
519930.83	4258692.09	18614.72996	0.4288	0.68378	0.46909	0.65189	3.73E-03	1.76E-05	2.45E-05	1.92E-05	2.24E-05	3.8115E-03
520055.76	4259249.9	18598.98899	8.67635	0.16391	15.67614	0.15893	3.72E-03	3.55E-04	5.86E-06	6.42E-04	5.46E-06	4.7331E-03
520703.25	4258736.18	18598.78408	0.12291	0.10476	0.11947	0.10818	3.72E-03	5.03E-06	3.75E-06	4.89E-06	3.71E-06	3.7420E-03
520109.77	4258202.41	18591.45668	0.17669	10.34008	0.18053	11.96041	3.72E-03	7.23E-06	3.70E-04	7.39E-06	4.11E-04	4.5183E-03
520685.42	4258850.58	18591.14138	0.13399	0.09708	0.13025	0.10011	3.72E-03	5.49E-06	3.47E-06	5.33E-06	3.44E-06	3.7409E-03
520694.89	4258674.98	18581.8938	0.12368	0.11241	0.11948	0.11577	3.72E-03	5.06E-06	4.02E-06	4.89E-06	3.97E-06	3.7392E-03
519886.36	4258874.23	18561.12347	0.43345	0.3315	0.46234	0.3213	3.72E-03	1.77E-05	1.19E-05	1.89E-05	1.10E-05	3.7767E-03
520063.3	4258293.35	18540.01116	0.20891	17.35354	0.22096	9.65838	3.71E-03	8.55E-06	6.21E-04	9.05E-06	3.32E-04	4.6828E-03
520685.1	4258637	18535.43147	0.12575	0.11782	0.12101	0.12176	3.71E-03	5.15E-06	4.21E-06	4.95E-06	4.18E-06	3.7305E-03
520689.08	4258841.86	18513.72506	0.13216	0.09736	0.12847	0.10032	3.71E-03	5.41E-06	3.48E-06	5.26E-06	3.44E-06	3.7252E-03
520677.76	4258353.17	18509.62549	0.11992	0.1317	0.11679	0.13733	3.71E-03	4.91E-06	4.71E-06	4.78E-06	4.71E-06	3.7259E-03
520149.11	4258142.53	18500.32975	0.15995	4.24595	0.16016	4.8699	3.70E-03	6.55E-06	1.52E-04	6.56E-06	1.67E-04	4.0371E-03
520046.09	4258340.4	18481.49415	0.23329	7.05446	0.2471	5.41804	3.70E-03	9.55E-06	2.52E-04	1.01E-05	1.86E-04	4.1592E-03
520658.16	4258482.77	18461.68841	0.13091	0.13427	0.12629	0.14024	3.70E-03	5.36E-06	4.80E-06	5.17E-06	4.81E-06	3.7174E-03
520702.21	4258786.54	18447.03642	0.12503	0.10025	0.12137	0.10332	3.69E-03	5.12E-06	3.59E-06	4.97E-06	3.55E-06	3.7115E-03
519903.81	4258771.61	18436.69654	0.41163	0.47101	0.44292	0.45366	3.69E-03	1.69E-05	1.68E-05	1.81E-05	1.56E-05	3.7596E-03
520086.48	4259273.24	18430.47624	15.24018	0.16285	15.97494	0.15532	3.69E-03	6.24E-04	5.82E-06	6.54E-04	5.33E-06	4.9802E-03
520692.73	4258833.13	18422.24049	0.13036	0.09761	0.1267	0.1005	3.69E-03	5.34E-06	3.49E-06	5.19E-06	3.45E-06	3.7068E-03
519892.99	4258817.88	18407.50096	0.41357	0.39612	0.44178	0.38248	3.69E-03	1.69E-05	1.42E-05	1.81E-05	1.31E-05	3.7487E-03
520670.55	4258411.84	18405.14795	0.12457	0.13226	0.12102	0.138	3.69E-03	5.10E-06	4.73E-06	4.96E-06	4.74E-06	3.7054E-03
520667.21	4258428.94	18402.51112	0.12627	0.13278	0.12255	0.13868	3.69E-03	5.17E-06	4.75E-06	5.02E-06	4.76E-06	3.7051E-03
519889.95	4258834.65	18389.39655	0.4161	0.3742	0.44409	0.36154	3.68E-03	1.70E-05	1.34E-05	1.82E-05	1.24E-05	3.7437E-03
520022.73	4258474.35	18387.60803	0.40425	3.51081	0.43921	2.95493	3.68E-03	1.66E-05	1.26E-04	1.80E-05	1.01E-04	3.9439E-03
519937.12	4258673.87	18382.58803	0.42999	0.74884	0.47202	0.7122	3.68E-03	1.76E-05	2.68E-05	1.93E-05	2.45E-05	3.7695E-03
520682.02	4258215.81	18365.75859	0.11142	0.1354	0.10973	0.14029	3.68E-03	4.56E-06	4.84E-06	4.49E-06	4.82E-06	3.6967E-03
520673.99	4258395.01	18354.20031	0.12284	0.13165	0.1194	0.13724	3.68E-03	5.03E-06	4.71E-06	4.89E-06	4.71E-06	3.6950E-03
520019.36	4258492.34	18352.72355	0.44076	3.20558	0.48362	2.7269	3.68E-03	1.80E-05	1.15E-04	1.98E-05	9.36E-05	3.9215E-03
520683.14	4258263.81	18335.50879	0.11394	0.13276	0.11232	0.13828	3.67E-03	4.67E-06	4.75E-06	4.60E-06	4.75E-06	3.6907E-03
520694.94	4258665.5	18335.13734	0.12332	0.11306	0.11899	0.11648	3.67E-03	5.05E-06	4.04E-06	4.87E-06	4.00E-06	3.6898E-03
520682.8	4258288.77	18333.25251	0.1154	0.13162	0.11344	0.13747	3.67E-03	4.72E-06	4.71E-06	4.64E-06	4.72E-06	3.6903E-03
520706.25	4258752.97	18330.24585	0.12242	0.10241	0.11897	0.10577	3.67E-03	5.01E-06	3.66E-06	4.87E-06	3.63E-06	3.6881E-03
519895.96	4258800.91	18327.15598	0.40966	0.41968	0.43823	0.40504	3.67E-03	1.68E-05	1.50E-05	1.79E-05	1.39E-05	3.7339E-03
519882.82	4258922.25	18321.9331	0.45211	0.28683	0.48247	0.28003	3.67E-03	1.85E-05	1.03E-05	1.98E-05	9.61E-06	3.7274E-03
520701.19	4258693.24	18320.81424	0.12212	0.10925	0.11833	0.11249	3.67E-03	5.00E-06	3.91E-06	4.84E-06	3.86E-06	3.6866E-03

520703.97	4258710.53	18312.5041	0.12175	0.10699	0.11822	0.11027	3.67E-03	4.98E-06	3.83E-06	4.84E-06	3.79E-06	3.6848E-03
520696.38	4258824.41	18308.82451	0.12857	0.0978	0.12494	0.10064	3.67E-03	5.26E-06	3.50E-06	5.12E-06	3.46E-06	3.6839E-03
519883.24	4258890.82	18300.221	0.43293	0.31353	0.46139	0.30452	3.66E-03	1.77E-05	1.12E-05	1.89E-05	1.05E-05	3.7232E-03
519886.82	4258851.23	18291.13112	0.41751	0.35359	0.44481	0.34206	3.66E-03	1.71E-05	1.26E-05	1.82E-05	1.17E-05	3.7227E-03
520661.45	4258465.56	18290.79808	0.1293	0.13356	0.12502	0.1396	3.66E-03	5.29E-06	4.78E-06	5.12E-06	4.79E-06	3.6830E-03
520119.62	4258182.44	18287.18717	0.16965	7.82114	0.1722	9.09417	3.66E-03	6.95E-06	2.80E-04	7.05E-06	3.12E-04	4.2682E-03
520682.55	4258314.01	18274.5752	0.11676	0.13065	0.11424	0.13654	3.66E-03	4.78E-06	4.67E-06	4.68E-06	4.69E-06	3.6786E-03
520683.55	4258226.48	18268.65798	0.1117	0.13433	0.11004	0.13929	3.66E-03	4.57E-06	4.80E-06	4.51E-06	4.78E-06	3.6772E-03
520045.86	4259249.92	18251.50847	6.08114	0.16145	8.46322	0.1573	3.66E-03	2.49E-04	5.77E-06	3.47E-04	5.40E-06	4.2618E-03
519915.99	4258728.64	18247.41579	0.41155	0.56481	0.44756	0.54114	3.65E-03	1.69E-05	2.02E-05	1.83E-05	1.86E-05	3.7282E-03
520139.29	4258152.5	18239.59569	0.1615	5.06849	0.16225	5.84583	3.65E-03	6.61E-06	1.81E-04	6.64E-06	2.01E-04	4.0480E-03
520677.52	4258378.4	18236.01905	0.12107	0.13093	0.11773	0.13641	3.65E-03	4.96E-06	4.68E-06	4.82E-06	4.68E-06	3.6712E-03
520096.4	4259283.23	18232.80974	11.41462	0.16135	10.41881	0.15315	3.65E-03	4.67E-04	5.77E-06	4.27E-04	5.26E-06	4.5563E-03
520685.16	4258627.52	18213.75445	0.1254	0.11831	0.12065	0.1224	3.65E-03	5.13E-06	4.23E-06	4.94E-06	4.20E-06	3.6661E-03
520705.77	4258778.06	18208.05134	0.12338	0.10016	0.1198	0.10331	3.65E-03	5.05E-06	3.58E-06	4.91E-06	3.55E-06	3.6635E-03
520706.85	4258727.59	18201.63895	0.12132	0.10466	0.11795	0.108	3.65E-03	4.97E-06	3.74E-06	4.83E-06	3.71E-06	3.6624E-03
520056.16	4258306.28	18200.55583	0.21281	10.90763	0.22553	7.40153	3.64E-03	8.71E-06	3.90E-04	9.23E-06	2.54E-04	4.3071E-03
520700.04	4258815.68	18171.6703	0.12682	0.09794	0.12321	0.10077	3.64E-03	5.19E-06	3.50E-06	5.04E-06	3.46E-06	3.6563E-03
520168.78	4258112.6	18161.39777	0.15187	3.14367	0.15152	3.54925	3.64E-03	6.22E-06	1.12E-04	6.20E-06	1.22E-04	3.8838E-03
519881.35	4258911.69	18152.42536	0.43945	0.29428	0.46835	0.28672	3.64E-03	1.80E-05	1.05E-05	1.92E-05	9.84E-06	3.6928E-03
520685.19	4258237.2	18149.70995	0.11195	0.13305	0.1103	0.13817	3.63E-03	4.58E-06	4.76E-06	4.52E-06	4.74E-06	3.6533E-03
519898.82	4258783.7	18131.34036	0.40417	0.44486	0.43294	0.42922	3.63E-03	1.65E-05	1.59E-05	1.77E-05	1.47E-05	3.6960E-03
520682.43	4258339.55	18126.63381	0.11794	0.13023	0.11497	0.13581	3.63E-03	4.83E-06	4.66E-06	4.71E-06	4.66E-06	3.6490E-03
520055.77	4259259.9	18121.59877	8.72331	0.16041	15.97142	0.15557	3.63E-03	3.57E-04	5.74E-06	6.54E-04	5.34E-06	4.6513E-03
520099.95	4258212.38	18119.40482	0.17763	14.81669	0.18269	16.12089	3.63E-03	7.27E-06	5.30E-04	7.48E-06	5.53E-04	4.7268E-03
520009.48	4258521.48	18100.38872	0.48322	2.52748	0.54365	2.19921	3.62E-03	1.98E-05	9.04E-05	2.23E-05	7.55E-05	3.8328E-03
520659.58	4258936.25	18083.01001	0.14759	0.09199	0.14308	0.09536	3.62E-03	6.04E-06	3.29E-06	5.86E-06	3.27E-06	3.6398E-03
519906.72	4258754.54	18080.76413	0.40429	0.50035	0.43639	0.4813	3.62E-03	1.66E-05	1.79E-05	1.79E-05	1.65E-05	3.6898E-03
520663.21	4258927.58	18074.34596	0.14573	0.09228	0.14133	0.0956	3.62E-03	5.97E-06	3.30E-06	5.79E-06	3.28E-06	3.6380E-03
520681.12	4258361.99	18067.89636	0.11932	0.13005	0.11608	0.1355	3.62E-03	4.89E-06	4.65E-06	4.75E-06	4.65E-06	3.6373E-03
520695	4258656.02	18065.29259	0.12296	0.11368	0.11855	0.1172	3.62E-03	5.03E-06	4.07E-06	4.85E-06	4.02E-06	3.6358E-03
520666.84	4258918.91	18060.15705	0.14388	0.0926	0.13959	0.09588	3.62E-03	5.89E-06	3.31E-06	5.72E-06	3.29E-06	3.6350E-03
520670.47	4258910.24	18040.97771	0.14204	0.09294	0.13786	0.09617	3.61E-03	5.82E-06	3.32E-06	5.64E-06	3.30E-06	3.6310E-03
520674.1	4258901.58	18016.93882	0.1402	0.0933	0.13614	0.09648	3.61E-03	5.74E-06	3.34E-06	5.57E-06	3.31E-06	3.6261E-03
520046.71	4258330.16	18013.50923	0.2241	7.2038	0.23726	5.52231	3.61E-03	9.18E-06	2.58E-04	9.71E-06	1.90E-04	4.0736E-03
520158.96	4258122.57	18001.69824	0.15351	3.62826	0.1533	4.12425	3.61E-03	6.29E-06	1.30E-04	6.28E-06	1.42E-04	3.8890E-03
520703.69	4258806.96	18001.19786	0.12508	0.098	0.12149	0.10084	3.60E-03	5.12E-06	3.51E-06	4.97E-06	3.46E-06	3.6220E-03
520709.82	4258744.43	17996.93449	0.12083	0.10239	0.11751	0.10571	3.60E-03	4.95E-06	3.66E-06	4.81E-06	3.63E-06	3.6212E-03
520686.54	4258272.74	17990.54502	0.11354	0.13084	0.11181	0.13643	3.60E-03	4.65E-06	4.68E-06	4.58E-06	4.68E-06	3.6214E-03
520677.73	4258892.91	17988.48878	0.13838	0.09362	0.13441	0.09676	3.60E-03	5.67E-06	3.35E-06	5.50E-06	3.32E-06	3.6203E-03
519924.46	4258700.84	17976.87101	0.41223	0.6395	0.44876	0.61134	3.60E-03	1.69E-05	2.29E-05	1.84E-05	2.10E-05	3.6792E-03
520686.22	4258297.76	17969.87416	0.11497	0.12959	0.11274	0.13543	3.60E-03	4.71E-06	4.64E-06	4.62E-06	4.65E-06	3.6173E-03
520709.32	4258769.57	17957.17477	0.12179	0.10008	0.11831	0.10328	3.60E-03	4.99E-06	3.58E-06	4.84E-06	3.55E-06	3.6131E-03
520681.36	4258884.24	17955.36247	0.13657	0.09397	0.1327	0.09706	3.60E-03	5.59E-06	3.36E-06	5.43E-06	3.33E-06	3.6135E-03
520086.5	4259283.24	17953.57969	15.16056	0.15944	15.78644	0.15213	3.60E-03	6.21E-04	5.70E-06	6.46E-04	5.22E-06	4.8735E-03
520129.47	4258162.47	17948.73231	0.16296	6.19612	0.16441	7.19761	3.59E-03	6.67E-06	2.22E-04	6.73E-06	2.47E-04	4.0766E-03
519882.59	4258865.13	17944.82181	0.41184	0.33565	0.43813	0.32509	3.59E-03	1.69E-05	1.20E-05	1.79E-05	1.12E-05	3.6517E-03
520063.64	4258283.22	17942.73312	0.20113	17.72943	0.2125	9.76668	3.59E-03	8.24E-06	6.34E-04	8.70E-06	3.35E-04	4.5797E-03
520684.98	4258875.57	17918.26517	0.13477	0.09431	0.131	0.09735	3.59E-03	5.52E-06	3.37E-06	5.36E-06	3.34E-06	3.6060E-03
519947.12	4258646.05	17890.38505	0.432	0.86409	0.4772	0.81973	3.58E-03	1.77E-05	3.09E-05	1.95E-05	2.81E-05	3.6791E-03
520685.21	4258618.03	17890.24322	0.12505	0.11883	0.12035	0.12304	3.58E-03	5.12E-06	4.25E-06	4.93E-06	4.22E-06	3.6013E-03
520109.8	4258192.41	17877.88222	0.17076	10.36886	0.17441	11.80161	3.58E-03	6.99E-06	3.71E-04	7.14E-06	4.05E-04	4.3705E-03
520688.61	4258866.9	17871.31867	0.13299	0.09461	0.12929	0.0976	3.58E-03	5.45E-06	3.38E-06	5.29E-06	3.35E-06	3.5964E-03
520707.59	4258701.88	17836.46907	0.12019	0.10682	0.11665	0.10999	3.57E-03	4.92E-06	3.82E-06	4.78E-06	3.78E-06	3.5893E-03
520707.34	4258798.23	17834.99668	0.12343	0.09804	0.11987	0.10092	3.57E-03	5.05E-06	3.51E-06	4.91E-06	3.46E-06	3.5886E-03
520673.99	4258420.88	17834.33812	0.12381	0.13039	0.12017	0.13609	3.57E-03	5.07E-06	4.66E-06	4.92E-06	4.67E-06	3.5909E-03
519969.81	4258599.22	17828.75657	0.46285	1.19921	0.52534	1.11813	3.57E-03	1.90E-05	4.29E-05	2.15E-05	3.84E-05	3.6922E-03
519959.89	4258618.66	17827.56056	0.44784	1.03195	0.5018	0.97281	3.57E-03	1.83E-05	3.69E-05	2.05E-05	3.34E-05	3.6794E-03
520677.4	4258403.97	17819.45754	0.12213	0.12984	0.11863	0.13537	3.57E-03	5.00E-06	4.64E-06	4.86E-06	4.65E-06	3.5877E-03
520692.24	4258858.23	17816.50809	0.13124	0.09485	0.12759	0.09779	3.57E-03	5.37E-06	3.39E-06	5.22E-06	3.36E-06	3.5853E-03
520149.14	4258132.54	17811.78251	0.15512	4.24828	0.1552	4.87086	3.57E-03	6.35E-06	1.52E-04	6.35E-06	1.67E-04	3.8989E-03
520670.69	4258438.06	17809.35232	0.12542	0.1309	0.12159	0.13676	3.57E-03	5.14E-06	4.68E-06	4.98E-06	4.70E-06	3.5861E-03
520045.87	4259259.92	17789.34351	6.10454	0.15803	8.54294	0.15401	3.56E-03	2.50E-04	5.65E-06	3.50E-04	5.29E-06	4.1732E-03
520704.84	4258684.52	17786.05247	0.12055	0.10896	0.11671	0.11213	3.56E-03	4.94E-06	3.90E-06	4.78E-06	3.85E-06	3.5794E-03
520710.45	4258719	17785.26879	0.11977	0.10455	0.11644	0.10779	3.56E-03	4.90E-06	3.74E-06	4.77E-06	3.70E-06	3.5789E-03
520664.82	4258474.39	17784.06255	0.12836	0.13188	0.12393	0.13776	3.56E-03	5.26E-06	4.72E-06	5.07E-06	4.73E-06	3.5813E-03
520695.05	4258646.54	17778.76221	0.12261	0.11423	0.11814	0.11787	3.56E-03	5.02E-06	4.09E-06	4.84E-06	4.05E-06	3.5784E-03
520096.42	4259293.23	17763.42573	11.36135	0.15802	10.33526	0.15005	3.56E-03	4.65E-04	5.65E-06	4.23E-04	5.15E-06	4.4565E-03
519879.5	4258881.79	17755.69846	0.41219	0.31775	0.43819	0.30825	3.56E-03	1.69E-05	1.14E-05	1.79E-05	1.06E-05	3.6126E-03
520695.87	4258849.56	17750.9293	0.1295	0.09511	0.12589	0.09797	3.55E-03	5.30E-06	3.40E-06	5.15E-06	3.36E-06	3.5721E-03
520680.9	4258387.29	17749.21511	0.12042	0.12918	0.11702	0.13457	3.55E-03	4.93E-06	4.62E-06	4.79E-06	4.62E-06	3.5735E-03
519979.73	4258579.79	17736.69483	0.47589	1.41467	0.54363	1.29929	3.55E-03	1.95E-05	5.06E-05	2.23E-05	4.46E-05	3.6890E-03
519999.56	4258540.91	17727.7182	0.48745	2.04543	0.55332	1.819	3.55E-03	2.00E-05	7.32E-05	2.27E-05	6.24E-05	3.7284E-03
520685.9	4258348.68	17713.60129	0.11737	0.12854	0.11424	0.13394	3.55E-03	4.81E-06	4.60E-06	4.68E-06	4.60E-06	3.5661E-03
520712.87	4258761.09	17707.9625	0.12028	0.10006	0.11691	0.10329	3.55E-03	4.92E-06	3.58E-06	4.79E-06	3.55E-06	3.5631E-03
520027.45	4258408.01	17705.42129	0.28722	4.03022	0.30444	3.3828	3.55E-03	1.18E-05	1.44E-04	1.25E-05	1.16E-04	3.8303E-03
520668.2	4258457.4	17679.32654	0.12679	0.13109	0.12266	0.13701	3.54E-03	5.19E-06	4.69E-06	5.02E-06	4.70E-06	3.5601E-03
520699.5	4258840.9	17672.41842	0.12778	0.09536	0.12421	0.09816	3.54E-03	5.23E-06	3.41E-06	5.09E-06	3.37E-06	3.5562E-03
520028.87	4258397.44	17668.7709	0.27495	4.18292	0.29081	3.50053	3.54E-03	1.13E-05	1.50E-04	1.19E-05	1.20E-04	3.8314E-03
520690.33	4258256.83	17662.0149	0.11175	0.12991	0.11009	0.13525	3.54E-03	4.58E-06	4.65E-06	4.51E-06	4.64E-06	3.5554E-03
520689.94	4258281.66	17652.43328	0.11315	0.12893	0.11122	0.13458	3.54E-03	4.63E-06	4.61E-06	4.55E-06	4.62E-06	3.5536E-03
519989.65	4258560.35	17651.45848	0.48451	1.68792	0.55185	1.52776	3.53E-03	1.98E-05	6.04E-05	2.26E-05	5.24E-05	3.6902E-03
520022.69	4258450.19	17647.77569	0.34893	3.5502	0.37448	3.00497	3.53E-03	1.43E-05	1.27E-04	1.53E-05	1.03E-04	3.7940E-03
520713.39	4258735.9	17639.92041	0.11931	0.10226	0.11606	0.10553	3.53E-03	4.89E-06	3.66E-06	4.75E-06	3.62E-06	3.5496E-03
520711	4258789.51	17636.92227	0.12179	0.09801	0.11829	0.10096	3.53E-03	4.99E-06	3.51E-06	4.84E-06	3.47E-06	3.5488E-03
519886.25	4258825.74	17623.44082	0.3943	0.3774	0.41984	0.36489	3.53E-03	1.61E-05	1.35E-05	1.72E-05	1.25E-05	3.5887E-03
520684.48	4258370.81	17620.12075	0.1187	0.1284	0.11539	0.1337	3.53E-03	4.86E-06	4.59E-06	4.72E-06	4.59E-06	3.5474E-03
520119.65	4258172.44	17611.90221	0.16422	7.83074	0.16657	9.10763	3.53E-03	6.72E-06	2.80E-04	6.82E-06	3.13E-04	4.1333E-03
520689.64	4258306.74	17609.06478	0.1145	0.12778	0.11201	0.13353	3.53E-03	4.69E-06	4.57E-06	4.59E-06	4.58E-06	3.5449E-03
519883.15	4258842.38	17599.20413	0.39638	0.35718	0.42156	0.34554	3.52E-03	1.62E-05	1.28E-05	1.73E-05	1.19E-05	3.5826E-03
520690.88	4258219.6	17585.31389	0.10953	0.13137	0.10781	0.13614	3.52E-03	4.48E-06	4.70E-06	4.41E-06	4.67E-06	3.5400E-03
520703.13	4258832.23	17579.04295	0.12607	0.09557	0.12254	0.09832	3.52E-03	5.16E-06	3.42E-06	5.02E-06	3.38E-06	3.5374E-03
520139.32	4258142.5	17575.16661	0.1566	5.06941	0.15719	5.85904	3.52E-03	6.41E-06	1.81E-04	6.44E-06	2.01E-04	3.9150E-03
520704.89	4258675.04	17570.38647	0.12022	0.10962	0.11624	0.11281	3.52E-03	4.92E-06	3.92E-06	4.76E-06	3.87E-06	3.5362E-03
520685.26	4258608.55	17569.97017	0.12473	0.11933	0.12007	0.12363	3.52E-03	5.11E-06	4.27E-06	4.92E-06	4.24E-06	3.5372E-03
519909.53	4258737.19	17567.6603	0.39478	0.53164	0.42761	0.51047	3.52E-03	1.62E-05	1.90E-05	1.75E-05	1.75E-05	3.5884E-03
519889.27	4258808.9	17559.69366	0.39102	0.39902	0.41686	0.38567	3.52E-03	1.60E-05	1.43E-05	1.71E-05	1.32E-05	3.5772E-03
520047.25	4258319.95	17540.46536	0.21548	7.33462	0.22802	5.61451	3.51E-03	8.82E-06	2.62E-04	9.34E-06	1.93E-04	3.9860E-03
520030	4258386.98	17525.84029	0.26322	4.3102	0.27791	3.59891	3.51E-03	1.08E-05	1.54E-04	1.14E-05	1.24E-04	3.8097E-03
519937.12	4258664.6	17504.2284	0.41479	0.76352	0.45474	0.72676	3.51E-03	1.70E-05	2.73E-05	1.86E-05	2.50E-05	3.5933E-03
520086.52	4259293.24	17494.4617	15.07173	0.15614	15.59979	0.14906	3.50E-03	6.17E-04	5.58E-06	6.39E-04	5.12E-06	4.7700E-03
520695.1	4258637.05	17478.89696	0.12228	0.11474	0.11778	0.11851	3.50E-03	5.01E-06	4.10E-06	4.82E-06	4.07E-06	3.5184E-03
520692.47	4258230.3	17478.47282	0.1098	0.13019	0.10809	0.13511	3.50E-03	4.50E-06	4.66E-06	4.43E-06	4.64E-06	3.5185E-03
520706.76	4258823.56	17468.53018	0.12441	0.09576	0.1209	0.09847	3.50E-03	5.09E-06	3.43E-06	4.95E-06	3.38E-06	3.5152E-03
520099.98	4258202.38	17452.47096	0.17168	14.86159	0.17643	15.99199	3.50E-03	7.03E-06	5.32E-04	7.22E-06	5.49E-04	4.5899E-03
520051.83	4259272.06	17443.63894	7.50513	0.15542	12.08496	0.15108	3.49E-03	3.07E-04	5.56E-06	4.95E-04	5.19E-06	4.3062E-03
520036.49	4258354.35	17418.44102	0.23555	5.15313	0.24839	4.20998	3.49E-03	9.64E-06	1.84E-04	1.02E-05	1.45E-04	3.8369E-03
520714.65	4258780.78	17417.60487	0.12019	0.09795	0.11677	0.10096	3.49E-03	4.92E-06	3.50E-06	4.78E-06	3.47E-06	3.5048E-03
520716.42	4258752.61	17410.00689	0.11876	0.10007	0.11553	0.10329	3.49E-03	4.86E-06	3.58E-06	4.73E-06	3.55E-06	3.5033E-03
519892.2	4258791.85	17393.01381	0.38637	0.42216	0.41254	0.40792	3.48E-03	1.58E-05	1.51E-05	1.69E-05	1.40E-05	3.5450E-03
520054.41	4258297.01	17383.71009	0.20354	9.92769	0.21547	6.99899	3.48E-03	8.33E-06	3.55E-04	8.82E-06	2.40E-04	4.0939E-03
519900.14	4258762.77	17373.18774	0.38723	0.47281	0.41598	0.45583	3.48E-03	1.59E-05	1.69E-05	1.70E-05	1.56E-05	3.5447E-03
520063.95	4258273.1	17362.33975	0.19382	18.06496	0.20457	9.84206	3.48E-03	7.94E-06	6.46E-04	8.38E-06	3.38E-04	4.4774E-03
520714.04	4258710.4	17352.6035	0.11827	0.10441	0.11494	0.10753	3.48E-03	4.84E-06	3.73E-06	4.71E-06	3.69E-06	3.4921E-03
520711.21	4258693.23	17347.04686	0.11868	0.10659	0.11509	0.10967	3.47E-03	4.86E-06	3.81E-06	4.71E-06	3.77E-06	3.4911E-03
520710.39	4258814.89	17338.86817	0.12277	0.09588	0.11929	0.09858	3.47E-03	5.03E-06	3.43E-06	4.88E-06	3.38E-06	3.4891E-03
520159	4258112.57	17337.11544	0.14901	3.62941	0.14869	4.12012	3.47E-03	6.10E-06	1.30E-04	6.09E-06	1.41E-04	3.7554E-03
520693.71	4258265.69	17336.98739	0.11137	0.12806	0.10961	0.13347	3.47E-03	4.56E-06	4.58E-06	4.49E-06	4.58E-06	3.4902E-03
519918.02	4258709.44	17335.57702	0.39584	0.59975	0.42946	0.57453	3.47E-03	1.62E-05	2.15E-05	1.76E-05	1.97E-05	3.5467E-03
519874.04	4258918.7	17332.56187	0.41594	0.28323	0.44189	0.27603	3.47E-03	1.70E-05	1.01E-05	1.81E-05	9.48E-06	3.5258E-03
520704.94	4258665.56	17331.23255	0.1199	0.11018	0.11579	0.11345	3.47E-03	4.91E-06	3.94E-06	4.74E-06	3.89E-06	3.4883E-03
520668.18	4258483.23	17327.22142	0.12743	0.1302	0.12285	0.13591	3.47E-03	5.22E-06	4.66E-06	5.03E-06	4.67E-06	3.4896E-03
520693.33	4258290.58	17319.09193	0.11275	0.12695	0.11057	0.13262	3.47E-03	4.62E-06	4.54E-06	4.53E-06	4.55E-06	3.4866E-03
519878.81	4258856.03	17298.15331	0.39113	0.33927	0.4151	0.32855	3.46E-03	1.60E-05	1.21E-05	1.70E-05	1.13E-05	3.5206E-03
520689.38	4258357.8	17292.47879	0.11678	0.12687	0.11353	0.13211	3.46E-03	4.78E-06	4.54E-06	4.65E-06	4.54E-06	3.4816E-03
520129.5	4258152.47	17291.22682	0.15791	6.20159	0.15923	7.20094	3.46E-03	6.47E-06	2.22E-04	6.52E-06	2.47E-04	3.9448E-03
520030.94	4258376.61	17288.1181	0.25209	4.41898	0.26579	3.68365	3.46E-03	1.03E-05	1.58E-04	1.09E-05	1.26E-04	3.7679E-03
520680.82	4258412.93	17285.09424	0.1214	0.12805	0.11784	0.13354	3.46E-03	4.97E-06	4.58E-06	4.82E-06	4.58E-06	3.4805E-03
520677.44	4258429.92	17269.2358	0.123	0.1286	0.11928	0.13426	3.46E-03	5.04E-06	4.60E-06	4.88E-06	4.61E-06	3.4775E-03
520716.97	4258727.36	17263.68346	0.11781	0.10216	0.11462	0.10534	3.46E-03	4.82E-06	3.65E-06	4.69E-06	3.62E-06	3.4741E-03
520684.29	4258396.18	17259.49001	0.11976	0.12742	0.11629	0.13276	3.46E-03	4.90E-06	4.56E-06	4.76E-06	4.56E-06	3.4752E-03
520685.32	4258599.07	17257.36996	0.12441	0.1198	0.11981	0.12417	3.46E-03	5.09E-06	4.29E-06	4.91E-06	4.26E-06	3.4746E-03
520693.06	4258315.73	17251.83448	0.114	0.12632	0.11129	0.1319	3.45E-03	4.67E-06	4.52E-06	4.56E-06	4.53E-06	3.4732E-03
520109.83	4258182.41	17225.52692	0.16523	10.38729	0.16864	11.79446	3.45E-03	6.77E-06	3.72E-04	6.90E-06	4.05E-04	4.2398E-03
520714.02	4258806.22	17183.41816	0.12115	0.09593	0.11771	0.09865	3.44E-03	4.96E-06	3.43E-06	4.82E-06	3.39E-06	3.4578E-03
519875.75	4258872.76	17180.76239	0.39225	0.32153	0.41601	0.3117	3.44E-03	1.61E-05	1.15E-05	1.70E-05	1.07E-05	3.4960E-03
520718.3	4258772.05	17176.27324	0.11864	0.09786	0.11531	0.10093	3.44E-03	4.86E-06	3.50E-06	4.72E-06	3.47E-06	3.4563E-03
520671.53	4258466.16	17174.11015	0.1259	0.12942	0.12163	0.13521	3.44E-03	5.15E-06	4.63E-06	4.98E-06	4.64E-06	3.4588E-03
520687.84	4258379.63	17173.25566	0.11809	0.12672	0.11471	0.13193	3.44E-03	4.84E-06	4.53E-06	4.70E-06	4.53E-06	3.4578E-03
520695.16	4258627.57	17170.58791	0.12195	0.1152	0.11745	0.11911	3.44E-03	4.99E-06	4.12E-06	4.81E-06	4.09E-06	3.4567E-03
520092.31	4259304.47	17150.56632	12.72305	0.15367	11.94546	0.14631	3.43E-03	5.21E-04	5.50E-06	4.89E-04	5.02E-06	4.4552E-03
520149.18	4258122.54	17150.441	0.15048	4.25158	0.1505	4.86062	3.43E-03	6.16E-06	1.52E-04	6.16E-06	1.67E-04	3.7659E-03
520009.44	4258511.78	17145.172	0.45302	2.55742	0.50431	2.22523	3.43E-03	1.85E-05	9.15E-05	2.06E-05	7.64E-05	3.6406E-03
520041.93	4259272.07	17133.49297	5.38645	0.15319	7.24762	0.14956	3.43E-03	2.21E-04	5.48E-06	2.97E-04	5.13E-06	3.9591E-03
519872.52	4258908.12	17128.07961	0.40401	0.29013	0.4286	0.28229	3.43E-03	1.65E-05	1.04E-05	1.75E-05	9.69E-06	3.4843E-03
519895.03	4258774.56	17108.32386	0.38019	0.44694	0.40671	0.43166	3.43E-03	1.56E-05	1.60E-05	1.67E-05	1.48E-05	3.4892E-03
520692.89	4258341.17	17100.934	0.1151	0.12598	0.11202	0.13125	3.42E-03	4.71E-06	4.51E-06	4.59E-06	4.51E-06	3.4430E-03
520719.97	4258744.13	17091.6466	0.11726	0.10002	0.11416	0.1032	3.42E-03	4.80E-06	3.58E-06	4.67E-06	3.54E-06	3.4394E-03
520037.34	4258344.01	17089.44427	0.22637	5.27908	0.23866	4.30336	3.42E-03	9.27E-06	1.89E-04	9.77E-06	1.48E-04	3.7780E-03
520705	4258656.07	17071.27907	0.11957	0.11077	0.11538	0.11413	3.42E-03	4.90E-06	3.96E-06	4.72E-06	3.92E-06	3.4363E-03
519927.12	4258683.15	17068.96143	0.39817	0.67877	0.43376	0.64827	3.42E-03	1.63E-05	2.43E-05	1.78E-05	2.23E-05	3.4989E-03
520022.36	4258426.74	17047.55935	0.30586	3.55203	0.32553	3.02045	3.41E-03	1.25E-05	1.27E-04	1.33E-05	1.04E-04	3.6706E-03
520031.72	4258366.3	17024.91962	0.24172	4.51135	0.25458	3.75647	3.41E-03	9.90E-06	1.61E-04	1.04E-05	1.29E-04	3.7201E-03
520697.08	4258274.56	17021.83588	0.111	0.12618	0.10907	0.13166	3.41E-03	4.54E-06	4.51E-06	4.47E-06	4.52E-06	3.4269E-03
520019.35	4258458.31	17021.41641	0.35631	3.27749	0.38324	2.79822	3.41E-03	1.46E-05	1.17E-04	1.57E-05	9.61E-05	3.6523E-03
520697.65	4258250.16	17017.45636	0.10962	0.12704	0.1079	0.13221	3.41E-03	4.49E-06	4.54E-06	4.42E-06	4.54E-06	3.4260E-03
520051.84	4259282.06	17012.88221	7.39373	0.15229	12.24817	0.14806	3.41E-03	3.03E-04	5.45E-06	5.01E-04	5.08E-06	4.2218E-03
520717.65	4258797.55	17004.91021	0.11957	0.09591	0.11617	0.09869	3.41E-03	4.90E-06	3.43E-06	4.76E-06	3.39E-06	3.4219E-03
520696.73	4258299.51	16980.94778	0.11231	0.12517	0.10987	0.13077	3.40E-03	4.60E-06	4.48E-06	4.50E-06	4.49E-06	3.4187E-03
520119.68	4258162.44	16976.85398	0.1591	7.83906	0.16126	9.12156	3.40E-03	6.51E-06	2.80E-04	6.60E-06	3.13E-04	4.0065E-03
520685.37	4258589.59	16959.71285	0.12411	0.12031	0.11955	0.12471	3.40E-03	5.08E-06	4.30E-06	4.89E-06	4.28E-06	3.4150E-03
520139.36	4258132.5	16937.35661	0.1519	5.07212	0.15239	5.8555	3.39E-03	6.22E-06	1.81E-04	6.24E-06	2.01E-04	3.7868E-03
519912.21	4258719.55	16934.00077	0.38445	0.56413	0.41643	0.54118	3.39E-03	1.57E-05	2.02E-05	1.71E-05	1.86E-05	3.4628E-03
519903.02	4258745.61	16925.35106	0.37912	0.50146	0.40873	0.48263	3.39E-03	1.55E-05	1.79E-05	1.67E-05	1.66E-05	3.4563E-03
520721.96	4258763.33	16924.35815	0.11713	0.09779	0.11392	0.1009	3.39E-03	4.80E-06	3.50E-06	4.66E-06	3.46E-06	3.4058E-03
519947.12	4258636.77	16918.08316	0.41632	0.87852	0.45981	0.83464	3.39E-03	1.70E-05	3.14E-05	1.88E-05	2.87E-05	3.4840E-03
520717.64	4258701.81	16904.83475	0.1168	0.10423	0.11344	0.10724	3.39E-03	4.78E-06	3.73E-06	4.64E-06	3.68E-06	3.4023E-03
519879.49	4258833.54	16887.54596	0.37629	0.36014	0.39954	0.3486	3.38E-03	1.54E-05	1.29E-05	1.64E-05	1.20E-05	3.4386E-03
520054.86	4258286.84	16881.04395	0.1962	10.10755	0.20752	7.11162	3.38E-03	8.03E-06	3.62E-04	8.50E-06	2.44E-04	4.0029E-03
519870.89	4258897.5	16875.83215	0.3917	0.29694	0.41494	0.28852	3.38E-03	1.60E-05	1.06E-05	1.70E-05	9.91E-06	3.4332E-03
520720.54	4258718.83	16871.11411	0.11635	0.10201	0.11318	0.1051	3.38E-03	4.76E-06	3.65E-06	4.63E-06	3.61E-06	3.3953E-03
520082.41	4259304.48	16869.75814	15.83084	0.15168	19.20433	0.14522	3.38E-03	6.48E-04	5.43E-06	7.86E-04	4.99E-06	4.8233E-03
520695.21	4258618.09	16861.14067	0.12164	0.11564	0.11717	0.11969	3.38E-03	4.98E-06	4.14E-06	4.80E-06	4.11E-06	3.3947E-03
520692.85	4258366.93	16860.25631	0.11616	0.12524	0.11285	0.13033	3.38E-03	4.76E-06	4.48E-06	4.62E-06	4.47E-06	3.3948E-03
520714.83	4258684.58	16847.08807	0.1172	0.1063	0.11357	0.10931	3.37E-03	4.80E-06	3.80E-06	4.65E-06	3.75E-06	3.3909E-03
519882.56	4258816.83	16839.44921	0.37359	0.38001	0.39704	0.36779	3.37E-03	1.53E-05	1.36E-05	1.63E-05	1.26E-05	3.4301E-03
520699.74	4258223.39	16833.98056	0.10767	0.12747	0.10593	0.13217	3.37E-03	4.41E-06	4.56E-06	4.34E-06	4.54E-06	3.3891E-03
520721.28	4258788.88	16814.47575	0.11804	0.09587	0.11471	0.09871	3.37E-03	4.83E-06	3.43E-06	4.70E-06	3.39E-06	3.3837E-03
520100.01	4258192.38	16810.26871	0.16601	14.90134	0.17054	15.57916	3.37E-03	6.80E-06	5.33E-04	6.98E-06	5.35E-04	4.4481E-03
520064.23	4258263	16802.94892	0.18695	18.34822	0.19714	9.89889	3.37E-03	7.65E-06	6.56E-04	8.07E-06	3.40E-04	4.3769E-03
520705.05	4258646.59	16795.88171	0.11925	0.1113	0.11501	0.11479	3.36E-03	4.88E-06	3.98E-06	4.71E-06	3.94E-06	3.3811E-03
520687.67	4258405.06	16765.40987	0.11907	0.12569	0.11556	0.131	3.36E-03	4.88E-06	4.50E-06	4.73E-06	4.50E-06	3.3761E-03
520684.23	4258421.89	16757.49961	0.12064	0.1263	0.11702	0.13177	3.36E-03	4.94E-06	4.52E-06	4.79E-06	4.52E-06	3.3747E-03
520723.52	4258735.64	16752.31763	0.11582	0.0999	0.11278	0.10302	3.35E-03	4.74E-06	3.57E-06	4.62E-06	3.54E-06	3.3714E-03
520038.08	4258333.72	16735.63655	0.2177	5.39226	0.22954	4.38017	3.35E-03	8.91E-06	1.93E-04	9.40E-06	1.50E-04	3.7131E-03
520680.88	4258438.96	16726.96032	0.12217	0.12685	0.11836	0.13246	3.35E-03	5.00E-06	4.54E-06	4.85E-06	4.55E-06	3.3687E-03
520691.2	4258388.46	16721.8921	0.11746	0.12502	0.11402	0.13019	3.35E-03	4.81E-06	4.47E-06	4.67E-06	4.47E-06	3.3672E-03
520041.94	4259282.07	16718.47338	5.34692	0.15014	7.31716	0.1466	3.35E-03	2.19E-04	5.37E-06	3.00E-04	5.03E-06	3.8770E-03
520696.34	4258350.22	16712.24245	0.11453	0.1244	0.11133	0.12949	3.35E-03	4.69E-06	4.45E-06	4.56E-06	4.45E-06	3.3650E-03
520674.87	4258474.92	16710.70554	0.12499	0.12785	0.1206	0.13349	3.35E-03	5.12E-06	4.57E-06	4.94E-06	4.58E-06	3.3658E-03

520677.64	4258456.32	16710.68648	0.12366	0.12739	0.11958	0.13308	3.35E-03	5.06E-06	4.56E-06	4.90E-06	4.57E-06	3.3656E-03
520092.32	4259314.47	16706.97309	12.82561	0.15053	11.83066	0.1434	3.35E-03	5.25E-04	5.38E-06	4.84E-04	4.92E-06	4.3656E-03
520700.46	4258283.43	16702.51377	0.11059	0.12442	0.10846	0.12992	3.34E-03	4.53E-06	4.45E-06	4.44E-06	4.46E-06	3.3628E-03
520701.12	4258259.29	16699.33494	0.10925	0.12521	0.10744	0.13046	3.34E-03	4.47E-06	4.48E-06	4.40E-06	4.48E-06	3.3621E-03
519885.54	4258799.92	16694.82215	0.36958	0.40131	0.39347	0.38831	3.34E-03	1.51E-05	1.44E-05	1.61E-05	1.33E-05	3.4023E-03
520685.42	4258580.11	16680.68189	0.12382	0.12082	0.11928	0.12522	3.34E-03	5.07E-06	4.32E-06	4.88E-06	4.30E-06	3.3591E-03
520129.54	4258142.47	16673.09348	0.15314	6.2048	0.15432	7.20189	3.34E-03	6.27E-06	2.22E-04	6.32E-06	2.47E-04	3.8208E-03
519959.85	4258608.96	16664.70385	0.42975	1.05064	0.48197	0.98977	3.34E-03	1.76E-05	3.76E-05	1.97E-05	3.40E-05	3.4462E-03
520700.13	4258308.43	16646.94528	0.11183	0.12367	0.10917	0.12913	3.33E-03	4.58E-06	4.42E-06	4.47E-06	4.43E-06	3.3517E-03
520714.89	4258675.09	16636.29603	0.1169	0.10689	0.11313	0.10994	3.33E-03	4.79E-06	3.82E-06	4.63E-06	3.77E-06	3.3487E-03
520725.61	4258754.6	16635.16912	0.11564	0.09777	0.11257	0.10087	3.33E-03	4.73E-06	3.50E-06	4.61E-06	3.46E-06	3.3477E-03
519937.12	4258655.32	16628.65181	0.40029	0.77694	0.43836	0.7405	3.33E-03	1.64E-05	2.78E-05	1.79E-05	2.54E-05	3.4177E-03
519875.04	4258846.93	16625.47711	0.37132	0.34244	0.39345	0.33171	3.33E-03	1.52E-05	1.22E-05	1.61E-05	1.14E-05	3.3844E-03
520109.86	4258172.41	16614.49276	0.16002	10.40377	0.1632	11.81847	3.33E-03	6.55E-06	3.72E-04	6.68E-06	4.06E-04	4.1184E-03
520724.91	4258780.21	16596.98357	0.11653	0.09578	0.11329	0.09869	3.32E-03	4.77E-06	3.43E-06	4.64E-06	3.39E-06	3.3400E-03
520051.86	4259292.06	16595.42506	7.30459	0.14925	12.41777	0.14512	3.32E-03	2.99E-04	5.34E-06	5.08E-04	4.98E-06	4.1413E-03
519872.01	4258863.73	16580.74354	0.3732	0.32483	0.39496	0.31488	3.32E-03	1.53E-05	1.16E-05	1.62E-05	1.08E-05	3.3744E-03
519969.77	4258589.53	16571.40155	0.4426	1.2229	0.50181	1.13712	3.32E-03	1.81E-05	4.37E-05	2.05E-05	3.90E-05	3.4401E-03
519999.52	4258531.21	16559.24122	0.45924	2.07456	0.51681	1.84421	3.32E-03	1.88E-05	7.42E-05	2.12E-05	6.33E-05	3.4937E-03
520695.26	4258608.61	16555.11295	0.12135	0.1161	0.11691	0.12023	3.32E-03	4.97E-06	4.15E-06	4.79E-06	4.13E-06	3.3334E-03
519920.79	4258692	16552.30571	0.38406	0.63573	0.41656	0.60863	3.31E-03	1.57E-05	2.27E-05	1.71E-05	2.09E-05	3.3912E-03
520149.21	4258112.54	16537.47067	0.14611	4.25292	0.14604	4.85883	3.31E-03	5.98E-06	1.52E-04	5.98E-06	1.67E-04	3.6427E-03
520705.1	4258637.11	16508.32819	0.11894	0.11176	0.11467	0.11538	3.31E-03	4.87E-06	4.00E-06	4.70E-06	3.96E-06	3.3235E-03
519868.5	4258886.57	16496.72798	0.37675	0.30316	0.39842	0.29428	3.30E-03	1.54E-05	1.08E-05	1.63E-05	1.01E-05	3.3564E-03
520724.11	4258710.29	16463.22722	0.11493	0.10186	0.11176	0.10484	3.30E-03	4.71E-06	3.64E-06	4.58E-06	3.60E-06	3.3135E-03
519888.44	4258782.79	16450.99941	0.3644	0.42394	0.38846	0.41013	3.29E-03	1.49E-05	1.52E-05	1.59E-05	1.41E-05	3.3546E-03
520721.24	4258693.22	16445.12209	0.11537	0.10399	0.11197	0.10692	3.29E-03	4.72E-06	3.72E-06	4.58E-06	3.67E-06	3.3101E-03
519979.69	4258570.09	16444.64425	0.45294	1.43973	0.51339	1.32095	3.29E-03	1.85E-05	5.15E-05	2.10E-05	4.53E-05	3.4297E-03
520082.42	4259314.48	16444.11344	15.90091	0.14861	18.91807	0.14235	3.29E-03	6.51E-04	5.32E-06	7.75E-04	4.89E-06	4.7290E-03
520696.33	4258376.05	16428.13875	0.11554	0.12356	0.11217	0.12858	3.29E-03	4.73E-06	4.42E-06	4.59E-06	4.41E-06	3.3081E-03
520685.48	4258570.63	16423.66438	0.12356	0.12118	0.11899	0.12561	3.29E-03	5.06E-06	4.33E-06	4.87E-06	4.31E-06	3.3076E-03
520009.4	4258502.08	16422.74489	0.42546	2.58246	0.4689	2.24849	3.29E-03	1.74E-05	9.24E-05	1.92E-05	7.72E-05	3.4951E-03
520704.83	4258243.18	16418.40152	0.10758	0.1243	0.10579	0.12931	3.29E-03	4.40E-06	4.45E-06	4.33E-06	4.44E-06	3.3056E-03
520714.94	4258665.61	16405.32534	0.1166	0.10746	0.11272	0.11058	3.29E-03	4.77E-06	3.84E-06	4.62E-06	3.80E-06	3.3024E-03
520727.08	4258727.16	16395.32902	0.11441	0.09979	0.11142	0.10283	3.28E-03	4.68E-06	3.57E-06	4.56E-06	3.53E-06	3.2997E-03
519989.61	4258550.65	16394.64822	0.45857	1.71424	0.51831	1.55112	3.28E-03	1.88E-05	6.13E-05	2.12E-05	5.33E-05	3.4378E-03
520055.27	4258276.69	16388.0124	0.18927	10.27597	0.20006	7.19542	3.28E-03	7.75E-06	3.68E-04	8.19E-06	2.47E-04	3.9124E-03
520703.84	4258292.29	16385.68651	0.11017	0.12269	0.1078	0.12815	3.28E-03	4.51E-06	4.39E-06	4.41E-06	4.40E-06	3.2992E-03
520704.6	4258268.42	16385.0199	0.10885	0.12339	0.10691	0.12871	3.28E-03	4.46E-06	4.41E-06	4.38E-06	4.42E-06	3.2990E-03
519865.27	4258915.14	16378.19053	0.38344	0.2793	0.4056	0.27184	3.28E-03	1.57E-05	9.99E-06	1.66E-05	9.33E-06	3.3316E-03
520119.72	4258152.44	16376.82808	0.15423	7.84537	0.15623	9.12063	3.28E-03	6.31E-06	2.81E-04	6.40E-06	3.13E-04	3.8861E-03
520038.72	4258323.47	16364.16915	0.20958	5.48863	0.22093	4.45692	3.28E-03	8.58E-06	1.96E-04	9.05E-06	1.53E-04	3.6441E-03
520728.54	4258771.55	16353.09758	0.11505	0.09566	0.11191	0.09863	3.27E-03	4.71E-06	3.42E-06	4.58E-06	3.39E-06	3.2910E-03
519905.8	4258728.19	16352.48618	0.36972	0.53141	0.3993	0.51071	3.27E-03	1.51E-05	1.90E-05	1.63E-05	1.75E-05	3.3428E-03
520139.39	4258122.5	16331.21059	0.14742	5.07602	0.14784	5.84708	3.27E-03	6.04E-06	1.82E-04	6.05E-06	2.01E-04	3.6649E-03
519896.47	4258753.92	16325.19281	0.36457	0.47363	0.39049	0.45716	3.27E-03	1.49E-05	1.69E-05	1.60E-05	1.57E-05	3.3329E-03
520729.26	4258745.88	16324.87562	0.11418	0.09772	0.11123	0.10078	3.27E-03	4.67E-06	3.50E-06	4.55E-06	3.46E-06	3.2855E-03
520699.79	4258359.27	16318.79892	0.11395	0.12282	0.11067	0.12777	3.27E-03	4.67E-06	4.39E-06	4.53E-06	4.39E-06	3.2860E-03
520041.96	4259292.07	16314.972	5.32238	0.14715	7.38698	0.14369	3.27E-03	2.18E-04	5.26E-06	3.02E-04	4.93E-06	3.7979E-03
520703.53	4258317.35	16314.50015	0.11132	0.12227	0.10847	0.12756	3.27E-03	4.56E-06	4.37E-06	4.44E-06	4.38E-06	3.2850E-03
519927.12	4258673.87	16292.10239	0.38505	0.69152	0.41874	0.66105	3.26E-03	1.58E-05	2.47E-05	1.71E-05	2.27E-05	3.3431E-03
520678.21	4258483.68	16291.78551	0.12408	0.12636	0.11958	0.13182	3.26E-03	5.08E-06	4.52E-06	4.90E-06	4.53E-06	3.2817E-03
520064.49	4258252.91	16282.52963	0.18054	18.60954	0.19014	10.03676	3.26E-03	7.39E-06	6.66E-04	7.79E-06	3.45E-04	4.2862E-03
520045.53	4258300.68	16280.5128	0.19815	6.84725	0.20938	5.33975	3.26E-03	8.11E-06	2.45E-04	8.57E-06	1.83E-04	3.7053E-03
520092.34	4259324.47	16276.83213	12.95923	0.14748	11.70976	0.14057	3.26E-03	5.31E-04	5.28E-06	4.79E-04	4.83E-06	4.2798E-03
520691.06	4258413.95	16269.12062	0.11835	0.12401	0.1148	0.12929	3.26E-03	4.85E-06	4.44E-06	4.70E-06	4.44E-06	3.2765E-03
520694.56	4258397.28	16260.7368	0.1168	0.12339	0.11333	0.1285	3.26E-03	4.78E-06	4.41E-06	4.64E-06	4.41E-06	3.2747E-03
520695.32	4258599.13	16257.05741	0.12105	0.11657	0.11667	0.12076	3.26E-03	4.96E-06	4.17E-06	4.78E-06	4.15E-06	3.2737E-03
520687.64	4258430.85	16241.9711	0.11986	0.12459	0.11617	0.13003	3.25E-03	4.91E-06	4.46E-06	4.76E-06	4.46E-06	3.2713E-03
520100.05	4258182.38	16221.96072	0.16072	14.92564	0.16498	15.50809	3.25E-03	6.58E-06	5.34E-04	6.75E-06	5.32E-04	4.3283E-03
520681.11	4258465.44	16218.48367	0.12276	0.12574	0.11855	0.13131	3.25E-03	5.03E-06	4.50E-06	4.85E-06	4.51E-06	3.2669E-03
520705.16	4258627.63	16213.19634	0.11865	0.11219	0.11438	0.11595	3.25E-03	4.86E-06	4.01E-06	4.68E-06	3.98E-06	3.2644E-03
520685.53	4258561.14	16193.83258	0.1233	0.12158	0.11869	0.12602	3.24E-03	5.05E-06	4.35E-06	4.86E-06	4.33E-06	3.2616E-03
519866.94	4258875.98	16178.80738	0.36493	0.30971	0.38546	0.30049	3.24E-03	1.49E-05	1.11E-05	1.58E-05	1.03E-05	3.2921E-03
519875.82	4258824.69	16161.58274	0.35726	0.36243	0.37853	0.35122	3.24E-03	1.46E-05	1.30E-05	1.55E-05	1.21E-05	3.2917E-03
520703.32	4258342.69	16160.78692	0.11236	0.12194	0.1092	0.12692	3.24E-03	4.60E-06	4.36E-06	4.47E-06	4.36E-06	3.2542E-03
520715	4258656.13	16154.67269	0.1163	0.10799	0.11234	0.11121	3.24E-03	4.76E-06	3.86E-06	4.60E-06	3.82E-06	3.2522E-03
519863.68	4258904.54	16141.51843	0.37215	0.28558	0.39307	0.27763	3.23E-03	1.52E-05	1.02E-05	1.61E-05	9.53E-06	3.2836E-03
520052.7	4259304.53	16116.6157	7.50665	0.1457	13.47389	0.14166	3.23E-03	3.07E-04	5.21E-06	5.52E-04	4.86E-06	4.0967E-03
520708.29	4258252.24	16116.42076	0.1072	0.12258	0.10537	0.12767	3.23E-03	4.39E-06	4.38E-06	4.31E-06	4.38E-06	3.2450E-03
520732.17	4258762.88	16105.73713	0.11363	0.09558	0.1106	0.09857	3.23E-03	4.65E-06	3.42E-06	4.53E-06	3.38E-06	3.2414E-03
520129.57	4258132.47	16092.25774	0.14862	6.20763	0.14967	7.21008	3.22E-03	6.09E-06	2.22E-04	6.13E-06	2.48E-04	3.7045E-03
519891.24	4258765.42	16086.67476	0.35767	0.4483	0.38214	0.43332	3.22E-03	1.46E-05	1.60E-05	1.56E-05	1.49E-05	3.2828E-03
520708.07	4258277.54	16076.39943	0.10845	0.12162	0.10631	0.12697	3.22E-03	4.44E-06	4.35E-06	4.35E-06	4.36E-06	3.2370E-03
520707.21	4258301.16	16073.37917	0.10972	0.12112	0.10712	0.12648	3.22E-03	4.49E-06	4.33E-06	4.39E-06	4.34E-06	3.2365E-03
520109.9	4258162.41	16042.15075	0.15511	10.41422	0.15806	11.86834	3.21E-03	6.35E-06	3.73E-04	6.47E-06	4.07E-04	4.0054E-03
520727.69	4258701.76	16041.50044	0.11354	0.10165	0.11034	0.10454	3.21E-03	4.65E-06	3.64E-06	4.52E-06	3.59E-06	3.2289E-03
519878.86	4258807.91	16037.97881	0.35385	0.3821	0.37562	0.37021	3.21E-03	1.45E-05	1.37E-05	1.54E-05	1.27E-05	3.2681E-03
520082.44	4259324.48	16034.1997	15.91924	0.14565	18.63394	0.13957	3.21E-03	6.52E-04	5.21E-06	7.63E-04	4.79E-06	4.6358E-03
519914.39	4258700.67	16033.29726	0.37022	0.59668	0.39979	0.5726	3.21E-03	1.52E-05	2.13E-05	1.64E-05	1.97E-05	3.2834E-03
520730.63	4258718.68	16023.80271	0.11304	0.09965	0.11006	0.10258	3.21E-03	4.63E-06	3.56E-06	4.51E-06	3.52E-06	3.2252E-03
520027.61	4258358.01	16006.97461	0.2282	4.05937	0.23976	3.43629	3.21E-03	9.34E-06	1.45E-04	9.82E-06	1.18E-04	3.4879E-03
520732.92	4258737.15	15994.72809	0.11277	0.09761	0.10988	0.10061	3.20E-03	4.62E-06	3.49E-06	4.50E-06	3.45E-06	3.2192E-03
520685.58	4258551.66	15993.18904	0.12305	0.12188	0.11839	0.12637	3.20E-03	5.04E-06	4.36E-06	4.85E-06	4.34E-06	3.2214E-03
520699.8	4258385.18	15991.63159	0.11491	0.12188	0.11149	0.12684	3.20E-03	4.70E-06	4.36E-06	4.56E-06	4.35E-06	3.2205E-03
520020.18	4258401.03	15986.17555	0.26529	3.39902	0.2803	2.92213	3.20E-03	1.09E-05	1.22E-04	1.15E-05	1.00E-04	3.4457E-03
520039.28	4258313.25	15982.96698	0.20192	5.5738	0.21284	4.52268	3.20E-03	8.27E-06	1.99E-04	8.71E-06	1.55E-04	3.5724E-03
520680.86	4258510.71	15977.06868	0.12373	0.12466	0.11898	0.1297	3.20E-03	5.07E-06	4.46E-06	4.87E-06	4.45E-06	3.2185E-03
520724.83	4258684.63	15976.98525	0.11397	0.10371	0.11053	0.10659	3.20E-03	4.67E-06	3.71E-06	4.53E-06	3.66E-06	3.2162E-03
520695.37	4258589.65	15974.32189	0.12077	0.11705	0.11643	0.12127	3.20E-03	4.94E-06	4.19E-06	4.77E-06	4.16E-06	3.2171E-03
520021.48	4258390.5	15959.73454	0.25451	3.50495	0.26837	3.00751	3.20E-03	1.04E-05	1.25E-04	1.10E-05	1.03E-04	3.4462E-03
519868.26	4258854.71	15954.96669	0.35492	0.32767	0.37502	0.31773	3.20E-03	1.45E-05	1.17E-05	1.54E-05	1.09E-05	3.2477E-03
520012.66	4258474.56	15943.87679	0.3708	2.81823	0.40094	2.43911	3.19E-03	1.52E-05	1.01E-04	1.64E-05	8.37E-05	3.4091E-03
519871.27	4258837.83	15933.10801	0.35247	0.34501	0.37293	0.33446	3.19E-03	1.44E-05	1.23E-05	1.53E-05	1.15E-05	3.2443E-03
520681.2	4258501.58	15928.68257	0.12344	0.12473	0.11876	0.12989	3.19E-03	5.05E-06	4.46E-06	4.86E-06	4.46E-06	3.2088E-03
520009.36	4258492.38	15920.10755	0.40069	2.60367	0.43773	2.2687	3.19E-03	1.64E-05	9.31E-05	1.79E-05	7.79E-05	3.3936E-03
520703.23	4258368.33	15919.55494	0.11336	0.12124	0.11002	0.12609	3.19E-03	4.64E-06	4.34E-06	4.50E-06	4.33E-06	3.2059E-03
520705.21	4258618.15	15917.20986	0.11837	0.1126	0.11412	0.11648	3.19E-03	4.85E-06	4.03E-06	4.67E-06	4.00E-06	3.2052E-03
520681.54	4258492.44	15916.95774	0.12316	0.12493	0.1186	0.13019	3.19E-03	5.04E-06	4.47E-06	4.86E-06	4.47E-06	3.2064E-03
520055.63	4258266.55	15908.04325	0.18274	10.42051	0.19302	7.27358	3.19E-03	7.48E-06	3.73E-04	7.90E-06	2.50E-04	3.8236E-03
520015.77	4258442.74	15899.95718	0.31785	3.05378	0.33934	2.63912	3.18E-03	1.30E-05	1.09E-04	1.39E-05	9.06E-05	3.4109E-03
520715.05	4258646.65	15890.04704	0.11601	0.10847	0.112	0.11181	3.18E-03	4.75E-06	3.88E-06	4.59E-06	3.84E-06	3.1993E-03
520092.36	4259334.47	15870.98586	12.9653	0.14457	11.59682	0.13786	3.18E-03	5.31E-04	5.17E-06	4.75E-04	4.73E-06	4.1940E-03
520046.09	4258290.46	15866.78021	0.19123	6.96703	0.20198	5.43134	3.18E-03	7.83E-06	2.49E-04	8.27E-06	1.86E-04	3.6293E-03
519861.99	4258893.9	15860.51045	0.36058	0.29172	0.38032	0.28337	3.18E-03	1.48E-05	1.04E-05	1.56E-05	9.73E-06	3.2268E-03
520022.54	4258380.08	15856.19319	0.24427	3.59457	0.25711	3.08006	3.18E-03	1.00E-05	1.29E-04	1.05E-05	1.06E-04	3.4303E-03
520042.8	4259304.55	15852.07143	5.44814	0.14368	7.74943	0.14029	3.17E-03	2.23E-04	5.14E-06	3.17E-04	4.82E-06	3.7249E-03
520712.03	4258236.19	15848.33141	0.10558	0.12173	0.10374	0.12656	3.17E-03	4.32E-06	4.35E-06	4.25E-06	4.34E-06	3.1911E-03
520735.8	4258754.21	15832.49589	0.11224	0.09551	0.10932	0.09849	3.17E-03	4.60E-06	3.42E-06	4.48E-06	3.38E-06	3.1865E-03
519881.82	4258790.94	15825.93432	0.34941	0.40296	0.37145	0.39036	3.17E-03	1.43E-05	1.44E-05	1.52E-05	1.34E-05	3.2267E-03
520685.64	4258542.18	15823.70812	0.12281	0.12219	0.11812	0.12674	3.17E-03	5.03E-06	4.37E-06	4.84E-06	4.35E-06	3.1875E-03
520711.74	4258261.3	15820.43565	0.10683	0.12077	0.10488	0.12595	3.17E-03	4.37E-06	4.32E-06	4.29E-06	4.32E-06	3.1856E-03
520119.75	4258142.44	15816.31654	0.14965	7.84944	0.15148	9.15061	3.17E-03	6.13E-06	2.81E-04	6.20E-06	3.14E-04	3.7747E-03
519899.32	4258736.69	15799.36067	0.35593	0.50149	0.38285	0.483	3.16E-03	1.46E-05	1.79E-05	1.57E-05	1.66E-05	3.2288E-03
520697.92	4258406.1	15797.72005	0.11611	0.12178	0.11263	0.12686	3.16E-03	4.75E-06	4.36E-06	4.61E-06	4.36E-06	3.1818E-03
520028.6	4258347.62	15788.40846	0.21963	4.15991	0.23065	3.51465	3.16E-03	8.99E-06	1.49E-04	9.44E-06	1.21E-04	3.4497E-03
520694.44	4258422.84	15780.54074	0.11761	0.12237	0.11401	0.12762	3.16E-03	4.82E-06	4.38E-06	4.67E-06	4.38E-06	3.1785E-03
520724.89	4258675.15	15772.31763	0.1137	0.10426	0.11013	0.10718	3.16E-03	4.66E-06	3.73E-06	4.51E-06	3.68E-06	3.1752E-03
520684.58	4258474.57	15769.82912	0.12183	0.12422	0.11753	0.12963	3.16E-03	4.99E-06	4.44E-06	4.81E-06	4.45E-06	3.1768E-03
520711.54	4258286.67	15769.63206	0.10801	0.12	0.10567	0.1253	3.16E-03	4.42E-06	4.29E-06	4.33E-06	4.30E-06	3.1754E-03
520139.42	4258112.5	15767.30283	0.1432	5.07727	0.14353	5.84917	3.16E-03	5.86E-06	1.82E-04	5.88E-06	2.01E-04	3.5518E-03
519937.12	4258646.05	15766.53398	0.38661	0.78932	0.42324	0.75345	3.16E-03	1.58E-05	2.82E-05	1.73E-05	2.59E-05	3.2447E-03
520710.59	4258310.02	15762.68806	0.10925	0.11969	0.10644	0.12489	3.16E-03	4.47E-06	4.28E-06	4.36E-06	4.29E-06	3.1741E-03
520691.05	4258439.81	15743.21699	0.11906	0.12296	0.11528	0.12836	3.15E-03	4.87E-06	4.40E-06	4.72E-06	4.41E-06	3.1712E-03
520052.72	4259314.53	15729.71568	7.49717	0.14282	13.7302	0.1389	3.15E-03	3.07E-04	5.11E-06	5.62E-04	4.77E-06	4.0291E-03
520687.76	4258457.04	15725.34115	0.12047	0.12357	0.11644	0.12903	3.15E-03	4.93E-06	4.42E-06	4.77E-06	4.43E-06	3.1678E-03
520695.42	4258580.16	15708.02879	0.12049	0.11758	0.11618	0.12179	3.15E-03	4.93E-06	4.21E-06	4.76E-06	4.18E-06	3.1638E-03
520685.69	4258532.7	15688.62408	0.12259	0.12249	0.11788	0.12713	3.14E-03	5.02E-06	4.38E-06	4.83E-06	4.36E-06	3.1605E-03
520100.08	4258172.38	15675.462	0.15576	14.96626	0.15973	15.6528	3.14E-03	6.38E-06	5.35E-04	6.54E-06	5.37E-04	4.2248E-03
519908.44	4258710.45	15673.58459	0.35967	0.5619	0.38766	0.53997	3.14E-03	1.47E-05	2.01E-05	1.59E-05	1.85E-05	3.2081E-03
520063.45	4258243.35	15667.68562	0.17396	16.89893	0.18306	9.64845	3.14E-03	7.12E-06	6.04E-04	7.50E-06	3.31E-04	4.0880E-03
520736.57	4258728.43	15648.81295	0.11137	0.09755	0.10856	0.10045	3.13E-03	4.56E-06	3.49E-06	4.44E-06	3.45E-06	3.1498E-03
520082.46	4259334.48	15642.35225	15.82203	0.1428	18.37836	0.1369	3.13E-03	6.48E-04	5.11E-06	7.52E-04	4.70E-06	4.5427E-03
520734.18	4258710.19	15638.52723	0.11169	0.09952	0.10872	0.10234	3.13E-03	4.57E-06	3.56E-06	4.45E-06	3.51E-06	3.1479E-03
519999.48	4258521.52	15627.62468	0.43308	2.10159	0.4833	1.86737	3.13E-03	1.77E-05	7.52E-05	1.98E-05	6.41E-05	3.3064E-03
520705.26	4258608.67	15624.9238	0.1181	0.11301	0.11389	0.11698	3.13E-03	4.84E-06	4.04E-06	4.66E-06	4.02E-06	3.1467E-03
519949.89	4258618.7	15622.58145	0.40001	0.93111	0.44393	0.88381	3.13E-03	1.64E-05	3.33E-05	1.82E-05	3.03E-05	3.2268E-03
520715.1	4258637.17	15614.47807	0.11574	0.10887	0.11169	0.11235	3.13E-03	4.74E-06	3.89E-06	4.57E-06	3.86E-06	3.1441E-03
520731.26	4258693.22	15610.11702	0.11218	0.10147	0.10896	0.10427	3.13E-03	4.59E-06	3.63E-06	4.46E-06	3.58E-06	3.1424E-03
520685.75	4258523.22	15586.73664	0.12238	0.12268	0.11767	0.12744	3.12E-03	5.01E-06	4.39E-06	4.82E-06	4.38E-06	3.1400E-03
520715.45	4258245.19	15562.19976	0.10521	0.1201	0.10336	0.12501	3.12E-03	4.31E-06	4.30E-06	4.23E-06	4.29E-06	3.1337E-03
519959.81	4258599.26	15555.50399	0.41254	1.06971	0.46281	1.00599	3.12E-03	1.69E-05	3.83E-05	1.89E-05	3.45E-05	3.2238E-03
520724.94	4258665.67	15548.99997	0.11343	0.10481	0.10976	0.1078	3.11E-03	4.64E-06	3.75E-06	4.49E-06	3.70E-06	3.1305E-03
520129.6	4258122.47	15546.10156	0.14433	6.2087	0.14526	7.22412	3.11E-03	5.91E-06	2.22E-04	5.95E-06	2.48E-04	3.5953E-03
520703.28	4258394.31	15544.68814	0.11424	0.12024	0.11081	0.12516	3.11E-03	4.68E-06	4.30E-06	4.54E-06	4.30E-06	3.1308E-03
520739.43	4258745.54	15535.96152	0.11087	0.09545	0.10806	0.09839	3.11E-03	4.54E-06	3.41E-06	4.42E-06	3.38E-06	3.1270E-03
520029.45	4258337.28	15532.31925	0.21151	4.24793	0.22205	3.58367	3.11E-03	8.66E-06	1.52E-04	9.09E-06	1.23E-04	3.4033E-03
520715.19	4258270.36	15526.97125	0.10644	0.11905	0.10432	0.12427	3.11E-03	4.36E-06	4.26E-06	4.27E-06	4.27E-06	3.1266E-03
519927.12	4258664.6	15514.54089	0.3724	0.70324	0.40449	0.67309	3.11E-03	1.52E-05	2.52E-05	1.66E-05	2.31E-05	3.1871E-03
520706.68	4258377.38	15512.3567	0.11274	0.11967	0.10938	0.12445	3.11E-03	4.62E-06	4.28E-06	4.48E-06	4.27E-06	3.1242E-03
519884.69	4258773.74	15508.41777	0.3437	0.42524	0.366	0.41172	3.11E-03	1.41E-05	1.52E-05	1.50E-05	1.41E-05	3.1642E-03
520109.93	4258152.41	15500.57112	0.15045	10.42545	0.15319	11.92105	3.10E-03	6.16E-06	3.73E-04	6.27E-06	4.09E-04	3.8988E-03
519859.86	4258883.07	15495.66851	0.34768	0.29742	0.36623	0.2888	3.10E-03	1.42E-05	1.06E-05	1.50E-05	9.91E-06	3.1530E-03
520042.82	4259314.55	15477.2618	5.45125	0.14087	7.83104	0.13757	3.10E-03	2.23E-04	5.04E-06	3.21E-04	4.72E-06	3.6531E-03
520695.48	4258570.68	15467.73416	0.12026	0.11794	0.11591	0.12217	3.10E-03	4.92E-06	4.22E-06	4.75E-06	4.19E-06	3.1157E-03
520715.02	4258295.79	15466.10442	0.10757	0.11838	0.10499	0.1236	3.10E-03	4.40E-06	4.23E-06	4.30E-06	4.24E-06	3.1145E-03
520092.79	4259345.29	15461.40228	12.73861	0.14161	11.30437	0.13508	3.10E-03	5.22E-04	5.07E-06	4.63E-04	4.64E-06	4.0905E-03
519856.49	4258911.59	15458.08704	0.35415	0.2749	0.373	0.26738	3.10E-03	1.45E-05	9.83E-06	1.53E-05	9.18E-06	3.1445E-03
520055.96	4258256.43	15453.08673	0.17661	10.54756	0.18638	7.3588	3.09E-03	7.23E-06	3.77E-04	7.63E-06	2.53E-04	3.7395E-03
520046.58	4258280.27	15453.08023	0.18466	7.07317	0.19499	5.5055	3.09E-03	7.56E-06	2.53E-04	7.98E-06	1.89E-04	3.5522E-03
520713.96	4258318.89	15449.59271	0.10873	0.11843	0.10578	0.12343	3.09E-03	4.45E-06	4.24E-06	4.33E-06	4.24E-06	3.1112E-03
519872.15	4258815.84	15418.53852	0.33906	0.36432	0.35887	0.35343	3.09E-03	1.39E-05	1.30E-05	1.47E-05	1.21E-05	3.1415E-03
519969.73	4258579.83	15415.52802	0.42341	1.24492	0.47763	1.15578	3.09E-03	1.73E-05	4.45E-05	1.96E-05	3.97E-05	3.2083E-03
520014.92	4258420.56	15366.58308	0.28202	3.02335	0.29909	2.62484	3.08E-03	1.15E-05	1.08E-04	1.22E-05	9.01E-05	3.2994E-03
520688.06	4258483.69	15364.31329	0.12089	0.12283	0.11652	0.12805	3.08E-03	4.95E-06	4.39E-06	4.77E-06	4.40E-06	3.0954E-03
520052.74	4259324.53	15355.93396	7.50525	0.14004	13.98496	0.13623	3.08E-03	3.07E-04	5.01E-06	5.73E-04	4.68E-06	3.9648E-03
520701.28	4258414.92	15341.2015	0.11542	0.12014	0.1119	0.12522	3.07E-03	4.73E-06	4.30E-06	4.58E-06	4.30E-06	3.0902E-03
520705.32	4258599.18	15341.04234	0.11783	0.11345	0.11366	0.11748	3.07E-03	4.82E-06	4.06E-06	4.65E-06	4.03E-06	3.0898E-03
520715.16	4258627.69	15331.91973	0.11547	0.10927	0.11143	0.11289	3.07E-03	4.73E-06	3.91E-06	4.56E-06	3.88E-06	3.0875E-03
519989.56	4258540.95	15313.79697	0.43445	1.73883	0.4876	1.57246	3.07E-03	1.78E-05	6.22E-05	2.00E-05	5.40E-05	3.2207E-03
519864.52	4258845.68	15310.2832	0.33748	0.33003	0.3562	0.32025	3.07E-03	1.38E-05	1.18E-05	1.46E-05	1.10E-05	3.1173E-03
520725	4258656.19	15307.8122	0.11315	0.10531	0.10941	0.1084	3.07E-03	4.63E-06	3.77E-06	4.48E-06	3.72E-06	3.0822E-03
520697.82	4258431.73	15302.87927	0.11685	0.12079	0.1132	0.12601	3.06E-03	4.78E-06	4.32E-06	4.63E-06	4.33E-06	3.0827E-03
519979.65	4258560.39	15290.61825	0.43101	1.46209	0.48483	1.34114	3.06E-03	1.76E-05	5.23E-05	1.99E-05	4.60E-05	3.1980E-03
520119.78	4258132.44	15287.77568	0.1453	7.85158	0.14697	9.18409	3.06E-03	5.95E-06	2.81E-04	6.02E-06	3.15E-04	3.6697E-03
520740.22	4258719.7	15286.75623	0.11002	0.09743	0.10723	0.10023	3.06E-03	4.50E-06	3.48E-06	4.39E-06	3.44E-06	3.0772E-03
520691.2	4258466.08	15275.80269	0.11959	0.12205	0.11546	0.12738	3.06E-03	4.90E-06	4.37E-06	4.73E-06	4.37E-06	3.0776E-03
520718.88	4258254.2	15275.43891	0.10483	0.11847	0.1029	0.12345	3.06E-03	4.29E-06	4.24E-06	4.21E-06	4.24E-06	3.0761E-03
519892.8	4258745.07	15265.90599	0.34273	0.47415	0.36715	0.45763	3.06E-03	1.40E-05	1.70E-05	1.50E-05	1.57E-05	3.1189E-03
520695.53	4258561.2	15252.05656	0.12003	0.11826	0.11563	0.12251	3.05E-03	4.91E-06	4.23E-06	4.73E-06	4.21E-06	3.0725E-03
520030.19	4258326.99	15251.20441	0.20383	4.32546	0.21395	3.64536	3.05E-03	8.35E-06	1.55E-04	8.76E-06	1.25E-04	3.3512E-03
520082.89	4259345.31	15244.01047	14.18758	0.1399	17.71265	0.13415	3.05E-03	5.81E-04	5.00E-06	7.25E-04	4.61E-06	4.3686E-03
520737.73	4258701.71	15241.63616	0.11038	0.09934	0.10738	0.10208	3.05E-03	4.52E-06	3.55E-06	4.40E-06	3.50E-06	3.0683E-03
520718.64	4258279.43	15238.48915	0.10602	0.11754	0.10371	0.12273	3.05E-03	4.34E-06	4.20E-06	4.25E-06	4.21E-06	3.0687E-03
519875.16	4258799	15229.53312	0.33517	0.38366	0.35543	0.37211	3.05E-03	1.37E-05	1.37E-05	1.46E-05	1.28E-05	3.1047E-03
519867.49	4258828.73	15227.76334	0.33461	0.34692	0.35338	0.33675	3.05E-03	1.37E-05	1.24E-05	1.45E-05	1.16E-05	3.1017E-03
520743.06	4258736.87	15222.28988	0.10953	0.09541	0.10681	0.09827	3.05E-03	4.48E-06	3.41E-06	4.37E-06	3.37E-06	3.0641E-03
519917.12	4258683.15	15204.04509	0.35847	0.63018	0.38748	0.6044	3.04E-03	1.47E-05	2.25E-05	1.59E-05	2.07E-05	3.1187E-03
520063.74	4258233.24	15197.68779	0.16831	17.14835	0.17691	9.73966	3.04E-03	6.89E-06	6.13E-04	7.24E-06	3.34E-04	4.0054E-03
519854.84	4258900.97	15195.11542	0.3435	0.28058	0.36129	0.27273	3.04E-03	1.41E-05	1.00E-05	1.48E-05	9.36E-06	3.0913E-03

519902.06	4258719.18	15174.16914	0.34655	0.52989	0.37302	0.50981	3.04E-03	1.42E-05	1.90E-05	1.53E-05	1.75E-05	3.1048E-03
520734.83	4258684.69	15170.27029	0.11085	0.10122	0.1076	0.10398	3.04E-03	4.54E-06	3.62E-06	4.41E-06	3.57E-06	3.0542E-03
520718.49	4258304.92	15166.41201	0.1071	0.11689	0.10431	0.12197	3.04E-03	4.39E-06	4.18E-06	4.27E-06	4.19E-06	3.0543E-03
520100.11	4258162.38	15160.16116	0.15106	14.99827	0.15476	15.85769	3.04E-03	6.19E-06	5.36E-04	6.34E-06	5.44E-04	4.1294E-03
520042.84	4259324.55	15115.00865	5.45596	0.13815	7.91258	0.13494	3.03E-03	2.23E-04	4.94E-06	3.24E-04	4.63E-06	3.5839E-03
520706.75	4258403.43	15097.23054	0.11356	0.11861	0.11011	0.12351	3.02E-03	4.65E-06	4.24E-06	4.51E-06	4.24E-06	3.0411E-03
520092.8	4259355.29	15086.3754	12.69207	0.13889	11.20425	0.13255	3.02E-03	5.20E-04	4.97E-06	4.59E-04	4.55E-06	4.0092E-03
519887.45	4258756.28	15078.11	0.33667	0.44876	0.35897	0.43414	3.02E-03	1.38E-05	1.61E-05	1.47E-05	1.49E-05	3.0790E-03
520705.37	4258589.7	15072.39623	0.11757	0.11392	0.11344	0.11797	3.02E-03	4.81E-06	4.07E-06	4.64E-06	4.05E-06	3.0360E-03
520695.58	4258551.72	15065.17332	0.1198	0.11858	0.11535	0.12287	3.02E-03	4.91E-06	4.24E-06	4.72E-06	4.22E-06	3.0351E-03
520690.85	4258511.08	15053.71739	0.12051	0.12123	0.11593	0.12604	3.01E-03	4.93E-06	4.34E-06	4.75E-06	4.33E-06	3.0331E-03
520725.05	4258646.71	15053.62612	0.1129	0.10574	0.1091	0.10896	3.01E-03	4.62E-06	3.78E-06	4.47E-06	3.74E-06	3.0313E-03
520715.21	4258618.2	15048.94509	0.11521	0.10968	0.11119	0.11341	3.01E-03	4.72E-06	3.92E-06	4.55E-06	3.89E-06	3.0308E-03
520047.03	4258270.1	15041.23875	0.17844	7.17285	0.1884	5.56741	3.01E-03	7.31E-06	2.57E-04	7.71E-06	1.91E-04	3.4749E-03
520129.63	4258112.47	15024.82122	0.14024	6.21097	0.14108	7.22608	3.01E-03	5.74E-06	2.22E-04	5.78E-06	2.48E-04	3.4907E-03
520691.19	4258501.95	15011.55438	0.12024	0.12129	0.11572	0.12621	3.01E-03	4.92E-06	4.34E-06	4.74E-06	4.33E-06	3.0246E-03
520722.31	4258263.2	15006.49958	0.10448	0.11672	0.10239	0.12178	3.01E-03	4.28E-06	4.17E-06	4.19E-06	4.18E-06	3.0221E-03
520691.53	4258492.82	15002.58732	0.11996	0.12144	0.11554	0.12646	3.00E-03	4.91E-06	4.34E-06	4.73E-06	4.34E-06	3.0228E-03
520052.75	4259334.53	14994.65095	7.5258	0.13735	14.22908	0.13364	3.00E-03	3.08E-04	4.91E-06	5.83E-04	4.59E-06	3.9031E-03
520109.96	4258142.41	14990.11578	0.14604	10.43302	0.14858	11.98875	3.00E-03	5.98E-06	3.73E-04	6.08E-06	4.12E-04	3.7988E-03
520734.89	4258675.21	14971.57139	0.11061	0.10173	0.10724	0.10453	3.00E-03	4.53E-06	3.64E-06	4.39E-06	3.59E-06	3.0144E-03
520722.09	4258288.49	14954.4451	0.10558	0.11602	0.10307	0.12113	2.99E-03	4.32E-06	4.15E-06	4.22E-06	4.16E-06	3.0117E-03
520030.84	4258316.73	14952.36096	0.19659	4.39365	0.20633	3.70121	2.99E-03	8.05E-06	1.57E-04	8.45E-06	1.27E-04	3.2951E-03
519878.09	4258781.96	14951.16246	0.33031	0.40406	0.35072	0.39179	2.99E-03	1.35E-05	1.45E-05	1.44E-05	1.35E-05	3.0500E-03
519937.12	4258636.77	14921.6155	0.37368	0.80119	0.40941	0.76569	2.99E-03	1.53E-05	2.87E-05	1.68E-05	2.63E-05	3.0753E-03
519999.44	4258511.82	14916.92714	0.40894	2.12648	0.45261	1.88851	2.99E-03	1.67E-05	7.61E-05	1.85E-05	6.48E-05	3.1635E-03
520743.87	4258710.98	14911.28123	0.1087	0.09729	0.10591	0.09998	2.99E-03	4.45E-06	3.48E-06	4.34E-06	3.43E-06	3.0019E-03
520695.64	4258542.24	14907.70145	0.11958	0.1188	0.11508	0.12317	2.99E-03	4.90E-06	4.25E-06	4.71E-06	4.23E-06	3.0036E-03
520037.31	4258294.09	14897.66231	0.18626	5.23396	0.19607	4.30669	2.98E-03	7.63E-06	1.87E-04	8.03E-06	1.48E-04	3.3342E-03
520746.69	4258728.2	14892.87957	0.10822	0.09531	0.10555	0.09808	2.98E-03	4.43E-06	3.41E-06	4.32E-06	3.37E-06	2.9980E-03
519853.09	4258890.3	14890.37448	0.33263	0.28607	0.34945	0.27799	2.98E-03	1.36E-05	1.02E-05	1.43E-05	9.54E-06	3.0297E-03
520704.63	4258423.74	14887.09914	0.11469	0.11862	0.11114	0.12367	2.98E-03	4.70E-06	4.24E-06	4.55E-06	4.25E-06	2.9991E-03
520082.9	4259355.31	14878.35828	14.12594	0.13722	17.49195	0.13164	2.98E-03	5.78E-04	4.91E-06	7.16E-04	4.52E-06	4.2836E-03
520721.97	4258314.05	14867.77638	0.1066	0.1156	0.10365	0.12048	2.98E-03	4.36E-06	4.13E-06	4.24E-06	4.14E-06	2.9944E-03
520694.64	4258475.12	14865.61534	0.1187	0.12066	0.1145	0.12582	2.98E-03	4.86E-06	4.32E-06	4.69E-06	4.32E-06	2.9952E-03
520054.57	4258247.01	14856.30836	0.17008	9.7882	0.17936	7.01779	2.98E-03	6.96E-06	3.50E-04	7.34E-06	2.41E-04	3.5805E-03
520009.19	4258458.73	14840.57631	0.32975	2.65368	0.35317	2.32304	2.97E-03	1.35E-05	9.49E-05	1.45E-05	7.98E-05	3.1747E-03
520741.28	4258693.23	14834.9504	0.1091	0.0991	0.10606	0.10177	2.97E-03	4.47E-06	3.54E-06	4.34E-06	3.49E-06	2.9867E-03
520697.87	4258457.73	14822.34055	0.11739	0.11996	0.11345	0.12517	2.97E-03	4.81E-06	4.29E-06	4.65E-06	4.30E-06	2.9864E-03
520705.42	4258580.22	14820.53233	0.11731	0.11441	0.11321	0.11845	2.97E-03	4.80E-06	4.09E-06	4.64E-06	4.07E-06	2.9856E-03
520720.71	4258336.62	14806.72886	0.10765	0.11583	0.10453	0.12042	2.97E-03	4.41E-06	4.14E-06	4.28E-06	4.13E-06	2.9822E-03
520011.26	4258429.45	14802.62341	0.28763	2.79869	0.30536	2.44862	2.96E-03	1.18E-05	1.00E-04	1.25E-05	8.41E-05	3.1729E-03
520725.1	4258637.22	14789.16945	0.11265	0.10612	0.10883	0.10947	2.96E-03	4.61E-06	3.80E-06	4.46E-06	3.76E-06	2.9784E-03
520119.81	4258122.44	14785.16607	0.14115	7.85414	0.14269	9.20502	2.96E-03	5.78E-06	2.81E-04	5.84E-06	3.16E-04	3.5695E-03
520695.69	4258532.76	14783.72937	0.11938	0.11909	0.11486	0.12353	2.96E-03	4.89E-06	4.26E-06	4.70E-06	4.24E-06	2.9787E-03
519910.75	4258691.91	14783.43051	0.34655	0.59226	0.37302	0.56925	2.96E-03	1.42E-05	2.12E-05	1.53E-05	1.95E-05	3.0308E-03
520715.26	4258608.72	14770.43226	0.11496	0.11008	0.11098	0.1139	2.96E-03	4.71E-06	3.94E-06	4.54E-06	3.91E-06	2.9751E-03
520042.85	4259334.55	14764.49393	5.46518	0.13552	7.9915	0.13239	2.96E-03	2.24E-04	4.85E-06	3.27E-04	4.55E-06	3.5172E-03
520734.94	4258665.73	14755.85206	0.11037	0.10224	0.1069	0.10511	2.96E-03	4.52E-06	3.66E-06	4.38E-06	3.61E-06	2.9712E-03
520064	4258223.15	14746.21532	0.16295	17.40711	0.17112	9.81808	2.95E-03	6.67E-06	6.23E-04	7.01E-06	3.37E-04	3.9265E-03
519927.12	4258655.32	14742.89504	0.36031	0.71407	0.39121	0.68444	2.95E-03	1.48E-05	2.55E-05	1.60E-05	2.35E-05	3.0323E-03
520725.74	4258272.21	14734.39648	0.10407	0.11518	0.10181	0.12024	2.95E-03	4.26E-06	4.12E-06	4.17E-06	4.13E-06	2.9674E-03
520092.82	4259365.29	14724.19497	12.63571	0.13626	11.09954	0.1301	2.95E-03	5.17E-04	4.87E-06	4.54E-04	4.47E-06	3.9299E-03
520018.73	4258361.68	14702.17606	0.22112	3.30649	0.23196	2.86913	2.94E-03	9.05E-06	1.18E-04	9.50E-06	9.85E-05	3.1796E-03
520695.75	4258523.27	14690.86864	0.11918	0.11925	0.11465	0.12381	2.94E-03	4.88E-06	4.27E-06	4.69E-06	4.25E-06	2.9601E-03
519895.62	4258727.77	14680.97162	0.33373	0.50051	0.35866	0.48214	2.94E-03	1.37E-05	1.79E-05	1.47E-05	1.66E-05	3.0029E-03
520725.54	4258297.55	14673.90199	0.10513	0.1146	0.10242	0.11959	2.94E-03	4.30E-06	4.10E-06	4.19E-06	4.11E-06	2.9554E-03
519868.48	4258807	14666.98087	0.32178	0.36578	0.34035	0.35519	2.94E-03	1.32E-05	1.31E-05	1.39E-05	1.22E-05	2.9897E-03
520100.14	4258152.38	14663.7744	0.14658	15.02436	0.15006	15.85514	2.94E-03	6.00E-06	5.37E-04	6.14E-06	5.44E-04	4.0305E-03
520053.18	4259344.53	14654.75487	7.69063	0.13481	14.97615	0.13118	2.93E-03	3.15E-04	4.82E-06	6.13E-04	4.50E-06	3.8722E-03
519860.78	4258836.65	14653.74431	0.32094	0.33185	0.3383	0.32239	2.93E-03	1.31E-05	1.19E-05	1.39E-05	1.11E-05	2.9845E-03
520047.43	4258259.95	14647.72851	0.1726	7.25673	0.18214	5.63286	2.93E-03	7.07E-06	2.60E-04	7.46E-06	1.93E-04	3.4009E-03
519949.85	4258609	14638.07597	0.38517	0.94644	0.42781	0.89773	2.93E-03	1.58E-05	3.39E-05	1.75E-05	3.08E-05	3.0294E-03
520720.52	4258361.97	14609.94761	0.10861	0.11524	0.10533	0.11973	2.93E-03	4.45E-06	4.12E-06	4.31E-06	4.11E-06	2.9428E-03
519854.6	4258863.81	14605.08885	0.32129	0.30531	0.33772	0.29665	2.92E-03	1.32E-05	1.09E-05	1.38E-05	1.02E-05	2.9730E-03
520705.48	4258570.74	14593.6653	0.11709	0.11475	0.11296	0.11881	2.92E-03	4.79E-06	4.10E-06	4.63E-06	4.08E-06	2.9402E-03
519847.71	4258908.04	14574.61512	0.32771	0.27013	0.34376	0.26273	2.92E-03	1.34E-05	9.66E-06	1.41E-05	9.02E-06	2.9649E-03
520019.85	4258351.23	14572.86798	0.21312	3.38911	0.22332	2.93651	2.92E-03	8.73E-06	1.21E-04	9.14E-06	1.01E-04	3.1583E-03
519880.93	4258764.68	14571.60298	0.32421	0.42591	0.34483	0.4126	2.92E-03	1.33E-05	1.52E-05	1.41E-05	1.42E-05	2.9750E-03
520037.9	4258283.86	14555.67372	0.18006	5.31391	0.18955	4.37136	2.91E-03	7.37E-06	1.90E-04	7.76E-06	1.50E-04	3.2702E-03
520750.32	4258719.53	14549.10918	0.10695	0.09513	0.10428	0.09781	2.91E-03	4.38E-06	3.40E-06	4.27E-06	3.36E-06	2.9291E-03
520012.95	4258394.02	14537.16838	0.24609	2.92041	0.25925	2.55849	2.91E-03	1.01E-05	1.04E-04	1.06E-05	8.78E-05	3.1243E-03
520082.92	4259365.31	14523.57991	15.70952	0.13463	17.25251	0.1292	2.91E-03	6.43E-04	4.82E-06	7.06E-04	4.44E-06	4.2674E-03
520747.53	4258702.25	14523.48259	0.10742	0.09707	0.10459	0.09968	2.91E-03	4.40E-06	3.47E-06	4.28E-06	3.42E-06	2.9241E-03
520735	4258656.24	14523.3266	0.11013	0.10269	0.10659	0.10567	2.91E-03	4.51E-06	3.67E-06	4.36E-06	3.63E-06	2.9247E-03
520725.16	4258627.74	14519.12696	0.11241	0.10649	0.10859	0.10997	2.91E-03	4.60E-06	3.81E-06	4.45E-06	3.78E-06	2.9243E-03
520014.14	4258383.54	14518.92111	0.23662	2.99651	0.24885	2.62189	2.91E-03	9.69E-06	1.07E-04	1.02E-05	9.00E-05	3.1247E-03
519917.12	4258673.87	14509.4049	0.34739	0.64051	0.37494	0.61505	2.91E-03	1.42E-05	2.29E-05	1.54E-05	2.11E-05	2.9793E-03
519863.72	4258819.63	14508.43744	0.31759	0.34848	0.3351	0.33865	2.91E-03	1.30E-05	1.25E-05	1.37E-05	1.16E-05	2.9563E-03
520109.99	4258132.41	14506.38579	0.14185	10.43818	0.14421	12.05007	2.91E-03	5.81E-06	3.73E-04	5.90E-06	4.14E-04	3.7039E-03
520724.09	4258345.48	14506.19695	0.10718	0.1144	0.10395	0.11889	2.91E-03	4.39E-06	4.09E-06	4.26E-06	4.08E-06	2.9219E-03
519959.77	4258589.57	14506.05203	0.39593	1.08894	0.44387	1.02148	2.91E-03	1.62E-05	3.89E-05	1.82E-05	3.51E-05	3.0134E-03
520715.32	4258599.24	14500.34474	0.11472	0.11047	0.11078	0.11435	2.90E-03	4.70E-06	3.95E-06	4.54E-06	3.93E-06	2.9210E-03
520698.09	4258484.15	14492.46164	0.11779	0.11934	0.11354	0.12432	2.90E-03	4.82E-06	4.27E-06	4.65E-06	4.27E-06	2.9203E-03
520729.17	4258281.21	14466.8689	0.10367	0.11355	0.1012	0.11858	2.90E-03	4.24E-06	4.06E-06	4.14E-06	4.07E-06	2.9137E-03
519904.67	4258701.35	14464.06876	0.33678	0.55816	0.36134	0.53741	2.90E-03	1.38E-05	2.00E-05	1.48E-05	1.84E-05	2.9636E-03
520054.94	4258236.87	14443.55596	0.16468	9.9189	0.17353	7.0919	2.89E-03	6.74E-06	3.55E-04	7.11E-06	2.43E-04	3.5046E-03
520015.14	4258373.14	14442.68389	0.2276	3.0623	0.23899	2.67703	2.89E-03	9.32E-06	1.10E-04	9.79E-06	9.19E-05	3.1129E-03
520043.28	4259344.55	14434.82779	5.55415	0.13304	8.22942	0.12997	2.89E-03	2.27E-04	4.76E-06	3.37E-04	4.46E-06	3.4643E-03
519989.52	4258531.26	14425.57278	0.41206	1.76187	0.45928	1.59249	2.89E-03	1.69E-05	6.30E-05	1.88E-05	5.47E-05	3.0423E-03
519871.47	4258790.09	14420.74264	0.31757	0.38468	0.33637	0.37346	2.89E-03	1.30E-05	1.38E-05	1.38E-05	1.28E-05	2.9413E-03
520744.83	4258684.75	14420.72666	0.10785	0.09881	0.10478	0.10145	2.89E-03	4.42E-06	3.53E-06	4.29E-06	3.48E-06	2.9037E-03
520701.29	4258466.69	14411.56046	0.11655	0.1185	0.11252	0.1236	2.89E-03	4.77E-06	4.24E-06	4.61E-06	4.24E-06	2.9040E-03
520020.82	4258340.84	14402.6648	0.20552	3.46188	0.21513	2.99744	2.88E-03	8.41E-06	1.24E-04	8.81E-06	1.03E-04	3.1283E-03
520728.99	4258306.62	14395.50825	0.10467	0.11323	0.10177	0.11805	2.88E-03	4.29E-06	4.05E-06	4.17E-06	4.05E-06	2.8995E-03
520705.53	4258561.26	14391.07705	0.11688	0.11504	0.11269	0.11913	2.88E-03	4.79E-06	4.11E-06	4.61E-06	4.09E-06	2.8996E-03
520092.84	4259375.29	14371.19927	12.60874	0.13369	10.98905	0.12771	2.88E-03	5.16E-04	4.78E-06	4.50E-04	4.38E-06	3.8534E-03
519969.69	4258570.13	14359.50609	0.40473	1.26526	0.45362	1.17316	2.88E-03	1.66E-05	4.53E-05	1.86E-05	4.03E-05	2.9964E-03
519999.4	4258502.12	14354.94726	0.38642	2.14822	0.42408	1.90778	2.87E-03	1.58E-05	7.68E-05	1.74E-05	6.55E-05	3.0503E-03
520053.2	4259354.53	14317.09151	7.75148	0.13229	15.27015	0.12876	2.87E-03	3.17E-04	4.73E-06	6.25E-04	4.42E-06	3.8189E-03
520064.24	4258213.06	14312.54883	0.15789	17.62013	0.16563	9.88711	2.87E-03	6.46E-06	6.30E-04	6.78E-06	3.39E-04	3.8492E-03
520119.84	4258112.44	14304.22998	0.13719	7.85872	0.13862	9.20207	2.86E-03	5.62E-06	2.81E-04	5.68E-06	3.16E-04	3.4729E-03
519846.01	4258897.39	14290.67221	0.31771	0.27522	0.33289	0.26764	2.86E-03	1.30E-05	9.84E-06	1.36E-05	9.19E-06	2.9076E-03
519979.61	4258550.69	14285.54215	0.41015	1.48279	0.45838	1.35989	2.86E-03	1.68E-05	5.30E-05	1.88E-05	4.67E-05	2.9962E-03
520720.43	4258387.62	14284.43809	0.10943	0.11445	0.10611	0.11899	2.86E-03	4.48E-06	4.09E-06	4.34E-06	4.09E-06	2.8777E-03
520735.05	4258646.76	14279.25377	0.1099	0.10309	0.10631	0.10619	2.86E-03	4.50E-06	3.69E-06	4.35E-06	3.65E-06	2.8758E-03
519889.13	4258736.23	14257.67052	0.32301	0.47329	0.34491	0.45729	2.86E-03	1.32E-05	1.69E-05	1.41E-05	1.57E-05	2.9153E-03
520723.91	4258370.89	14255.78725	0.10804	0.11383	0.10475	0.11825	2.85E-03	4.42E-06	4.07E-06	4.29E-06	4.06E-06	2.8718E-03
520725.21	4258618.26	14249.32684	0.11217	0.10687	0.10838	0.11046	2.85E-03	4.59E-06	3.82E-06	4.44E-06	3.79E-06	2.8703E-03
520715.37	4258589.76	14245.14559	0.11449	0.11087	0.11057	0.11478	2.85E-03	4.69E-06	3.97E-06	4.53E-06	3.94E-06	2.8699E-03
520007.6	4258438.34	14243.98891	0.29317	2.59818	0.31161	2.28841	2.85E-03	1.20E-05	9.29E-05	1.28E-05	7.86E-05	3.0488E-03
520027.77	4258308.01	14240.00197	0.18762	4.06165	0.19657	3.46285	2.85E-03	7.68E-06	1.45E-04	8.05E-06	1.19E-04	3.1316E-03
520744.89	4258675.26	14227.85486	0.10764	0.0993	0.10445	0.10199	2.85E-03	4.41E-06	3.55E-06	4.28E-06	3.50E-06	2.8651E-03
520705.58	4258551.78	14216.16103	0.11668	0.11535	0.11243	0.11947	2.85E-03	4.78E-06	4.13E-06	4.60E-06	4.10E-06	2.8646E-03
520038.43	4258273.65	14212.86357	0.17416	5.38672	0.18337	4.42712	2.85E-03	7.13E-06	1.93E-04	7.51E-06	1.52E-04	3.2056E-03
520700.84	4258511.46	14206.74688	0.1174	0.11785	0.11299	0.12244	2.85E-03	4.81E-06	4.22E-06	4.63E-06	4.20E-06	2.8629E-03
520732.6	4258290.22	14204.35118	0.10323	0.11227	0.10058	0.11718	2.84E-03	4.23E-06	4.02E-06	4.12E-06	4.02E-06	2.8610E-03
520021.66	4258330.5	14200.33809	0.19828	3.52608	0.20742	3.05073	2.84E-03	8.12E-06	1.26E-04	8.49E-06	1.05E-04	3.0913E-03
520100.17	4258142.38	14196.26664	0.14233	15.04492	0.1456	15.91239	2.84E-03	5.83E-06	5.38E-04	5.96E-06	5.46E-04	3.9392E-03
520753.95	4258710.86	14193.44198	0.10571	0.09495	0.10303	0.09754	2.84E-03	4.33E-06	3.40E-06	4.22E-06	3.35E-06	2.8577E-03
520082.94	4259375.31	14183.30432	15.65256	0.13212	17.01862	0.12685	2.84E-03	6.41E-04	4.73E-06	6.97E-04	4.35E-06	4.1872E-03
520727.46	4258354.35	14182.52505	0.10663	0.11307	0.10339	0.11744	2.84E-03	4.37E-06	4.04E-06	4.23E-06	4.03E-06	2.8569E-03
520701.18	4258502.33	14169.80421	0.11715	0.11796	0.11279	0.12265	2.84E-03	4.80E-06	4.22E-06	4.62E-06	4.21E-06	2.8555E-03
520701.53	4258493.19	14162.80034	0.1169	0.118	0.11261	0.1228	2.84E-03	4.79E-06	4.22E-06	4.61E-06	4.22E-06	2.8541E-03
520751.18	4258693.53	14126.86506	0.10616	0.09681	0.1033	0.09937	2.83E-03	4.35E-06	3.46E-06	4.23E-06	3.41E-06	2.8445E-03
520732.44	4258315.68	14117.04144	0.10417	0.11199	0.10116	0.11663	2.83E-03	4.27E-06	4.01E-06	4.14E-06	4.00E-06	2.8435E-03
520043.3	4259354.55	14106.81781	5.57877	0.13058	8.31975	0.12758	2.83E-03	2.28E-04	4.67E-06	3.41E-04	4.38E-06	3.4032E-03
519874.37	4258772.97	14082.80594	0.3123	0.40479	0.33127	0.39271	2.82E-03	1.28E-05	1.45E-05	1.36E-05	1.35E-05	2.8746E-03
519883.66	4258747.14	14075.29301	0.31674	0.44886	0.33762	0.43423	2.82E-03	1.30E-05	1.61E-05	1.38E-05	1.49E-05	2.8765E-03
520045.69	4258250.68	14075.2646	0.16614	6.78528	0.17518	5.35522	2.82E-03	6.80E-06	2.43E-04	7.17E-06	1.84E-04	3.2593E-03
520705.64	4258542.29	14069.38826	0.11648	0.11556	0.11217	0.11974	2.82E-03	4.77E-06	4.13E-06	4.59E-06	4.11E-06	2.8352E-03
519898.33	4258710.17	14061.21806	0.32564	0.52695	0.34881	0.50795	2.82E-03	1.33E-05	1.88E-05	1.43E-05	1.74E-05	2.8799E-03
520055.28	4258226.75	14044.48202	0.15957	10.04245	0.16802	7.15987	2.81E-03	6.53E-06	3.59E-04	6.88E-06	2.46E-04	3.4310E-03
520110.02	4258122.41	14042.49321	0.13785	10.44651	0.14005	12.04597	2.81E-03	5.64E-06	3.74E-04	5.73E-06	4.14E-04	3.6108E-03
519850.96	4258855.16	14040.68429	0.30668	0.30698	0.32205	0.29854	2.81E-03	1.26E-05	1.10E-05	1.32E-05	1.02E-05	2.8588E-03
520092.85	4259385.29	14036.80581	12.48859	0.13124	10.8918	0.12542	2.81E-03	5.11E-04	4.69E-06	4.46E-04	4.31E-06	3.7774E-03
520704.7	4258475.65	14035.27931	0.11568	0.11719	0.1116	0.12213	2.81E-03	4.74E-06	4.19E-06	4.57E-06	4.19E-06	2.8284E-03
519847.6	4258870.98	14027.11967	0.30735	0.29316	0.32225	0.2851	2.81E-03	1.26E-05	1.05E-05	1.32E-05	9.79E-06	2.8552E-03
520735.1	4258637.28	14026.46689	0.10968	0.10346	0.10607	0.10669	2.81E-03	4.49E-06	3.70E-06	4.34E-06	3.66E-06	2.8252E-03
520744.94	4258665.78	14019.30218	0.10742	0.09976	0.10414	0.10253	2.81E-03	4.40E-06	3.57E-06	4.26E-06	3.52E-06	2.8233E-03
520715.42	4258580.28	14008.34904	0.11427	0.1113	0.11036	0.11521	2.81E-03	4.68E-06	3.98E-06	4.52E-06	3.96E-06	2.8225E-03
520007.92	4258413.3	14005.02339	0.26059	2.63683	0.27533	2.32687	2.80E-03	1.07E-05	9.43E-05	1.13E-05	7.99E-05	3.0008E-03
520707.98	4258458.39	13996.83081	0.11445	0.11644	0.11059	0.12143	2.80E-03	4.69E-06	4.16E-06	4.53E-06	4.17E-06	2.8206E-03
520053.22	4259364.53	13990.65864	7.80478	0.12985	15.58313	0.12641	2.80E-03	3.20E-04	4.64E-06	6.38E-04	4.34E-06	3.7684E-03
519927.12	4258646.05	13987.66337	0.34887	0.72427	0.37905	0.69514	2.80E-03	1.43E-05	2.59E-05	1.55E-05	2.39E-05	2.8808E-03
519857.03	4258827.62	13986.3514	0.3052	0.33319	0.3213	0.3241	2.80E-03	1.25E-05	1.19E-05	1.32E-05	1.11E-05	2.8497E-03
520725.26	4258608.78	13983.95926	0.11195	0.10724	0.10819	0.11092	2.80E-03	4.58E-06	3.84E-06	4.43E-06	3.81E-06	2.8171E-03
520022.41	4258320.21	13976.28843	0.19144	3.58397	0.20017	3.09898	2.80E-03	7.84E-06	1.28E-04	8.20E-06	1.06E-04	3.0496E-03
520002.61	4258474.73	13975.19984	0.34126	2.3269	0.36748	2.05643	2.80E-03	1.40E-05	8.32E-05	1.50E-05	7.06E-05	2.9816E-03
520028.53	4258297.71	13972.60874	0.1814	4.13345	0.1901	3.52006	2.80E-03	7.43E-06	1.48E-04	7.78E-06	1.21E-04	3.0821E-03
519999.36	4258492.42	13956.3272	0.36589	2.16708	0.39833	1.925	2.79E-03	1.50E-05	7.75E-05	1.63E-05	6.61E-05	2.9698E-03
520705.69	4258532.81	13954.8524	0.11629	0.1158	0.11196	0.12006	2.79E-03	4.76E-06	4.14E-06	4.58E-06	4.12E-06	2.8123E-03
520732.39	4258341.42	13947.32997	0.105	0.11173	0.10184	0.11607	2.79E-03	4.30E-06	4.00E-06	4.17E-06	3.98E-06	2.8096E-03
520736.02	4258299.22	13943.90935	0.10277	0.11105	0.09996	0.1158	2.79E-03	4.21E-06	3.97E-06	4.09E-06	3.98E-06	2.8087E-03
519864.81	4258798.15	13913.61352	0.30542	0.36679	0.32278	0.35648	2.79E-03	1.25E-05	1.31E-05	1.32E-05	1.22E-05	2.8375E-03
520727.31	4258379.82	13891.82767	0.10743	0.11244	0.10418	0.11681	2.78E-03	4.40E-06	4.02E-06	4.27E-06	4.01E-06	2.7987E-03
520723.85	4258396.6	13891.76892	0.10879	0.113	0.10548	0.11751	2.78E-03	4.45E-06	4.04E-06	4.32E-06	4.03E-06	2.7989E-03
520038.91	4258263.47	13872.62353	0.16859	5.45238	0.17752	4.47766	2.78E-03	6.90E-06	1.95E-04	7.27E-06	1.54E-04	3.1411E-03
520705.75	4258523.33	13870.55887	0.11611	0.116	0.11176	0.12035	2.78E-03	4.75E-06	4.15E-06	4.58E-06	4.13E-06	2.7954E-03
520082.95	4259385.31	13858.71222	15.48663	0.12972	16.81339	0.12459	2.78E-03	6.34E-04	4.64E-06	6.88E-04	4.28E-06	4.1068E-03
520730.84	4258363.21	13851.8994	0.10607	0.11173	0.10284	0.11602	2.77E-03	4.34E-06	4.00E-06	4.21E-06	3.98E-06	2.7906E-03
520720.47	4258413.59	13836.62374	0.11007	0.11364	0.10673	0.11829	2.77E-03	4.51E-06	4.06E-06	4.37E-06	4.06E-06	2.7880E-03
520757.58	4258702.2	13827.65383	0.1045	0.09476	0.10179	0.09728	2.77E-03	4.28E-06	3.39E-06	4.17E-06	3.34E-06	2.7844E-03
519917.12	4258664.6	13819.87054	0.33674	0.65002	0.36318	0.62508	2.77E-03	1.38E-05	2.33E-05	1.49E-05	2.15E-05	2.8410E-03
520063.35	4258203.44	13815.54656	0.15269	16.2997	0.16013	9.53009	2.77E-03	6.25E-06	5.83E-04	6.56E-06	3.27E-04	3.6898E-03
519939.89	4258618.74	13803.07463	0.36035	0.84549	0.39661	0.80722	2.76E-03	1.48E-05	3.02E-05	1.62E-05	2.77E-05	2.8532E-03
520745	4258656.3	13795.85294	0.10721	0.10016	0.10386	0.10303	2.76E-03	4.39E-06	3.58E-06	4.25E-06	3.54E-06	2.7786E-03
520715.48	4258570.8	13792.36419	0.11406	0.11162	0.11012	0.11554	2.76E-03	4.67E-06	3.99E-06	4.51E-06	3.97E-06	2.7792E-03
520043.32	4259364.55	13789.4761	5.60916	0.12819	8.41254	0.12527	2.76E-03	2.30E-04	4.59E-06	3.44E-04	4.30E-06	3.3445E-03
519859.95	4258810.54	13782.80826	0.30142	0.34971	0.31789	0.34014	2.76E-03	1.23E-05	1.25E-05	1.30E-05	1.17E-05	2.8097E-03
520735.16	4258627.8	13768.39287	0.10946	0.1038	0.10585	0.10716	2.76E-03	4.48E-06	3.71E-06	4.33E-06	3.68E-06	2.7735E-03
520100.2	4258132.38	13753.08727	0.1383	15.06047	0.14136	15.96666	2.75E-03	5.66E-06	5.39E-04	5.79E-06	5.48E-04	3.8525E-03
519838.93	4258904.49	13728.54681	0.30381	0.26501	0.3175	0.25789	2.75E-03	1.24E-05	9.48E-06	1.30E-05	8.85E-06	2.7931E-03
520725.32	4258599.3	13727.08255	0.11173	0.1076	0.108	0.11134	2.75E-03	4.57E-06	3.85E-06	4.42E-06	3.82E-06	2.7657E-03
520754.83	4258684.8	13723.07729	0.10495	0.09646	0.10204	0.099	2.75E-03	4.30E-06	3.45E-06	4.18E-06	3.40E-06	2.7636E-03
520046.14	4258240.51	13716.28351	0.16099	6.87349	0.1697	5.41591	2.75E-03	6.59E-06	2.46E-04	6.95E-06	1.86E-04	3.1922E-03
520003.95	4258447.22	13712.29719	0.29869	2.41874	0.31788	2.14282	2.75E-03	1.22E-05	8.65E-05	1.30E-05	7.36E-05	2.9314E-03
519949.81	4258599.31	13702.88299	0.37093	0.96202	0.41211	0.91107	2.74E-03	1.52E-05	3.44E-05	1.69E-05	3.13E-05	2.8419E-03
520029.21	4258287.44	13696.16921	0.17552	4.1974	0.18397	3.57333	2.74E-03	7.19E-06	1.50E-04	7.53E-06	1.23E-04	3.0304E-03
520708.11	4258484.61	13695.27799	0.11482	0.11589	0.11069	0.12067	2.74E-03	4.70E-06	4.15E-06	4.53E-06	4.14E-06	2.7602E-03
519989.48	4258521.56	13687.6774	0.39084	1.78305	0.43265	1.61122	2.74E-03	1.60E-05	6.38E-05	1.77E-05	5.53E-05	2.8940E-03
520739.45	4258308.23	13683.22465	0.1023	0.10981	0.09936	0.11439	2.74E-03	4.19E-06	3.93E-06	4.07E-06	3.93E-06	2.7564E-03
520053.23	4259374.53	13674.85115	7.86009	0.12749	15.89956	0.12414	2.74E-03	3.22E-04	4.56E-06	6.51E-04	4.26E-06	3.7202E-03
520055.59	4258216.63	13657.86582	0.15471	10.1548	0.16279	7.22087	2.74E-03	6.33E-06	3.63E-04	6.67E-06	2.48E-04	3.3593E-03
520089.57	4259395.71	13651.26178	13.53983	0.12831	12.26189	0.12287	2.73E-03	5.54E-04	4.59E-06	5.02E-04	4.22E-06	3.7991E-03
519877.17	4258755.62	13646.34042	0.30591	0.42595	0.32498	0.41279	2.73E-03	1.25E-05	1.52E-05	1.33E-05	1.42E-05	2.7881E-03
520735.87	4258350.55	13639.32394	0.10448	0.11037	0.10128	0.11461	2.73E-03	4.28E-06	3.95E-06	4.15E-06	3.93E-06	2.7478E-03
519891.92	4258718.84	13629.47439	0.31393	0.49834	0.33639	0.48056	2.73E-03	1.29E-05	1.78E-05	1.38E-05	1.65E-05	2.7904E-03
520711.36	4258467.28	13618.06892	0.11362	0.11514	0.10971	0.12001	2.73E-03	4.65E-06	4.12E-06	4.49E-06	4.12E-06	2.7446E-03
519867.77	4258781.18	13612.63234	0.30089	0.38528	0.31835	0.37428	2.73E-03	1.23E-05	1.38E-05	1.30E-05	1.28E-05	2.7781E-03

519907.12	4258683.15	13607.63183	0.32501	0.58641	0.3489	0.56469	2.73E-03	1.33E-05	2.10E-05	1.43E-05	1.94E-05	2.7931E-03
520715.53	4258561.31	13601.37858	0.11386	0.11194	0.10987	0.11587	2.72E-03	4.66E-06	4.00E-06	4.50E-06	3.98E-06	2.7410E-03
520110.05	4258112.41	13599.35505	0.13402	10.45566	0.1361	12.00483	2.72E-03	5.49E-06	3.74E-04	5.57E-06	4.12E-04	3.5206E-03
520745.05	4258646.82	13561.76708	0.10701	0.10051	0.10361	0.10351	2.72E-03	4.38E-06	3.60E-06	4.24E-06	3.55E-06	2.7317E-03
519959.73	4258579.87	13552.97295	0.38017	1.10675	0.42426	1.03673	2.71E-03	1.56E-05	3.96E-05	1.74E-05	3.56E-05	2.8223E-03
520754.89	4258675.32	13536.2278	0.10477	0.09692	0.10174	0.09951	2.71E-03	4.29E-06	3.47E-06	4.17E-06	3.42E-06	2.7262E-03
520730.71	4258388.74	13525.76086	0.10682	0.11105	0.10359	0.11539	2.71E-03	4.37E-06	3.97E-06	4.24E-06	3.96E-06	2.7253E-03
520734.21	4258372.08	13518.45524	0.10551	0.11038	0.1023	0.11462	2.71E-03	4.32E-06	3.95E-06	4.19E-06	3.94E-06	2.7236E-03
520004.35	4258421.99	13517.61263	0.26525	2.46118	0.28045	2.18456	2.71E-03	1.09E-05	8.80E-05	1.15E-05	7.50E-05	2.8925E-03
520735.21	4258618.32	13511.02193	0.10925	0.10414	0.10567	0.10761	2.71E-03	4.47E-06	3.72E-06	4.33E-06	3.69E-06	2.7220E-03
519843.98	4258862.39	13499.85382	0.2938	0.29463	0.30775	0.2868	2.70E-03	1.20E-05	1.05E-05	1.26E-05	9.85E-06	2.7485E-03
520009.85	4258365.34	13497.86049	0.21431	2.75852	0.22462	2.44038	2.70E-03	8.77E-06	9.87E-05	9.20E-06	8.38E-05	2.9036E-03
520727.27	4258405.59	13496.58946	0.10813	0.11159	0.10484	0.11609	2.70E-03	4.43E-06	3.99E-06	4.29E-06	3.99E-06	2.7196E-03
520725.37	4258589.82	13484.7708	0.11153	0.10795	0.10781	0.11172	2.70E-03	4.57E-06	3.86E-06	4.41E-06	3.84E-06	2.7172E-03
520043.33	4259374.55	13482.18444	5.64531	0.12587	8.50373	0.12303	2.70E-03	2.31E-04	4.50E-06	3.48E-04	4.22E-06	3.2880E-03
520079.67	4259395.72	13475.5324	16.36914	0.12678	20.03811	0.12202	2.70E-03	6.70E-04	4.53E-06	8.20E-04	4.19E-06	4.1980E-03
519840.47	4258877.85	13467.65591	0.29389	0.28178	0.30734	0.27429	2.70E-03	1.20E-05	1.01E-05	1.26E-05	9.42E-06	2.7412E-03
519847.32	4258846.51	13466.4475	0.29273	0.30827	0.30715	0.30012	2.70E-03	1.20E-05	1.10E-05	1.26E-05	1.03E-05	2.7427E-03
520761.2	4258693.53	13453.67071	0.1033	0.09456	0.10058	0.09701	2.69E-03	4.23E-06	3.38E-06	4.12E-06	3.33E-06	2.7093E-03
520011.11	4258354.84	13444.74143	0.20688	2.82895	0.21655	2.49953	2.69E-03	8.47E-06	1.01E-04	8.87E-06	8.58E-05	2.8968E-03
520715.58	4258551.83	13437.49698	0.11368	0.11221	0.10963	0.11618	2.69E-03	4.65E-06	4.01E-06	4.49E-06	3.99E-06	2.7082E-03
520710.84	4258511.83	13428.18787	0.11441	0.11467	0.11018	0.11905	2.69E-03	4.68E-06	4.10E-06	4.51E-06	4.09E-06	2.7066E-03
520723.92	4258422.64	13424.76196	0.10936	0.11221	0.10601	0.11684	2.69E-03	4.48E-06	4.01E-06	4.34E-06	4.01E-06	2.7053E-03
519969.65	4258560.43	13421.42302	0.38686	1.28331	0.43075	1.18952	2.69E-03	1.58E-05	4.59E-05	1.76E-05	4.08E-05	2.8080E-03
520742.88	4258317.23	13421.42057	0.10182	0.1086	0.09878	0.11301	2.69E-03	4.17E-06	3.88E-06	4.04E-06	3.88E-06	2.7038E-03
520063.61	4258193.35	13420.95286	0.14816	16.52504	0.15526	9.59285	2.69E-03	6.07E-06	5.91E-04	6.36E-06	3.29E-04	3.6206E-03
520029.82	4258277.2	13412.34215	0.16993	4.25475	0.17816	3.6214	2.69E-03	6.96E-06	1.52E-04	7.29E-06	1.24E-04	2.9768E-03
519979.56	4258541	13408.81911	0.39036	1.50209	0.4337	1.37707	2.69E-03	1.60E-05	5.37E-05	1.78E-05	4.73E-05	2.8200E-03
520711.18	4258502.7	13393.6232	0.11417	0.11472	0.10999	0.1192	2.68E-03	4.67E-06	4.10E-06	4.50E-06	4.09E-06	2.6996E-03
520711.52	4258493.57	13390.83229	0.11395	0.11468	0.10981	0.11927	2.68E-03	4.67E-06	4.10E-06	4.50E-06	4.09E-06	2.6991E-03
520053.25	4259384.53	13368.84592	7.97432	0.12518	16.24682	0.12192	2.68E-03	3.27E-04	4.48E-06	6.65E-04	4.19E-06	3.6777E-03
520046.56	4258230.35	13366.11498	0.15611	6.9574	0.1645	5.4729	2.68E-03	6.39E-06	2.49E-04	6.74E-06	1.88E-04	3.1266E-03
520720.65	4258439.94	13354.27753	0.11059	0.11271	0.10705	0.11748	2.67E-03	4.53E-06	4.03E-06	4.38E-06	4.03E-06	2.6914E-03
520012.19	4258344.4	13345.65486	0.19975	2.89047	0.2088	2.55239	2.67E-03	8.18E-06	1.03E-04	8.55E-06	8.76E-05	2.8804E-03
520089.58	4259405.71	13344.56976	13.34105	0.12603	12.14676	0.12073	2.67E-03	5.46E-04	4.51E-06	4.97E-04	4.14E-06	3.7247E-03
520754.94	4258665.84	13335.03518	0.10458	0.09735	0.10147	0.10002	2.67E-03	4.28E-06	3.48E-06	4.15E-06	3.43E-06	2.6859E-03
520100.23	4258122.38	13330.49556	0.13446	15.07372	0.13734	15.96652	2.67E-03	5.51E-06	5.39E-04	5.62E-06	5.48E-04	3.7681E-03
520036.8	4258254.35	13323.21804	0.16218	5.11207	0.1706	4.24758	2.67E-03	6.64E-06	1.83E-04	6.99E-06	1.46E-04	3.0105E-03
520739.34	4258359.68	13321.77189	0.10393	0.10904	0.10074	0.11319	2.67E-03	4.26E-06	3.90E-06	4.12E-06	3.89E-06	2.6840E-03
520745.1	4258637.34	13319.69126	0.10682	0.10083	0.1034	0.10397	2.67E-03	4.37E-06	3.61E-06	4.23E-06	3.57E-06	2.6832E-03
519853.29	4258818.59	13310.46106	0.29019	0.33431	0.30536	0.32548	2.67E-03	1.19E-05	1.20E-05	1.25E-05	1.12E-05	2.7131E-03
519900.89	4258692.25	13308.08877	0.3156	0.55324	0.33769	0.53354	2.67E-03	1.29E-05	1.98E-05	1.38E-05	1.83E-05	2.7300E-03
520005.75	4258387.01	13301.95688	0.22922	2.54609	0.2408	2.26479	2.66E-03	9.39E-06	9.11E-05	9.86E-06	7.78E-05	2.8520E-03
520715.64	4258542.35	13301.06866	0.11349	0.11247	0.10939	0.11648	2.66E-03	4.65E-06	4.02E-06	4.48E-06	4.00E-06	2.6809E-03
520018.88	4258311.68	13295.22742	0.18259	3.31427	0.19059	2.89457	2.66E-03	7.48E-06	1.19E-04	7.80E-06	9.94E-05	2.8958E-03
520714.75	4258476.17	13271.79658	0.11279	0.11387	0.10883	0.11859	2.66E-03	4.62E-06	4.07E-06	4.46E-06	4.07E-06	2.6751E-03
519885.46	4258727.38	13262.50169	0.30418	0.47176	0.32444	0.45597	2.66E-03	1.25E-05	1.69E-05	1.33E-05	1.57E-05	2.7143E-03
520725.42	4258580.33	13260.00173	0.11133	0.1083	0.10761	0.11207	2.66E-03	4.56E-06	3.87E-06	4.41E-06	3.85E-06	2.6722E-03
520735.26	4258608.84	13258.15945	0.10905	0.10449	0.1055	0.10804	2.66E-03	4.46E-06	3.74E-06	4.32E-06	3.71E-06	2.6714E-03
519927.12	4258636.77	13252.63084	0.33805	0.73424	0.36787	0.7053	2.65E-03	1.38E-05	2.63E-05	1.51E-05	2.42E-05	2.7334E-03
520742.79	4258342.87	13252.30622	0.10261	0.10832	0.09948	0.11246	2.65E-03	4.20E-06	3.87E-06	4.07E-06	3.86E-06	2.6700E-03
520718.07	4258459.03	13236.63954	0.11161	0.11309	0.10786	0.11788	2.65E-03	4.57E-06	4.05E-06	4.42E-06	4.05E-06	2.6679E-03
519870.64	4258763.99	13226.05349	0.29537	0.40485	0.31286	0.39295	2.65E-03	1.21E-05	1.45E-05	1.28E-05	1.35E-05	2.7016E-03
520000.29	4258456.11	13220.66004	0.30412	2.25667	0.32419	2.00938	2.65E-03	1.25E-05	8.07E-05	1.33E-05	6.90E-05	2.8230E-03
520013.14	4258334.02	13212.90196	0.19294	2.94594	0.20147	2.59929	2.65E-03	7.90E-06	1.05E-04	8.25E-06	8.92E-05	2.8568E-03
520715.69	4258532.87	13194.53009	0.11332	0.11268	0.10918	0.11676	2.64E-03	4.64E-06	4.03E-06	4.47E-06	4.01E-06	2.6595E-03
520043.35	4259384.55	13184.91109	5.70134	0.12362	8.59936	0.12084	2.64E-03	2.33E-04	4.42E-06	3.52E-04	4.15E-06	3.2346E-03
520737.59	4258380.94	13182.42671	0.10495	0.10898	0.10175	0.11319	2.64E-03	4.30E-06	3.90E-06	4.17E-06	3.89E-06	2.6562E-03
520054.39	4258207.14	13180.8256	0.14956	9.54213	0.15734	6.92649	2.64E-03	6.12E-06	3.41E-04	6.44E-06	2.38E-04	3.2313E-03
520079.68	4259405.72	13176.50391	16.11421	0.12454	19.76931	0.1199	2.64E-03	6.60E-04	4.45E-06	8.09E-04	4.12E-06	4.1166E-03
519861.14	4258789.3	13161.34504	0.28995	0.36735	0.30611	0.35726	2.64E-03	1.19E-05	1.31E-05	1.25E-05	1.23E-05	2.6855E-03
520734.11	4258397.66	13151.86666	0.10618	0.10972	0.103	0.11402	2.63E-03	4.35E-06	3.92E-06	4.22E-06	3.91E-06	2.6502E-03
519917.12	4258655.32	13142.27325	0.3266	0.65889	0.35232	0.63455	2.63E-03	1.34E-05	2.36E-05	1.44E-05	2.18E-05	2.7051E-03
519989.44	4258511.86	13134.84945	0.37127	1.80311	0.40832	1.62855	2.63E-03	1.52E-05	6.45E-05	1.67E-05	5.59E-05	2.7828E-03
520030.38	4258266.99	13126.57486	0.16463	4.30797	0.17266	3.66458	2.63E-03	6.74E-06	1.54E-04	7.07E-06	1.26E-04	2.9225E-03
520754.99	4258656.36	13120.78441	0.1044	0.09773	0.10123	0.1005	2.63E-03	4.27E-06	3.50E-06	4.14E-06	3.45E-06	2.6430E-03
520715.74	4258523.39	13117.85351	0.11316	0.11289	0.109	0.11706	2.63E-03	4.63E-06	4.04E-06	4.46E-06	4.02E-06	2.6442E-03
519879.86	4258738	13104.46814	0.29827	0.44779	0.31745	0.43338	2.62E-03	1.22E-05	1.60E-05	1.30E-05	1.49E-05	2.6805E-03
520730.69	4258414.57	13102.65092	0.10745	0.11024	0.10418	0.11472	2.62E-03	4.40E-06	3.94E-06	4.27E-06	3.94E-06	2.6405E-03
520019.75	4258301.33	13093.38073	0.17672	3.37395	0.18442	2.94481	2.62E-03	7.24E-06	1.21E-04	7.55E-06	1.01E-04	2.8587E-03
520745.16	4258627.86	13073.38184	0.10662	0.10118	0.10321	0.10443	2.62E-03	4.37E-06	3.62E-06	4.23E-06	3.59E-06	2.6339E-03
520764.83	4258684.86	13072.78467	0.10215	0.0942	0.09939	0.09664	2.62E-03	4.18E-06	3.37E-06	4.07E-06	3.32E-06	2.6329E-03
520725.48	4258570.85	13055.78547	0.11114	0.10861	0.10739	0.1124	2.61E-03	4.55E-06	3.88E-06	4.40E-06	3.86E-06	2.6313E-03
519856.17	4258801.44	13054.30318	0.28609	0.35052	0.30153	0.34115	2.61E-03	1.17E-05	1.25E-05	1.23E-05	1.17E-05	2.6626E-03
520013.97	4258323.69	13051.66667	0.18646	2.99478	0.19453	2.64122	2.61E-03	7.63E-06	1.07E-04	7.96E-06	9.07E-05	2.8272E-03
520063.85	4258183.26	13050.78713	0.14389	16.70083	0.15062	9.66763	2.61E-03	5.89E-06	5.97E-04	6.17E-06	3.32E-04	3.5549E-03
520090.41	4258132.35	13044.06622	0.13471	25.66983	0.13843	17.09441	2.61E-03	5.52E-06	9.18E-04	5.67E-06	5.87E-04	4.1285E-03
520089.6	4259415.71	13043.89012	13.20119	0.1238	12.01849	0.11864	2.61E-03	5.41E-04	4.43E-06	4.92E-04	4.07E-06	3.6533E-03
520000.77	4258430.68	13029.4315	0.26983	2.30145	0.28548	2.05423	2.61E-03	1.10E-05	8.23E-05	1.17E-05	7.05E-05	2.7849E-03
520727.36	4258431.7	13024.77862	0.10863	0.11083	0.10525	0.11543	2.61E-03	4.45E-06	3.96E-06	4.31E-06	3.96E-06	2.6251E-03
520046.94	4258220.2	13023.90875	0.15146	7.03249	0.15954	5.52358	2.61E-03	6.20E-06	2.52E-04	6.53E-06	1.90E-04	3.0621E-03
520037.34	4258244.14	13015.14398	0.15728	5.18007	0.16547	4.29917	2.61E-03	6.44E-06	1.85E-04	6.78E-06	1.48E-04	2.9526E-03
520735.32	4258599.35	13013.94234	0.10885	0.10483	0.10533	0.10843	2.61E-03	4.46E-06	3.75E-06	4.31E-06	3.72E-06	2.6225E-03
520742.82	4258368.8	12996.81183	0.10336	0.10771	0.10021	0.1118	2.60E-03	4.23E-06	3.85E-06	4.10E-06	3.84E-06	2.6188E-03
520049.96	4259394.95	12996.74451	7.20017	0.12234	12.75539	0.11933	2.60E-03	2.95E-04	4.38E-06	5.22E-04	4.10E-06	3.4283E-03
519894.59	4258701.16	12989.56257	0.30608	0.52283	0.32671	0.50485	2.60E-03	1.25E-05	1.87E-05	1.34E-05	1.73E-05	2.6633E-03
519907.12	4258673.87	12987.38325	0.31558	0.59486	0.33841	0.57362	2.60E-03	1.29E-05	2.13E-05	1.39E-05	1.97E-05	2.6686E-03
519939.85	4258609.05	12966.42429	0.34797	0.8582	0.38328	0.81876	2.60E-03	1.42E-05	3.07E-05	1.57E-05	2.81E-05	2.6854E-03
519840.37	4258853.79	12962.90019	0.28086	0.29579	0.29398	0.28824	2.60E-03	1.15E-05	1.06E-05	1.20E-05	9.90E-06	2.6400E-03
520746.24	4258351.93	12960.62073	0.10209	0.10704	0.09896	0.11109	2.60E-03	4.18E-06	3.83E-06	4.05E-06	3.81E-06	2.6114E-03
520724.13	4258449.06	12960.36727	0.10981	0.11134	0.10622	0.11604	2.60E-03	4.50E-06	3.98E-06	4.35E-06	3.98E-06	2.6123E-03
519833.48	4258885.03	12960.27665	0.28179	0.27104	0.29393	0.26406	2.60E-03	1.15E-05	9.69E-06	1.20E-05	9.07E-06	2.6378E-03
520718.13	4258485.06	12959.24161	0.11195	0.11268	0.10797	0.11724	2.60E-03	4.58E-06	4.03E-06	4.42E-06	4.02E-06	2.6123E-03
519836.75	4258869	12955.94208	0.28087	0.28317	0.2935	0.27591	2.59E-03	1.15E-05	1.01E-05	1.20E-05	9.47E-06	2.6377E-03
520100.26	4258112.38	12933.32263	0.13082	15.08266	0.13351	16.12367	2.59E-03	5.36E-06	5.39E-04	5.47E-06	5.54E-04	3.6939E-03
520106.08	4258102.11	12910.53662	0.12906	11.99693	0.13124	13.56271	2.59E-03	5.28E-06	4.29E-04	5.37E-06	4.66E-04	3.4909E-03
520755.05	4258646.88	12895.54311	0.10422	0.09804	0.10101	0.10094	2.58E-03	4.27E-06	3.51E-06	4.14E-06	3.47E-06	2.5979E-03
520764.89	4258675.38	12891.79233	0.102	0.09462	0.09913	0.09712	2.58E-03	4.18E-06	3.38E-06	4.06E-06	3.33E-06	2.5967E-03
520079.7	4259415.72	12888.76323	15.85025	0.12237	19.49327	0.11785	2.58E-03	6.49E-04	4.38E-06	7.98E-04	4.05E-06	4.0367E-03
520721.43	4258467.85	12886.57406	0.11081	0.11189	0.10702	0.11655	2.58E-03	4.54E-06	4.00E-06	4.38E-06	4.00E-06	2.5976E-03
519843.68	4258837.86	12884.04621	0.27942	0.30926	0.29302	0.30139	2.58E-03	1.14E-05	1.11E-05	1.20E-05	1.03E-05	2.6251E-03
520020.53	4258291.03	12876.4942	0.17113	3.42831	0.1786	2.98985	2.58E-03	7.01E-06	1.23E-04	7.31E-06	1.03E-04	2.8183E-03
520725.53	4258561.37	12876.3508	0.11096	0.10896	0.10717	0.11275	2.58E-03	4.54E-06	3.90E-06	4.39E-06	3.87E-06	2.5954E-03
520000.91	4258406.07	12836.04019	0.24184	2.32534	0.25454	2.08075	2.57E-03	9.90E-06	8.32E-05	1.04E-05	7.14E-05	2.7455E-03
520054.73	4258197.01	12831.59383	0.14523	9.65938	0.15268	6.99027	2.57E-03	5.95E-06	3.46E-04	6.25E-06	2.40E-04	3.1674E-03
520740.97	4258389.81	12831.1545	0.10433	0.10773	0.10119	0.11191	2.57E-03	4.27E-06	3.85E-06	4.14E-06	3.84E-06	2.5857E-03
520745.21	4258618.37	12827.66543	0.10643	0.10152	0.10305	0.10487	2.57E-03	4.36E-06	3.63E-06	4.22E-06	3.60E-06	2.5847E-03
519949.77	4258589.61	12826.62717	0.35715	0.97771	0.39649	0.92395	2.57E-03	1.46E-05	3.50E-05	1.62E-05	3.17E-05	2.6663E-03
520040.06	4259394.96	12823.37819	5.21773	0.12085	7.47668	0.11828	2.57E-03	2.14E-04	4.32E-06	3.06E-04	4.06E-06	3.0962E-03
519864.08	4258772.27	12815.50683	0.28518	0.38545	0.30136	0.37461	2.57E-03	1.17E-05	1.38E-05	1.23E-05	1.29E-05	2.6171E-03
520735.37	4258589.87	12783.93522	0.10867	0.10514	0.10516	0.10878	2.56E-03	4.45E-06	3.76E-06	4.31E-06	3.73E-06	2.5764E-03
520737.5	4258406.59	12782.38221	0.10554	0.10838	0.10238	0.11267	2.56E-03	4.32E-06	3.88E-06	4.19E-06	3.87E-06	2.5761E-03
519996.63	4258465	12781.94091	0.30942	2.1098	0.33065	1.88733	2.56E-03	1.27E-05	7.55E-05	1.35E-05	6.48E-05	2.7262E-03
520089.62	4259425.71	12753.94116	13.03529	0.12163	11.8887	0.11661	2.55E-03	5.34E-04	4.35E-06	4.87E-04	4.00E-06	3.5830E-03
519873.42	4258746.56	12747.44398	0.28887	0.42517	0.30635	0.41225	2.55E-03	1.18E-05	1.52E-05	1.25E-05	1.42E-05	2.6066E-03
520725.58	4258551.89	12722.11779	0.11078	0.10925	0.10694	0.11306	2.55E-03	4.54E-06	3.91E-06	4.38E-06	3.88E-06	2.5645E-03
520734.11	4258423.56	12713.02113	0.10673	0.10894	0.10348	0.11339	2.55E-03	4.37E-06	3.90E-06	4.24E-06	3.89E-06	2.5624E-03
520049.98	4259404.95	12712.62167	7.31155	0.1202	12.97143	0.11727	2.55E-03	2.99E-04	4.30E-06	5.31E-04	4.03E-06	3.3847E-03
520720.83	4258512.21	12711.78671	0.11154	0.11153	0.10748	0.11573	2.55E-03	4.57E-06	3.99E-06	4.40E-06	3.97E-06	2.5626E-03
520037.84	4258233.95	12711.42201	0.15262	5.24363	0.1606	4.34703	2.55E-03	6.25E-06	1.88E-04	6.58E-06	1.49E-04	2.8953E-03
519979.52	4258531.3	12699.51655	0.37207	1.52051	0.41104	1.39331	2.54E-03	1.52E-05	5.44E-05	1.68E-05	4.78E-05	2.6775E-03
520764.94	4258665.9	12697.6504	0.10184	0.095	0.09889	0.09759	2.54E-03	4.17E-06	3.40E-06	4.05E-06	3.35E-06	2.5578E-03
519989.4	4258502.16	12692.8227	0.35279	1.82147	0.38543	1.64454	2.54E-03	1.44E-05	6.52E-05	1.58E-05	5.65E-05	2.6937E-03
520064.08	4258173.18	12690.69499	0.13982	16.86979	0.14622	9.72724	2.54E-03	5.72E-06	6.03E-04	5.99E-06	3.34E-04	3.4906E-03
519959.69	4258570.17	12683.05881	0.36479	1.12301	0.40466	1.05109	2.54E-03	1.49E-05	4.02E-05	1.66E-05	3.61E-05	2.6477E-03
520721.17	4258503.08	12681.36046	0.11132	0.11155	0.1073	0.11584	2.54E-03	4.56E-06	3.99E-06	4.39E-06	3.98E-06	2.5565E-03
520721.51	4258493.94	12678.48547	0.11111	0.11155	0.10713	0.11594	2.54E-03	4.55E-06	3.99E-06	4.39E-06	3.98E-06	2.5559E-03
520746.29	4258377.93	12664.02533	0.10277	0.10641	0.09967	0.11046	2.54E-03	4.21E-06	3.81E-06	4.08E-06	3.79E-06	2.5520E-03
520755.1	4258637.39	12663.80033	0.10405	0.09834	0.10082	0.10137	2.54E-03	4.26E-06	3.52E-06	4.13E-06	3.48E-06	2.5515E-03
520749.7	4258361	12661.82883	0.10156	0.10573	0.09845	0.10973	2.54E-03	4.16E-06	3.78E-06	4.03E-06	3.77E-06	2.5514E-03
520090.44	4258122.35	12661.29794	0.13104	25.70709	0.13455	17.29996	2.54E-03	5.37E-06	9.20E-04	5.51E-06	5.94E-04	4.0599E-03
520021.22	4258280.75	12646.67152	0.16581	3.47589	0.17307	3.0309	2.53E-03	6.79E-06	1.24E-04	7.09E-06	1.04E-04	2.7749E-03
520730.81	4258440.75	12638.73373	0.10788	0.10952	0.10447	0.11407	2.53E-03	4.42E-06	3.92E-06	4.28E-06	3.92E-06	2.5476E-03
519849.54	4258809.56	12630.97046	0.27591	0.33509	0.29021	0.32644	2.53E-03	1.13E-05	1.20E-05	1.19E-05	1.12E-05	2.5759E-03
519888.22	4258709.92	12628.90984	0.29574	0.49506	0.31596	0.47803	2.53E-03	1.21E-05	1.77E-05	1.29E-05	1.64E-05	2.5883E-03
520079.72	4259425.72	12617.15597	15.41232	0.1203	19.24512	0.11588	2.53E-03	6.31E-04	4.30E-06	7.88E-04	3.98E-06	3.9541E-03
519969.61	4258550.74	12607.01906	0.36988	1.2994	0.40935	1.20492	2.52E-03	1.51E-05	4.65E-05	1.68E-05	4.14E-05	2.6445E-03
520753.17	4258344.24	12604.90303	0.10028	0.10509	0.09722	0.10905	2.52E-03	4.11E-06	3.76E-06	3.98E-06	3.74E-06	2.5399E-03
520027.92	4258258.01	12601.08256	0.15829	4.04527	0.16581	3.47211	2.52E-03	6.48E-06	1.45E-04	6.79E-06	1.19E-04	2.8007E-03
520725.64	4258542.41	12594.2987	0.11061	0.1095	0.10672	0.11334	2.52E-03	4.53E-06	3.92E-06	4.37E-06	3.89E-06	2.5389E-03
520727.6	4258458.19	12591.43857	0.10901	0.11009	0.10538	0.11468	2.52E-03	4.46E-06	3.94E-06	4.31E-06	3.94E-06	2.5383E-03
520745.26	4258608.89	12587.01551	0.10625	0.10185	0.1029	0.10528	2.52E-03	4.35E-06	3.64E-06	4.21E-06	3.61E-06	2.5365E-03
520735.42	4258580.39	12570.67549	0.1085	0.10538	0.10496	0.10905	2.52E-03	4.44E-06	3.77E-06	4.30E-06	3.74E-06	2.5337E-03
520724.79	4258476.67	12567.99218	0.11	0.11072	0.10618	0.11523	2.52E-03	4.50E-06	3.96E-06	4.35E-06	3.96E-06	2.5337E-03
520045.43	4258210.84	12565.39333	0.14637	6.64334	0.15414	5.28473	2.52E-03	5.99E-06	2.38E-04	6.31E-06	1.81E-04	2.9477E-03
519997.2	4258439.37	12558.69888	0.27435	2.15685	0.29049	1.93475	2.52E-03	1.12E-05	7.71E-05	1.19E-05	6.64E-05	2.6817E-03
520040.08	4259404.96	12547.06365	5.27491	0.11875	7.55354	0.11625	2.51E-03	2.16E-04	4.25E-06	3.09E-04	3.99E-06	3.0462E-03
520106.11	4258092.11	12535.65858	0.12569	11.99699	0.1277	13.72723	2.51E-03	5.15E-06	4.29E-04	5.23E-06	4.71E-04	3.4212E-03
520725.69	4258532.92	12494.81597	0.11046	0.10971	0.10652	0.11362	2.50E-03	4.52E-06	3.92E-06	4.36E-06	3.90E-06	2.5190E-03
520055.04	4258186.9	12493.80626	0.14111	9.76226	0.14825	7.0465	2.50E-03	5.78E-06	3.49E-04	6.07E-06	2.42E-04	3.1050E-03
520764.99	4258656.41	12491.46104	0.10168	0.09534	0.09868	0.09803	2.50E-03	4.16E-06	3.41E-06	4.04E-06	3.37E-06	2.5166E-03
519917.12	4258646.05	12482.55802	0.31697	0.66742	0.34239	0.64349	2.50E-03	1.30E-05	2.39E-05	1.40E-05	2.21E-05	2.5728E-03
519826.48	4258892.21	12482.33989	0.2704	0.261	0.28142	0.25445	2.50E-03	1.11E-05	9.34E-06	1.15E-05	8.74E-06	2.5404E-03
519829.78	4258876.24	12480.46639	0.26965	0.27231	0.28112	0.26554	2.50E-03	1.10E-05	9.74E-06	1.15E-05	9.12E-06	2.5408E-03
520089.63	4259435.71	12479.48032	12.81139	0.11956	11.7699	0.11466	2.50E-03	5.25E-04	4.28E-06	4.82E-04	3.94E-06	3.5139E-03
520744.34	4258398.67	12477.96253	0.1037	0.10649	0.10062	0.11063	2.50E-03	4.25E-06	3.81E-06	4.12E-06	3.80E-06	2.5149E-03
520050	4259414.95	12438.2199	7.44017	0.11812	13.1941	0.11527	2.49E-03	3.05E-04	4.22E-06	5.40E-04	3.96E-06	3.3440E-03
519833.03	4258860.16	12433.81486	0.26843	0.28423	0.28035	0.27724	2.49E-03	1.10E-05	1.02E-05	1.15E-05	9.52E-06	2.5322E-03
520755.16	4258627.91	12428.7513	0.10388	0.09863	0.10066	0.10179	2.49E-03	4.25E-06	3.53E-06	4.12E-06	3.49E-06	2.5044E-03
520725.74	4258523.44	12423.58164	0.11031	0.10986	0.10635	0.11386	2.49E-03	4.52E-06	3.93E-06	4.35E-06	3.91E-06	2.5047E-03
519836.75	4258845.2	12417.08441	0.26846	0.29668	0.28089	0.2894	2.49E-03	1.10E-05	1.06E-05	1.15E-05	9.94E-06	2.5297E-03
519857.47	4258780.46	12416.82929	0.27533	0.36751	0.29032	0.35758	2.49E-03	1.13E-05	1.31E-05	1.19E-05	1.23E-05	2.5352E-03
520740.9	4258415.51	12416.75976	0.10488	0.10706	0.10173	0.11135	2.49E-03	4.29E-06	3.83E-06	4.17E-06	3.82E-06	2.5027E-03
520038.29	4258223.77	12411.14841	0.14818	5.30041	0.15593	4.38955	2.49E-03	6.07E-06	1.90E-04	6.38E-06	1.51E-04	2.8382E-03
520021.85	4258270.5	12409.75605	0.16076	3.51953	0.16782	3.06791	2.49E-03	6.58E-06	1.26E-04	6.87E-06	1.05E-04	2.7299E-03
519997.4	4258414.6	12408.36107	0.24571	2.18472	0.25878	1.96332	2.48E-03	1.01E-05	7.81E-05	1.06E-05	6.74E-05	2.6511E-03
519992.98	4258473.88	12402.62311	0.31458	1.97633	0.33747	1.77542	2.48E-03	1.29E-05	7.07E-05	1.38E-05	6.10E-05	2.6421E-03
520002.36	4258358.45	12399.47615	0.20082	2.40472	0.21	2.15826	2.48E-03	8.22E-06	8.60E-05	8.60E-06	7.41E-05	2.6601E-03
520000.96	4258369.01	12391.26646	0.20771	2.34375	0.21742	2.10594	2.48E-03	8.50E-06	8.38E-05	8.90E-06	7.23E-05	2.6551E-03
519866.92	4258755.01	12382.62754	0.27941	0.40444	0.29572	0.3926	2.48E-03	1.14E-05	1.45E-05	1.21E-05	1.35E-05	2.5313E-03
520735.48	4258570.91	12377.88746	0.10833	0.10575	0.10477	0.1094	2.48E-03	4.44E-06	3.78E-06	4.29E-06	3.76E-06	2.4951E-03
519907.12	4258664.6	12377.44379	0.30656	0.60266	0.32866	0.58204	2.48E-03	1.26E-05	2.16E-05	1.35E-05	2.00E-05	2.5463E-03
520003.56	4258347.96	12360.81621	0.19417	2.45839	0.20281	2.2047	2.48E-03	7.95E-06	8.79E-05	8.30E-06	7.57E-05	2.6553E-03
519989.36	4258492.47	12355.71407	0.33564	1.8381	0.36422	1.65909	2.47E-03	1.37E-05	6.57E-05	1.49E-05	5.70E-05	2.6258E-03
520745.32	4258599.41	12355.14581	0.10608	0.10215	0.10275	0.10563	2.47E-03	4.34E-06	3.65E-06	4.21E-06	3.63E-06	2.4901E-03
520753.15	4258370.06	12354.70027	0.10101	0.10445	0.09794	0.1084	2.47E-03	4.14E-06	3.74E-06	4.01E-06	3.72E-06	2.4898E-03
520079.73	4259435.72	12346.92365	13.75175	0.11828	19.00838	0.11397	2.47E-03	5.63E-04	4.23E-06	7.78E-04	3.91E-06	3.8221E-03
520028.55	4258247.77	12341.01187	0.15363	4.09988	0.161	3.51621	2.47E-03	6.29E-06	1.47E-04	6.59E-06	1.21E-04	2.7517E-03
520064.29	4258163.1	12337.24086	0.13589	17.07678	0.14204	9.77496	2.47E-03	5.56E-06	6.11E-04	5.82E-06	3.36E-04	3.4285E-03
520737.54	4258432.54	12335.66528	0.106	0.10768	0.10275	0.11208	2.47E-03	4.34E-06	3.85E-06	4.21E-06	3.85E-06	2.4866E-03
519852.4	4258792.34	12330.65655	0.27162	0.35092	0.28602	0.34171	2.47E-03	1.11E-05	1.26E-05	1.17E-05	1.17E-05	2.5165E-03
520756.6	4258353.25	12329.96836	0.09978	0.10385	0.09674	0.10774	2.47E-03	4.09E-06	3.71E-06	3.96E-06	3.70E-06	2.4847E-03
520749.77	4258387.05	12321.01975	0.10215	0.10516	0.09912	0.10916	2.47E-03	4.18E-06	3.76E-06	4.06E-06	3.75E-06	2.4832E-03
520107.26	4258084.19	12314.50712	0.12344	11.52707	0.12528	13.29827	2.47E-03	5.05E-06	4.12E-04	5.13E-06	4.57E-04	3.3452E-03
519881.79	4258718.53	12309.27503	0.28672	0.46918	0.30542	0.45375	2.47E-03	1.17E-05	1.68E-05	1.25E-05	1.56E-05	2.5217E-03
519840.04	4258829.2	12296.36403	0.26673	0.30996	0.27956	0.30234	2.46E-03	1.09E-05	1.11E-05	1.14E-05	1.04E-05	2.5063E-03
520090.47	4258112.35	12295.88407	0.12754	25.74522	0.13085	17.47521	2.46E-03	5.22E-06	9.21E-04	5.36E-06	6.00E-04	3.9938E-03
520096.29	4258102.08	12291.90353	0.12597	18.23749	0.12873	18.28798	2.46E-03	5.16E-06	6.52E-04	5.27E-06	6.28E-04	3.7522E-03
520004.61	4258337.54	12285.75709	0.18778	2.50638	0.19591	2.24628	2.46E-03	7.69E-06	8.96E-05	8.02E-06	7.71E-05	2.6429E-03
519929.89	4258618.79	12282.25945	0.32693	0.77206	0.3574	0.74068	2.46E-03	1.34E-05	2.76E-05	1.46E-05	2.54E-05	2.5408E-03

520728.15	4258485.5	12279.09501	0.10919	0.1096	0.10536	0.11396	2.46E-03	4.47E-06	3.92E-06	4.31E-06	3.91E-06	2.4757E-03
520040.1	4259414.96	12278.77625	5.34353	0.11672	7.63229	0.11427	2.46E-03	2.19E-04	4.17E-06	3.12E-04	3.92E-06	2.9984E-03
520765.05	4258646.93	12275.72801	0.10153	0.09564	0.09849	0.09845	2.46E-03	4.16E-06	3.42E-06	4.03E-06	3.38E-06	2.4734E-03
520734.26	4258449.8	12275.54506	0.10713	0.10825	0.10367	0.11274	2.46E-03	4.39E-06	3.87E-06	4.24E-06	3.87E-06	2.4747E-03
520010.97	4258304.96	12257.93404	0.17221	2.82106	0.17925	2.5077	2.45E-03	7.05E-06	1.01E-04	7.34E-06	8.61E-05	2.6562E-03
520045.84	4258200.68	12254.68573	0.14222	6.72003	0.14973	5.33613	2.45E-03	5.82E-06	2.40E-04	6.13E-06	1.83E-04	2.8897E-03
520731.07	4258467.32	12249.48212	0.10819	0.10894	0.10454	0.1134	2.45E-03	4.43E-06	3.90E-06	4.28E-06	3.89E-06	2.4696E-03
519998.56	4258379.99	12234.75779	0.21419	2.24553	0.22437	2.02286	2.45E-03	8.77E-06	8.03E-05	9.19E-06	6.94E-05	2.6179E-03
519897.12	4258683.15	12233.26188	0.29648	0.54693	0.3164	0.52863	2.45E-03	1.21E-05	1.96E-05	1.30E-05	1.81E-05	2.5127E-03
520089.65	4259445.71	12212.86549	12.59876	0.11754	11.63442	0.11276	2.45E-03	5.16E-04	4.20E-06	4.76E-04	3.87E-06	3.4461E-03
520735.53	4258561.43	12208.31623	0.10816	0.10609	0.10456	0.10974	2.44E-03	4.43E-06	3.79E-06	4.28E-06	3.77E-06	2.4612E-03
520755.21	4258618.43	12195.04043	0.10371	0.09896	0.10052	0.10221	2.44E-03	4.25E-06	3.54E-06	4.12E-06	3.51E-06	2.4576E-03
519876.07	4258728.86	12181.82002	0.28142	0.4457	0.29871	0.4318	2.44E-03	1.15E-05	1.59E-05	1.22E-05	1.48E-05	2.4941E-03
520005.53	4258327.18	12180.25534	0.18167	2.54908	0.18933	2.28334	2.44E-03	7.44E-06	9.12E-05	7.75E-06	7.84E-05	2.6240E-03
519939.81	4258599.35	12176.30281	0.33603	0.87106	0.37019	0.82992	2.44E-03	1.38E-05	3.12E-05	1.52E-05	2.85E-05	2.5270E-03
520050.01	4259424.95	12171.18381	7.58902	0.11611	13.41094	0.11332	2.44E-03	3.11E-04	4.15E-06	5.49E-04	3.89E-06	3.3053E-03
520055.34	4258176.79	12167.95247	0.1372	9.85915	0.14402	7.09809	2.44E-03	5.62E-06	3.53E-04	5.90E-06	2.44E-04	3.0446E-03
520745.37	4258589.93	12136.97217	0.10592	0.10243	0.1026	0.10595	2.43E-03	4.34E-06	3.66E-06	4.20E-06	3.64E-06	2.4464E-03
520747.72	4258407.54	12133.34008	0.10309	0.10518	0.10002	0.10933	2.43E-03	4.22E-06	3.76E-06	4.10E-06	3.75E-06	2.4457E-03
519979.48	4258521.6	12123.42309	0.35485	1.53755	0.38981	1.40854	2.43E-03	1.45E-05	5.50E-05	1.60E-05	4.84E-05	2.5617E-03
519993.62	4258448.05	12117.00303	0.2788	2.02518	0.29555	1.82435	2.43E-03	1.14E-05	7.24E-05	1.21E-05	6.26E-05	2.5852E-03
520011.84	4258294.61	12093.41459	0.16691	2.86681	0.17363	2.54735	2.42E-03	6.83E-06	1.03E-04	7.11E-06	8.75E-05	2.6258E-03
520079.75	4259445.72	12081.47121	15.79727	0.11632	18.72106	0.1121	2.42E-03	6.47E-04	4.16E-06	7.67E-04	3.85E-06	3.8408E-03
519989.32	4258482.77	12079.85437	0.31952	1.85285	0.34446	1.67211	2.42E-03	1.31E-05	6.63E-05	1.41E-05	5.74E-05	2.5700E-03
520029.12	4258237.55	12079.63051	0.14918	4.1485	0.15641	3.55536	2.42E-03	6.11E-06	1.48E-04	6.40E-06	1.22E-04	2.7021E-03
520735.58	4258551.94	12062.82494	0.10801	0.10632	0.10434	0.10999	2.42E-03	4.42E-06	3.80E-06	4.27E-06	3.78E-06	2.4320E-03
520744.3	4258424.43	12054.89005	0.1042	0.10582	0.10106	0.11008	2.41E-03	4.27E-06	3.79E-06	4.14E-06	3.78E-06	2.4301E-03
520765.1	4258637.45	12054.53176	0.10138	0.09593	0.09833	0.09887	2.41E-03	4.15E-06	3.43E-06	4.03E-06	3.39E-06	2.4291E-03
520730.82	4258512.58	12050.9731	0.10878	0.10846	0.10489	0.11248	2.41E-03	4.45E-06	3.88E-06	4.29E-06	3.86E-06	2.4299E-03
520760.02	4258362.25	12043.50338	0.09925	0.10265	0.09626	0.10649	2.41E-03	4.06E-06	3.67E-06	3.94E-06	3.66E-06	2.4272E-03
519949.73	4258579.91	12035.94659	0.34403	0.99217	0.38027	0.93661	2.41E-03	1.41E-05	3.55E-05	1.56E-05	3.22E-05	2.5077E-03
520756.6	4258379.12	12034.98197	0.10042	0.10327	0.09742	0.10718	2.41E-03	4.11E-06	3.69E-06	3.99E-06	3.68E-06	2.4256E-03
519860.38	4258763.36	12033.15617	0.2704	0.38503	0.2853	0.37436	2.41E-03	1.11E-05	1.38E-05	1.17E-05	1.29E-05	2.4592E-03
519822.8	4258883.48	12031.95823	0.25909	0.26212	0.26951	0.25579	2.41E-03	1.06E-05	9.38E-06	1.10E-05	8.78E-06	2.4494E-03
520731.16	4258503.45	12023.42572	0.10859	0.10845	0.10471	0.11257	2.41E-03	4.45E-06	3.88E-06	4.29E-06	3.86E-06	2.4243E-03
520731.51	4258494.32	12021.08317	0.10839	0.10848	0.10456	0.11269	2.41E-03	4.44E-06	3.88E-06	4.28E-06	3.87E-06	2.4239E-03
520040.11	4259424.96	12019.83999	5.41791	0.11475	7.71109	0.11235	2.41E-03	2.22E-04	4.10E-06	3.16E-04	3.86E-06	2.9527E-03
519826.08	4258867.46	11990.63807	0.25803	0.27332	0.26894	0.26678	2.40E-03	1.06E-05	9.78E-06	1.10E-05	9.16E-06	2.4418E-03
520753.24	4258396.18	11986.87575	0.10156	0.10382	0.09856	0.10784	2.40E-03	4.16E-06	3.71E-06	4.04E-06	3.70E-06	2.4161E-03
519890.86	4258692.16	11980.2727	0.28815	0.51762	0.30677	0.50077	2.40E-03	1.18E-05	1.85E-05	1.26E-05	1.72E-05	2.4593E-03
519993.89	4258423.14	11979.06136	0.24956	2.0554	0.26293	1.85559	2.40E-03	1.02E-05	7.35E-05	1.08E-05	6.37E-05	2.5572E-03
520740.96	4258441.53	11977.77258	0.10528	0.10645	0.102	0.1108	2.40E-03	4.31E-06	3.81E-06	4.18E-06	3.80E-06	2.4148E-03
520036.47	4258214.54	11970.51088	0.14315	5.01769	0.15057	4.1931	2.40E-03	5.86E-06	1.79E-04	6.16E-06	1.44E-04	2.7327E-03
520755.26	4258608.95	11965.70498	0.10355	0.09928	0.1004	0.1026	2.40E-03	4.24E-06	3.55E-06	4.11E-06	3.52E-06	2.4117E-03
519845.8	4258800.53	11955.20778	0.26243	0.33548	0.27579	0.32699	2.39E-03	1.07E-05	1.20E-05	1.13E-05	1.12E-05	2.4395E-03
520107.29	4258074.19	11954.78216	0.12027	11.53685	0.12202	13.28157	2.39E-03	4.92E-06	4.13E-04	5.00E-06	4.56E-04	3.2727E-03
520046.23	4258190.53	11953.07557	0.13827	6.79314	0.14553	5.38525	2.39E-03	5.66E-06	2.43E-04	5.96E-06	1.85E-04	2.8332E-03
520063.54	4258153.43	11946.84478	0.13191	16.02437	0.13786	9.43431	2.39E-03	5.40E-06	5.73E-04	5.64E-06	3.24E-04	3.3006E-03
520735.64	4258542.46	11942.77135	0.10785	0.10658	0.10414	0.11029	2.39E-03	4.42E-06	3.81E-06	4.26E-06	3.79E-06	2.4080E-03
520096.32	4258092.08	11940.37032	0.1227	18.25557	0.12531	18.34495	2.39E-03	5.02E-06	6.53E-04	5.13E-06	6.30E-04	3.6842E-03
520734.55	4258476.44	11938.22306	0.10737	0.10781	0.10371	0.11213	2.39E-03	4.40E-06	3.86E-06	4.25E-06	3.85E-06	2.4071E-03
520745.42	4258580.45	11935.09625	0.10577	0.10269	0.10243	0.10622	2.39E-03	4.33E-06	3.67E-06	4.19E-06	3.65E-06	2.4060E-03
520737.7	4258458.86	11934.55778	0.10636	0.10708	0.10287	0.11146	2.39E-03	4.35E-06	3.83E-06	4.21E-06	3.83E-06	2.4063E-03
520050.03	4259434.95	11918.96021	7.72817	0.11417	13.66492	0.11144	2.39E-03	3.16E-04	4.08E-06	5.59E-04	3.83E-06	3.2708E-03
520012.62	4258284.3	11913.96795	0.16185	2.90839	0.16831	2.58291	2.39E-03	6.63E-06	1.04E-04	6.89E-06	8.87E-05	2.5922E-03
519969.56	4258541.04	11908.73189	0.35359	1.31493	0.38941	1.21897	2.38E-03	1.45E-05	4.70E-05	1.59E-05	4.18E-05	2.5042E-03
520019.04	4258261.68	11906.96371	0.15451	3.3041	0.16106	2.9022	2.38E-03	6.33E-06	1.18E-04	6.59E-06	9.96E-05	2.6153E-03
519829.31	4258851.31	11903.54626	0.25654	0.28504	0.26784	0.2783	2.38E-03	1.05E-05	1.02E-05	1.10E-05	9.55E-06	2.4251E-03
520084.71	4259456.12	11881.74333	14.1073	0.11492	14.22784	0.11053	2.38E-03	5.78E-04	4.11E-06	5.83E-04	3.79E-06	3.5475E-03
519869.66	4258737.5	11873.47415	0.27288	0.42364	0.28903	0.41093	2.38E-03	1.12E-05	1.52E-05	1.18E-05	1.41E-05	2.4301E-03
519833.14	4258836.61	11867.27345	0.25664	0.29735	0.26844	0.29028	2.38E-03	1.05E-05	1.06E-05	1.10E-05	9.97E-06	2.4187E-03
519959.65	4258560.47	11864.04826	0.34905	1.13651	0.38439	1.06443	2.38E-03	1.43E-05	4.07E-05	1.57E-05	3.65E-05	2.4832E-03
520055.61	4258166.69	11852.96095	0.13345	9.9536	0.14	7.14562	2.37E-03	5.46E-06	3.56E-04	5.73E-06	2.45E-04	2.9863E-03
520735.69	4258532.98	11849.73804	0.10771	0.10679	0.10396	0.11054	2.37E-03	4.41E-06	3.82E-06	4.26E-06	3.79E-06	2.3894E-03
519917.12	4258636.77	11844.39598	0.30782	0.67588	0.33314	0.65201	2.37E-03	1.26E-05	2.42E-05	1.36E-05	2.24E-05	2.4448E-03
520765.16	4258627.97	11830.2323	0.10123	0.09621	0.0982	0.09926	2.37E-03	4.14E-06	3.44E-06	4.02E-06	3.41E-06	2.3842E-03
519993.89	4258398.88	11823.69401	0.22528	2.07028	0.23627	1.87393	2.37E-03	9.22E-06	7.41E-05	9.67E-06	6.43E-05	2.5251E-03
520029.64	4258227.34	11819.04909	0.14493	4.1947	0.15204	3.59212	2.37E-03	5.93E-06	1.50E-04	6.23E-06	1.23E-04	2.6524E-03
520751.09	4258416.4	11791.58106	0.10246	0.1039	0.09939	0.10805	2.36E-03	4.20E-06	3.72E-06	4.07E-06	3.71E-06	2.3771E-03
520735.74	4258523.5	11783.27108	0.10758	0.1069	0.10379	0.11073	2.36E-03	4.40E-06	3.82E-06	4.25E-06	3.80E-06	2.3760E-03
519907.12	4258655.32	11780.79762	0.29794	0.61008	0.31971	0.58999	2.36E-03	1.22E-05	2.18E-05	1.31E-05	2.03E-05	2.4266E-03
520040.13	4259434.96	11770.74179	5.49993	0.11284	7.79856	0.11049	2.36E-03	2.25E-04	4.04E-06	3.19E-04	3.79E-06	2.9096E-03
520745.48	4258570.96	11751.98623	0.10561	0.10299	0.10224	0.10652	2.35E-03	4.32E-06	3.68E-06	4.19E-06	3.66E-06	2.3693E-03
520763.45	4258371.26	11748.21916	0.0987	0.10147	0.09577	0.10526	2.35E-03	4.04E-06	3.63E-06	3.92E-06	3.61E-06	2.3679E-03
520074.81	4259456.13	11746.51704	14.42934	0.11358	25.77511	0.10977	2.35E-03	5.91E-04	4.06E-06	1.06E-03	3.77E-06	4.0064E-03
520755.32	4258599.47	11745.45988	0.1034	0.09957	0.10027	0.10294	2.35E-03	4.23E-06	3.56E-06	4.11E-06	3.53E-06	2.3676E-03
520097.47	4258084.16	11738.06705	0.12055	17.26476	0.12298	17.8146	2.35E-03	4.94E-06	6.18E-04	5.04E-06	6.12E-04	3.5898E-03
520013.32	4258274.02	11722.50018	0.15701	2.9455	0.16327	2.61488	2.35E-03	6.43E-06	1.05E-04	6.68E-06	8.98E-05	2.5558E-03
519990.05	4258456.74	11716.47688	0.28318	1.90516	0.30079	1.7227	2.35E-03	1.16E-05	6.81E-05	1.23E-05	5.91E-05	2.4976E-03
520760.05	4258388.18	11707.82395	0.0998	0.1021	0.0969	0.10596	2.34E-03	4.09E-06	3.65E-06	3.97E-06	3.64E-06	2.3600E-03
519836.4	4258820.55	11707.00572	0.25461	0.31049	0.26678	0.30301	2.34E-03	1.04E-05	1.11E-05	1.09E-05	1.04E-05	2.3873E-03
520747.7	4258433.35	11705.48582	0.1035	0.10462	0.10035	0.10884	2.34E-03	4.24E-06	3.74E-06	4.11E-06	3.74E-06	2.3600E-03
519884.52	4258701	11704.51647	0.27958	0.4906	0.29732	0.47487	2.34E-03	1.14E-05	1.75E-05	1.22E-05	1.63E-05	2.4015E-03
520036.96	4258204.35	11696.79983	0.1392	5.07521	0.14642	4.23562	2.34E-03	5.70E-06	1.82E-04	6.00E-06	1.45E-04	2.6811E-03
520019.75	4258251.4	11691.25483	0.15006	3.35222	0.15652	2.94191	2.34E-03	6.14E-06	1.20E-04	6.41E-06	1.01E-04	2.5748E-03
519853.81	4258771.61	11685.86542	0.26156	0.36724	0.27541	0.35745	2.34E-03	1.07E-05	1.31E-05	1.13E-05	1.23E-05	2.3876E-03
519897.12	4258673.87	11681.57349	0.28844	0.55387	0.30758	0.53619	2.34E-03	1.18E-05	1.98E-05	1.26E-05	1.84E-05	2.4020E-03
520050.05	4259444.95	11674.51042	7.86108	0.1123	13.94759	0.10964	2.34E-03	3.22E-04	4.02E-06	5.71E-04	3.76E-06	3.2387E-03
519979.44	4258511.9	11670.54364	0.33868	1.55357	0.37008	1.42282	2.34E-03	1.39E-05	5.56E-05	1.52E-05	4.88E-05	2.4706E-03
520738.02	4258485.57	11659.7419	0.10656	0.1067	0.10289	0.11086	2.34E-03	4.36E-06	3.82E-06	4.21E-06	3.81E-06	2.3512E-03
520046.59	4258180.4	11659.59405	0.13452	6.86117	0.14151	5.4277	2.33E-03	5.51E-06	2.45E-04	5.79E-06	1.86E-04	2.7780E-03
520756.72	4258405.31	11647.61068	0.10094	0.10253	0.09796	0.10655	2.33E-03	4.13E-06	3.67E-06	4.01E-06	3.66E-06	2.3481E-03
520744.38	4258450.51	11639.39312	0.10454	0.10529	0.10123	0.10956	2.33E-03	4.28E-06	3.77E-06	4.14E-06	3.76E-06	2.3469E-03
520063.76	4258143.35	11631.13195	0.1284	16.22394	0.13409	9.4817	2.33E-03	5.26E-06	5.80E-04	5.49E-06	3.26E-04	3.2459E-03
520084.73	4259466.12	11630.84794	13.77693	0.11304	13.98689	0.10876	2.33E-03	5.64E-04	4.04E-06	5.73E-04	3.73E-06	3.4738E-03
520741.15	4258467.91	11617.89946	0.10556	0.10599	0.10206	0.11023	2.33E-03	4.32E-06	3.79E-06	4.18E-06	3.78E-06	2.3427E-03
519848.63	4258783.24	11616.02611	0.25798	0.35085	0.27128	0.34179	2.33E-03	1.06E-05	1.25E-05	1.11E-05	1.17E-05	2.3722E-03
520107.32	4258064.19	11614.82128	0.11726	11.54345	0.1189	13.28956	2.33E-03	4.80E-06	4.13E-04	4.87E-06	4.56E-04	3.2048E-03
520765.21	4258618.49	11607.65013	0.10109	0.0965	0.09808	0.09965	2.32E-03	4.14E-06	3.45E-06	4.02E-06	3.42E-06	2.3396E-03
520745.53	4258561.48	11591.58988	0.10546	0.1033	0.10205	0.10682	2.32E-03	4.32E-06	3.69E-06	4.18E-06	3.67E-06	2.3372E-03
519819.13	4258874.75	11572.79623	0.24826	0.263	0.25817	0.25691	2.32E-03	1.02E-05	9.41E-06	1.06E-05	8.82E-06	2.3566E-03
519929.85	4258609.09	11571.9195	0.31649	0.78265	0.34614	0.75038	2.32E-03	1.30E-05	2.80E-05	1.42E-05	2.58E-05	2.3983E-03
519863.19	4258746.03	11564.74219	0.26447	0.40319	0.27958	0.39154	2.32E-03	1.08E-05	1.44E-05	1.14E-05	1.34E-05	2.3661E-03
520001.12	4258319.01	11561.47168	0.17311	2.35762	0.18013	2.12849	2.32E-03	7.09E-06	8.43E-05	7.38E-06	7.31E-05	2.4872E-03
519990.38	4258431.67	11559.43407	0.25332	1.93677	0.26699	1.75597	2.31E-03	1.04E-05	6.93E-05	1.09E-05	6.03E-05	2.4658E-03
520755.37	4258589.98	11538.22886	0.10326	0.09985	0.10013	0.10325	2.31E-03	4.23E-06	3.57E-06	4.10E-06	3.54E-06	2.3261E-03
520040.15	4259444.96	11529.83938	5.58981	0.11098	7.89275	0.10869	2.31E-03	2.29E-04	3.97E-06	3.23E-04	3.73E-06	2.8687E-03
520074.83	4259466.13	11500.63861	14.3175	0.11173	25.2064	0.10801	2.30E-03	5.86E-04	4.00E-06	1.03E-03	3.71E-06	3.9291E-03
519822.39	4258858.67	11494.11395	0.24695	0.27402	0.2573	0.26774	2.30E-03	1.01E-05	9.80E-06	1.05E-05	9.19E-06	2.3415E-03
520054.59	4258157.12	11474.88823	0.1295	9.45464	0.13587	6.8905	2.30E-03	5.30E-06	3.38E-04	5.56E-06	2.37E-04	2.8836E-03
520020.39	4258241.14	11469.35438	0.14581	3.38971	0.15216	2.9737	2.30E-03	5.97E-06	1.21E-04	6.23E-06	1.02E-04	2.5324E-03
520002.19	4258308.58	11466.04232	0.16786	2.40161	0.1745	2.16658	2.30E-03	6.87E-06	8.59E-05	7.14E-06	7.44E-05	2.4705E-03
520745.58	4258552	11454.28654	0.10533	0.10354	0.10185	0.10707	2.29E-03	4.31E-06	3.70E-06	4.17E-06	3.68E-06	2.3097E-03
520754.47	4258425.27	11452.73628	0.10179	0.10273	0.09873	0.10686	2.29E-03	4.17E-06	3.67E-06	4.04E-06	3.67E-06	2.3091E-03
519994.93	4258351.52	11446.81165	0.18874	2.12186	0.19687	1.92717	2.29E-03	7.73E-06	7.59E-05	8.06E-06	6.62E-05	2.4502E-03
519939.77	4258589.65	11446.76697	0.32451	0.88393	0.35707	0.84077	2.29E-03	1.33E-05	3.16E-05	1.46E-05	2.89E-05	2.3808E-03
520766.88	4258380.26	11443.98906	0.09812	0.10033	0.09527	0.10407	2.29E-03	4.02E-06	3.59E-06	3.90E-06	3.57E-06	2.3069E-03
520740.81	4258512.96	11439.92732	0.10613	0.10549	0.1024	0.10936	2.29E-03	4.35E-06	3.77E-06	4.19E-06	3.75E-06	2.3071E-03
519993.61	4258362.05	11436.14783	0.19491	2.07488	0.20347	1.88569	2.29E-03	7.98E-06	7.42E-05	8.33E-06	6.47E-05	2.4455E-03
520037.42	4258194.17	11428.96272	0.13541	5.13176	0.14247	4.27669	2.29E-03	5.54E-06	1.84E-04	5.83E-06	1.47E-04	2.6306E-03
520050.06	4259454.95	11427.61853	8.09177	0.11042	14.20794	0.10783	2.29E-03	3.31E-04	3.95E-06	5.82E-04	3.70E-06	3.2092E-03
519996.08	4258341.06	11419.63228	0.18276	2.16383	0.19048	1.96419	2.29E-03	7.48E-06	7.74E-05	7.80E-06	6.74E-05	2.4470E-03
520741.16	4258503.83	11413.85342	0.10594	0.10552	0.10223	0.10946	2.29E-03	4.34E-06	3.77E-06	4.19E-06	3.76E-06	2.3018E-03
519878.13	4258709.69	11413.29674	0.27083	0.46558	0.28794	0.45079	2.29E-03	1.11E-05	1.67E-05	1.18E-05	1.55E-05	2.3407E-03
520741.5	4258494.69	11412.88106	0.10576	0.10558	0.10209	0.1096	2.29E-03	4.33E-06	3.78E-06	4.18E-06	3.76E-06	2.3016E-03
520097.5	4258074.16	11409.83044	0.11752	17.28431	0.11981	17.82044	2.28E-03	4.81E-06	6.18E-04	4.91E-06	6.12E-04	3.5247E-03
520027.51	4258218.24	11395.77086	0.13996	3.97313	0.14671	3.42692	2.28E-03	5.73E-06	1.42E-04	6.01E-06	1.18E-04	2.5537E-03
520763.5	4258397.25	11392.10153	0.09923	0.10085	0.09635	0.10472	2.28E-03	4.06E-06	3.61E-06	3.94E-06	3.60E-06	2.2966E-03
520765.26	4258609	11389.44132	0.10095	0.0968	0.09798	0.10002	2.28E-03	4.13E-06	3.46E-06	4.01E-06	3.43E-06	2.2959E-03
520084.75	4259476.12	11387.90235	13.65237	0.11118	13.6865	0.10701	2.28E-03	5.59E-04	3.98E-06	5.60E-04	3.67E-06	3.4076E-03
519992.08	4258372.67	11380.50649	0.20126	2.02181	0.21023	1.83931	2.28E-03	8.24E-06	7.23E-05	8.61E-06	6.31E-05	2.4314E-03
520046.92	4258170.27	11374.12586	0.13091	6.92348	0.13767	5.46662	2.28E-03	5.36E-06	2.48E-04	5.64E-06	1.88E-04	2.7241E-03
520751.09	4258442.28	11373.04022	0.1028	0.10346	0.09962	0.10764	2.28E-03	4.21E-06	3.70E-06	4.08E-06	3.70E-06	2.2933E-03
519825.58	4258842.46	11367.70512	0.24516	0.28564	0.25591	0.27909	2.28E-03	1.00E-05	1.02E-05	1.05E-05	9.58E-06	2.3169E-03
519986.47	4258465.43	11361.43497	0.28741	1.79455	0.3063	1.62836	2.28E-03	1.18E-05	6.42E-05	1.25E-05	5.59E-05	2.4197E-03
519997.09	4258330.66	11361.22735	0.17701	2.2015	0.18432	1.99732	2.28E-03	7.25E-06	7.87E-05	7.55E-06	6.86E-05	2.4373E-03
520003.15	4258298.19	11348.32202	0.16283	2.4407	0.1691	2.20078	2.27E-03	6.67E-06	8.73E-05	6.92E-06	7.56E-05	2.4491E-03
520755.42	4258580.5	11346.70541	0.10313	0.10011	0.09998	0.10351	2.27E-03	4.22E-06	3.58E-06	4.09E-06	3.55E-06	2.2878E-03
520745.64	4258542.52	11340.92501	0.10519	0.10376	0.10166	0.10733	2.27E-03	4.31E-06	3.71E-06	4.16E-06	3.68E-06	2.2870E-03
520744.6	4258476.96	11331.1041	0.10477	0.10492	0.10126	0.10902	2.27E-03	4.29E-06	3.75E-06	4.15E-06	3.74E-06	2.2851E-03
520063.98	4258133.27	11330.64887	0.12505	16.43267	0.13048	9.54957	2.27E-03	5.12E-06	5.88E-04	5.34E-06	3.28E-04	3.1952E-03
520747.8	4258459.5	11327.87989	0.10381	0.10414	0.10045	0.10833	2.27E-03	4.25E-06	3.72E-06	4.11E-06	3.72E-06	2.2844E-03
519969.52	4258531.34	11324.73535	0.33839	1.32981	0.37092	1.23227	2.27E-03	1.39E-05	4.76E-05	1.52E-05	4.23E-05	2.3868E-03
519829.52	4258828.01	11314.48529	0.24533	0.29782	0.25654	0.29088	2.27E-03	1.00E-05	1.07E-05	1.05E-05	9.99E-06	2.3071E-03
520760.19	4258414.43	11308.97063	0.1003	0.1013	0.09734	0.10531	2.26E-03	4.11E-06	3.62E-06	3.99E-06	3.62E-06	2.2801E-03
519979.4	4258502.21	11307.06942	0.32335	1.56857	0.35147	1.43612	2.26E-03	1.32E-05	5.61E-05	1.44E-05	4.93E-05	2.3974E-03
519872.28	4258719.71	11301.42977	0.26583	0.44272	0.28146	0.42944	2.26E-03	1.09E-05	1.58E-05	1.15E-05	1.47E-05	2.3163E-03
520040.16	4259454.96	11293.96818	5.68902	0.10917	7.99091	0.10693	2.26E-03	2.33E-04	3.90E-06	3.27E-04	3.67E-06	2.8295E-03
519842.05	4258791.5	11285.32075	0.24965	0.3355	0.26207	0.32711	2.26E-03	1.02E-05	1.20E-05	1.07E-05	1.12E-05	2.3042E-03
519856.69	4258754.44	11265.21833	0.25641	0.38419	0.27037	0.37358	2.26E-03	1.05E-05	1.37E-05	1.11E-05	1.28E-05	2.3041E-03
520074.85	4259476.13	11262.50929	16.26559	0.10991	24.47647	0.10628	2.26E-03	6.66E-04	3.93E-06	1.00E-03	3.65E-06	3.9312E-03
520745.69	4258533.04	11253.45094	0.10506	0.10396	0.10149	0.10757	2.25E-03	4.30E-06	3.72E-06	4.16E-06	3.69E-06	2.2695E-03
520020.99	4258230.91	11246.76693	0.14175	3.42655	0.14802	3.00374	2.25E-03	5.80E-06	1.23E-04	6.06E-06	1.03E-04	2.4899E-03
520106.57	4258053.98	11245.37638	0.11412	11.87464	0.1157	13.63537	2.25E-03	4.67E-06	4.25E-04	4.74E-06	4.68E-04	3.1543E-03
520010.16	4258265.34	11242.19437	0.15086	2.76812	0.15665	2.4733	2.25E-03	6.18E-06	9.90E-05	6.41E-06	8.49E-05	2.4479E-03
519959.61	4258550.78	11227.98053	0.33546	1.15048	0.3679	1.07708	2.25E-03	1.37E-05	4.12E-05	1.51E-05	3.70E-05	2.3555E-03
520004.02	4258287.85	11213.43607	0.158	2.47515	0.16396	2.23093	2.25E-03	6.47E-06	8.85E-05	6.71E-06	7.66E-05	2.4239E-03
519949.69	4258570.21	11204.95883	0.32834	1.00353	0.35999	0.94758	2.24E-03	1.34E-05	3.59E-05	1.47E-05	3.25E-05	2.3406E-03
519907.12	4258646.05	11203.77788	0.28974	0.61734	0.31148	0.59752	2.24E-03	1.19E-05	2.21E-05	1.28E-05	2.05E-05	2.3109E-03
520745.74	4258523.56	11191.34786	0.10495	0.10407	0.10133	0.10775	2.24E-03	4.30E-06	3.72E-06	4.15E-06	3.70E-06	2.2571E-03
520054.88	4258147.02	11187.97148	0.12612	9.5546	0.13224	6.93828	2.24E-03	5.16E-06	3.42E-04	5.41E-06	2.38E-04	2.8311E-03
520765.32	4258599.52	11179.78712	0.10081	0.09707	0.09787	0.10034	2.24E-03	4.13E-06	3.47E-06	4.01E-06	3.44E-06	2.2540E-03
520755.48	4258571.02	11173.40605	0.10299	0.10038	0.09981	0.10378	2.24E-03	4.22E-06	3.59E-06	4.09E-06	3.56E-06	2.2531E-03
520037.84	4258184.01	11166.20338	0.13179	5.18194	0.13868	4.31285	2.24E-03	5.40E-06	1.85E-04	5.68E-06	1.48E-04	2.5807E-03
519986.87	4258440.2	11161.51388	0.25701	1.8281	0.27109	1.66355	2.24E-03	1.05E-05	6.54E-05	1.11E-05	5.71E-05	2.3794E-03
520028.08	4258208.01	11157.04798	0.13618	4.02	0.14283	3.46318	2.23E-03	5.58E-06	1.44E-04	5.85E-06	1.19E-04	2.5085E-03
520084.76	4259486.12	11152.60518	13.26241	0.1094	13.34248	0.10533	2.23E-03	5.43E-04	3.91E-06	5.46E-04	3.62E-06	3.3303E-03
519897.12	4258664.6	11142.53322	0.28074	0.56036	0.29945	0.5433	2.23E-03	1.15E-05	2.00E-05	1.23E-05	1.87E-05	2.2939E-03
520770.31	4258389.26	11138.8966	0.09754	0.09918	0.09476	0.1029	2.23E-03	3.99E-06	3.55E-06	3.88E-06	3.53E-06	2.2457E-03
520757.84	4258434.14	11123.29574	0.1011	0.10166	0.09805	0.10573	2.23E-03	4.14E-06	3.64E-06	4.01E-06	3.63E-06	2.2430E-03
519832.76	4258811.9	11117.62642	0.24305	0.31078	0.2546	0.30336	2.23E-03	9.95E-06	1.11E-05	1.04E-05	1.04E-05	2.2684E-03
519815.46	4258866.02	11106.23991	0.23791	0.2636	0.2473	0.25776	2.22E-03	9.74E-06	9.43E-06	1.01E-05	8.85E-06	2.2623E-03
520045.13	4259466.18	11104.74966	6.8697	0.10784	10.48169	0.10548	2.22E-03	2.81E-04	3.86E-06	4.29E-04	3.62E-06	2.9418E-03
520097.53	4258064.16	11095.06439	0.11461	17.30617	0.11679	17.78716	2.22E-03	4.69E-06	6.19E-04	4.78E-06	6.11E-04	3.4611E-03
520748.05	4258486.01	11075.012	0.10399	0.10386	0.10048	0.10782	2.22E-03	4.26E-06	3.71E-06	4.11E-06	3.70E-06	2.2337E-03
520766.95	4258406.31	11072.93479	0.09863	0.09962	0.09577	0.1035	2.22E-03	4.04E-06	3.56E-06	3.92E-06	3.55E-06	2.2326E-03
520010.95	4258255.03	11066.25063	0.14662	2.80633	0.15226	2.50599	2.22E-03	6.00E-06	1.00E-04	6.23E-06	8.60E-05	2.4148E-03
520004.8	4258277.54	11064.40339	0.1534	2.5081	0.15909	2.25965	2.22E-03	6.28E-06	8.97E-05	6.51E-06	7.76E-05	2.3959E-03
519986.98	4258415.68	11064.18011	0.23181	1.849	0.24324	1.68584	2.22E-03	9.49E-06	6.61E-05	9.96E-06	5.79E-05	2.3592E-03
520754.49	4258451.2	11060.9247	0.10209	0.10233	0.09888	0.10644	2.22E-03	4.18E-06	3.66E-06	4.05E-06	3.65E-06	2.2306E-03
519982.9	4258474.12	11056.06162	0.2915	1.69232	0.31206	1.54092	2.21E-03	1.19E-05	6.05E-05	1.28E-05	5.29E-05	2.3523E-03
519887.12	4258683.15	11046.09996	0.27195	0.51119	0.28874	0.49584	2.21E-03	1.11E-05	1.83E-05	1.18E-05	1.70E-05	2.2704E-03
520064.18	4258123.2	11040.33094	0.12185	16.62208	0.12704	9.59777	2.21E-03	4.99E-06	5.95E-04	5.20E-06	3.30E-04	3.1452E-03
519865.9	4258728.44	11040.09877	0.25811	0.42122	0.27293	0.40891	2.21E-03	1.06E-05	1.51E-05	1.12E-05	1.40E-05	2.2618E-03
520751.22	4258468.49	11037.42749	0.10305	0.10309	0.09968	0.10715	2.21E-03	4.22E-06	3.69E-06	4.08E-06	3.68E-06	2.2261E-03
520074.86	4259486.13	11031.69951	15.94607	0.10816	23.43619	0.10461	2.21E-03	6.53E-04	3.87E-06	9.60E-04	3.59E-06	3.8292E-03
519979.36	4258492.51	11022.02567	0.3089	1.58261	0.33394	1.44847	2.21E-03	1.26E-05	5.66E-05	1.37E-05	4.97E-05	2.3400E-03
520755.53	4258561.54	11021.30182	0.10286	0.10066	0.09963	0.10405	2.21E-03	4.21E-06	3.60E-06	4.08E-06	3.57E-06	2.2226E-03
520045.64	4258160.82	11015.99486	0.12702	6.5996	0.13358	5.26288	2.21E-03	5.20E-06	2.36E-04	5.47E-06	1.81E-04	2.6335E-03
519919.89	4258618.83	11009.96033	0.29854	0.70827	0.3243	0.68249	2.20E-03	1.22E-05	2.53E-05	1.33E-05	2.34E-05	2.2792E-03

519818.69	4258849.89	10991.9581	0.23633	0.27455	0.24619	0.26845	2.20E-03	9.68E-06	9.82E-06	1.01E-05	9.22E-06	2.2401E-03
520765.37	4258590.04	10982.86187	0.10069	0.09736	0.09775	0.10064	2.20E-03	4.12E-06	3.48E-06	4.00E-06	3.46E-06	2.2145E-03
520763.67	4258423.56	10976.73472	0.09963	0.10016	0.09668	0.10414	2.20E-03	4.08E-06	3.58E-06	3.96E-06	3.58E-06	2.2134E-03
519850.14	4258762.77	10972.44601	0.24861	0.36636	0.26133	0.35678	2.20E-03	1.02E-05	1.31E-05	1.07E-05	1.22E-05	2.2436E-03
520035.22	4259466.2	10971.5653	4.9616	0.10665	6.60344	0.10459	2.20E-03	2.03E-04	3.81E-06	2.70E-04	3.59E-06	2.6781E-03
519986.86	4258391.7	10939.36884	0.21056	1.85797	0.22008	1.69827	2.19E-03	8.62E-06	6.65E-05	9.01E-06	5.83E-05	2.3332E-03
520106.6	4258043.98	10933.64853	0.11136	11.88598	0.11285	13.52951	2.19E-03	4.56E-06	4.25E-04	4.62E-06	4.64E-04	3.0884E-03
520084.78	4259496.12	10925.16323	12.91227	0.10767	12.93859	0.10368	2.19E-03	5.29E-04	3.85E-06	5.30E-04	3.56E-06	3.2538E-03
520028.61	4258197.81	10921.1159	0.13257	4.06418	0.13911	3.49663	2.19E-03	5.43E-06	1.45E-04	5.70E-06	1.20E-04	2.4636E-03
519844.85	4258774.14	10914.81807	0.2451	0.35033	0.25735	0.34141	2.19E-03	1.00E-05	1.25E-05	1.05E-05	1.17E-05	2.2307E-03
520055.16	4258136.91	10910.03442	0.12288	9.65391	0.12877	6.98286	2.18E-03	5.03E-06	3.45E-04	5.27E-06	2.40E-04	2.7802E-03
520038.24	4258173.86	10909.75408	0.12835	5.2302	0.13504	4.34501	2.18E-03	5.26E-06	1.87E-04	5.53E-06	1.49E-04	2.5319E-03
519929.81	4258599.39	10907.35103	0.30641	0.79332	0.33505	0.75982	2.18E-03	1.25E-05	2.84E-05	1.37E-05	2.61E-05	2.2651E-03
520755.58	4258552.06	10891.38907	0.10274	0.10089	0.09945	0.10429	2.18E-03	4.21E-06	3.61E-06	4.07E-06	3.58E-06	2.1966E-03
520011.67	4258244.74	10882.57233	0.14255	2.84	0.14808	2.53522	2.18E-03	5.84E-06	1.02E-04	6.06E-06	8.70E-05	2.3799E-03
520045.14	4259476.18	10881.7947	6.88458	0.10619	10.69573	0.10386	2.18E-03	2.82E-04	3.80E-06	4.38E-04	3.57E-06	2.9064E-03
520750.81	4258513.33	10873.8756	0.10356	0.10271	0.1	0.10641	2.18E-03	4.24E-06	3.67E-06	4.09E-06	3.65E-06	2.1933E-03
519969.48	4258521.64	10859.61698	0.32418	1.34376	0.3537	1.24481	2.17E-03	1.33E-05	4.81E-05	1.45E-05	4.27E-05	2.2933E-03
520751.15	4258504.2	10849.85966	0.10339	0.10273	0.09984	0.1065	2.17E-03	4.23E-06	3.67E-06	4.09E-06	3.66E-06	2.1885E-03
520751.49	4258495.07	10848.92829	0.10322	0.10279	0.09971	0.10662	2.17E-03	4.23E-06	3.68E-06	4.08E-06	3.66E-06	2.1883E-03
520018.55	4258221.93	10840.01517	0.13683	3.24406	0.14273	2.85985	2.17E-03	5.60E-06	1.16E-04	5.84E-06	9.82E-05	2.3965E-03
520773.74	4258398.27	10838.64	0.09698	0.098	0.09423	0.10174	2.17E-03	3.97E-06	3.51E-06	3.86E-06	3.49E-06	2.1854E-03
519821.86	4258833.61	10830.06899	0.2343	0.28607	0.24455	0.27962	2.17E-03	9.59E-06	1.02E-05	1.00E-05	9.60E-06	2.2083E-03
519880.82	4258692.07	10826.97524	0.26444	0.48514	0.28031	0.47075	2.17E-03	1.08E-05	1.74E-05	1.15E-05	1.62E-05	2.2241E-03
520761.22	4258443	10810.47096	0.1004	0.1006	0.09734	0.10461	2.16E-03	4.11E-06	3.60E-06	3.99E-06	3.59E-06	2.1802E-03
520074.88	4259496.13	10808.20329	15.68911	0.10645	22.17807	0.10298	2.16E-03	6.42E-04	3.81E-06	9.08E-04	3.54E-06	3.7223E-03
520765.42	4258580.56	10800.78768	0.10056	0.09766	0.09762	0.10094	2.16E-03	4.12E-06	3.49E-06	4.00E-06	3.47E-06	2.1781E-03
519979.32	4258482.81	10795.64776	0.29536	1.59577	0.31754	1.45977	2.16E-03	1.21E-05	5.71E-05	1.30E-05	5.01E-05	2.2943E-03
519983.36	4258448.73	10794.27214	0.26067	1.72826	0.2754	1.57766	2.16E-03	1.07E-05	6.18E-05	1.13E-05	5.42E-05	2.2996E-03
519859.47	4258737.04	10786.78924	0.25076	0.40115	0.26451	0.3899	2.16E-03	1.03E-05	1.43E-05	1.08E-05	1.34E-05	2.2090E-03
520755.64	4258542.58	10784.31248	0.10261	0.10111	0.09927	0.10453	2.16E-03	4.20E-06	3.62E-06	4.06E-06	3.59E-06	2.1752E-03
519939.73	4258579.95	10772.59679	0.31305	0.89514	0.3427	0.85118	2.16E-03	1.28E-05	3.20E-05	1.40E-05	2.92E-05	2.2454E-03
520754.64	4258477.47	10772.49718	0.10229	0.10208	0.09891	0.10601	2.16E-03	4.19E-06	3.65E-06	4.05E-06	3.64E-06	2.1729E-03
519992.24	4258322.68	10771.63474	0.16858	2.03556	0.17524	1.85996	2.16E-03	6.90E-06	7.28E-05	7.18E-06	6.39E-05	2.3079E-03
520757.89	4258460.12	10768.89645	0.10138	0.10122	0.09813	0.10523	2.16E-03	4.15E-06	3.62E-06	4.02E-06	3.61E-06	2.1720E-03
519825.91	4258819.42	10761.01318	0.23451	0.29814	0.24524	0.29122	2.16E-03	9.60E-06	1.07E-05	1.00E-05	1.00E-05	2.1953E-03
520770.4	4258415.37	10753.70131	0.09799	0.09849	0.09516	0.10235	2.15E-03	4.01E-06	3.52E-06	3.90E-06	3.51E-06	2.1685E-03
520035.24	4259476.2	10753.56069	5.00497	0.10501	6.70911	0.10299	2.15E-03	2.05E-04	3.76E-06	2.75E-04	3.54E-06	2.6405E-03
520046	4258150.68	10750.72962	0.12375	6.66743	0.13012	5.30283	2.15E-03	5.07E-06	2.38E-04	5.33E-06	1.82E-04	2.5839E-03
520096.78	4258053.95	10750.35762	0.11157	18.01865	0.11367	18.14535	2.15E-03	4.57E-06	6.45E-04	4.65E-06	6.23E-04	3.4296E-03
519993.42	4258312.2	10719.6628	0.16365	2.07438	0.16998	1.89404	2.15E-03	6.70E-06	7.42E-05	6.96E-06	6.50E-05	2.2996E-03
520755.69	4258533.09	10701.34579	0.1025	0.10128	0.09911	0.10474	2.14E-03	4.20E-06	3.62E-06	4.06E-06	3.60E-06	2.1586E-03
520061.5	4258116.61	10697.18628	0.11884	13.65703	0.12402	8.64626	2.14E-03	4.87E-06	4.88E-04	5.08E-06	2.97E-04	2.9375E-03
520012.34	4258234.48	10694.52747	0.13866	2.86959	0.1441	2.5603	2.14E-03	5.68E-06	1.03E-04	5.90E-06	8.79E-05	2.3438E-03
519983.52	4258424.08	10688.57444	0.23499	1.75046	0.24662	1.60169	2.14E-03	9.62E-06	6.26E-05	1.01E-05	5.50E-05	2.2779E-03
520029.1	4258187.62	10688.22207	0.1291	4.10761	0.13555	3.52922	2.14E-03	5.29E-06	1.47E-04	5.55E-06	1.21E-04	2.4194E-03
520045.16	4259486.18	10665.26858	7.02856	0.10452	11.02098	0.10225	2.14E-03	2.88E-04	3.74E-06	4.51E-04	3.51E-06	2.8821E-03
520082.08	4259506.95	10656.25792	13.40689	0.10552	14.06741	0.10178	2.13E-03	5.49E-04	3.77E-06	5.76E-04	3.49E-06	3.2662E-03
520767.14	4258432.68	10654.39551	0.09893	0.09911	0.096	0.10304	2.13E-03	4.05E-06	3.55E-06	3.93E-06	3.54E-06	2.1488E-03
519907.12	4258636.77	10652.02122	0.28198	0.62453	0.30367	0.60476	2.13E-03	1.15E-05	2.23E-05	1.24E-05	2.08E-05	2.2003E-03
519994.47	4258301.78	10643.77811	0.15889	2.10997	0.16491	1.92504	2.13E-03	6.51E-06	7.55E-05	6.75E-06	6.61E-05	2.2864E-03
520755.74	4258523.61	10643.00193	0.10241	0.10135	0.09897	0.10488	2.13E-03	4.19E-06	3.63E-06	4.05E-06	3.60E-06	2.1469E-03
520106.64	4258033.98	10640.27187	0.10872	11.88694	0.11013	13.52701	2.13E-03	4.45E-06	4.25E-04	4.51E-06	4.64E-04	3.0294E-03
520055.42	4258126.82	10640.112	0.11978	9.74745	0.12545	7.01866	2.13E-03	4.90E-06	3.49E-04	5.14E-06	2.41E-04	2.7305E-03
520765.48	4258571.08	10636.57503	0.10045	0.09792	0.09747	0.10119	2.13E-03	4.11E-06	3.50E-06	3.99E-06	3.47E-06	2.1452E-03
520019.2	4258211.68	10635.23792	0.13323	3.28858	0.13909	2.89728	2.13E-03	5.45E-06	1.18E-04	5.69E-06	9.95E-05	2.3581E-03
519811.79	4258857.29	10635.08246	0.22796	0.26414	0.23698	0.25845	2.13E-03	9.33E-06	9.45E-06	9.70E-06	8.87E-06	2.1672E-03
519959.56	4258541.08	10634.53003	0.32166	1.16311	0.35129	1.08859	2.13E-03	1.32E-05	4.16E-05	1.44E-05	3.74E-05	2.2362E-03
519838.31	4258782.47	10628.09417	0.23761	0.33507	0.24905	0.32682	2.13E-03	9.73E-06	1.20E-05	1.02E-05	1.12E-05	2.1716E-03
519897.12	4258655.32	10616.61773	0.27333	0.56668	0.29202	0.55002	2.13E-03	1.12E-05	2.03E-05	1.20E-05	1.89E-05	2.1884E-03
519987.55	4258344.58	10613.32298	0.17786	1.89087	0.18501	1.73451	2.13E-03	7.28E-06	6.76E-05	7.58E-06	5.95E-05	2.2675E-03
520001.27	4258269.01	10603.63537	0.14734	2.35602	0.15261	2.13509	2.12E-03	6.03E-06	8.43E-05	6.25E-06	7.33E-05	2.2934E-03
519986.31	4258355.08	10601.84911	0.18343	1.85405	0.1909	1.70155	2.12E-03	7.51E-06	6.63E-05	7.82E-06	5.84E-05	2.2632E-03
519983.45	4258400	10601.2884	0.21338	1.76232	0.22303	1.61602	2.12E-03	8.74E-06	6.30E-05	9.13E-06	5.55E-05	2.2594E-03
519988.65	4258334.14	10594.41997	0.17247	1.92421	0.17931	1.76432	2.12E-03	7.06E-06	6.88E-05	7.34E-06	6.06E-05	2.2655E-03
519874.46	4258700.84	10575.77307	0.25635	0.46102	0.27196	0.44715	2.12E-03	1.05E-05	1.65E-05	1.11E-05	1.54E-05	2.1714E-03
520036.69	4258164.51	10563.71496	0.1245	4.99211	0.13097	4.17592	2.12E-03	5.10E-06	1.79E-04	5.36E-06	1.43E-04	2.4479E-03
519887.12	4258673.87	10555.25032	0.26503	0.51696	0.28131	0.50225	2.11E-03	1.09E-05	1.85E-05	1.15E-05	1.72E-05	2.1719E-03
519984.87	4258365.66	10551.81349	0.18914	1.81234	0.19695	1.66432	2.11E-03	7.74E-06	6.48E-05	8.06E-06	5.71E-05	2.2509E-03
519995.42	4258291.4	10547.68496	0.15431	2.14017	0.16	1.9521	2.11E-03	6.32E-06	7.66E-05	6.55E-06	6.70E-05	2.2688E-03
520072.18	4259506.97	10542.71872	14.75712	0.1043	25.19065	0.10106	2.11E-03	6.04E-04	3.73E-06	1.03E-03	3.47E-06	3.7541E-03
520035.26	4259486.2	10541.93905	5.07758	0.10338	6.82972	0.10139	2.11E-03	2.08E-04	3.70E-06	2.80E-04	3.48E-06	2.6059E-03
519949.65	4258560.52	10539.86989	0.3147	1.01372	0.34318	0.95744	2.11E-03	1.29E-05	3.63E-05	1.41E-05	3.29E-05	2.2068E-03
520777.17	4258407.27	10536.71452	0.09639	0.09686	0.09366	0.1006	2.11E-03	3.95E-06	3.46E-06	3.83E-06	3.45E-06	2.1248E-03
520758.06	4258486.46	10535.17352	0.10153	0.10109	0.09816	0.10489	2.11E-03	4.16E-06	3.62E-06	4.02E-06	3.60E-06	2.1252E-03
520062	4258109.76	10534.94741	0.11695	14.08256	0.12197	8.78526	2.11E-03	4.79E-06	5.04E-04	4.99E-06	3.02E-04	2.9249E-03
519829.12	4258803.25	10534.87652	0.2321	0.31072	0.24293	0.30336	2.11E-03	9.50E-06	1.11E-05	9.95E-06	1.04E-05	2.1507E-03
519852.99	4258745.53	10525.48493	0.24335	0.38257	0.25633	0.37215	2.11E-03	9.96E-06	1.37E-05	1.05E-05	1.28E-05	2.1548E-03
520764.59	4258451.87	10519.03891	0.09971	0.09955	0.09662	0.10348	2.11E-03	4.08E-06	3.56E-06	3.96E-06	3.55E-06	2.1217E-03
520761.29	4258469.05	10498.70058	0.10064	0.10026	0.09738	0.10415	2.10E-03	4.12E-06	3.59E-06	3.99E-06	3.58E-06	2.1178E-03
520046.34	4258140.55	10497.27864	0.12064	6.73129	0.1268	5.33984	2.10E-03	4.94E-06	2.41E-04	5.19E-06	1.83E-04	2.5364E-03
520765.53	4258561.6	10492.73178	0.10034	0.09815	0.0973	0.10141	2.10E-03	4.11E-06	3.51E-06	3.98E-06	3.48E-06	2.1164E-03
519814.99	4258841.1	10486.96361	0.22617	0.27495	0.23559	0.26894	2.10E-03	9.26E-06	9.83E-06	9.65E-06	9.23E-06	2.1381E-03
519969.44	4258511.95	10479.55788	0.31066	1.35671	0.33741	1.25662	2.10E-03	1.27E-05	4.85E-05	1.38E-05	4.31E-05	2.2169E-03
520002.15	4258258.66	10465.7646	0.14329	2.39178	0.14837	2.16553	2.10E-03	5.87E-06	8.56E-05	6.07E-06	7.43E-05	2.2677E-03
519979.85	4258457.26	10464.44738	0.26423	1.63585	0.27996	1.49764	2.10E-03	1.08E-05	5.85E-05	1.15E-05	5.14E-05	2.2279E-03
520096.82	4258043.95	10464.23976	0.10891	18.03618	0.11091	17.95999	2.10E-03	4.46E-06	6.45E-04	4.54E-06	6.17E-04	3.3663E-03
519868.49	4258710.57	10461.93637	0.25126	0.43893	0.26568	0.42624	2.10E-03	1.03E-05	1.57E-05	1.09E-05	1.46E-05	2.1466E-03
520029.55	4258177.44	10458.05669	0.12578	4.14291	0.13211	3.55467	2.09E-03	5.15E-06	1.48E-04	5.41E-06	1.22E-04	2.3751E-03
520045.18	4259496.18	10455.25736	7.16622	0.1029	11.48355	0.10067	2.09E-03	2.93E-04	3.68E-06	4.70E-04	3.46E-06	2.8645E-03
520082.1	4259516.95	10444.02112	13.05274	0.10388	13.52034	0.10022	2.09E-03	5.34E-04	3.72E-06	5.54E-04	3.44E-06	3.1867E-03
520773.85	4258424.44	10439.01492	0.09733	0.09746	0.09452	0.10128	2.09E-03	3.99E-06	3.49E-06	3.87E-06	3.48E-06	2.1054E-03
519996.27	4258281.06	10435.60227	0.14992	2.16925	0.15531	1.97764	2.09E-03	6.14E-06	7.76E-05	6.36E-06	6.79E-05	2.2479E-03
520019.8	4258201.44	10424.14289	0.12973	3.31428	0.13554	2.91303	2.09E-03	5.31E-06	1.19E-04	5.55E-06	1.00E-04	2.3170E-03
519919.85	4258609.13	10408.39853	0.28969	0.7171	0.31466	0.69075	2.08E-03	1.19E-05	2.56E-05	1.29E-05	2.37E-05	2.1585E-03
520781.19	4258599.97	10370.77127	0.0969	0.09327	0.09421	0.09637	2.08E-03	3.97E-06	3.34E-06	3.86E-06	3.31E-06	2.0914E-03
520765.58	4258552.11	10369.38629	0.10023	0.09836	0.09713	0.10162	2.08E-03	4.10E-06	3.52E-06	3.98E-06	3.49E-06	2.0917E-03
520106.67	4258023.98	10356.90929	0.10619	11.89394	0.10752	13.4786	2.07E-03	4.35E-06	4.25E-04	4.40E-06	4.63E-04	2.9710E-03
520760.8	4258513.71	10349.3448	0.10108	0.10006	0.09769	0.1036	2.07E-03	4.14E-06	3.58E-06	4.00E-06	3.56E-06	2.0879E-03
520770.62	4258441.81	10346.09765	0.09822	0.09809	0.09529	0.10195	2.07E-03	4.02E-06	3.51E-06	3.90E-06	3.50E-06	2.0869E-03
520035.28	4259496.2	10336.33645	5.16322	0.10178	6.98422	0.09984	2.07E-03	2.11E-04	3.64E-06	2.86E-04	3.43E-06	2.5744E-03
520072.2	4259516.97	10334.70885	14.37437	0.1027	23.54454	0.09953	2.07E-03	5.89E-04	3.67E-06	9.64E-04	3.42E-06	3.6293E-03
520037.12	4258154.35	10329.10641	0.12137	5.04232	0.1277	4.21132	2.07E-03	4.97E-06	1.80E-04	5.23E-06	1.45E-04	2.4037E-03
519980.06	4258432.48	10327.91799	0.23809	1.65945	0.25	1.5232	2.07E-03	9.75E-06	5.94E-05	1.02E-05	5.23E-05	2.1999E-03
520761.14	4258504.58	10326.32292	0.10093	0.10006	0.09755	0.10366	2.07E-03	4.13E-06	3.58E-06	3.99E-06	3.56E-06	2.0833E-03
520761.49	4258495.44	10324.6985	0.10077	0.10008	0.09742	0.10375	2.07E-03	4.13E-06	3.58E-06	3.99E-06	3.56E-06	2.0829E-03
520002.95	4258248.34	10317.26396	0.13941	2.4217	0.14432	2.19158	2.07E-03	5.71E-06	8.66E-05	5.91E-06	7.52E-05	2.2396E-03
520009.59	4258225.63	10303.97238	0.13381	2.71691	0.13889	2.43628	2.06E-03	5.48E-06	9.72E-05	5.69E-06	8.36E-05	2.2555E-03
519929.77	4258589.69	10299.41785	0.2967	0.80389	0.32387	0.76903	2.06E-03	1.21E-05	2.88E-05	1.33E-05	2.64E-05	2.1432E-03
519818.14	4258824.77	10292.5285	0.22395	0.28628	0.2337	0.27986	2.06E-03	9.17E-06	1.02E-05	9.57E-06	9.61E-06	2.0998E-03
519846.47	4258753.92	10272.66861	0.23627	0.36519	0.24831	0.35564	2.06E-03	9.67E-06	1.31E-05	1.02E-05	1.22E-05	2.1024E-03
520765.64	4258542.63	10267.75417	0.10013	0.09854	0.09697	0.10182	2.06E-03	4.10E-06	3.52E-06	3.97E-06	3.50E-06	2.0713E-03
519862.15	4258719.38	10258.22028	0.24466	0.41795	0.25808	0.4063	2.05E-03	1.00E-05	1.49E-05	1.06E-05	1.39E-05	2.1038E-03
520764.68	4258477.97	10251.97358	0.09988	0.09938	0.09665	0.10313	2.05E-03	4.09E-06	3.55E-06	3.96E-06	3.54E-06	2.0682E-03
520046.65	4258130.44	10250.01371	0.11765	6.78975	0.12362	5.37168	2.05E-03	4.82E-06	2.43E-04	5.06E-06	1.84E-04	2.4899E-03
520767.97	4258460.73	10246.91772	0.09901	0.09856	0.0959	0.10239	2.05E-03	4.05E-06	3.53E-06	3.93E-06	3.52E-06	2.0671E-03
520082.12	4259526.95	10237.74045	12.93918	0.10227	12.98519	0.0987	2.05E-03	5.30E-04	3.66E-06	5.32E-04	3.39E-06	3.1187E-03
519841.08	4258765.04	10233.92164	0.23305	0.34921	0.24424	0.34053	2.05E-03	9.54E-06	1.25E-05	1.00E-05	1.17E-05	2.0932E-03
520780.59	4258416.28	10233.32037	0.09575	0.09583	0.09307	0.09954	2.05E-03	3.92E-06	3.43E-06	3.81E-06	3.42E-06	2.0639E-03
520020.35	4258191.23	10223.83649	0.12644	3.35863	0.13221	2.95208	2.05E-03	5.18E-06	1.20E-04	5.41E-06	1.01E-04	2.2795E-03
519822.29	4258810.82	10212.61565	0.22424	0.2981	0.23433	0.29123	2.05E-03	9.18E-06	1.07E-05	9.59E-06	1.00E-05	2.0847E-03
520042.48	4259507.02	10203.14337	6.67455	0.10088	10.25519	0.09879	2.04E-03	2.73E-04	3.61E-06	4.20E-04	3.39E-06	2.7435E-03
520778.28	4258583.39	10203.08164	0.09743	0.09447	0.09472	0.0976	2.04E-03	3.99E-06	3.38E-06	3.88E-06	3.35E-06	2.0579E-03
520096.85	4258033.95	10194.0866	0.10638	18.05343	0.10826	18.0902	2.04E-03	4.36E-06	6.46E-04	4.43E-06	6.21E-04	3.3171E-03
520765.69	4258533.15	10189.31154	0.10004	0.09868	0.09682	0.102	2.04E-03	4.10E-06	3.53E-06	3.96E-06	3.50E-06	2.0556E-03
519959.52	4258531.38	10177.30844	0.30932	1.17559	0.33664	1.0997	2.04E-03	1.27E-05	4.20E-05	1.38E-05	3.78E-05	2.1444E-03
520059.08	4258101.95	10176.29182	0.11372	11.71354	0.11872	7.89602	2.04E-03	4.66E-06	4.19E-04	4.86E-06	2.71E-04	2.7375E-03
519976.34	4258465.79	10175.01483	0.26766	1.54944	0.2847	1.42297	2.04E-03	1.10E-05	5.54E-05	1.17E-05	4.89E-05	2.1646E-03
519969.4	4258502.25	10174.482	0.29781	1.36903	0.32207	1.26774	2.04E-03	1.22E-05	4.90E-05	1.32E-05	4.35E-05	2.1555E-03
520051.71	4258116.57	10164.12809	0.11537	8.22773	0.12097	6.20541	2.04E-03	4.72E-06	2.94E-04	4.95E-06	2.13E-04	2.5525E-03
520003.69	4258238.05	10161.88672	0.13568	2.44963	0.14047	2.21563	2.04E-03	5.56E-06	8.76E-05	5.75E-06	7.61E-05	2.2100E-03
519808.11	4258848.56	10160.47539	0.21843	0.26449	0.22707	0.2589	2.03E-03	8.94E-06	9.46E-06	9.30E-06	8.89E-06	2.0714E-03
519979.54	4258385.23	10135.8031	0.19762	1.67173	0.20584	1.54142	2.03E-03	8.09E-06	5.98E-05	8.43E-06	5.29E-05	2.1591E-03
520777.3	4258433.5	10135.73052	0.09665	0.09646	0.09386	0.10022	2.03E-03	3.96E-06	3.45E-06	3.84E-06	3.44E-06	2.0445E-03
520765.74	4258523.67	10133.90903	0.09995	0.09878	0.09669	0.10216	2.03E-03	4.09E-06	3.53E-06	3.96E-06	3.51E-06	2.0445E-03
520072.22	4259526.97	10133.05515	13.88786	0.10114	22.06855	0.09804	2.03E-03	5.69E-04	3.62E-06	9.04E-04	3.37E-06	3.5085E-03
520010.31	4258215.34	10129.31854	0.13035	2.75175	0.1354	2.46564	2.03E-03	5.34E-06	9.84E-05	5.54E-06	8.46E-05	2.2225E-03
520027.74	4258168.2	10124.38825	0.12198	3.95364	0.12807	3.40939	2.03E-03	4.99E-06	1.41E-04	5.24E-06	1.17E-04	2.2962E-03
519897.12	4258646.05	10113.0582	0.2663	0.5729	0.28508	0.55643	2.03E-03	1.09E-05	2.05E-05	1.17E-05	1.91E-05	2.0874E-03
520037.52	4258144.2	10095.20871	0.11836	5.0891	0.12456	4.24224	2.02E-03	4.85E-06	1.82E-04	5.10E-06	1.46E-04	2.3593E-03
519949.61	4258550.82	10093.60485	0.30621	1.02802	0.33318	0.96999	2.02E-03	1.25E-05	3.68E-05	1.36E-05	3.33E-05	2.1176E-03
520106.7	4258013.98	10089.12547	0.10377	11.89491	0.10501	13.54855	2.02E-03	4.25E-06	4.25E-04	4.30E-06	4.65E-04	2.9196E-03
519939.69	4258570.26	10089.12041	0.30001	0.90522	0.32637	0.86026	2.02E-03	1.23E-05	3.24E-05	1.34E-05	2.95E-05	2.1080E-03
520032.58	4259507.04	10088.69869	4.85894	0.09981	6.44808	0.09797	2.02E-03	1.99E-04	3.57E-06	2.64E-04	3.36E-06	2.4903E-03
519887.12	4258664.6	10078.4998	0.25839	0.52245	0.27449	0.5083	2.02E-03	1.06E-05	1.87E-05	1.12E-05	1.75E-05	2.0763E-03
520774.09	4258450.94	10058.92857	0.09752	0.0971	0.09458	0.10087	2.01E-03	3.99E-06	3.47E-06	3.87E-06	3.46E-06	2.0292E-03
519855.74	4258728.06	10042.19271	0.23794	0.39842	0.25057	0.38761	2.01E-03	9.74E-06	1.43E-05	1.03E-05	1.33E-05	2.0586E-03
520768.08	4258486.89	10033.0629	0.09915	0.09842	0.09592	0.10205	2.01E-03	4.06E-06	3.52E-06	3.93E-06	3.50E-06	2.0243E-03
520775.96	4258565.45	10033.04954	0.09785	0.09545	0.09501	0.0986	2.01E-03	4.01E-06	3.41E-06	3.89E-06	3.39E-06	2.0240E-03
519983.35	4258326.34	10031.90073	0.16415	1.77835	0.17031	1.64112	2.01E-03	6.72E-06	6.36E-05	6.97E-06	5.63E-05	2.1427E-03
520020.87	4258181.03	10020.27596	0.12326	3.38716	0.12898	2.97338	2.01E-03	5.05E-06	1.21E-04	5.28E-06	1.02E-04	2.2403E-03
520052.22	4258109.73	10018.80533	0.11359	8.39058	0.11904	6.29267	2.01E-03	4.65E-06	3.00E-04	4.87E-06	2.16E-04	2.5321E-03
519984.64	4258315.82	10017.04248	0.15953	1.81298	0.16547	1.67193	2.01E-03	6.53E-06	6.48E-05	6.78E-06	5.74E-05	2.1416E-03
519877.12	4258683.15	10009.35538	0.25051	0.47891	0.26507	0.46586	2.00E-03	1.03E-05	1.71E-05	1.09E-05	1.60E-05	2.0587E-03
520042.5	4259517.02	10006.70586	6.84583	0.09935	10.7863	0.0973	2.00E-03	2.80E-04	3.55E-06	4.42E-04	3.34E-06	2.7328E-03
519992.39	4258272.68	9994.83025	0.14395	2.03695	0.14895	1.86679	2.00E-03	5.89E-06	7.29E-05	6.10E-06	6.41E-05	2.1505E-03
520771.34	4258469.6	9994.017	0.09828	0.09769	0.09518	0.10139	2.00E-03	4.02E-06	3.49E-06	3.90E-06	3.48E-06	2.0163E-03
519976.61	4258440.89	9991.89084	0.24116	1.57546	0.25356	1.45005	2.00E-03	9.87E-06	5.64E-05	1.04E-05	4.98E-05	2.1274E-03
519834.56	4258773.44	9983.49861	0.2262	0.33428	0.23684	0.32613	2.00E-03	9.26E-06	1.20E-05	9.70E-06	1.12E-05	2.0414E-03
519811.3	4258832.31	9983.23171	0.2165	0.27511	0.22542	0.26917	2.00E-03	8.86E-06	9.84E-06	9.23E-06	9.24E-06	2.0365E-03
519985.78	4258305.36	9976.12458	0.15504	1.84378	0.16074	1.69941	2.00E-03	6.35E-06	6.59E-05	6.58E-06	5.83E-05	2.1351E-03
520078.01	4259538.19	9971.70159	14.22257	0.10006	14.94506	0.09678	2.00E-03	5.82E-04	3.58E-06	6.12E-04	3.32E-06	3.1981E-03
519825.48	4258794.6	9965.48379	0.22181	0.31015	0.2317	0.30298	2.00E-03	9.08E-06	1.11E-05	9.49E-06	1.04E-05	2.0358E-03
520010.98	4258205.08	9951.99143	0.12702	2.77954	0.13204	2.48754	1.99E-03	5.20E-06	9.94E-05	5.41E-06	8.54E-05	2.1884E-03
520784.02	4258425.28	9942.41132	0.09513	0.09479	0.09244	0.09847	1.99E-03	3.90E-06	3.39E-06	3.78E-06	3.38E-06	2.0056E-03
519909.89	4258618.87	9940.68631	0.27423	0.65229	0.29599	0.63125	1.99E-03	1.12E-05	2.33E-05	1.21E-05	2.17E-05	2.0591E-03
520096.88	4258023.95	9934.04371	0.10395	18.0718	0.10572	18.1656	1.99E-03	4.26E-06	6.46E-04	4.33E-06	6.24E-04	3.2681E-03
519972.83	4258474.32	9926.4727	0.2709	1.46845	0.2894	1.3531	1.99E-03	1.11E-05	5.25E-05	1.18E-05	4.65E-05	2.1098E-03
520059.11	4258091.95	9925.04438	0.11097	11.69128	0.11579	7.87756	1.99E-03	4.54E-06	4.18E-04	4.74E-06	2.70E-04	2.6855E-03
519976.62	4258416.58	9922.5313	0.21884	1.5909	0.22876	1.4674	1.99E-03	8.96E-06	5.69E-05	9.37E-06	5.04E-05	2.1127E-03
519969.36	4258492.55	9921.36641	0.28555	1.38068	0.30747	1.27815	1.99E-03	1.17E-05	4.94E-05	1.26E-05	4.39E-05	2.1044E-03
519986.81	4258294.95	9914.61432	0.1507	1.87096	0.15614	1.72373	1.99E-03	6.17E-06	6.69E-05	6.39E-06	5.92E-05	2.1242E-03
520028.23	4258158.01	9913.54666	0.11898	3.99708	0.12499	3.44306	1.99E-03	4.87E-06	1.43E-04	5.12E-06	1.18E-04	2.2565E-03
520032.6	4259517.04	9896.32076	4.95994	0.0983	6.63476	0.0965	1.98E-03	2.03E-04	3.52E-06	2.72E-04	3.31E-06	2.4634E-03
519993.35	4258262.29	9888.76579	0.14007	2.06373	0.14482	1.89033	1.98E-03	5.74E-06	7.38E-05	5.93E-06	6.49E-05	2.1307E-03
519980.21	4258337.62	9878.65998	0.168	1.69896	0.17426	1.57146	1.98E-03	6.88E-06	6.08E-05	7.13E-06	5.39E-05	2.1071E-03
520068.11	4259538.21	9870.62395	14.21053	0.09896	27.75039	0.09611	1.98E-03	5.82E-04	3.54E-06	1.14E-03	3.30E-06	3.7016E-03
520037.89	4258134.05	9869.63373	0.11549	5.1323	0.12153	4.26959	1.98E-03	4.73E-06	1.84E-04	4.98E-06	1.47E-04	2.3164E-03
519979.03	4258348.1	9865.72732	0.17304	1.66956	0.17955	1.54474	1.98E-03	7.08E-06	5.97E-05	7.35E-06	5.30E-05	2.1029E-03
520770.79	4258514.08	9861.72157	0.09868	0.09758	0.09547	0.10095	1.97E-03	4.04E-06	3.49E-06	3.91E-06	3.47E-06	1.9898E-03
520780.75	4258442.56	9852.89672	0.09598	0.09545	0.09317	0.09915	1.97E-03	3.93E-06	3.41E-06	3.81E-06	3.40E-06	1.9877E-03
519919.81	4258599.43	9843.87008	0.28104	0.72617	0.30522	0.69875	1.97E-03	1.15E-05	2.60E-05	1.25E-05	2.40E-05	2.0453E-03
520771.14	4258504.95	9839.16681	0.09855	0.09753	0.09533	0.10097	1.97E-03	4.04E-06	3.49E-06	3.90E-06	3.47E-06	1.9853E-03
520771.48	4258495.82	9837.53114	0.09841	0.09748	0.09521	0.10099	1.97E-03	4.03E-06	3.49E-06	3.90E-06	3.47E-06	1.9850E-03
519987.74	4258284.58	9835.6641	0.14653	1.89605	0.1517	1.74604	1.97E-03	6.00E-06	6.78E-05	6.21E-06	5.99E-05	2.1097E-03
520106.73	4258003.98	9834.53072	0.10146	11.89223	0.1026	13.68468	1.97E-03	4.15E-06	4.25E-04	4.20E-06	4.70E-04	2.8730E-03
519849.29	4258736.62	9822.04362	0.23127	0.38024	0.24322	0.37018	1.97E-03	9.47E-06	1.36E-05	9.96E-06	1.27E-05	2.0127E-03
519977.68	4258358.64	9821.03607	0.17821	1.63632	0.18497	1.5147	1.97E-03	7.30E-06	5.85E-05	7.57E-06	5.20E-05	2.0922E-03
519870.79	4258692	9816.54117	0.24364	0.4556	0.25757	0.44315	1.97E-03	9.98E-06	1.63E-05	1.05E-05	1.52E-05	2.0179E-03
520042.51	4259527.02	9815.9378	7.01281	0.09786	11.38372	0.09585	1.97E-03	2.87E-04	3.50E-06	4.66E-04	3.29E-06	2.7258E-03

519975.88	4258394.11	9805.55861	0.20022	1.58521	0.20852	1.46598	1.96E-03	8.20E-06	5.67E-05	8.54E-06	5.03E-05	2.0875E-03
519959.48	4258521.68	9800.85386	0.29761	1.1874	0.32273	1.11019	1.96E-03	1.22E-05	4.25E-05	1.32E-05	3.81E-05	2.0687E-03
520777.57	4258460.06	9792.3888	0.0968	0.09616	0.09385	0.09982	1.96E-03	3.96E-06	3.44E-06	3.84E-06	3.43E-06	1.9757E-03
520000.63	4258229.33	9786.83834	0.13091	2.31813	0.13535	2.10655	1.96E-03	5.36E-06	8.29E-05	5.54E-06	7.23E-05	2.1261E-03
520060.26	4258084.04	9783.85703	0.10921	12.47338	0.11384	8.17456	1.96E-03	4.47E-06	4.46E-04	4.66E-06	2.81E-04	2.6953E-03
520078.02	4259548.19	9780.24726	13.67845	0.09856	14.27527	0.09535	1.96E-03	5.60E-04	3.53E-06	5.84E-04	3.27E-06	3.1100E-03
520011.61	4258194.84	9774.10277	0.12385	2.8111	0.12885	2.51358	1.96E-03	5.07E-06	1.01E-04	5.28E-06	8.63E-05	2.1546E-03
520774.72	4258478.46	9768.6547	0.09757	0.09675	0.09447	0.10034	1.96E-03	3.99E-06	3.46E-06	3.87E-06	3.44E-06	1.9711E-03
519994.23	4258251.94	9765.24516	0.13633	2.08716	0.14086	1.91061	1.96E-03	5.58E-06	7.47E-05	5.77E-06	6.56E-05	2.1072E-03
519814.42	4258815.92	9761.40448	0.21414	0.28615	0.22325	0.2798	1.95E-03	8.77E-06	1.02E-05	9.14E-06	9.61E-06	1.9926E-03
519929.73	4258580	9737.53833	0.28716	0.81393	0.31238	0.77783	1.95E-03	1.18E-05	2.91E-05	1.28E-05	2.67E-05	2.0304E-03
520788.42	4258583.44	9733.13381	0.09504	0.0921	0.09249	0.09513	1.95E-03	3.89E-06	3.29E-06	3.79E-06	3.27E-06	1.9634E-03
520776.55	4258540.86	9730.70751	0.09752	0.09579	0.09451	0.09895	1.95E-03	3.99E-06	3.43E-06	3.87E-06	3.40E-06	1.9634E-03
519969.32	4258482.85	9716.63933	0.2739	1.39181	0.2936	1.28781	1.95E-03	1.12E-05	4.98E-05	1.20E-05	4.42E-05	2.0631E-03
520032.61	4259527.04	9709.45867	5.0545	0.09684	6.84375	0.09507	1.94E-03	2.07E-04	3.46E-06	2.80E-04	3.26E-06	2.4383E-03
520028.69	4258147.84	9706.57336	0.11609	4.03433	0.12203	3.47004	1.94E-03	4.75E-06	1.44E-04	5.00E-06	1.19E-04	2.2171E-03
520018.79	4258171.9	9697.86576	0.11949	3.22835	0.12496	2.84429	1.94E-03	4.89E-06	1.15E-04	5.12E-06	9.76E-05	2.1653E-03
519804.44	4258839.83	9686.40759	0.20935	0.26463	0.21754	0.2591	1.94E-03	8.57E-06	9.47E-06	8.91E-06	8.90E-06	1.9757E-03
520096.91	4258013.95	9683.71756	0.10161	18.0904	0.10328	18.227	1.94E-03	4.16E-06	6.47E-04	4.23E-06	6.26E-04	3.2205E-03
520049.29	4258101.92	9682.97867	0.11046	7.43598	0.11587	5.7418	1.94E-03	4.52E-06	2.66E-04	4.74E-06	1.97E-04	2.4115E-03
520068.12	4259548.21	9682.44278	16.11111	0.09748	25.7271	0.0947	1.94E-03	6.60E-04	3.49E-06	1.05E-03	3.25E-06	3.6588E-03
519818.67	4258802.23	9675.87551	0.21457	0.29765	0.22384	0.29091	1.94E-03	8.79E-06	1.06E-05	9.16E-06	9.99E-06	1.9763E-03
519864.7	4258701.43	9670.97579	0.23769	0.43422	0.25119	0.42223	1.94E-03	9.73E-06	1.55E-05	1.03E-05	1.45E-05	1.9868E-03
520787.45	4258434.29	9662.25981	0.09449	0.09378	0.09179	0.09742	1.93E-03	3.87E-06	3.35E-06	3.76E-06	3.34E-06	1.9493E-03
519995.03	4258241.62	9647.27085	0.1328	2.11694	0.13716	1.93654	1.93E-03	5.44E-06	7.57E-05	5.62E-06	6.65E-05	2.0853E-03
520001.43	4258219.01	9640.99006	0.12758	2.34414	0.13194	2.12809	1.93E-03	5.22E-06	8.38E-05	5.40E-06	7.31E-05	2.0983E-03
519897.12	4258636.77	9635.59389	0.25966	0.57906	0.27838	0.56262	1.93E-03	1.06E-05	2.07E-05	1.14E-05	1.93E-05	1.9917E-03
519887.12	4258655.32	9615.97693	0.25199	0.52789	0.26823	0.51403	1.93E-03	1.03E-05	1.89E-05	1.10E-05	1.76E-05	1.9836E-03
519949.56	4258541.12	9613.25704	0.29479	1.03852	0.31968	0.97966	1.93E-03	1.21E-05	3.71E-05	1.31E-05	3.36E-05	2.0211E-03
520785.55	4258566.75	9610.21114	0.0956	0.09314	0.09292	0.09618	1.92E-03	3.91E-06	3.33E-06	3.80E-06	3.30E-06	1.9389E-03
519842.8	4258745.07	9606.34751	0.22485	0.36324	0.23601	0.35395	1.92E-03	9.21E-06	1.30E-05	9.66E-06	1.22E-05	1.9678E-03
519939.65	4258560.56	9599.20249	0.29083	0.91612	0.31523	0.87023	1.92E-03	1.19E-05	3.28E-05	1.29E-05	2.99E-05	2.0098E-03
520012.18	4258184.61	9594.70575	0.12078	2.84047	0.12577	2.53661	1.92E-03	4.95E-06	1.02E-04	5.15E-06	8.71E-05	2.1202E-03
520078.04	4259558.19	9594.27016	13.29701	0.0971	13.63606	0.09396	1.92E-03	5.44E-04	3.47E-06	5.58E-04	3.23E-06	3.0308E-03
520784.2	4258451.63	9586.0977	0.0953	0.09451	0.09247	0.09812	1.92E-03	3.90E-06	3.38E-06	3.79E-06	3.37E-06	1.9342E-03
520106.76	4257993.98	9584.91434	0.09922	11.8949	0.10029	13.68228	1.92E-03	4.06E-06	4.25E-04	4.11E-06	4.70E-04	2.8229E-03
519877.12	4258673.87	9573.60401	0.24453	0.48377	0.25879	0.47135	1.92E-03	1.00E-05	1.73E-05	1.06E-05	1.62E-05	1.9713E-03
519837.31	4258755.94	9568.23654	0.22156	0.34788	0.23219	0.33923	1.92E-03	9.07E-06	1.24E-05	9.51E-06	1.16E-05	1.9588E-03
520038.4	4259538.26	9565.66084	6.23596	0.09581	9.40905	0.09395	1.92E-03	2.55E-04	3.43E-06	3.85E-04	3.23E-06	2.5629E-03
520778.1	4258487.33	9564.37232	0.09686	0.09581	0.09376	0.09929	1.92E-03	3.97E-06	3.43E-06	3.84E-06	3.41E-06	1.9300E-03
520781.04	4258469.19	9550.27142	0.09609	0.09523	0.09313	0.09878	1.91E-03	3.93E-06	3.41E-06	3.81E-06	3.39E-06	1.9271E-03
520060.29	4258074.04	9546.30997	0.10664	12.44701	0.11111	8.15151	1.91E-03	4.37E-06	4.45E-04	4.55E-06	2.80E-04	2.6458E-03
519858.39	4258710.33	9522.97999	0.23224	0.41387	0.24444	0.40304	1.91E-03	9.51E-06	1.48E-05	1.00E-05	1.38E-05	1.9553E-03
520783.03	4258549.27	9515.25567	0.09607	0.09404	0.09322	0.09711	1.91E-03	3.93E-06	3.36E-06	3.82E-06	3.33E-06	1.9200E-03
520780.1	4258532.72	9511.41173	0.09663	0.09509	0.09364	0.09822	1.90E-03	3.96E-06	3.40E-06	3.83E-06	3.37E-06	1.9194E-03
520019.35	4258161.68	9510.49903	0.11662	3.26852	0.12207	2.87756	1.90E-03	4.77E-06	1.17E-04	5.00E-06	9.88E-05	2.1301E-03
520068.14	4259558.21	9499.75991	15.78501	0.09604	23.91989	0.09332	1.90E-03	6.46E-04	3.44E-06	9.79E-04	3.20E-06	3.5348E-03
520029.13	4258137.67	9499.72082	0.11332	4.06927	0.11917	3.49439	1.90E-03	4.64E-06	1.46E-04	4.88E-06	1.20E-04	2.1775E-03
520002.17	4258208.72	9491.05378	0.1244	2.37366	0.12871	2.15308	1.90E-03	5.09E-06	8.49E-05	5.27E-06	7.39E-05	2.0699E-03
519807.6	4258823.53	9483.97154	0.2073	0.27496	0.21561	0.2691	1.90E-03	8.49E-06	9.83E-06	8.83E-06	9.24E-06	1.9357E-03
519959.44	4258511.99	9474.3596	0.28613	1.19796	0.30903	1.12	1.90E-03	1.17E-05	4.28E-05	1.27E-05	3.85E-05	2.0030E-03
519972.23	4258403	9473.71837	0.20279	1.50523	0.21117	1.39581	1.90E-03	8.30E-06	5.38E-05	8.65E-06	4.79E-05	2.0160E-03
520028.5	4259538.27	9463.30576	4.55887	0.09485	6.01299	0.09318	1.90E-03	1.87E-04	3.39E-06	2.46E-04	3.20E-06	2.3346E-03
520049.32	4258091.92	9453.36662	0.10785	7.42415	0.11308	5.7286	1.89E-03	4.42E-06	2.66E-04	4.63E-06	1.97E-04	2.3644E-03
519972.52	4258378.02	9450.30447	0.18572	1.51985	0.1928	1.41171	1.89E-03	7.60E-06	5.44E-05	7.89E-06	4.85E-05	2.0109E-03
520780.44	4258523.59	9448.97268	0.09649	0.09513	0.09347	0.09829	1.89E-03	3.95E-06	3.40E-06	3.83E-06	3.37E-06	1.9068E-03
520096.94	4258003.95	9444.07918	0.09937	18.1056	0.10094	18.34843	1.89E-03	4.07E-06	6.48E-04	4.13E-06	6.30E-04	3.1770E-03
519909.85	4258609.17	9426.16712	0.26659	0.65977	0.28772	0.63827	1.89E-03	1.09E-05	2.36E-05	1.18E-05	2.19E-05	1.9559E-03
520108.08	4257984.88	9417.26912	0.09751	11.35439	0.09847	13.21272	1.89E-03	3.99E-06	4.06E-04	4.03E-06	4.54E-04	2.7537E-03
519983.51	4258276.34	9414.48667	0.14066	1.78113	0.14545	1.6478	1.89E-03	5.76E-06	6.37E-05	5.96E-06	5.66E-05	2.0174E-03
520078.06	4259568.19	9413.69793	12.92113	0.09567	13.03476	0.0926	1.89E-03	5.29E-04	3.42E-06	5.34E-04	3.18E-06	2.9546E-03
519969.69	4258457.69	9411.29972	0.24709	1.42358	0.26139	1.31703	1.88E-03	1.01E-05	5.09E-05	1.07E-05	4.52E-05	2.0017E-03
520780.79	4258514.46	9407.48737	0.09637	0.09509	0.09332	0.09832	1.88E-03	3.95E-06	3.40E-06	3.82E-06	3.38E-06	1.8985E-03
519821.84	4258785.95	9404.81432	0.212	0.30938	0.22115	0.30232	1.88E-03	8.68E-06	1.11E-05	9.05E-06	1.04E-05	1.9226E-03
520790.88	4258443.29	9394.91741	0.09382	0.09287	0.09112	0.09643	1.88E-03	3.84E-06	3.32E-06	3.73E-06	3.31E-06	1.8957E-03
520038.42	4259548.26	9387.78631	6.40719	0.09441	9.86949	0.09258	1.88E-03	2.62E-04	3.38E-06	4.04E-04	3.18E-06	2.5530E-03
520781.13	4258505.32	9385.85562	0.09625	0.09502	0.09318	0.0983	1.88E-03	3.94E-06	3.40E-06	3.82E-06	3.37E-06	1.8942E-03
520781.47	4258496.19	9383.73054	0.09614	0.09493	0.09307	0.09829	1.88E-03	3.94E-06	3.40E-06	3.81E-06	3.37E-06	1.8937E-03
519830.82	4258764.41	9360.18907	0.21549	0.33297	0.22538	0.32498	1.87E-03	8.82E-06	1.19E-05	9.23E-06	1.12E-05	1.9156E-03
519975.86	4258319.45	9358.35243	0.15549	1.60027	0.16088	1.48798	1.87E-03	6.37E-06	5.72E-05	6.59E-06	5.11E-05	1.9954E-03
519977.1	4258308.95	9348.50648	0.15129	1.62839	0.15653	1.5133	1.87E-03	6.19E-06	5.82E-05	6.41E-06	5.20E-05	1.9950E-03
520789.18	4258558.43	9346.82036	0.09472	0.09246	0.09204	0.09545	1.87E-03	3.88E-06	3.31E-06	3.77E-06	3.28E-06	1.8861E-03
519974.47	4258330.01	9343.13279	0.1598	1.56974	0.16535	1.46035	1.87E-03	6.54E-06	5.61E-05	6.77E-06	5.01E-05	1.9907E-03
519852.02	4258719.08	9338.94971	0.22606	0.395	0.23772	0.38475	1.87E-03	9.26E-06	1.41E-05	9.73E-06	1.32E-05	1.9166E-03
519984.56	4258265.92	9338.34752	0.13697	1.80536	0.14153	1.66929	1.87E-03	5.61E-06	6.46E-05	5.79E-06	5.73E-05	2.0034E-03
520787.65	4258460.69	9337.84691	0.0946	0.09363	0.09177	0.09714	1.87E-03	3.87E-06	3.35E-06	3.76E-06	3.33E-06	1.8843E-03
520002.86	4258198.45	9335.21178	0.12132	2.3922	0.12558	2.16703	1.87E-03	4.97E-06	8.56E-05	5.14E-06	7.44E-05	2.0396E-03
520784.51	4258478.31	9331.38379	0.09538	0.09429	0.09241	0.09773	1.87E-03	3.91E-06	3.37E-06	3.78E-06	3.36E-06	1.8832E-03
520050.47	4258084.01	9330.49645	0.1062	7.74807	0.11126	5.91875	1.87E-03	4.35E-06	2.77E-04	4.56E-06	2.03E-04	2.3578E-03
519919.77	4258589.73	9325.94472	0.27263	0.73527	0.29571	0.70653	1.87E-03	1.12E-05	2.63E-05	1.21E-05	2.43E-05	1.9415E-03
520019.87	4258151.48	9324.93641	0.11385	3.30234	0.11927	2.90367	1.87E-03	4.66E-06	1.18E-04	4.88E-06	9.97E-05	2.0948E-03
520068.16	4259568.21	9322.18872	15.5962	0.09463	22.34603	0.09198	1.87E-03	6.39E-04	3.38E-06	9.15E-04	3.16E-06	3.4269E-03
520060.32	4258064.04	9316.86843	0.10417	12.42092	0.10848	8.11523	1.87E-03	4.27E-06	4.44E-04	4.44E-06	2.79E-04	2.5974E-03
519978.21	4258298.5	9316.75908	0.1472	1.65378	0.15228	1.53609	1.87E-03	6.03E-06	5.92E-05	6.23E-06	5.27E-05	1.9900E-03
520786.56	4258541.19	9289.57364	0.09521	0.09337	0.09237	0.09641	1.86E-03	3.90E-06	3.34E-06	3.78E-06	3.31E-06	1.8747E-03
520028.52	4259548.27	9288.97956	4.65018	0.09347	6.19428	0.09183	1.86E-03	1.90E-04	3.34E-06	2.54E-04	3.15E-06	2.3108E-03
519991.67	4258233.03	9288.29264	0.12811	2.00629	0.13216	1.8425	1.86E-03	5.25E-06	7.18E-05	5.41E-06	6.33E-05	2.0058E-03
519969.8	4258433.17	9286.65983	0.22411	1.44246	0.23461	1.33715	1.86E-03	9.18E-06	5.16E-05	9.61E-06	4.59E-05	1.9761E-03
520009.85	4258175.59	9284.92134	0.11707	2.71117	0.1218	2.43023	1.86E-03	4.79E-06	9.70E-05	4.99E-06	8.34E-05	2.0496E-03
519979.21	4258288.1	9266.24954	0.14324	1.67597	0.14813	1.55614	1.86E-03	5.86E-06	5.99E-05	6.07E-06	5.34E-05	1.9810E-03
519985.51	4258255.54	9242.89527	0.13339	1.82578	0.13772	1.68731	1.85E-03	5.46E-06	6.53E-05	5.64E-06	5.79E-05	1.9853E-03
519810.69	4258807.07	9239.13126	0.20486	0.28565	0.21321	0.27942	1.85E-03	8.39E-06	1.02E-05	8.73E-06	9.59E-06	1.8872E-03
519929.69	4258570.3	9230.2262	0.27779	0.82342	0.30089	0.78623	1.85E-03	1.14E-05	2.95E-05	1.23E-05	2.70E-05	1.9286E-03
519949.52	4258531.42	9226.61256	0.28431	1.04888	0.30744	0.98896	1.85E-03	1.16E-05	3.75E-05	1.26E-05	3.40E-05	1.9435E-03
519800.77	4258831.1	9215.91684	0.20072	0.2645	0.20835	0.25904	1.85E-03	8.22E-06	9.46E-06	8.53E-06	8.89E-06	1.8807E-03
520038.44	4259558.26	9214.92422	6.59381	0.09304	10.38266	0.09125	1.85E-03	2.70E-04	3.33E-06	4.25E-04	3.13E-06	2.5470E-03
519971.77	4258341.11	9212.19228	0.16361	1.51317	0.16924	1.40975	1.84E-03	6.70E-06	5.41E-05	6.93E-06	4.84E-05	1.9610E-03
520096.97	4257993.95	9211.90676	0.0972	18.12302	0.09869	18.37007	1.84E-03	3.98E-06	6.48E-04	4.04E-06	6.31E-04	3.1317E-03
519959.4	4258502.29	9196.64156	0.27507	1.20778	0.29593	1.12923	1.84E-03	1.13E-05	4.32E-05	1.21E-05	3.88E-05	1.9471E-03
520108.11	4257974.88	9191.18774	0.09545	11.34093	0.09632	13.25142	1.84E-03	3.91E-06	4.06E-04	3.94E-06	4.55E-04	2.7091E-03
520003.5	4258188.2	9182.01906	0.11839	2.42265	0.12264	2.19267	1.84E-03	4.85E-06	8.67E-05	5.02E-06	7.53E-05	2.0106E-03
520795.64	4258566.91	9179.07729	0.0933	0.09085	0.09079	0.09378	1.84E-03	3.82E-06	3.25E-06	3.72E-06	3.22E-06	1.8522E-03
520073.53	4259579.43	9176.91376	14.01962	0.09365	15.29984	0.09085	1.84E-03	5.74E-04	3.35E-06	6.26E-04	3.12E-06	3.0447E-03
519887.12	4258646.05	9174.82797	0.24589	0.53331	0.26231	0.51949	1.84E-03	1.01E-05	1.91E-05	1.07E-05	1.78E-05	1.8951E-03
519966.23	4258466.09	9173.17028	0.24986	1.35425	0.26537	1.25654	1.84E-03	1.02E-05	4.84E-05	1.09E-05	4.31E-05	1.9497E-03
519970.5	4258351.62	9172.05425	0.16829	1.48644	0.17415	1.38533	1.84E-03	6.89E-06	5.32E-05	7.13E-06	4.76E-05	1.9516E-03
519939.61	4258550.86	9170.87981	0.28145	0.9259	0.3042	0.87931	1.84E-03	1.15E-05	3.31E-05	1.25E-05	3.02E-05	1.9239E-03
519992.55	4258222.68	9169.81687	0.12493	2.03179	0.12884	1.86413	1.84E-03	5.12E-06	7.27E-05	5.28E-06	6.40E-05	1.9834E-03
519845.6	4258727.71	9156.44241	0.22008	0.3773	0.23109	0.36772	1.83E-03	9.01E-06	1.35E-05	9.46E-06	1.26E-05	1.8783E-03
519968.92	4258386.77	9154.02493	0.18797	1.44673	0.19508	1.34722	1.83E-03	7.70E-06	5.17E-05	7.99E-06	4.63E-05	1.9469E-03
519877.12	4258664.6	9152.52742	0.23879	0.48847	0.25301	0.47652	1.83E-03	9.78E-06	1.75E-05	1.04E-05	1.64E-05	1.8869E-03
519815.06	4258793.63	9150.26747	0.20541	0.29685	0.21388	0.29029	1.83E-03	8.41E-06	1.06E-05	8.76E-06	9.97E-06	1.8702E-03
519986.38	4258245.19	9149.26541	0.13	1.84963	0.13412	1.70791	1.83E-03	5.32E-06	6.62E-05	5.49E-06	5.86E-05	1.9679E-03
519968.57	4258411.89	9144.65833	0.20531	1.43072	0.21379	1.33004	1.83E-03	8.41E-06	5.12E-05	8.75E-06	4.57E-05	1.9453E-03
520794.31	4258452.29	9144.34753	0.09315	0.09201	0.09044	0.09548	1.83E-03	3.81E-06	3.29E-06	3.70E-06	3.28E-06	1.8454E-03
520020.36	4258141.29	9140.88848	0.11118	3.3309	0.11658	2.92466	1.83E-03	4.55E-06	1.19E-04	4.77E-06	1.00E-04	2.0595E-03
520787.99	4258487.44	9134.14999	0.09466	0.09339	0.0917	0.09671	1.83E-03	3.88E-06	3.34E-06	3.75E-06	3.32E-06	1.8435E-03
520028.53	4259558.27	9119.36458	4.75639	0.09212	6.38938	0.09052	1.83E-03	1.95E-04	3.30E-06	2.62E-04	3.11E-06	2.2890E-03
520010.47	4258165.34	9118.70179	0.1143	2.73877	0.11904	2.45173	1.83E-03	4.68E-06	9.80E-05	4.87E-06	8.42E-05	2.0178E-03
520050.5	4258074.01	9115.86746	0.10377	7.73284	0.10865	5.90757	1.83E-03	4.25E-06	2.77E-04	4.45E-06	2.03E-04	2.3137E-03
520791.1	4258469.75	9112.84737	0.09391	0.09274	0.09107	0.09614	1.82E-03	3.85E-06	3.32E-06	3.73E-06	3.30E-06	1.8392E-03
519867.12	4258683.15	9105.61893	0.23174	0.44955	0.24455	0.43844	1.82E-03	9.49E-06	1.61E-05	1.00E-05	1.51E-05	1.8742E-03
520063.63	4259579.45	9088.08683	14.7088	0.09262	29.17623	0.09021	1.82E-03	6.02E-04	3.31E-06	1.19E-03	3.10E-06	3.6233E-03
520098.29	4257984.85	9057.52745	0.09557	16.98966	0.09692	17.78398	1.81E-03	3.91E-06	6.08E-04	3.97E-06	6.11E-04	3.0400E-03
520059.57	4258053.82	9052.75742	0.10151	11.8343	0.10573	7.79413	1.81E-03	4.16E-06	4.23E-04	4.33E-06	2.68E-04	2.5123E-03
520038.45	4259568.26	9046.83487	6.78536	0.09171	10.95257	0.08995	1.81E-03	2.78E-04	3.28E-06	4.48E-04	3.09E-06	2.5444E-03
519993.36	4258212.35	9044.7432	0.12186	2.05745	0.12567	1.88502	1.81E-03	4.99E-06	7.36E-05	5.15E-06	6.47E-05	1.9598E-03
519899.89	4258618.91	9025.0365	0.25304	0.60311	0.2717	0.58573	1.81E-03	1.04E-05	2.16E-05	1.11E-05	2.01E-05	1.8706E-03
520790.44	4258523.96	9024.35512	0.09424	0.09274	0.09138	0.09577	1.81E-03	3.86E-06	3.32E-06	3.74E-06	3.29E-06	1.8215E-03
520073.55	4259589.43	9008.68365	13.47585	0.09231	14.54239	0.08957	1.80E-03	5.52E-04	3.30E-06	5.95E-04	3.08E-06	2.9577E-03
519966.38	4258441.47	9000.30575	0.22666	1.37529	0.23782	1.27769	1.80E-03	9.28E-06	4.92E-05	9.74E-06	4.39E-05	1.9145E-03
519803.9	4258814.74	8989.96271	0.19854	0.27457	0.20624	0.26877	1.80E-03	8.13E-06	9.82E-06	8.44E-06	9.23E-06	1.8360E-03
520790.78	4258514.83	8984.51318	0.09414	0.0927	0.09124	0.09578	1.80E-03	3.85E-06	3.32E-06	3.74E-06	3.29E-06	1.8135E-03
519959.36	4258492.59	8982.68706	0.26474	1.21761	0.28385	1.13808	1.80E-03	1.08E-05	4.36E-05	1.16E-05	3.91E-05	1.9040E-03
519839.13	4258736.23	8976.09505	0.21431	0.36067	0.22456	0.35181	1.80E-03	8.77E-06	1.29E-05	9.19E-06	1.21E-05	1.8405E-03
519962.78	4258474.49	8970.95114	0.25243	1.28892	0.26905	1.19979	1.80E-03	1.03E-05	4.61E-05	1.10E-05	4.12E-05	1.9052E-03
520108.14	4257964.88	8964.35861	0.09342	11.34151	0.09424	13.27536	1.80E-03	3.82E-06	4.06E-04	3.86E-06	4.56E-04	2.6643E-03
520791.12	4258505.7	8963.18617	0.09403	0.09262	0.09111	0.09576	1.80E-03	3.85E-06	3.31E-06	3.73E-06	3.29E-06	1.8092E-03
519860.91	4258692.29	8960.72871	0.22586	0.42876	0.23823	0.41796	1.79E-03	9.25E-06	1.53E-05	9.75E-06	1.43E-05	1.8432E-03
520791.46	4258496.57	8960.48903	0.09393	0.09255	0.09101	0.09575	1.79E-03	3.85E-06	3.31E-06	3.73E-06	3.29E-06	1.8086E-03
520028.55	4259568.27	8954.55006	4.86811	0.09081	6.60112	0.08924	1.79E-03	1.99E-04	3.25E-06	2.70E-04	3.06E-06	2.2692E-03
520011.05	4258155.12	8953.39691	0.11164	2.76509	0.11639	2.47229	1.79E-03	4.57E-06	9.89E-05	4.77E-06	8.49E-05	1.9862E-03
519909.81	4258599.47	8944.34895	0.25907	0.6676	0.27963	0.64511	1.79E-03	1.06E-05	2.39E-05	1.14E-05	2.21E-05	1.8593E-03
519833.53	4258746.84	8940.22306	0.21103	0.3457	0.22077	0.3374	1.79E-03	8.64E-06	1.24E-05	9.04E-06	1.16E-05	1.8320E-03
520063.65	4259589.45	8922.5916	14.4781	0.0913	26.94141	0.08894	1.79E-03	5.93E-04	3.27E-06	1.10E-03	3.05E-06	3.4891E-03
519994.11	4258202.06	8914.47694	0.11891	2.07672	0.12263	1.90169	1.79E-03	4.87E-06	7.43E-05	5.02E-06	6.53E-05	1.9347E-03
520797.74	4258461.3	8911.78299	0.09246	0.09122	0.08975	0.09457	1.78E-03	3.79E-06	3.26E-06	3.67E-06	3.25E-06	1.7987E-03
520794.56	4258478.82	8907.95756	0.0932	0.09189	0.09037	0.09517	1.78E-03	3.82E-06	3.29E-06	3.70E-06	3.27E-06	1.7980E-03
520050.53	4258064.01	8902.56692	0.10141	7.72122	0.10615	5.88472	1.78E-03	4.15E-06	2.76E-04	4.35E-06	2.02E-04	2.2696E-03
519949.48	4258521.73	8900.89283	0.27425	1.05857	0.29563	0.99771	1.78E-03	1.12E-05	3.79E-05	1.21E-05	3.43E-05	1.8780E-03
520796.45	4258541.79	8885.13853	0.09301	0.09106	0.09032	0.09397	1.78E-03	3.81E-06	3.26E-06	3.70E-06	3.23E-06	1.7934E-03
519974.63	4258280.01	8863.91661	0.13745	1.57454	0.14195	1.4677	1.78E-03	5.63E-06	5.63E-05	5.81E-06	5.04E-05	1.8933E-03
519818.2	4258777.3	8860.20399	0.20274	0.3082	0.21119	0.30131	1.77E-03	8.30E-06	1.10E-05	8.65E-06	1.03E-05	1.8127E-03
519965.32	4258395.52	8855.13286	0.19021	1.37884	0.19736	1.28693	1.77E-03	7.79E-06	4.93E-05	8.08E-06	4.42E-05	1.8827E-03
519919.73	4258580.04	8853.01449	0.26442	0.74371	0.28585	0.71401	1.77E-03	1.08E-05	2.66E-05	1.17E-05	2.45E-05	1.8466E-03
520073.56	4259599.43	8845.02578	13.07194	0.091	13.84045	0.08832	1.77E-03	5.35E-04	3.25E-06	5.67E-04	3.03E-06	2.8795E-03
520059.61	4258043.82	8843.50032	0.09925	11.81149	0.10333	7.76919	1.77E-03	4.06E-06	4.22E-04	4.23E-06	2.67E-04	2.4685E-03
520098.32	4257974.85	8843.1843	0.09356	16.98425	0.09482	17.83434	1.77E-03	3.83E-06	6.08E-04	3.88E-06	6.12E-04	2.9985E-03
519965.5	4258370.84	8831.42814	0.17497	1.38821	0.18107	1.29801	1.77E-03	7.16E-06	4.97E-05	7.41E-06	4.46E-05	1.8774E-03
519964.92	4258420.77	8827.45443	0.20778	1.36154	0.2165	1.26858	1.77E-03	8.51E-06	4.87E-05	8.86E-06	4.36E-05	1.8774E-03
519854.63	4258701.27	8825.564	0.22049	0.4092	0.23204	0.39907	1.77E-03	9.03E-06	1.46E-05	9.50E-06	1.37E-05	1.8143E-03
520033.93	4259579.5	8822.99983	5.95768	0.08984	8.87668	0.08821	1.77E-03	2.44E-04	3.21E-06	3.63E-04	3.03E-06	2.3805E-03
519975.76	4258269.55	8815.39873	0.13396	1.59552	0.13829	1.4868	1.77E-03	5.48E-06	5.71E-05	5.66E-06	5.10E-05	1.8847E-03
519982.71	4258236.72	8808.59411	0.1254	1.75547	0.12925	1.6264	1.76E-03	5.13E-06	6.28E-05	5.29E-06	5.58E-05	1.8931E-03
519959.32	4258482.89	8801.03942	0.25473	1.22719	0.2722	1.1463	1.76E-03	1.04E-05	4.39E-05	1.11E-05	3.94E-05	1.8674E-03
520011.6	4258144.9	8789.42364	0.10908	2.79117	0.11384	2.49159	1.76E-03	4.47E-06	9.98E-05	4.66E-06	8.55E-05	1.9547E-03
519994.81	4258191.78	8780.81851	0.11607	2.09722	0.11973	1.91837	1.76E-03	4.75E-06	7.50E-05	4.90E-06	6.59E-05	1.9090E-03
519929.65	4258560.6	8778.5465	0.26869	0.83179	0.28974	0.79415	1.76E-03	1.10E-05	2.98E-05	1.19E-05	2.73E-05	1.8379E-03
519827.08	4258755.38	8765.42683	0.20555	0.3311	0.21461	0.32341	1.76E-03	8.42E-06	1.18E-05	8.79E-06	1.11E-05	1.7955E-03
520063.66	4259599.45	8761.68017	14.19236	0.09002	24.9672	0.0877	1.75E-03	5.81E-04	3.22E-06	1.02E-03	3.01E-06	3.3642E-03
519887.12	4258636.77	8759.89005	0.24012	0.53865	0.2565	0.52481	1.75E-03	9.83E-06	1.93E-05	1.05E-05	1.80E-05	1.8119E-03
519968.41	4258312.53	8757.96979	0.14757	1.44984	0.15225	1.35662	1.75E-03	6.04E-06	5.19E-05	6.23E-06	4.66E-05	1.8646E-03
519939.57	4258541.16	8756.39624	0.27158	0.9346	0.29264	0.88749	1.75E-03	1.11E-05	3.34E-05	1.20E-05	3.05E-05	1.8406E-03
519969.61	4258302.05	8752.73214	0.14375	1.4742	0.14834	1.37828	1.75E-03	5.89E-06	5.27E-05	6.07E-06	4.73E-05	1.8649E-03
519797.1	4258822.37	8750.09706	0.19248	0.26416	0.19956	0.25876	1.75E-03	7.88E-06	9.45E-06	8.17E-06	8.88E-06	1.7867E-03
519877.12	4258655.32	8748.40032	0.23328	0.49313	0.24762	0.48145	1.75E-03	9.55E-06	1.76E-05	1.01E-05	1.65E-05	1.8058E-03
520108.17	4257954.88	8748.21794	0.09148	11.33367	0.09224	13.29763	1.75E-03	3.75E-06	4.05E-04	3.78E-06	4.57E-04	2.6214E-03
519976.79	4258259.14	8744.64003	0.13055	1.61333	0.13469	1.50286	1.75E-03	5.35E-06	5.77E-05	5.51E-06	5.16E-05	1.8714E-03
519967.08	4258323.07	8742.57837	0.1515	1.42495	0.1563	1.33387	1.75E-03	6.20E-06	5.10E-05	6.40E-06	4.58E-05	1.8602E-03
520001.59	4258169.01	8737.8633	0.11206	2.3344	0.11607	2.11718	1.75E-03	4.59E-06	8.35E-05	4.75E-06	7.27E-05	1.9154E-03
520024.03	4259579.51	8733.98286	4.34388	0.08899	5.70676	0.08751	1.75E-03	1.78E-04	3.18E-06	2.34E-04	3.00E-06	2.1668E-03
519806.97	4258798.23	8728.61323	0.19608	0.2848	0.2037	0.27874	1.75E-03	8.03E-06	1.02E-05	8.34E-06	9.57E-06	1.7841E-03
519970.69	4258291.62	8727.98354	0.14001	1.4953	0.1445	1.39727	1.75E-03	5.73E-06	5.35E-05	5.92E-06	4.80E-05	1.8610E-03
520798.01	4258487.88	8725.62464	0.0925	0.09105	0.08968	0.09422	1.75E-03	3.79E-06	3.26E-06	3.67E-06	3.23E-06	1.7614E-03
519867.12	4258673.87	8720.07195	0.22658	0.45368	0.2392	0.44317	1.75E-03	9.28E-06	1.62E-05	9.79E-06	1.52E-05	1.7968E-03
519983.67	4258226.34	8715.09671	0.12236	1.77951	0.12603	1.64661	1.75E-03	5.01E-06	6.37E-05	5.16E-06	5.65E-05	1.8757E-03
520802.86	4258550.38	8706.58068	0.09164	0.08952	0.08912	0.09235	1.74E-03	3.75E-06	3.20E-06	3.65E-06	3.17E-06	1.7574E-03
520801.16	4258470.3	8702.653	0.09178	0.09039	0.08907	0.09364	1.74E-03	3.76E-06	3.23E-06	3.65E-06	3.21E-06	1.7567E-03
519965.59	4258333.67	8702.088	0.15549	1.39713	0.16042	1.30851	1.74E-03	6.37E-06	5.00E-05	6.57E-06	4.49E-05	1.8505E-03
520073.58	4259609.43	8686.03294	12.69509	0.08972	13.16367	0.0871	1.74E-03	5.20E-04	3.21E-06	5.39E-04	2.99E-06	2.8045E-03

520800.09	4258533.47	8685.76217	0.09218	0.09037	0.0895	0.09325	1.74E-03	3.77E-06	3.23E-06	3.66E-06	3.20E-06	1.7533E-03
519848.29	4258710.1	8675.83386	0.21495	0.3909	0.22589	0.38128	1.74E-03	8.80E-06	1.40E-05	9.25E-06	1.31E-05	1.7826E-03
519977.73	4258248.76	8674.66154	0.12731	1.63443	0.13127	1.52116	1.74E-03	5.21E-06	5.85E-05	5.37E-06	5.22E-05	1.8585E-03
520033.94	4259589.5	8665.97333	6.10968	0.08858	9.29212	0.08698	1.74E-03	2.50E-04	3.17E-06	3.80E-04	2.99E-06	2.3722E-03
520049.79	4258053.79	8659.7136	0.09886	7.48118	0.10351	5.70835	1.73E-03	4.05E-06	2.68E-04	4.24E-06	1.96E-04	2.2061E-03
520059.64	4258033.82	8643.83059	0.09709	11.78613	0.10102	7.76828	1.73E-03	3.98E-06	4.22E-04	4.14E-06	2.67E-04	2.4274E-03
519811.44	4258785.04	8635.90186	0.1967	0.29577	0.20449	0.28938	1.73E-03	8.05E-06	1.06E-05	8.37E-06	9.93E-06	1.7664E-03
520098.35	4257964.85	8630.39604	0.09159	17.00253	0.0928	17.84891	1.73E-03	3.75E-06	6.08E-04	3.80E-06	6.13E-04	2.9568E-03
520800.43	4258524.34	8628.65184	0.09207	0.09043	0.08935	0.09333	1.73E-03	3.77E-06	3.23E-06	3.66E-06	3.20E-06	1.7419E-03
519984.55	4258215.99	8613.38912	0.11942	1.80161	0.12294	1.66492	1.72E-03	4.89E-06	6.44E-05	5.03E-06	5.72E-05	1.8565E-03
519949.44	4258512.03	8612.49906	0.26443	1.06738	0.28406	1.00591	1.72E-03	1.08E-05	3.82E-05	1.16E-05	3.45E-05	1.8199E-03
520063.68	4259609.45	8605.38064	13.80921	0.08876	23.1832	0.0865	1.72E-03	5.65E-04	3.17E-06	9.49E-04	2.97E-06	3.2441E-03
519963.34	4258344.59	8593.14387	0.15927	1.35759	0.16433	1.27261	1.72E-03	6.52E-06	4.86E-05	6.73E-06	4.37E-05	1.8264E-03
520002.23	4258158.76	8591.90534	0.1095	2.35647	0.11352	2.13449	1.72E-03	4.48E-06	8.43E-05	4.65E-06	7.33E-05	1.8873E-03
520800.77	4258515.21	8589.32955	0.09197	0.09041	0.08922	0.09336	1.72E-03	3.77E-06	3.23E-06	3.65E-06	3.21E-06	1.7340E-03
519899.85	4258609.21	8582.40452	0.24638	0.6095	0.26454	0.59174	1.72E-03	1.01E-05	2.18E-05	1.08E-05	2.03E-05	1.7818E-03
520024.04	4259589.51	8579.86585	4.41989	0.08775	5.86682	0.0863	1.72E-03	1.81E-04	3.14E-06	2.40E-04	2.96E-06	2.1455E-03
520801.11	4258506.07	8568.50003	0.09188	0.09034	0.08911	0.09334	1.72E-03	3.76E-06	3.23E-06	3.65E-06	3.20E-06	1.7298E-03
520801.46	4258496.94	8564.78883	0.09179	0.09026	0.08901	0.09331	1.72E-03	3.76E-06	3.23E-06	3.64E-06	3.20E-06	1.7291E-03
519961.94	4258379.47	8562.15274	0.1769	1.32553	0.18298	1.24218	1.71E-03	7.24E-06	4.74E-05	7.49E-06	4.26E-05	1.8195E-03
519961.72	4258404.27	8557.80579	0.19238	1.31535	0.1996	1.23018	1.71E-03	7.88E-06	4.70E-05	8.17E-06	4.22E-05	1.8191E-03
520108.2	4257944.88	8540.73115	0.0896	11.32107	0.09032	13.32047	1.71E-03	3.67E-06	4.05E-04	3.70E-06	4.57E-04	2.5800E-03
520073.6	4259619.43	8531.6094	12.22302	0.08848	12.508	0.08591	1.71E-03	5.00E-04	3.16E-06	5.12E-04	2.95E-06	2.7273E-03
519841.9	4258718.8	8529.83704	0.20969	0.37372	0.21988	0.36474	1.71E-03	8.59E-06	1.34E-05	9.00E-06	1.25E-05	1.7517E-03
519961.26	4258429.66	8527.47625	0.21018	1.2967	0.21936	1.21071	1.71E-03	8.61E-06	4.64E-05	8.98E-06	4.16E-05	1.8133E-03
519959.56	4258458.05	8515.8988	0.23155	1.25234	0.24464	1.16925	1.71E-03	9.48E-06	4.48E-05	1.00E-05	4.01E-05	1.8099E-03
520033.96	4259599.5	8513.27595	6.27546	0.08736	9.75832	0.08579	1.70E-03	2.57E-04	3.12E-06	4.00E-04	2.95E-06	2.3675E-03
520804.59	4258479.31	8513.18824	0.0911	0.08958	0.0884	0.09272	1.70E-03	3.73E-06	3.20E-06	3.62E-06	3.18E-06	1.7186E-03
519800.21	4258805.95	8506.61892	0.19026	0.27384	0.19731	0.26817	1.70E-03	7.79E-06	9.79E-06	8.08E-06	9.21E-06	1.7384E-03
519985.37	4258205.66	8505.2372	0.11658	1.82032	0.11996	1.68085	1.70E-03	4.77E-06	6.51E-05	4.91E-06	5.77E-05	1.8358E-03
520806.47	4258542.11	8500.1315	0.09084	0.08878	0.0883	0.09157	1.70E-03	3.72E-06	3.18E-06	3.62E-06	3.14E-06	1.7159E-03
519909.77	4258589.78	8498.54102	0.25168	0.67561	0.27152	0.65171	1.70E-03	1.03E-05	2.42E-05	1.11E-05	2.24E-05	1.7699E-03
519991.95	4258182.97	8492.74386	0.11246	2.00103	0.11588	1.83563	1.70E-03	4.60E-06	7.16E-05	4.74E-06	6.30E-05	1.8447E-03
520049.82	4258043.79	8466.39703	0.0967	7.46664	0.10121	5.69014	1.70E-03	3.96E-06	2.67E-04	4.14E-06	1.95E-04	2.1660E-03
520063.7	4259619.45	8453.44406	15.30187	0.08754	21.59285	0.08532	1.69E-03	6.27E-04	3.13E-06	8.84E-04	2.93E-06	3.2096E-03
520059.67	4258023.82	8453.28413	0.09503	11.7595	0.09879	7.78925	1.69E-03	3.89E-06	4.21E-04	4.04E-06	2.67E-04	2.3889E-03
520002.83	4258148.52	8445.72991	0.10702	2.37794	0.11107	2.15133	1.69E-03	4.38E-06	8.51E-05	4.55E-06	7.39E-05	1.8592E-03
520024.06	4259599.51	8429.9877	4.50212	0.08655	6.03702	0.08512	1.69E-03	1.84E-04	3.10E-06	2.47E-04	2.92E-06	2.1258E-03
520098.38	4257954.85	8429.70678	0.08972	16.99525	0.09085	17.89593	1.69E-03	3.67E-06	6.08E-04	3.72E-06	6.14E-04	2.9178E-03
519919.69	4258570.34	8423.22993	0.25631	0.75176	0.27599	0.72115	1.69E-03	1.05E-05	2.69E-05	1.13E-05	2.48E-05	1.7603E-03
519939.52	4258531.47	8413.37607	0.26239	0.94297	0.28203	0.89516	1.68E-03	1.07E-05	3.37E-05	1.15E-05	3.07E-05	1.7716E-03
519986.13	4258195.36	8391.78156	0.11384	1.83219	0.11709	1.69148	1.68E-03	4.66E-06	6.55E-05	4.79E-06	5.81E-05	1.8136E-03
519929.61	4258550.9	8380.75071	0.25984	0.8394	0.27918	0.80155	1.68E-03	1.06E-05	3.00E-05	1.14E-05	2.75E-05	1.7580E-03
519835.46	4258727.38	8379.70208	0.20448	0.35756	0.21394	0.34922	1.68E-03	8.37E-06	1.28E-05	8.76E-06	1.20E-05	1.7201E-03
519949.4	4258502.33	8372.37702	0.25504	1.07563	0.27306	1.01368	1.68E-03	1.04E-05	3.85E-05	1.12E-05	3.48E-05	1.7716E-03
519992.7	4258172.68	8367.20354	0.1099	2.01927	0.11328	1.85054	1.68E-03	4.50E-06	7.22E-05	4.64E-06	6.35E-05	1.8205E-03
519877.12	4258646.05	8364.76888	0.228	0.4978	0.24248	0.48617	1.68E-03	9.34E-06	1.78E-05	9.93E-06	1.67E-05	1.7289E-03
520033.98	4259609.5	8364.72698	6.42369	0.08616	10.26254	0.08462	1.68E-03	2.63E-04	3.08E-06	4.20E-04	2.91E-06	2.3643E-03
520070.31	4259629.84	8350.57319	12.64934	0.08693	13.73692	0.08452	1.67E-03	5.18E-04	3.11E-06	5.62E-04	2.90E-06	2.7587E-03
519867.12	4258664.6	8348.60193	0.22158	0.45773	0.23426	0.44762	1.67E-03	9.07E-06	1.64E-05	9.59E-06	1.54E-05	1.7223E-03
519973.75	4258240.42	8348.25058	0.12277	1.54942	0.12646	1.4464	1.67E-03	5.03E-06	5.54E-05	5.18E-06	4.97E-05	1.7871E-03
519829.76	4258737.74	8345.33736	0.20125	0.343	0.21017	0.33515	1.67E-03	8.24E-06	1.23E-05	8.61E-06	1.15E-05	1.7119E-03
520808.02	4258488.31	8343.84675	0.09041	0.08877	0.08773	0.0918	1.67E-03	3.70E-06	3.18E-06	3.59E-06	3.15E-06	1.6846E-03
519965.74	4258283.67	8341.81323	0.13429	1.4027	0.13834	1.31575	1.67E-03	5.50E-06	5.02E-05	5.66E-06	4.52E-05	1.7771E-03
520108.23	4257934.88	8341.03208	0.0878	11.30504	0.08846	13.32766	1.67E-03	3.59E-06	4.04E-04	3.62E-06	4.58E-04	2.5395E-03
519814.56	4258768.65	8336.43542	0.19406	0.30658	0.2018	0.29994	1.67E-03	7.95E-06	1.10E-05	8.26E-06	1.03E-05	1.7070E-03
519966.96	4258273.18	8317.23167	0.13101	1.42308	0.13498	1.33445	1.67E-03	5.36E-06	5.09E-05	5.53E-06	4.58E-05	1.7732E-03
519857.12	4258683.15	8313.33045	0.21515	0.42278	0.22661	0.41327	1.66E-03	8.81E-06	1.51E-05	9.28E-06	1.42E-05	1.7123E-03
519958.39	4258388.1	8301.57092	0.1789	1.26814	0.18499	1.19031	1.66E-03	7.32E-06	4.54E-05	7.57E-06	4.09E-05	1.7636E-03
519958.46	4258363.67	8293.29343	0.16532	1.27523	0.17057	1.19846	1.66E-03	6.77E-06	4.56E-05	6.98E-06	4.11E-05	1.7614E-03
519793.42	4258813.64	8291.55989	0.18463	0.26353	0.19115	0.25822	1.66E-03	7.56E-06	9.43E-06	7.83E-06	8.86E-06	1.6942E-03
520024.08	4259609.51	8284.14679	4.57352	0.08537	6.21031	0.08397	1.66E-03	1.87E-04	3.05E-06	2.54E-04	2.88E-06	2.1065E-03
520049.85	4258033.79	8280.59908	0.09463	7.45115	0.099	5.67487	1.66E-03	3.87E-06	2.67E-04	4.05E-06	1.95E-04	2.1276E-03
519968.07	4258262.74	8277.73503	0.12781	1.44114	0.13167	1.35084	1.66E-03	5.23E-06	5.15E-05	5.39E-06	4.64E-05	1.7663E-03
519974.78	4258230.01	8277.19192	0.11987	1.57246	0.1234	1.46573	1.66E-03	4.91E-06	5.62E-05	5.05E-06	5.03E-05	1.7741E-03
520060.41	4259629.86	8274.43994	14.2798	0.086	25.60142	0.08393	1.66E-03	5.85E-04	3.08E-06	1.05E-03	2.88E-06	3.2959E-03
519958.12	4258413.02	8267.84038	0.1945	1.25572	0.2019	1.17667	1.66E-03	7.96E-06	4.49E-05	8.27E-06	4.04E-05	1.7573E-03
520059.7	4258013.82	8262.04532	0.093	11.73031	0.09665	7.73232	1.65E-03	3.81E-06	4.20E-04	3.96E-06	2.65E-04	2.3474E-03
520810.42	4258524.71	8257.98298	0.08997	0.0881	0.08738	0.09089	1.65E-03	3.68E-06	3.15E-06	3.58E-06	3.12E-06	1.6673E-03
519957.6	4258438.55	8252.09557	0.21251	1.23575	0.22243	1.15629	1.65E-03	8.70E-06	4.42E-05	9.11E-06	3.97E-05	1.7543E-03
519993.41	4258162.4	8239.99635	0.10742	2.03771	0.1108	1.86525	1.65E-03	4.40E-06	7.29E-05	4.54E-06	6.40E-05	1.7960E-03
519889.89	4258618.95	8235.40739	0.23443	0.5597	0.25066	0.54512	1.65E-03	9.60E-06	2.00E-05	1.03E-05	1.87E-05	1.7078E-03
520098.41	4257944.85	8234.79901	0.0879	16.98183	0.08897	17.9227	1.65E-03	3.60E-06	6.07E-04	3.64E-06	6.15E-04	2.8791E-03
519803.25	4258789.38	8230.10061	0.18775	0.28367	0.19473	0.27778	1.65E-03	7.69E-06	1.01E-05	7.97E-06	9.54E-06	1.6835E-03
519969.08	4258252.33	8225.20857	0.1247	1.45875	0.12845	1.36647	1.65E-03	5.11E-06	5.22E-05	5.26E-06	4.69E-05	1.7567E-03
519961.01	4258305.6	8221.48515	0.14033	1.32253	0.14438	1.24371	1.65E-03	5.75E-06	4.73E-05	5.91E-06	4.27E-05	1.7481E-03
520033.99	4259619.5	8220.1895	6.4907	0.085	10.75897	0.08349	1.65E-03	2.66E-04	3.04E-06	4.41E-04	2.87E-06	2.3584E-03
520810.77	4258515.58	8219.78912	0.08988	0.08813	0.08726	0.09095	1.65E-03	3.68E-06	3.15E-06	3.57E-06	3.12E-06	1.6597E-03
519962.16	4258295.14	8218.2439	0.13682	1.34204	0.1408	1.26124	1.65E-03	5.60E-06	4.80E-05	5.76E-06	4.33E-05	1.7485E-03
519959.73	4258316.12	8205.40008	0.14391	1.30057	0.14803	1.22383	1.64E-03	5.89E-06	4.65E-05	6.06E-06	4.20E-05	1.7437E-03
520070.33	4259639.84	8204.8411	12.85691	0.08573	13.08477	0.08338	1.64E-03	5.26E-04	3.07E-06	5.36E-04	2.86E-06	2.7112E-03
520811.11	4258506.45	8198.90697	0.0898	0.08809	0.08716	0.09096	1.64E-03	3.68E-06	3.15E-06	3.57E-06	3.12E-06	1.6555E-03
519823.33	4258746.35	8198.42087	0.19626	0.32873	0.20456	0.32142	1.64E-03	8.04E-06	1.18E-05	8.38E-06	1.10E-05	1.6810E-03
519975.74	4258219.63	8197.1414	0.11705	1.59166	0.12042	1.48204	1.64E-03	4.79E-06	5.69E-05	4.93E-06	5.09E-05	1.7591E-03
520811.45	4258497.32	8194.78395	0.08972	0.08801	0.08708	0.09093	1.64E-03	3.67E-06	3.15E-06	3.57E-06	3.12E-06	1.6546E-03
519850.88	4258692.21	8181.65504	0.20967	0.40393	0.22076	0.39458	1.64E-03	8.58E-06	1.44E-05	9.04E-06	1.35E-05	1.6841E-03
519949.36	4258492.63	8180.97518	0.2462	1.08384	0.26284	1.02119	1.64E-03	1.01E-05	3.88E-05	1.08E-05	3.51E-05	1.7330E-03
519899.81	4258599.52	8172.26441	0.23984	0.61622	0.25753	0.59761	1.64E-03	9.82E-06	2.20E-05	1.05E-05	2.05E-05	1.6995E-03
519958.3	4258326.69	8167.12555	0.14755	1.27765	0.15179	1.20282	1.64E-03	6.04E-06	4.57E-05	6.21E-06	4.13E-05	1.7348E-03
519952.73	4258474.64	8153.56106	0.23579	1.1422	0.25062	1.07252	1.63E-03	9.65E-06	4.09E-05	1.03E-05	3.68E-05	1.7305E-03
520108.26	4257924.88	8149.80056	0.08606	11.28447	0.08667	13.35796	1.63E-03	3.52E-06	4.04E-04	3.55E-06	4.59E-04	2.5014E-03
520024.09	4259619.51	8142.1185	4.62133	0.08423	6.37637	0.08284	1.63E-03	1.89E-04	3.01E-06	2.61E-04	2.84E-06	2.0867E-03
519807.83	4258776.44	8138.62067	0.18849	0.29434	0.19566	0.28816	1.63E-03	7.72E-06	1.05E-05	8.01E-06	9.89E-06	1.6660E-03
519939.48	4258521.77	8134.10583	0.25381	0.9512	0.27213	0.90258	1.63E-03	1.04E-05	3.40E-05	1.11E-05	3.10E-05	1.7155E-03
520060.43	4259639.86	8131.62282	13.87968	0.08485	23.71832	0.08282	1.63E-03	5.68E-04	3.03E-06	9.71E-04	2.84E-06	3.1738E-03
519983	4258186.67	8113.86371	0.11027	1.74587	0.1133	1.61567	1.62E-03	4.51E-06	6.24E-05	4.64E-06	5.55E-05	1.7520E-03
519994.07	4258152.14	8111.30278	0.10504	2.05493	0.10842	1.87871	1.62E-03	4.30E-06	7.35E-05	4.44E-06	6.45E-05	1.7711E-03
519976.62	4258209.27	8109.26556	0.11432	1.60981	0.11753	1.49711	1.62E-03	4.68E-06	5.76E-05	4.81E-06	5.14E-05	1.7425E-03
519956.71	4258337.34	8106.90069	0.15126	1.25289	0.15565	1.18009	1.62E-03	6.19E-06	4.48E-05	6.37E-06	4.05E-05	1.7214E-03
520049.88	4258023.79	8100.21619	0.09263	7.43587	0.09686	5.65535	1.62E-03	3.79E-06	2.66E-04	3.97E-06	1.94E-04	2.0901E-03
519909.73	4258580.08	8098.02581	0.24457	0.68274	0.26295	0.6581	1.62E-03	1.00E-05	2.44E-05	1.08E-05	2.26E-05	1.6895E-03
520059.73	4258003.82	8083.33495	0.09108	11.7036	0.09459	7.74149	1.62E-03	3.73E-06	4.19E-04	3.87E-06	2.66E-04	2.3108E-03
519844.57	4258701.11	8064.82291	0.20482	0.38622	0.21513	0.37741	1.62E-03	8.39E-06	1.38E-05	8.81E-06	1.30E-05	1.6591E-03
520070.34	4259649.84	8063.69044	12.27416	0.08458	12.35062	0.08228	1.61E-03	5.03E-04	3.03E-06	5.06E-04	2.82E-06	2.6290E-03
520030.71	4259629.91	8048.6814	5.86285	0.08356	9.18232	0.08212	1.61E-03	2.40E-04	2.99E-06	3.76E-04	2.82E-06	2.2337E-03
520098.45	4257934.85	8048.01104	0.08615	16.94831	0.08716	17.92595	1.61E-03	3.53E-06	6.06E-04	3.57E-06	6.15E-04	2.8405E-03
519954.95	4258372.2	8045.71418	0.167	1.22088	0.17221	1.14975	1.61E-03	6.84E-06	4.37E-05	7.05E-06	3.95E-05	1.7083E-03
519919.65	4258560.64	8038.41786	0.24843	0.75874	0.26635	0.72786	1.61E-03	1.02E-05	2.71E-05	1.09E-05	2.50E-05	1.6830E-03
519796.51	4258797.17	8034.27281	0.18239	0.27282	0.18885	0.2673	1.61E-03	7.47E-06	9.76E-06	7.73E-06	9.18E-06	1.6431E-03
519954.84	4258396.74	8031.60228	0.18081	1.21359	0.18695	1.14104	1.61E-03	7.40E-06	4.34E-05	7.65E-06	3.92E-05	1.7061E-03
519929.57	4258541.21	8023.32854	0.25123	0.84654	0.26917	0.80842	1.61E-03	1.03E-05	3.03E-05	1.10E-05	2.78E-05	1.6861E-03
519949.32	4258482.94	8016.58202	0.23757	1.09177	0.25292	1.02821	1.61E-03	9.73E-06	3.91E-05	1.04E-05	3.53E-05	1.6999E-03
519977.44	4258198.95	8015.20808	0.11169	1.62338	0.11474	1.50909	1.61E-03	4.57E-06	5.81E-05	4.70E-06	5.18E-05	1.7243E-03
519983.82	4258176.34	8007.46689	0.10781	1.76759	0.11077	1.63371	1.60E-03	4.41E-06	6.32E-05	4.54E-06	5.61E-05	1.7319E-03
519953.95	4258447.43	8006.95622	0.21481	1.17847	0.22567	1.1053	1.60E-03	8.80E-06	4.22E-05	9.24E-06	3.79E-05	1.7016E-03
519877.12	4258636.77	8003.58857	0.22294	0.50246	0.23739	0.49075	1.60E-03	9.13E-06	1.80E-05	9.72E-06	1.68E-05	1.6565E-03
519867.12	4258655.32	7994.92981	0.21679	0.46177	0.22959	0.45188	1.60E-03	8.88E-06	1.65E-05	9.40E-06	1.55E-05	1.6514E-03
520060.44	4259649.86	7992.87876	13.05629	0.08373	21.94417	0.08174	1.60E-03	5.35E-04	2.99E-06	8.98E-04	2.81E-06	3.0395E-03
519954.52	4258421.77	7991.54412	0.19657	1.19975	0.20437	1.12622	1.60E-03	8.05E-06	4.29E-05	8.37E-06	3.87E-05	1.6984E-03
519857.12	4258673.87	7973.62767	0.21071	0.42632	0.22204	0.41739	1.60E-03	8.63E-06	1.52E-05	9.09E-06	1.43E-05	1.6441E-03
520020.81	4259629.93	7972.99576	4.24324	0.08281	5.71165	0.08149	1.60E-03	1.74E-04	2.96E-06	2.34E-04	2.80E-06	2.0101E-03
520108.3	4257914.88	7968.49903	0.08439	11.25308	0.08494	13.39592	1.60E-03	3.46E-06	4.03E-04	3.48E-06	4.60E-04	2.4651E-03
519838.21	4258709.89	7946.3763	0.2001	0.3696	0.20963	0.36135	1.59E-03	8.19E-06	1.32E-05	8.58E-06	1.24E-05	1.6338E-03
520049.91	4258013.79	7927.9075	0.09071	7.41896	0.09481	5.64438	1.59E-03	3.71E-06	2.65E-04	3.88E-06	1.94E-04	2.0544E-03
520070.36	4259659.84	7926.21375	11.86413	0.08345	11.62687	0.08121	1.59E-03	4.86E-04	2.98E-06	4.76E-04	2.79E-06	2.5549E-03
520059.76	4257993.82	7912.71333	0.08923	11.66949	0.09261	7.75046	1.58E-03	3.65E-06	4.17E-04	3.79E-06	2.66E-04	2.2756E-03
520030.72	4259639.91	7912.45533	5.9885	0.08245	9.58054	0.08104	1.58E-03	2.45E-04	2.95E-06	3.92E-04	2.78E-06	2.2278E-03
519964.79	4258244.12	7906.64665	0.1202	1.37871	0.12364	1.29528	1.58E-03	4.92E-06	4.93E-05	5.06E-06	4.45E-05	1.6872E-03
519984.59	4258166.04	7897.80866	0.10543	1.78349	0.10832	1.64656	1.58E-03	4.32E-06	6.38E-05	4.44E-06	5.65E-05	1.7107E-03
519939.44	4258512.07	7883.60014	0.24539	0.95867	0.26234	0.90951	1.58E-03	1.00E-05	3.43E-05	1.07E-05	3.12E-05	1.6651E-03
520098.48	4257924.85	7867.78037	0.08447	16.91475	0.08541	17.93534	1.58E-03	3.46E-06	6.05E-04	3.50E-06	6.16E-04	2.8033E-03
520060.46	4259659.86	7857.18692	13.14081	0.08261	20.70183	0.08066	1.57E-03	5.38E-04	2.95E-06	8.48E-04	2.77E-06	2.9649E-03
519965.9	4258233.67	7857.09264	0.11744	1.39963	0.12079	1.31331	1.57E-03	4.81E-06	5.01E-05	4.95E-06	4.51E-05	1.6784E-03
519889.85	4258609.26	7856.80545	0.2286	0.56521	0.24442	0.5503	1.57E-03	9.36E-06	2.02E-05	1.00E-05	1.89E-05	1.6319E-03
519956.86	4258287.34	7849.49494	0.13118	1.25864	0.1347	1.18681	1.57E-03	5.37E-06	4.50E-05	5.52E-06	4.07E-05	1.6686E-03
519958.16	4258276.81	7844.80856	0.12809	1.27695	0.13157	1.20384	1.57E-03	5.24E-06	4.57E-05	5.39E-06	4.13E-05	1.6687E-03
519789.75	4258804.91	7843.97199	0.1772	0.26261	0.18317	0.25743	1.57E-03	7.26E-06	9.39E-06	7.50E-06	8.84E-06	1.6038E-03
520020.82	4259639.93	7839.19433	4.29381	0.08172	5.83053	0.08042	1.57E-03	1.76E-04	2.92E-06	2.39E-04	2.76E-06	1.9901E-03
519810.93	4258760	7833.77852	0.18588	0.30467	0.19304	0.29829	1.57E-03	7.61E-06	1.09E-05	7.90E-06	1.02E-05	1.6055E-03
519959.35	4258266.34	7825.49647	0.12507	1.29399	0.12852	1.21943	1.57E-03	5.12E-06	4.63E-05	5.26E-06	4.19E-05	1.6657E-03
519831.79	4258718.53	7819.44011	0.19532	0.35394	0.20415	0.34619	1.57E-03	8.00E-06	1.27E-05	8.36E-06	1.19E-05	1.6069E-03
519951.44	4258380.73	7803.98326	0.16871	1.17077	0.1739	1.10426	1.56E-03	6.91E-06	4.19E-05	7.12E-06	3.79E-05	1.6567E-03
519951.42	4258356.51	7801.20926	0.1565	1.17549	0.16101	1.10988	1.56E-03	6.41E-06	4.20E-05	6.59E-06	3.81E-05	1.6554E-03
520061.08	4257984.72	7796.95998	0.08786	12.57583	0.09107	8.08682	1.56E-03	3.60E-06	4.50E-04	3.73E-06	2.78E-04	2.2962E-03
519966.93	4258223.26	7796.65888	0.11475	1.41792	0.11798	1.32869	1.56E-03	4.70E-06	5.07E-05	4.83E-06	4.56E-05	1.6672E-03
519899.77	4258589.82	7793.46269	0.23338	0.62311	0.25044	0.60332	1.56E-03	9.56E-06	2.23E-05	1.03E-05	2.07E-05	1.6236E-03
520070.38	4259669.84	7792.58681	11.1891	0.08236	10.84525	0.08016	1.56E-03	4.58E-04	2.95E-06	4.44E-04	2.75E-06	2.4684E-03
519960.43	4258255.9	7792.53952	0.12213	1.31109	0.12553	1.23445	1.56E-03	5.00E-06	4.69E-05	5.14E-06	4.24E-05	1.6600E-03
519950.29	4258456.32	7792.36118	0.21693	1.12379	0.22869	1.05701	1.56E-03	8.88E-06	4.02E-05	9.36E-06	3.63E-05	1.6553E-03
519825.99	4258728.64	7787.3185	0.1922	0.33975	0.20035	0.33249	1.56E-03	7.87E-06	1.22E-05	8.20E-06	1.14E-05	1.5992E-03
519985.31	4258155.76	7785.7848	0.10312	1.80024	0.10599	1.65983	1.56E-03	4.22E-06	6.44E-05	4.34E-06	5.70E-05	1.6891E-03
520108.33	4257904.88	7783.40837	0.08273	11.23977	0.08327	13.25046	1.56E-03	3.39E-06	4.02E-04	3.41E-06	4.55E-04	2.4225E-03
520030.74	4259649.91	7780.00179	6.03792	0.08137	9.934	0.07998	1.56E-03	2.47E-04	2.91E-06	4.07E-04	2.75E-06	2.2177E-03
519951.29	4258405.37	7766.60492	0.18267	1.16219	0.18898	1.09438	1.56E-03	7.48E-06	4.16E-05	7.74E-06	3.76E-05	1.6497E-03
520049.94	4258003.79	7761.59397	0.08887	7.40107	0.09284	5.63382	1.55E-03	3.64E-06	2.65E-04	3.80E-06	1.93E-04	2.0199E-03
519799.53	4258780.53	7748.2589	0.17989	0.28224	0.18631	0.27654	1.55E-03	7.37E-06	1.01E-05	7.63E-06	9.49E-06	1.5863E-03
519953.63	4258298.66	7737.57791	0.13366	1.21182	0.13712	1.14443	1.55E-03	5.47E-06	4.33E-05	5.61E-06	3.93E-05	1.6433E-03
519950.92	4258430.52	7734.64818	0.1986	1.14697	0.20704	1.07866	1.55E-03	8.13E-06	4.10E-05	8.48E-06	3.70E-05	1.6436E-03
519909.69	4258570.38	7731.21979	0.23749	0.68968	0.25443	0.66422	1.55E-03	9.72E-06	2.47E-05	1.04E-05	2.28E-05	1.6159E-03
519967.88	4258212.88	7727.58763	0.11213	1.43406	0.11522	1.3423	1.55E-03	4.59E-06	5.13E-05	4.72E-06	4.61E-05	1.6542E-03
520060.48	4259669.86	7725.79757	12.12741	0.08154	19.12624	0.07963	1.55E-03	4.97E-04	2.92E-06	7.83E-04	2.73E-06	2.8325E-03
519974.05	4258190.36	7722.25991	0.108	1.52912	0.11082	1.42444	1.55E-03	4.42E-06	5.47E-05	4.54E-06	4.89E-05	1.6590E-03
519952.4	4258309.15	7721.77481	0.13694	1.19316	0.14047	1.12766	1.55E-03	5.61E-06	4.27E-05	5.75E-06	3.87E-05	1.6391E-03
519929.52	4258531.51	7719.39321	0.24316	0.85345	0.25995	0.81488	1.55E-03	9.96E-06	3.05E-05	1.06E-05	2.80E-05	1.6250E-03
520020.84	4259649.93	7708.9769	4.31628	0.08065	5.93093	0.07937	1.54E-03	1.77E-04	2.88E-06	2.43E-04	2.72E-06	1.9690E-03
519919.61	4258550.94	7697.40646	0.24077	0.7652	0.25729	0.73418	1.54E-03	9.86E-06	2.74E-05	1.05E-05	2.52E-05	1.6145E-03
520098.51	4257914.85	7693.83434	0.08284	16.87668	0.08372	17.95734	1.54E-03	3.39E-06	6.04E-04	3.43E-06	6.16E-04	2.7678E-03
519951.04	4258319.7	7684.04633	0.14026	1.17342	0.1439	1.10967	1.54E-03	5.74E-06	4.20E-05	5.89E-06	3.81E-05	1.6305E-03
519939.4	4258502.37	7668.27757	0.23729	0.9656	0.25292	0.91605	1.54E-03	9.72E-06	3.45E-05	1.04E-05	3.14E-05	1.6217E-03
519819.59	4258737.33	7662.52603	0.18759	0.32592	0.19525	0.31905	1.53E-03	7.68E-06	1.17E-05	7.99E-06	1.10E-05	1.5728E-03
520070.39	4259679.84	7662.32317	10.52234	0.08129	10.00378	0.07913	1.53E-03	4.31E-04	2.91E-06	4.10E-04	2.72E-06	2.3805E-03
519867.12	4258646.05	7661.28698	0.2122	0.46582	0.22506	0.45598	1.53E-03	8.69E-06	1.67E-05	9.21E-06	1.57E-05	1.5845E-03
519804.21	4258767.85	7660.49919	0.18075	0.29259	0.18736	0.28665	1.53E-03	7.40E-06	1.05E-05	7.67E-06	9.84E-06	1.5695E-03
519974.94	4258180.01	7658.5557	0.1058	1.56121	0.10852	1.45342	1.53E-03	4.33E-06	5.58E-05	4.44E-06	4.99E-05	1.6482E-03
519968.76	4258202.53	7651.31122	0.1096	1.4482	0.11255	1.35428	1.53E-03	4.49E-06	5.18E-05	4.61E-06	4.65E-05	1.6397E-03
520030.76	4259659.91	7651.00781	6.06363	0.08031	10.24065	0.07895	1.53E-03	2.48E-04	2.87E-06	4.19E-04	2.71E-06	2.2054E-03
519857.12	4258664.6	7646.8962	0.20636	0.42983	0.21776	0.42125	1.53E-03	8.45E-06	1.54E-05	8.92E-06	1.45E-05	1.5786E-03
520061.11	4257974.72	7631.2623	0.08611	12.54583	0.0892	8.05195	1.53E-03	3.53E-06	4.49E-04	3.65E-06	2.76E-04	2.2606E-03
519949.53	4258330.31	7627.02844	0.14364	1.15244	0.14741	1.0905	1.53E-03	5.88E-06	4.12E-05	6.04E-06	3.74E-05	1.6180E-03
519847.12	4258683.15	7620.73307	0.20052	0.39828	0.21079	0.39019	1.53E-03	8.21E-06	1.42E-05	8.63E-06	1.34E-05	1.5706E-03
519946.63	4258465.21	7610.14057	0.2189	1.07228	0.23141	1.01154	1.52E-03	8.96E-06	3.84E-05	9.47E-06	3.47E-05	1.6156E-03
520108.36	4257894.88	7608.95571	0.08115	11.22094	0.08165	13.16284	1.52E-03	3.32E-06	4.01E-04	3.34E-06	4.52E-04	2.3837E-03
520049.97	4257993.79	7602.31309	0.0871	7.382	0.09093	5.62298	1.52E-03	3.57E-06	2.64E-04	3.72E-06	1.93E-04	1.9868E-03
520060.49	4259679.86	7597.18093	11.82832	0.08047	17.78204	0.0786	1.52E-03	4.84E-04	2.88E-06	7.28E-04	2.70E-06	2.7394E-03
520020.86	4259659.93	7582.09208	4.32531	0.07961	6.0043	0.07836	1.52E-03	1.77E-04	2.85E-06	2.46E-04	2.69E-06	1.9469E-03
519792.81	4258788.38	7576.41436	0.17495	0.27149	0.18087	0.26616	1.52E-03	7.16E-06	9.71E-06	7.41E-06	9.14E-06	1.5507E-03
519947.95	4258364.96	7575.64737	0.15798	1.12808	0.16243	1.0671	1.52E-03	6.47E-06	4.03E-05	6.65E-06	3.66E-05	1.6072E-03
519975.77	4258169.68	7565.19276	0.1035	1.57506	0.10611	1.4647	1.52E-03	4.24E-06	5.63E-05	4.34E-06	5.03E-05	1.6302E-03
519947.93	4258389.26	7557.3393	0.17037	1.12329	0.1756	1.06103	1.51E-03	6.98E-06	4.02E-05	7.19E-06	3.64E-05	1.6042E-03
519879.89	4258618.99	7547.71766	0.21791	0.52116	0.23232	0.50866	1.51E-03	8.92E-06	1.86E-05	9.51E-06	1.75E-05	1.5661E-03

520070.41	4259689.84	7535.60043	9.66126	0.08024	9.07552	0.07812	1.51E-03	3.96E-04	2.87E-06	3.72E-04	2.68E-06	2.2818E-03
520030.77	4259669.91	7525.25702	6.06188	0.07928	10.48165	0.07794	1.51E-03	2.48E-04	2.84E-06	4.29E-04	2.68E-06	2.1899E-03
520098.54	4257904.85	7523.51768	0.08125	16.84107	0.08209	17.7278	1.51E-03	3.33E-06	6.02E-04	3.36E-06	6.09E-04	2.7244E-03
519947.74	4258414	7506.52562	0.18441	1.11297	0.19106	1.04985	1.50E-03	7.55E-06	3.98E-05	7.82E-06	3.60E-05	1.5945E-03
519889.81	4258599.56	7504.24501	0.22283	0.57104	0.23829	0.55536	1.50E-03	9.12E-06	2.04E-05	9.76E-06	1.91E-05	1.5612E-03
520051.29	4257984.69	7500.62366	0.08581	7.75292	0.08947	5.82602	1.50E-03	3.51E-06	2.77E-04	3.66E-06	2.00E-04	1.9866E-03
519840.84	4258692.13	7500.25121	0.19542	0.38111	0.20537	0.37308	1.50E-03	8.00E-06	1.36E-05	8.41E-06	1.28E-05	1.5449E-03
519947.32	4258439.27	7498.61926	0.20054	1.09675	0.20978	1.03369	1.50E-03	8.21E-06	3.92E-05	8.59E-06	3.55E-05	1.5932E-03
519939.36	4258492.68	7490.50484	0.22961	0.97239	0.24409	0.92238	1.50E-03	9.40E-06	3.48E-05	9.99E-06	3.17E-05	1.5859E-03
519955.83	4258247.82	7488.45771	0.11769	1.23952	0.12078	1.17013	1.50E-03	4.82E-06	4.43E-05	4.95E-06	4.02E-05	1.5939E-03
520060.51	4259689.86	7472.35959	12.35362	0.07944	15.97227	0.07761	1.50E-03	5.06E-04	2.84E-06	6.54E-04	2.66E-06	2.6617E-03
519929.48	4258521.81	7472.04466	0.23573	0.86039	0.25149	0.82117	1.50E-03	9.65E-06	3.08E-05	1.03E-05	2.82E-05	1.5753E-03
519976.54	4258159.37	7468.49598	0.10127	1.59187	0.1038	1.47802	1.50E-03	4.15E-06	5.69E-05	4.25E-06	5.07E-05	1.6117E-03
520061.14	4257964.73	7465.92086	0.08439	12.53169	0.0874	7.96796	1.50E-03	3.46E-06	4.48E-04	3.58E-06	2.74E-04	2.2240E-03
519942.98	4258474.09	7460.44872	0.22066	1.02424	0.23374	0.96883	1.49E-03	9.03E-06	3.66E-05	9.57E-06	3.33E-05	1.5826E-03
520020.87	4259669.93	7458.42197	4.30148	0.0786	6.02906	0.07736	1.49E-03	1.76E-04	2.81E-06	2.47E-04	2.66E-06	1.9221E-03
519957.02	4258237.34	7455.10803	0.11505	1.25354	0.11809	1.18289	1.49E-03	4.71E-06	4.48E-05	4.84E-06	4.06E-05	1.5880E-03
520108.39	4257884.88	7452.15466	0.07968	11.1791	0.0801	13.45922	1.49E-03	3.26E-06	4.00E-04	3.28E-06	4.62E-04	2.3609E-03
519899.73	4258580.12	7447.23844	0.2271	0.62933	0.243	0.60876	1.49E-03	9.30E-06	2.25E-05	9.95E-06	2.09E-05	1.5541E-03
519958.12	4258226.9	7412.3993	0.11249	1.2724	0.11549	1.19867	1.48E-03	4.61E-06	4.55E-05	4.73E-06	4.12E-05	1.5804E-03
520070.43	4259699.84	7412.1206	8.76311	0.07921	8.11911	0.07714	1.48E-03	3.59E-04	2.83E-06	3.32E-04	2.65E-06	2.1811E-03
519786.08	4258796.19	7409.45156	0.17016	0.26143	0.17565	0.2564	1.48E-03	6.97E-06	9.35E-06	7.19E-06	8.80E-06	1.5162E-03
519834.51	4258700.97	7405.26362	0.1912	0.36503	0.20028	0.35754	1.48E-03	7.83E-06	1.31E-05	8.20E-06	1.23E-05	1.5244E-03
520030.79	4259679.91	7402.81775	6.02065	0.07827	10.63062	0.07696	1.48E-03	2.47E-04	2.80E-06	4.35E-04	2.64E-06	2.1697E-03
519909.65	4258560.68	7400.9787	0.23062	0.69562	0.24607	0.66997	1.48E-03	9.44E-06	2.49E-05	1.01E-05	2.30E-05	1.5495E-03
519949.36	4258280.45	7398.30495	0.1252	1.15315	0.12818	1.09189	1.48E-03	5.13E-06	4.12E-05	5.25E-06	3.75E-05	1.5707E-03
519919.57	4258541.25	7397.17552	0.2334	0.7713	0.24881	0.74008	1.48E-03	9.56E-06	2.76E-05	1.02E-05	2.54E-05	1.5541E-03
519950.63	4258269.94	7396.27518	0.12236	1.16845	0.12531	1.10609	1.48E-03	5.01E-06	4.18E-05	5.13E-06	3.80E-05	1.5711E-03
519965.1	4258194.05	7392.99394	0.10614	1.37479	0.10887	1.28937	1.48E-03	4.35E-06	4.92E-05	4.46E-06	4.43E-05	1.5828E-03
519947.98	4258291	7385.58057	0.12809	1.13611	0.13112	1.07611	1.48E-03	5.24E-06	4.06E-05	5.37E-06	3.69E-05	1.5673E-03
519951.78	4258259.47	7380.21868	0.11957	1.1828	0.12251	1.11917	1.48E-03	4.90E-06	4.23E-05	5.02E-06	3.84E-05	1.5686E-03
520098.57	4257894.85	7360.38047	0.07972	16.80408	0.08051	17.65778	1.47E-03	3.26E-06	6.01E-04	3.30E-06	6.06E-04	2.6878E-03
519959.13	4258216.49	7359.86411	0.10999	1.28683	0.11291	1.21096	1.47E-03	4.50E-06	4.60E-05	4.62E-06	4.16E-05	1.5706E-03
519944.48	4258373.4	7355.07039	0.1595	1.08467	0.16392	1.02734	1.47E-03	6.53E-06	3.88E-05	6.71E-06	3.53E-05	1.5603E-03
519807.29	4258751.35	7354.38277	0.1782	0.30238	0.18484	0.29631	1.47E-03	7.30E-06	1.08E-05	7.57E-06	1.02E-05	1.5087E-03
520060.53	4259699.86	7350.70615	11.03371	0.07844	13.78763	0.07663	1.47E-03	4.52E-04	2.81E-06	5.65E-04	2.63E-06	2.4938E-03
519867.12	4258636.77	7348.19059	0.20777	0.46984	0.22054	0.45997	1.47E-03	8.51E-06	1.68E-05	9.03E-06	1.58E-05	1.5217E-03
520051.32	4257974.69	7341.8536	0.08411	7.74161	0.08768	5.7963	1.47E-03	3.44E-06	2.77E-04	3.59E-06	1.99E-04	1.9532E-03
519944.17	4258349.89	7341.14922	0.14851	1.08414	0.15236	1.02808	1.47E-03	6.08E-06	3.88E-05	6.24E-06	3.53E-05	1.5566E-03
519939.32	4258482.98	7339.40504	0.22212	0.97896	0.23557	0.92837	1.47E-03	9.09E-06	3.50E-05	9.65E-06	3.19E-05	1.5554E-03
520020.89	4259679.93	7337.93586	4.26608	0.07761	6.00125	0.07639	1.47E-03	1.75E-04	2.78E-06	2.46E-04	2.62E-06	1.8953E-03
519857.12	4258655.32	7337.49849	0.20217	0.43335	0.21366	0.42495	1.47E-03	8.28E-06	1.55E-05	8.75E-06	1.46E-05	1.5165E-03
519966.06	4258183.67	7320.35955	0.10385	1.38871	0.10644	1.30093	1.47E-03	4.25E-06	4.97E-05	4.36E-06	4.47E-05	1.5689E-03
519847.12	4258673.87	7319.09416	0.19661	0.40136	0.20686	0.39375	1.47E-03	8.05E-06	1.44E-05	8.47E-06	1.35E-05	1.5101E-03
519944.42	4258397.79	7313.99113	0.17201	1.07845	0.17738	1.02	1.46E-03	7.04E-06	3.86E-05	7.26E-06	3.50E-05	1.5526E-03
520061.17	4257954.73	7310.8214	0.08276	12.51636	0.08567	7.92699	1.46E-03	3.39E-06	4.48E-04	3.51E-06	2.72E-04	2.1908E-03
519828.13	4258709.69	7300.58246	0.18686	0.34987	0.19522	0.34282	1.46E-03	7.65E-06	1.25E-05	7.99E-06	1.18E-05	1.5020E-03
519960.07	4258206.12	7299.85257	0.10757	1.29919	0.11038	1.22165	1.46E-03	4.40E-06	4.65E-05	4.52E-06	4.19E-05	1.5592E-03
519943.72	4258448.02	7295.5875	0.20244	1.04922	0.21248	0.99127	1.46E-03	8.29E-06	3.75E-05	8.70E-06	3.40E-05	1.5496E-03
520108.42	4257874.88	7294.95778	0.07823	11.14128	0.07859	13.46663	1.46E-03	3.20E-06	3.99E-04	3.22E-06	4.62E-04	2.3282E-03
520070.44	4259709.84	7291.81665	7.8666	0.07821	7.16082	0.07618	1.46E-03	3.22E-04	2.80E-06	2.93E-04	2.62E-06	2.0810E-03
519795.81	4258771.68	7286.06244	0.1725	0.28047	0.1784	0.275	1.46E-03	7.06E-06	1.00E-05	7.30E-06	9.44E-06	1.4930E-03
519945.11	4258302.18	7285.52685	0.13054	1.0999	0.13356	1.04325	1.46E-03	5.34E-06	3.93E-05	5.47E-06	3.58E-05	1.5450E-03
520030.81	4259689.91	7283.4377	5.95256	0.07728	10.62462	0.07599	1.46E-03	2.44E-04	2.76E-06	4.35E-04	2.61E-06	2.1427E-03
519944.18	4258422.63	7265.33986	0.18617	1.06677	0.19338	1.0079	1.45E-03	7.62E-06	3.82E-05	7.92E-06	3.46E-05	1.5433E-03
519822.21	4258719.55	7263.2403	0.18372	0.33605	0.19137	0.32941	1.45E-03	7.52E-06	1.20E-05	7.84E-06	1.13E-05	1.4932E-03
519929.44	4258512.11	7250.41231	0.22846	0.86679	0.24314	0.82706	1.45E-03	9.35E-06	3.10E-05	9.96E-06	2.84E-05	1.5307E-03
519943.8	4258312.7	7245.5484	0.13354	1.08136	0.13665	1.02675	1.45E-03	5.47E-06	3.87E-05	5.60E-06	3.52E-05	1.5360E-03
519966.95	4258173.32	7242.70025	0.10164	1.40442	0.10411	1.31378	1.45E-03	4.16E-06	5.02E-05	4.26E-06	4.51E-05	1.5542E-03
520060.54	4259709.86	7232.0975	9.57358	0.07745	11.39704	0.07568	1.45E-03	3.92E-04	2.77E-06	4.67E-04	2.60E-06	2.3123E-03
519879.85	4258609.3	7223.1348	0.21279	0.52594	0.22682	0.51317	1.45E-03	8.71E-06	1.88E-05	9.29E-06	1.76E-05	1.5010E-03
520020.91	4259689.93	7220.32485	4.23336	0.07662	5.89534	0.07543	1.45E-03	1.73E-04	2.74E-06	2.41E-04	2.59E-06	1.8660E-03
520098.6	4257884.85	7205.4782	0.07825	16.76329	0.07899	17.90194	1.44E-03	3.20E-06	6.00E-04	3.23E-06	6.15E-04	2.6636E-03
519800.59	4258759.26	7203.83546	0.17346	0.29053	0.17957	0.28486	1.44E-03	7.10E-06	1.04E-05	7.35E-06	9.78E-06	1.4773E-03
519942.36	4258323.29	7193.9934	0.13665	1.06376	0.13987	1.01069	1.44E-03	5.60E-06	3.80E-05	5.73E-06	3.47E-05	1.5248E-03
520051.35	4257964.69	7188.96235	0.08247	7.73221	0.08594	5.754	1.44E-03	3.38E-06	2.77E-04	3.52E-06	1.98E-04	1.9207E-03
519889.77	4258589.86	7179.15401	0.21716	0.57694	0.23205	0.56028	1.44E-03	8.89E-06	2.06E-05	9.50E-06	1.92E-05	1.4960E-03
520070.46	4259719.84	7174.61957	7.01039	0.07723	6.10521	0.07524	1.44E-03	2.87E-04	2.76E-06	2.50E-04	2.58E-06	1.9792E-03
520030.82	4259699.91	7167.03323	5.803	0.07632	10.28282	0.07505	1.44E-03	2.38E-04	2.73E-06	4.21E-04	2.58E-06	2.0992E-03
520061.2	4257944.73	7161.83804	0.08119	12.50865	0.08399	7.89996	1.43E-03	3.32E-06	4.47E-04	3.44E-06	2.71E-04	2.1596E-03
519967.78	4258162.99	7160.47962	0.09949	1.41739	0.10184	1.32414	1.43E-03	4.07E-06	5.07E-05	4.17E-06	4.55E-05	1.5384E-03
519815.84	4258728.3	7158.04355	0.17948	0.32266	0.18665	0.3163	1.43E-03	7.35E-06	1.15E-05	7.64E-06	1.09E-05	1.4709E-03
520108.45	4257864.88	7139.47084	0.0768	11.12303	0.07713	13.48321	1.43E-03	3.14E-06	3.98E-04	3.16E-06	4.63E-04	2.2968E-03
519789.12	4258779.6	7136.56743	0.16794	0.26993	0.1734	0.26478	1.43E-03	6.88E-06	9.66E-06	7.10E-06	9.09E-06	1.4619E-03
519899.69	4258570.42	7132.0117	0.2209	0.63516	0.2355	0.61399	1.43E-03	9.04E-06	2.27E-05	9.64E-06	2.11E-05	1.4908E-03
519941	4258381.84	7128.48	0.16095	1.04298	0.1654	0.98911	1.43E-03	6.59E-06	3.73E-05	6.77E-06	3.40E-05	1.5122E-03
519919.52	4258531.55	7128.30961	0.22634	0.77709	0.24082	0.74557	1.43E-03	9.27E-06	2.78E-05	9.86E-06	2.56E-05	1.5001E-03
519940.51	4258358.78	7126.60966	0.14992	1.04099	0.15371	0.98862	1.43E-03	6.14E-06	3.72E-05	6.29E-06	3.39E-05	1.5108E-03
519940.12	4258456.77	7117.77234	0.20417	1.00401	0.21488	0.95107	1.43E-03	8.36E-06	3.59E-05	8.80E-06	3.27E-05	1.5112E-03
520060.56	4259719.86	7116.51655	9.41125	0.07647	8.79644	0.07474	1.43E-03	3.85E-04	2.74E-06	3.60E-04	2.57E-06	2.1760E-03
519909.61	4258550.99	7106.01266	0.22393	0.70103	0.23817	0.67534	1.42E-03	9.17E-06	2.51E-05	9.75E-06	2.32E-05	1.4903E-03
520020.92	4259699.93	7105.73378	4.13191	0.07567	5.67516	0.07449	1.42E-03	1.69E-04	2.71E-06	2.32E-04	2.56E-06	1.8298E-03
519946.87	4258251.51	7089.2089	0.11519	1.11977	0.11782	1.06127	1.42E-03	4.72E-06	4.01E-05	4.82E-06	3.64E-05	1.5057E-03
519940.91	4258406.32	7078.23637	0.17362	1.03602	0.17933	0.98108	1.42E-03	7.11E-06	3.71E-05	7.34E-06	3.37E-05	1.5027E-03
519948.14	4258241	7071.80097	0.1127	1.13203	0.11533	1.07291	1.42E-03	4.61E-06	4.05E-05	4.72E-06	3.68E-05	1.5029E-03
520070.48	4259729.84	7060.3235	6.05315	0.07624	5.06903	0.0743	1.41E-03	2.48E-04	2.73E-06	2.08E-04	2.55E-06	1.8746E-03
519929.4	4258502.42	7057.31073	0.22143	0.87268	0.23503	0.8326	1.41E-03	9.07E-06	3.12E-05	9.62E-06	2.86E-05	1.4918E-03
520030.84	4259709.91	7053.6341	5.5637	0.07537	9.42302	0.07413	1.41E-03	2.28E-04	2.70E-06	3.86E-04	2.54E-06	2.0314E-03
520098.63	4257874.85	7052.88558	0.07682	16.73272	0.07751	17.80573	1.41E-03	3.15E-06	5.99E-04	3.17E-06	6.11E-04	2.6285E-03
519956.16	4258197.75	7052.29513	0.10416	1.23749	0.10677	1.16579	1.41E-03	4.26E-06	4.43E-05	4.37E-06	4.00E-05	1.5052E-03
519940.63	4258431.27	7049.6439	0.18794	1.02314	0.19587	0.96837	1.41E-03	7.70E-06	3.66E-05	8.02E-06	3.32E-05	1.4973E-03
519857.12	4258646.05	7047.08079	0.19814	0.43687	0.20964	0.42852	1.41E-03	8.11E-06	1.56E-05	8.58E-06	1.47E-05	1.4583E-03
520051.38	4257954.69	7044.25264	0.0809	7.72073	0.08427	5.72403	1.41E-03	3.31E-06	2.76E-04	3.45E-06	1.97E-04	1.8901E-03
519949.3	4258230.54	7043.99405	0.11027	1.14736	0.11291	1.08615	1.41E-03	4.51E-06	4.10E-05	4.62E-06	3.73E-05	1.4981E-03
519847.12	4258664.6	7031.70107	0.1928	0.40443	0.20313	0.39711	1.41E-03	7.89E-06	1.45E-05	8.32E-06	1.36E-05	1.4525E-03
520061.23	4257934.73	7022.27566	0.07969	12.49498	0.08238	7.88064	1.41E-03	3.26E-06	4.47E-04	3.37E-06	2.71E-04	2.1304E-03
519837.12	4258683.15	7011.43725	0.18749	0.37582	0.19676	0.36895	1.40E-03	7.68E-06	1.34E-05	8.06E-06	1.27E-05	1.4460E-03
519950.38	4258220.1	7007.04133	0.10788	1.16161	0.11052	1.09815	1.40E-03	4.42E-06	4.15E-05	4.53E-06	3.77E-05	1.4914E-03
520060.58	4259729.86	7003.96195	7.60776	0.07552	6.63057	0.07382	1.40E-03	3.11E-04	2.70E-06	2.71E-04	2.53E-06	1.9909E-03
520020.94	4259709.93	6994.13656	3.97908	0.07474	5.34059	0.07358	1.40E-03	1.63E-04	2.67E-06	2.19E-04	2.53E-06	1.7875E-03
519957.17	4258187.34	6993.89141	0.10196	1.24977	0.10446	1.17621	1.40E-03	4.17E-06	4.47E-05	4.28E-06	4.04E-05	1.4942E-03
519782.41	4258787.46	6989.80186	0.1635	0.25999	0.16855	0.25514	1.40E-03	6.69E-06	9.30E-06	6.90E-06	8.76E-06	1.4315E-03
519941.9	4258273.54	6989.53392	0.11966	1.06072	0.12216	1.00792	1.40E-03	4.90E-06	3.79E-05	5.00E-06	3.46E-05	1.4822E-03
519943.13	4258263.04	6988.77989	0.11703	1.07344	0.11951	1.01965	1.40E-03	4.79E-06	3.84E-05	4.89E-06	3.50E-05	1.4827E-03
520108.48	4257854.88	6988.40894	0.07542	11.11171	0.07571	13.5012	1.40E-03	3.09E-06	3.97E-04	3.10E-06	4.64E-04	2.2667E-03
519940.57	4258284.08	6977.16028	0.12234	1.04669	0.12489	0.9949	1.40E-03	5.01E-06	3.74E-05	5.11E-06	3.42E-05	1.4790E-03
519936.52	4258465.52	6968.46208	0.2057	0.96133	0.2169	0.91301	1.40E-03	8.42E-06	3.44E-05	8.88E-06	3.13E-05	1.4786E-03
519951.39	4258209.7	6962.04122	0.10556	1.17329	0.10816	1.10827	1.39E-03	4.32E-06	4.20E-05	4.43E-06	3.80E-05	1.4830E-03
519869.89	4258619.04	6955.69117	0.20335	0.48636	0.21606	0.47583	1.39E-03	8.33E-06	1.74E-05	8.85E-06	1.63E-05	1.4439E-03
519939.1	4258294.67	6949.12788	0.12504	1.03102	0.12766	0.98038	1.39E-03	5.12E-06	3.69E-05	5.23E-06	3.37E-05	1.4725E-03
520030.86	4259719.91	6943.07596	5.23477	0.07445	7.69295	0.07323	1.39E-03	2.14E-04	2.66E-06	3.15E-04	2.51E-06	1.9249E-03
519937.14	4258342.72	6933.04035	0.14107	1.00503	0.14433	0.9568	1.39E-03	5.78E-06	3.59E-05	5.91E-06	3.28E-05	1.4689E-03
519958.12	4258176.96	6930.01766	0.09983	1.26058	0.10221	1.18524	1.39E-03	4.09E-06	4.51E-05	4.18E-06	4.07E-05	1.4819E-03
519879.81	4258599.6	6920.93133	0.20772	0.53092	0.2214	0.51755	1.39E-03	8.50E-06	1.90E-05	9.07E-06	1.78E-05	1.4403E-03
519936.85	4258367.66	6908.22123	0.15133	1.00057	0.15508	0.95139	1.38E-03	6.20E-06	3.58E-05	6.35E-06	3.27E-05	1.4645E-03
520098.66	4257864.85	6906.06529	0.07543	16.70805	0.07608	17.80475	1.38E-03	3.09E-06	5.98E-04	3.12E-06	6.11E-04	2.5981E-03
520051.41	4257944.69	6904.34889	0.07938	7.71012	0.08265	5.69441	1.38E-03	3.25E-06	2.76E-04	3.38E-06	1.95E-04	1.8606E-03
519830.82	4258692.06	6903.48021	0.18282	0.36017	0.19176	0.35332	1.38E-03	7.49E-06	1.29E-05	7.85E-06	1.21E-05	1.4229E-03
519803.65	4258742.7	6902.42292	0.17102	0.2997	0.17717	0.29403	1.38E-03	7.00E-06	1.07E-05	7.25E-06	1.01E-05	1.4174E-03
519919.48	4258521.85	6896.436	0.21965	0.78275	0.23327	0.75082	1.38E-03	8.99E-06	2.80E-05	9.55E-06	2.58E-05	1.4534E-03
519929.36	4258492.72	6891.26245	0.21466	0.87826	0.22728	0.83788	1.38E-03	8.79E-06	3.14E-05	9.31E-06	2.88E-05	1.4583E-03
520020.96	4259719.93	6885.35314	3.77202	0.07384	4.8716	0.0727	1.38E-03	1.54E-04	2.64E-06	1.99E-04	2.50E-06	1.7379E-03
519889.73	4258580.16	6881.70142	0.21162	0.58216	0.22546	0.56492	1.38E-03	8.66E-06	2.08E-05	9.23E-06	1.94E-05	1.4363E-03
520061.27	4257924.73	6876.5578	0.07819	12.51659	0.08081	7.82316	1.38E-03	3.20E-06	4.48E-04	3.31E-06	2.69E-04	2.0999E-03
520109.07	4257845.4	6862.65779	0.07422	10.8825	0.07447	13.27905	1.37E-03	3.04E-06	3.89E-04	3.05E-06	4.56E-04	2.2256E-03
519959.01	4258166.61	6861.37852	0.09775	1.27097	0.10002	1.1937	1.37E-03	4.00E-06	4.55E-05	4.10E-06	4.10E-05	1.4686E-03
519936.58	4258305.7	6859.64722	0.12743	1.00253	0.13008	0.95456	1.37E-03	5.22E-06	3.59E-05	5.33E-06	3.28E-05	1.4529E-03
519937.4	4258414.86	6854.10334	0.17518	0.99536	0.1814	0.94396	1.37E-03	7.17E-06	3.56E-05	7.43E-06	3.24E-05	1.4552E-03
519937.08	4258439.9	6853.01603	0.18961	0.98139	0.19827	0.93084	1.37E-03	7.76E-06	3.51E-05	8.12E-06	3.20E-05	1.4554E-03
519932.92	4258474.27	6847.08039	0.20707	0.92151	0.21862	0.87712	1.37E-03	8.48E-06	3.30E-05	8.95E-06	3.01E-05	1.4517E-03
519899.65	4258560.73	6846.78683	0.21483	0.64028	0.22819	0.61891	1.37E-03	8.80E-06	2.29E-05	9.34E-06	2.12E-05	1.4335E-03
519792.08	4258762.84	6845.44117	0.16556	0.27833	0.17096	0.27316	1.37E-03	6.78E-06	9.96E-06	7.00E-06	9.38E-06	1.4040E-03
519909.57	4258541.29	6841.76415	0.21742	0.70612	0.23071	0.68036	1.37E-03	8.90E-06	2.53E-05	9.45E-06	2.34E-05	1.4371E-03
520030.87	4259729.91	6835.18141	4.69454	0.07355	5.81229	0.07234	1.37E-03	1.92E-04	2.63E-06	2.38E-04	2.48E-06	1.8041E-03
519824.46	4258700.84	6821.15903	0.17901	0.34547	0.18708	0.33912	1.37E-03	7.33E-06	1.24E-05	7.66E-06	1.16E-05	1.4050E-03
519935.2	4258316.25	6803.31048	0.13022	0.98557	0.13296	0.9395	1.36E-03	5.33E-06	3.53E-05	5.44E-06	3.23E-05	1.4407E-03
520020.97	4259729.93	6779.0976	3.50959	0.07296	4.24388	0.07183	1.36E-03	1.44E-04	2.61E-06	1.74E-04	2.47E-06	1.6801E-03
519818.44	4258710.45	6775.0508	0.17577	0.33203	0.18319	0.32595	1.36E-03	7.20E-06	1.19E-05	7.50E-06	1.12E-05	1.3946E-03
519857.12	4258636.77	6774.93955	0.19423	0.44035	0.2056	0.43199	1.36E-03	7.95E-06	1.58E-05	8.42E-06	1.48E-05	1.4037E-03
520051.45	4257934.69	6772.9714	0.07794	7.70002	0.08109	5.6744	1.36E-03	3.19E-06	2.75E-04	3.32E-06	1.95E-04	1.8331E-03
519796.98	4258750.66	6770.78106	0.16663	0.28816	0.1723	0.28281	1.36E-03	6.82E-06	1.03E-05	7.05E-06	9.71E-06	1.3898E-03
520098.69	4257854.85	6764.69323	0.0741	16.6903	0.0747	17.90184	1.35E-03	3.03E-06	5.97E-04	3.06E-06	6.15E-04	2.5724E-03
519847.12	4258655.32	6760.62979	0.18911	0.40751	0.19951	0.40034	1.35E-03	7.74E-06	1.46E-05	8.17E-06	1.37E-05	1.3981E-03
519929.32	4258483.02	6750.74658	0.20816	0.8837	0.21992	0.84298	1.35E-03	8.52E-06	3.16E-05	9.00E-06	2.89E-05	1.4300E-03
520061.3	4257914.73	6747.90029	0.0768	12.48265	0.07929	7.78197	1.35E-03	3.14E-06	4.46E-04	3.25E-06	2.67E-04	2.0714E-03
519837.12	4258673.87	6743.65715	0.18403	0.37851	0.19334	0.37204	1.35E-03	7.53E-06	1.35E-05	7.92E-06	1.28E-05	1.3923E-03
519933.52	4258351.5	6737.12968	0.14232	0.96742	0.14552	0.92209	1.35E-03	5.83E-06	3.46E-05	5.96E-06	3.17E-05	1.4272E-03
519947.21	4258201.44	6723.43418	0.1022	1.11549	0.10457	1.05584	1.35E-03	4.18E-06	3.99E-05	4.28E-06	3.62E-05	1.4311E-03
520109.1	4257835.4	6721.4025	0.07292	10.87196	0.07314	13.28876	1.35E-03	2.99E-06	3.89E-04	2.99E-06	4.56E-04	2.1971E-03
519785.42	4258770.81	6715.25508	0.16132	0.26806	0.16635	0.26314	1.34E-03	6.61E-06	9.59E-06	6.81E-06	9.03E-06	1.3769E-03
519937.91	4258255.21	6709.98283	0.11272	1.01511	0.11488	0.96592	1.34E-03	4.62E-06	3.63E-05	4.70E-06	3.32E-05	1.4226E-03
519939.25	4258244.67	6706.96273	0.11037	1.02959	0.11256	0.97872	1.34E-03	4.52E-06	3.68E-05	4.61E-06	3.36E-05	1.4227E-03
519919.44	4258512.15	6693.21181	0.21324	0.7881	0.22598	0.75577	1.34E-03	8.73E-06	2.82E-05	9.25E-06	2.59E-05	1.4125E-03
519940.49	4258234.17	6692.66358	0.10806	1.03976	0.11026	0.98841	1.34E-03	4.42E-06	3.72E-05	4.51E-06	3.39E-05	1.4204E-03
519812.1	4258719.27	6688.95029	0.17194	0.31902	0.17877	0.31322	1.34E-03	7.04E-06	1.14E-05	7.32E-06	1.08E-05	1.3761E-03
519933.2	4258376.55	6687.75553	0.15271	0.96224	0.15652	0.91596	1.34E-03	6.25E-06	3.44E-05	6.41E-06	3.14E-05	1.4178E-03
519934.06	4258398.72	6686.42221	0.16381	0.96627	0.16872	0.91838	1.34E-03	6.71E-06	3.46E-05	6.91E-06	3.15E-05	1.4188E-03
519933.53	4258448.53	6680.16481	0.19116	0.94164	0.20043	0.8952	1.34E-03	7.83E-06	3.37E-05	8.21E-06	3.07E-05	1.4182E-03
519948.29	4258191	6678.914	0.1001	1.12772	0.10243	1.06613	1.34E-03	4.10E-06	4.03E-05	4.19E-06	3.66E-05	1.4228E-03
519869.85	4258609.34	6674.73418	0.19879	0.49053	0.2112	0.47974	1.34E-03	8.14E-06	1.75E-05	8.65E-06	1.65E-05	1.3875E-03
519941.64	4258223.71	6669.51613	0.10581	1.05323	0.10804	0.99992	1.34E-03	4.33E-06	3.77E-05	4.42E-06	3.43E-05	1.4164E-03
520099.28	4257845.37	6646.00528	0.07294	16.23426	0.07348	17.62373	1.33E-03	2.99E-06	5.81E-04	3.01E-06	6.05E-04	2.5227E-03
519933.89	4258423.39	6645.81783	0.17671	0.95671	0.18356	0.90878	1.33E-03	7.24E-06	3.42E-05	7.52E-06	3.12E-05	1.4111E-03
519879.77	4258589.9	6642.26969	0.20271	0.53598	0.21586	0.52181	1.33E-03	8.30E-06	1.92E-05	8.84E-06	1.79E-05	1.3844E-03
519942.7	4258213.29	6637.47578	0.10359	1.06442	0.10585	1.00952	1.33E-03	4.24E-06	3.81E-05	4.33E-06	3.47E-05	1.4106E-03
520051.48	4257924.69	6636.62113	0.07649	7.69478	0.07957	5.62806	1.33E-03	3.13E-06	2.75E-04	3.26E-06	1.93E-04	1.8039E-03
519949.3	4258180.6	6628.14285	0.09805	1.13783	0.10031	1.07465	1.33E-03	4.01E-06	4.07E-05	4.11E-06	3.69E-05	1.4131E-03
519934.48	4258266.61	6617.77871	0.11452	0.97931	0.1166	0.93326	1.33E-03	4.69E-06	3.50E-05	4.77E-06	3.20E-05	1.4018E-03
519889.69	4258570.47	6609.55894	0.20615	0.58729	0.21891	0.56945	1.32E-03	8.44E-06	2.10E-05	8.96E-06	1.95E-05	1.3816E-03
519933.18	4258277.14	6605.23075	0.11699	0.96715	0.11912	0.9221	1.32E-03	4.79E-06	3.46E-05	4.88E-06	3.17E-05	1.3987E-03
519909.52	4258531.59	6602.4969	0.2112	0.71096	0.22372	0.68503	1.32E-03	8.65E-06	2.54E-05	9.16E-06	2.35E-05	1.3890E-03
520061.33	4257904.73	6601.00667	0.07534	12.51625	0.07781	7.62588	1.32E-03	3.08E-06	4.48E-04	3.19E-06	2.62E-04	2.0377E-03
519899.61	4258551.03	6589.06176	0.20886	0.64488	0.22116	0.62349	1.32E-03	8.55E-06	2.31E-05	9.06E-06	2.14E-05	1.3816E-03
519778.73	4258778.73	6586.79177	0.1572	0.2583	0.16186	0.25364	1.32E-03	6.44E-06	9.24E-06	6.63E-06	8.71E-06	1.3501E-03
520109.13	4257825.4	6582.3607	0.07164	10.87252	0.07184	13.30118	1.32E-03	2.93E-06	3.89E-04	2.94E-06	4.57E-04	2.1696E-03
519931.77	4258287.71	6579.66495	0.1195	0.95479	0.12171	0.91051	1.32E-03	4.89E-06	3.42E-05	4.98E-06	3.13E-05	1.3930E-03
519950.25	4258170.22	6572.20171	0.09606	1.14748	0.09824	1.08257	1.32E-03	3.93E-06	4.10E-05	4.02E-06	3.72E-05	1.4023E-03
519930.1	4258335.56	6563.31487	0.13424	0.93438	0.13699	0.89244	1.31E-03	5.50E-06	3.34E-05	5.61E-06	3.06E-05	1.3896E-03
519929.91	4258360.28	6540.61697	0.14359	0.93222	0.14676	0.88935	1.31E-03	5.88E-06	3.33E-05	6.01E-06	3.05E-05	1.3856E-03
519930.21	4258298.34	6538.21575	0.12202	0.93992	0.12431	0.89688	1.31E-03	5.00E-06	3.36E-05	5.09E-06	3.08E-05	1.3839E-03
519929.98	4258457.16	6532.58888	0.19252	0.90368	0.20221	0.86121	1.31E-03	7.88E-06	3.23E-05	8.28E-06	2.96E-05	1.3863E-03
519919.4	4258502.46	6514.75323	0.20706	0.79307	0.21892	0.76044	1.30E-03	8.48E-06	2.84E-05	8.96E-06	2.61E-05	1.3766E-03
520099.31	4257835.37	6513.06941	0.07168	16.2281	0.07218	17.73974	1.30E-03	2.93E-06	5.80E-04	2.96E-06	6.09E-04	2.4997E-03
520051.51	4257914.69	6512.71472	0.07514	7.68083	0.07811	5.60226	1.30E-03	3.08E-06	2.75E-04	3.20E-06	1.92E-04	1.7776E-03
519847.12	4258646.05	6506.27876	0.18553	0.4106	0.19592	0.40345	1.30E-03	7.60E-06	1.47E-05	8.02E-06	1.39E-05	1.3471E-03
519837.12	4258664.6	6489.78995	0.18065	0.38121	0.19006	0.37496	1.30E-03	7.40E-06	1.36E-05	7.78E-06	1.29E-05	1.3414E-03
519800.01	4258734.05	6477.41583	0.16428	0.2967	0.17009	0.29147	1.30E-03	6.73E-06	1.06E-05	6.96E-06	1.00E-05	1.3315E-03
519930.58	4258407.17	6476.73182	0.1652	0.93048	0.17058	0.88542	1.30E-03	6.76E-06	3.33E-05	6.98E-06	3.04E-05	1.3745E-03
519827.12	4258683.15	6472.73074	0.17581	0.35518	0.18421	0.34934	1.30E-03	7.20E-06	1.27E-05	7.54E-06	1.20E-05	1.3357E-03
520061.36	4257894.73	6468.81887	0.07398	12.4928	0.07638	7.51336	1.30E-03	3.03E-06	4.47E-04	3.13E-06	2.58E-04	2.0064E-03

519929.54	4258385.44	6468.69579	0.15406	0.92588	0.15807	0.88219	1.30E-03	6.31E-06	3.31E-05	6.47E-06	3.03E-05	1.3716E-03
519930.38	4258431.92	6456.49702	0.17815	0.91976	0.18567	0.87532	1.29E-03	7.29E-06	3.29E-05	7.60E-06	3.01E-05	1.3708E-03
519928.05	4258309.22	6456.39314	0.12435	0.91778	0.12669	0.8769	1.29E-03	5.09E-06	3.28E-05	5.19E-06	3.01E-05	1.3662E-03
520109.16	4257815.4	6446.81247	0.0704	10.87249	0.07059	13.21919	1.29E-03	2.88E-06	3.89E-04	2.89E-06	4.54E-04	2.1396E-03
519859.89	4258619.08	6437.83788	0.19035	0.45497	0.20162	0.4461	1.29E-03	7.79E-06	1.63E-05	8.26E-06	1.53E-05	1.3369E-03
519788.36	4258753.99	6427.32647	0.15901	0.27602	0.16407	0.27112	1.29E-03	6.51E-06	9.87E-06	6.72E-06	9.31E-06	1.3196E-03
519869.81	4258599.64	6413.80519	0.19428	0.49488	0.2064	0.48354	1.28E-03	7.95E-06	1.77E-05	8.45E-06	1.66E-05	1.3352E-03
519926.43	4258465.8	6410.55874	0.19373	0.86818	0.20373	0.82908	1.28E-03	7.93E-06	3.11E-05	8.34E-06	2.85E-05	1.3596E-03
519938.26	4258205.13	6408.20397	0.10027	1.01237	0.10229	0.96167	1.28E-03	4.11E-06	3.62E-05	4.19E-06	3.30E-05	1.3609E-03
519909.48	4258521.89	6392.2602	0.20527	0.7157	0.21709	0.68947	1.28E-03	8.40E-06	2.56E-05	8.89E-06	2.37E-05	1.3467E-03
519879.73	4258580.2	6386.59745	0.19782	0.54049	0.21004	0.52583	1.28E-03	8.10E-06	1.93E-05	8.60E-06	1.81E-05	1.3331E-03
519926.52	4258344.25	6385.20361	0.13537	0.90165	0.13807	0.86201	1.28E-03	5.54E-06	3.23E-05	5.65E-06	2.96E-05	1.3518E-03
520099.34	4257825.37	6383.98464	0.07045	16.22589	0.07092	17.80294	1.28E-03	2.88E-06	5.80E-04	2.90E-06	6.11E-04	2.4758E-03
519939.41	4258194.67	6376.04332	0.09827	1.02282	0.10031	0.97068	1.28E-03	4.02E-06	3.66E-05	4.11E-06	3.33E-05	1.3549E-03
520051.54	4257904.69	6375.94371	0.07374	7.67788	0.07667	5.49728	1.28E-03	3.02E-06	2.75E-04	3.14E-06	1.89E-04	1.7464E-03
519820.79	4258692	6374.99961	0.17151	0.34085	0.17958	0.33502	1.28E-03	7.02E-06	1.22E-05	7.35E-06	1.15E-05	1.3147E-03
519793.36	4258742.07	6363.03174	0.16022	0.28543	0.16552	0.28048	1.27E-03	6.56E-06	1.02E-05	6.78E-06	9.63E-06	1.3075E-03
519889.65	4258560.77	6360.81428	0.20075	0.59164	0.21241	0.57366	1.27E-03	8.22E-06	2.12E-05	8.70E-06	1.97E-05	1.3316E-03
519930.37	4258248.34	6360.26945	0.10806	0.93836	0.10984	0.8949	1.27E-03	4.42E-06	3.36E-05	4.50E-06	3.07E-05	1.3469E-03
519919.36	4258492.76	6359.25106	0.20109	0.79771	0.21211	0.76486	1.27E-03	8.23E-06	2.85E-05	8.68E-06	2.63E-05	1.3452E-03
519931.68	4258237.81	6358.54552	0.10588	0.95027	0.10767	0.90553	1.27E-03	4.34E-06	3.40E-05	4.41E-06	3.11E-05	1.3472E-03
519899.57	4258541.33	6351.19955	0.20312	0.64921	0.21464	0.6278	1.27E-03	8.32E-06	2.32E-05	8.79E-06	2.16E-05	1.3338E-03
519928.95	4258258.91	6350.60933	0.11025	0.92431	0.11204	0.88245	1.27E-03	4.51E-06	3.31E-05	4.59E-06	3.03E-05	1.3443E-03
520061.39	4257884.73	6348.45699	0.0727	12.51728	0.07501	7.53349	1.27E-03	2.98E-06	4.48E-04	3.07E-06	2.59E-04	1.9838E-03
519932.89	4258227.32	6346.47612	0.10373	0.95786	0.10553	0.91287	1.27E-03	4.25E-06	3.43E-05	4.32E-06	3.13E-05	1.3451E-03
519926.3	4258369.06	6339.5932	0.14481	0.89843	0.14803	0.8579	1.27E-03	5.93E-06	3.21E-05	6.06E-06	2.95E-05	1.3432E-03
519940.48	4258184.24	6337.14972	0.09631	1.03207	0.09834	0.97858	1.27E-03	3.94E-06	3.69E-05	4.03E-06	3.36E-05	1.3476E-03
519814.67	4258701.35	6331.80584	0.16853	0.32768	0.17574	0.32228	1.27E-03	6.90E-06	1.17E-05	7.20E-06	1.11E-05	1.3049E-03
519934.02	4258216.87	6326.86661	0.10164	0.96971	0.10349	0.92301	1.27E-03	4.16E-06	3.47E-05	4.24E-06	3.17E-05	1.3418E-03
520109.19	4257805.4	6320.84576	0.06922	10.86594	0.06937	13.30176	1.27E-03	2.83E-06	3.89E-04	2.84E-06	4.57E-04	2.1168E-03
519781.72	4258762.02	6314.98047	0.1551	0.26589	0.15975	0.26125	1.26E-03	6.35E-06	9.51E-06	6.54E-06	8.97E-06	1.2960E-03
519922.87	4258474.43	6312.0087	0.19472	0.83441	0.2049	0.79841	1.26E-03	7.97E-06	2.98E-05	8.39E-06	2.74E-05	1.3377E-03
519941.48	4258173.84	6292.4766	0.0944	1.04121	0.0964	0.98606	1.26E-03	3.87E-06	3.72E-05	3.95E-06	3.39E-05	1.3391E-03
519926.87	4258440.45	6288.57288	0.1795	0.88439	0.18757	0.84342	1.26E-03	7.35E-06	3.16E-05	7.68E-06	2.90E-05	1.3350E-03
519927.11	4258415.61	6280.25352	0.16654	0.89631	0.17251	0.85409	1.26E-03	6.82E-06	3.21E-05	7.06E-06	2.93E-05	1.3330E-03
519847.12	4258636.77	6268.8978	0.18204	0.41364	0.1923	0.40647	1.26E-03	7.45E-06	1.48E-05	7.87E-06	1.40E-05	1.2995E-03
519925.83	4258270.19	6259.78338	0.11198	0.895	0.11375	0.85575	1.25E-03	4.58E-06	3.20E-05	4.66E-06	2.94E-05	1.3242E-03
520099.37	4257815.37	6258.72695	0.06926	16.22535	0.06969	17.83727	1.25E-03	2.84E-06	5.80E-04	2.85E-06	6.12E-04	2.4518E-03
520051.57	4257894.69	6258.52668	0.07246	7.66659	0.0753	5.4807	1.25E-03	2.97E-06	2.74E-04	3.08E-06	1.88E-04	1.7218E-03
519808.35	4258710.24	6257.58902	0.16497	0.31504	0.17156	0.30987	1.25E-03	6.75E-06	1.13E-05	7.02E-06	1.06E-05	1.2889E-03
519925.89	4258394.32	6255.64156	0.15539	0.89121	0.15976	0.85005	1.25E-03	6.36E-06	3.19E-05	6.54E-06	2.92E-05	1.3267E-03
519837.12	4258655.32	6251.64521	0.17737	0.38393	0.18683	0.37777	1.25E-03	7.26E-06	1.37E-05	7.65E-06	1.30E-05	1.2936E-03
519924.46	4258280.74	6240.46558	0.11433	0.88497	0.11617	0.84639	1.25E-03	4.68E-06	3.17E-05	4.76E-06	2.91E-05	1.3199E-03
519827.12	4258673.87	6234.44855	0.17272	0.35755	0.18121	0.35202	1.25E-03	7.07E-06	1.28E-05	7.42E-06	1.21E-05	1.2879E-03
519923.06	4258328.41	6232.51941	0.12801	0.87227	0.13033	0.83513	1.25E-03	5.24E-06	3.12E-05	5.34E-06	2.87E-05	1.3186E-03
519919.32	4258483.06	6231.77005	0.19541	0.8023	0.2057	0.76917	1.25E-03	8.00E-06	2.87E-05	8.42E-06	2.64E-05	1.3195E-03
520061.42	4257874.73	6228.35784	0.07145	12.50541	0.07368	7.49474	1.25E-03	2.93E-06	4.47E-04	3.02E-06	2.57E-04	1.9579E-03
519909.44	4258512.2	6206.4964	0.19961	0.72021	0.21073	0.69366	1.24E-03	8.17E-06	2.58E-05	8.63E-06	2.38E-05	1.3093E-03
519922.97	4258291.34	6204.98188	0.11669	0.87439	0.11863	0.83638	1.24E-03	4.78E-06	3.13E-05	4.86E-06	2.87E-05	1.3123E-03
519775.06	4258770	6203.85644	0.15129	0.25632	0.15556	0.25191	1.24E-03	6.19E-06	9.17E-06	6.37E-06	8.65E-06	1.2728E-03
520109.23	4257795.4	6201.34808	0.0681	10.84914	0.0682	13.2989	1.24E-03	2.79E-06	3.88E-04	2.79E-06	4.57E-04	2.0921E-03
519922.95	4258352.94	6200.02403	0.13647	0.86999	0.13913	0.83257	1.24E-03	5.59E-06	3.11E-05	5.70E-06	2.86E-05	1.3126E-03
519859.85	4258609.38	6193.48644	0.18626	0.45865	0.19732	0.4495	1.24E-03	7.63E-06	1.64E-05	8.08E-06	1.54E-05	1.2879E-03
519802.96	4258717.25	6182.07643	0.16184	0.30497	0.16795	0.3	1.24E-03	6.63E-06	1.09E-05	6.88E-06	1.03E-05	1.2728E-03
519869.77	4258589.94	6172.34012	0.18982	0.4993	0.20148	0.48723	1.24E-03	7.77E-06	1.79E-05	8.25E-06	1.67E-05	1.2867E-03
519921.33	4258302	6152.27984	0.11904	0.86026	0.12103	0.82356	1.23E-03	4.87E-06	3.08E-05	4.96E-06	2.83E-05	1.3010E-03
519879.69	4258570.51	6149.92484	0.19295	0.54498	0.20426	0.52977	1.23E-03	7.90E-06	1.95E-05	8.36E-06	1.82E-05	1.2856E-03
519923.36	4258448.98	6143.09017	0.18072	0.85066	0.18919	0.81302	1.23E-03	7.40E-06	3.04E-05	7.75E-06	2.79E-05	1.3037E-03
520051.6	4257884.69	6140.59962	0.07121	7.65046	0.07397	5.4346	1.23E-03	2.92E-06	2.74E-04	3.03E-06	1.87E-04	1.6959E-03
519899.52	4258531.63	6140.45795	0.19765	0.65335	0.20856	0.63182	1.23E-03	8.09E-06	2.34E-05	8.54E-06	2.17E-05	1.2914E-03
520099.41	4257805.37	6137.702	0.06811	16.21707	0.0685	17.88632	1.23E-03	2.79E-06	5.80E-04	2.80E-06	6.14E-04	2.4289E-03
519922.68	4258377.85	6137.28598	0.14604	0.86655	0.14946	0.82809	1.23E-03	5.98E-06	3.10E-05	6.12E-06	2.84E-05	1.3006E-03
519889.61	4258551.07	6125.11874	0.19531	0.59543	0.20601	0.57751	1.23E-03	8.00E-06	2.13E-05	8.43E-06	1.98E-05	1.2842E-03
520061.45	4257864.73	6111.72111	0.07023	12.47987	0.07239	7.45351	1.22E-03	2.88E-06	4.46E-04	2.96E-06	2.56E-04	1.9321E-03
519929.31	4258208.83	6106.07691	0.09835	0.91936	0.09995	0.87662	1.22E-03	4.03E-06	3.29E-05	4.09E-06	3.01E-05	1.2939E-03
519923.64	4258424.05	6099.46161	0.16782	0.86341	0.17438	0.82414	1.22E-03	6.87E-06	3.09E-05	7.14E-06	2.83E-05	1.2947E-03
519930.53	4258198.34	6082.58285	0.09644	0.92771	0.09808	0.88392	1.22E-03	3.95E-06	3.32E-05	4.02E-06	3.03E-05	1.2896E-03
519796.37	4258725.4	6082.51532	0.15801	0.29338	0.16355	0.28867	1.22E-03	6.47E-06	1.05E-05	6.70E-06	9.91E-06	1.2517E-03
520109.26	4257785.4	6077.96375	0.06696	10.87062	0.06705	13.30878	1.22E-03	2.74E-06	3.89E-04	2.75E-06	4.57E-04	2.0684E-03
519919.52	4258337.01	6066.22065	0.12901	0.84283	0.13127	0.80772	1.21E-03	5.28E-06	3.01E-05	5.37E-06	2.77E-05	1.2834E-03
519931.66	4258187.88	6056.91333	0.09458	0.93733	0.09627	0.89218	1.21E-03	3.87E-06	3.35E-05	3.94E-06	3.06E-05	1.2850E-03
519922.23	4258403.21	6051.37079	0.15668	0.85799	0.16157	0.81936	1.21E-03	6.42E-06	3.07E-05	6.62E-06	2.81E-05	1.2837E-03
519922.87	4258241.44	6040.50316	0.1037	0.87068	0.10516	0.8317	1.21E-03	4.25E-06	3.11E-05	4.31E-06	2.86E-05	1.2779E-03
519924.15	4258230.93	6039.33421	0.10168	0.87755	0.10311	0.83848	1.21E-03	4.16E-06	3.14E-05	4.22E-06	2.88E-05	1.2780E-03
519909.4	4258502.5	6039.26254	0.1941	0.72435	0.20447	0.69756	1.21E-03	7.95E-06	2.59E-05	8.37E-06	2.39E-05	1.2756E-03
519784.64	4258745.14	6036.21288	0.15292	0.27329	0.15761	0.2688	1.21E-03	6.26E-06	9.78E-06	6.45E-06	9.23E-06	1.2406E-03
519921.49	4258252	6030.97077	0.10575	0.85773	0.10721	0.82055	1.21E-03	4.33E-06	3.07E-05	4.39E-06	2.82E-05	1.2754E-03
519925.33	4258220.45	6029.43099	0.09969	0.88582	0.10113	0.84588	1.21E-03	4.08E-06	3.17E-05	4.14E-06	2.90E-05	1.2764E-03
519837.12	4258646.05	6029.2572	0.17418	0.38664	0.18361	0.38049	1.21E-03	7.13E-06	1.38E-05	7.52E-06	1.31E-05	1.2490E-03
520051.63	4257874.69	6026.30812	0.06999	7.62966	0.07267	5.38786	1.21E-03	2.87E-06	2.73E-04	2.98E-06	1.85E-04	1.6706E-03
519919.85	4258457.51	6020.80372	0.18179	0.81863	0.19051	0.78405	1.21E-03	7.44E-06	2.93E-05	7.80E-06	2.69E-05	1.2772E-03
520099.44	4257795.37	6019.5978	0.06699	16.21919	0.06735	17.85708	1.21E-03	2.74E-06	5.80E-04	2.76E-06	6.13E-04	2.4042E-03
519932.72	4258177.46	6019.34744	0.09274	0.94332	0.09444	0.89709	1.21E-03	3.80E-06	3.37E-05	3.87E-06	3.08E-05	1.2777E-03
519919.37	4258361.63	6012.27523	0.13754	0.83982	0.14026	0.8044	1.20E-03	5.63E-06	3.00E-05	5.74E-06	2.76E-05	1.2731E-03
520172.84	4257692.52	6011.40844	0.06294	3.36277	0.06206	2.90458	1.20E-03	2.58E-06	1.20E-04	2.54E-06	9.97E-05	1.4290E-03
519827.12	4258664.6	6010.33995	0.1697	0.35994	0.1783	0.35456	1.20E-03	6.95E-06	1.29E-05	7.30E-06	1.22E-05	1.2429E-03
519919.99	4258262.61	5999.32658	0.10773	0.84301	0.10923	0.8075	1.20E-03	4.41E-06	3.02E-05	4.47E-06	2.77E-05	1.2682E-03
520061.48	4257854.73	5998.70329	0.06905	12.44024	0.07114	7.41443	1.20E-03	2.83E-06	4.45E-04	2.91E-06	2.55E-04	1.9066E-03
519817.12	4258683.15	5994.48074	0.16528	0.33617	0.17291	0.3312	1.20E-03	6.77E-06	1.20E-05	7.08E-06	1.14E-05	1.2377E-03
519789.75	4258733.47	5982.55073	0.15424	0.28242	0.15926	0.27794	1.20E-03	6.32E-06	1.01E-05	6.52E-06	9.54E-06	1.2306E-03
519849.89	4258619.12	5980.35301	0.17863	0.42661	0.18874	0.41908	1.20E-03	7.31E-06	1.53E-05	7.73E-06	1.44E-05	1.2423E-03
519859.81	4258599.68	5968.33217	0.18224	0.4624	0.19301	0.4528	1.20E-03	7.46E-06	1.65E-05	7.90E-06	1.55E-05	1.2427E-03
520109.29	4257775.4	5954.35152	0.06583	10.902	0.06592	12.95111	1.19E-03	2.70E-06	3.90E-04	2.70E-06	4.45E-04	2.0324E-03
519899.48	4258521.94	5950.21669	0.19241	0.65734	0.20274	0.63562	1.19E-03	7.88E-06	2.35E-05	8.30E-06	2.18E-05	1.2531E-03
519869.73	4258580.25	5950.03427	0.18542	0.50348	0.19638	0.49078	1.19E-03	7.59E-06	1.80E-05	8.04E-06	1.68E-05	1.2421E-03
519919.07	4258386.63	5938.90916	0.14722	0.83548	0.15097	0.79925	1.19E-03	6.03E-06	2.99E-05	6.18E-06	2.74E-05	1.2589E-03
519778.03	4258753.24	5938.20466	0.14928	0.26345	0.15359	0.25914	1.19E-03	6.11E-06	9.42E-06	6.29E-06	8.90E-06	1.2199E-03
519920.16	4258432.49	5936.40918	0.16902	0.8316	0.17605	0.79543	1.19E-03	6.92E-06	2.97E-05	7.21E-06	2.73E-05	1.2600E-03
519879.65	4258560.81	5932.04483	0.18818	0.5489	0.19858	0.53349	1.19E-03	7.70E-06	1.96E-05	8.13E-06	1.83E-05	1.2418E-03
519916.01	4258321.27	5926.95631	0.12223	0.81568	0.12418	0.78263	1.19E-03	5.00E-06	2.92E-05	5.08E-06	2.69E-05	1.2531E-03
519916.34	4258466.04	5921.05148	0.18271	0.78843	0.19159	0.7565	1.19E-03	7.48E-06	2.82E-05	7.84E-06	2.60E-05	1.2553E-03
520051.66	4257864.69	5918.74349	0.06883	7.60149	0.07143	5.36554	1.19E-03	2.82E-06	2.72E-04	2.92E-06	1.84E-04	1.6472E-03
519917.18	4258273.76	5917.48786	0.10942	0.8203	0.11094	0.7866	1.19E-03	4.48E-06	2.93E-05	4.54E-06	2.70E-05	1.2504E-03
519810.89	4258692.25	5916.15397	0.16147	0.32317	0.16882	0.31814	1.18E-03	6.61E-06	1.16E-05	6.91E-06	1.09E-05	1.2208E-03
519889.57	4258541.37	5913.69721	0.19017	0.59905	0.20018	0.58117	1.18E-03	7.79E-06	2.14E-05	8.20E-06	2.00E-05	1.2417E-03
520099.47	4257785.37	5904.31568	0.06589	16.22502	0.06622	17.71991	1.18E-03	2.70E-06	5.80E-04	2.71E-06	6.08E-04	2.3765E-03
519915.74	4258284.33	5898.93965	0.11172	0.81392	0.11333	0.78049	1.18E-03	4.57E-06	2.91E-05	4.64E-06	2.68E-05	1.2465E-03
519909.36	4258492.8	5894.34839	0.18884	0.72826	0.1985	0.70127	1.18E-03	7.73E-06	2.60E-05	8.13E-06	2.41E-05	1.2464E-03
519915.98	4258345.62	5892.75822	0.12996	0.81424	0.1322	0.78113	1.18E-03	5.32E-06	2.91E-05	5.41E-06	2.68E-05	1.2468E-03
520172.87	4257682.52	5888.27556	0.06192	3.40753	0.06109	2.736	1.18E-03	2.54E-06	1.22E-04	2.50E-06	9.39E-05	1.4001E-03
520060.13	4257845.25	5868.54183	0.06778	11.39669	0.06986	7.00797	1.18E-03	2.78E-06	4.08E-04	2.86E-06	2.41E-04	1.8291E-03
520163.05	4257692.49	5864.90075	0.06218	4.37655	0.06146	3.63197	1.17E-03	2.55E-06	1.57E-04	2.52E-06	1.25E-04	1.4608E-03
519804.61	4258701.21	5862.46581	0.15848	0.31091	0.165	0.30629	1.17E-03	6.49E-06	1.11E-05	6.76E-06	1.05E-05	1.2089E-03
519918.57	4258412.1	5859.73106	0.15793	0.82556	0.16334	0.78985	1.17E-03	6.47E-06	2.95E-05	6.69E-06	2.71E-05	1.2433E-03
519914.17	4258294.97	5851.67177	0.11392	0.80369	0.1156	0.77087	1.17E-03	4.66E-06	2.87E-05	4.73E-06	2.65E-05	1.2365E-03
520109.32	4257765.4	5846.53238	0.0648	10.93101	0.06485	13.28524	1.17E-03	2.65E-06	3.91E-04	2.66E-06	4.56E-04	2.0232E-03
519912.83	4258474.57	5841.56923	0.18339	0.75952	0.19234	0.73007	1.17E-03	7.51E-06	2.72E-05	7.88E-06	2.51E-05	1.2375E-03
519771.39	4258761.27	5841.19614	0.14573	0.25408	0.14966	0.24997	1.17E-03	5.97E-06	9.09E-06	6.13E-06	8.58E-06	1.1995E-03
519915.8	4258370.31	5826.47261	0.13862	0.8113	0.14152	0.77764	1.17E-03	5.68E-06	2.90E-05	5.79E-06	2.67E-05	1.2340E-03
519837.12	4258636.77	5822.66797	0.17106	0.38929	0.18035	0.38314	1.17E-03	7.00E-06	1.39E-05	7.38E-06	1.32E-05	1.2075E-03
519920.36	4258212.52	5816.32834	0.09644	0.8411	0.09766	0.80397	1.16E-03	3.95E-06	3.01E-05	4.00E-06	2.76E-05	1.2304E-03
520051.7	4257854.7	5813.08554	0.0677	7.57142	0.07021	5.33075	1.16E-03	2.77E-06	2.71E-04	2.87E-06	1.83E-04	1.6236E-03
519799.29	4258708.54	5806.0431	0.15573	0.30112	0.16171	0.29671	1.16E-03	6.38E-06	1.08E-05	6.62E-06	1.02E-05	1.1967E-03
519921.64	4258202	5804.22899	0.09463	0.84922	0.09589	0.81114	1.16E-03	3.87E-06	3.04E-05	3.93E-06	2.78E-05	1.2284E-03
519827.12	4258655.32	5801.31106	0.16677	0.36234	0.17541	0.35702	1.16E-03	6.83E-06	1.30E-05	7.18E-06	1.23E-05	1.2010E-03
519916.69	4258440.94	5793.48501	0.17013	0.80112	0.17749	0.768	1.16E-03	6.97E-06	2.87E-05	7.27E-06	2.64E-05	1.2295E-03
520099.5	4257775.37	5792.23342	0.06483	16.23586	0.06513	17.52899	1.16E-03	2.65E-06	5.81E-04	2.67E-06	6.02E-04	2.3478E-03
519922.84	4258191.52	5784.94191	0.09285	0.85652	0.09415	0.81746	1.16E-03	3.80E-06	3.06E-05	3.85E-06	2.81E-05	1.2249E-03
519817.12	4258673.87	5782.55004	0.16249	0.33827	0.17026	0.33353	1.16E-03	6.65E-06	1.21E-05	6.97E-06	1.15E-05	1.1952E-03
519899.44	4258512.24	5779.73895	0.18738	0.66117	0.19715	0.63919	1.16E-03	7.67E-06	2.36E-05	8.07E-06	2.19E-05	1.2188E-03
519909.32	4258483.1	5776.0431	0.18388	0.73229	0.19294	0.70502	1.16E-03	7.53E-06	2.62E-05	7.90E-06	2.42E-05	1.2226E-03
519912.5	4258329.8	5771.00602	0.12311	0.78905	0.125	0.75784	1.16E-03	5.04E-06	2.82E-05	5.12E-06	2.60E-05	1.2201E-03
519849.85	4258609.42	5769.93113	0.17499	0.42972	0.18487	0.42202	1.16E-03	7.16E-06	1.54E-05	7.57E-06	1.45E-05	1.2001E-03
519923.96	4258181.07	5763.12141	0.09112	0.86451	0.09248	0.82426	1.15E-03	3.73E-06	3.09E-05	3.79E-06	2.83E-05	1.2209E-03
520060.16	4257835.25	5762.08946	0.06667	11.34629	0.06868	6.9518	1.15E-03	2.73E-06	4.06E-04	2.81E-06	2.39E-04	1.8040E-03
519859.77	4258589.99	5758.54202	0.17824	0.46623	0.18863	0.456	1.15E-03	7.30E-06	1.67E-05	7.72E-06	1.57E-05	1.2006E-03
519915.46	4258395.41	5747.79105	0.14837	0.80575	0.15257	0.77174	1.15E-03	6.07E-06	2.88E-05	6.25E-06	2.65E-05	1.2187E-03
520163.08	4257682.49	5746.96348	0.06118	4.6188	0.0605	3.41863	1.15E-03	2.50E-06	1.65E-04	2.48E-06	1.17E-04	1.4385E-03
519915.4	4258234.54	5746.74097	0.09964	0.80835	0.1008	0.77367	1.15E-03	4.08E-06	2.89E-05	4.13E-06	2.66E-05	1.2145E-03
519916.65	4258224.04	5746.31655	0.09776	0.81421	0.09888	0.77919	1.15E-03	4.00E-06	2.91E-05	4.05E-06	2.68E-05	1.2147E-03
520109.35	4257755.4	5743.41427	0.06381	10.96995	0.06381	13.33335	1.15E-03	2.61E-06	3.92E-04	2.61E-06	4.58E-04	2.0055E-03
519869.69	4258570.55	5742.85232	0.18107	0.50732	0.19119	0.49418	1.15E-03	7.41E-06	1.81E-05	7.83E-06	1.70E-05	1.2004E-03
519914.06	4258245.08	5737.96596	0.10155	0.79924	0.10275	0.76557	1.15E-03	4.16E-06	2.86E-05	4.21E-06	2.63E-05	1.2123E-03
519879.61	4258551.11	5731.71636	0.18354	0.55239	0.19319	0.53697	1.15E-03	7.51E-06	1.98E-05	7.91E-06	1.84E-05	1.2015E-03
519889.52	4258531.68	5725.39543	0.18533	0.60255	0.19484	0.58462	1.15E-03	7.59E-06	2.16E-05	7.98E-06	2.01E-05	1.2038E-03
519912.44	4258354.23	5721.54258	0.13095	0.78775	0.13326	0.75618	1.15E-03	5.36E-06	2.82E-05	5.46E-06	2.60E-05	1.2108E-03
519792.73	4258716.75	5716.97495	0.15213	0.28986	0.15755	0.28564	1.14E-03	6.23E-06	1.04E-05	6.45E-06	9.81E-06	1.1778E-03
519912.61	4258255.67	5712.31185	0.10342	0.78621	0.10466	0.75424	1.14E-03	4.23E-06	2.81E-05	4.29E-06	2.59E-05	1.2065E-03
520150.97	4257693.59	5702.29378	0.06136	6.40139	0.06079	5.10373	1.14E-03	2.51E-06	2.29E-04	2.49E-06	1.75E-04	1.5511E-03
520050.34	4257845.22	5688.75422	0.06645	7.12149	0.06896	5.05945	1.14E-03	2.72E-06	2.55E-04	2.82E-06	1.74E-04	1.5732E-03
520099.53	4257765.37	5684.99866	0.0638	16.25375	0.06407	17.59112	1.14E-03	2.61E-06	5.81E-04	2.62E-06	6.04E-04	2.3290E-03
519914.92	4258420.98	5678.67584	0.15901	0.79413	0.16489	0.76147	1.14E-03	6.51E-06	2.84E-05	6.75E-06	2.61E-05	1.2050E-03
519913.22	4258449.38	5671.7849	0.17108	0.77236	0.17867	0.74187	1.14E-03	7.00E-06	2.76E-05	7.32E-06	2.55E-05	1.2033E-03
519780.92	4258736.29	5671.47397	0.14722	0.27029	0.15167	0.26626	1.14E-03	6.03E-06	9.67E-06	6.21E-06	9.14E-06	1.1668E-03
519911.03	4258266.31	5667.28984	0.10517	0.77174	0.10646	0.74111	1.13E-03	4.31E-06	2.76E-05	4.36E-06	2.54E-05	1.1967E-03
520060.19	4257825.25	5658.83994	0.06559	11.29114	0.06754	6.88869	1.13E-03	2.69E-06	4.04E-04	2.77E-06	2.36E-04	1.7791E-03
519908.79	4258314.55	5639.43114	0.11692	0.76318	0.11854	0.73364	1.13E-03	4.79E-06	2.73E-05	4.85E-06	2.52E-05	1.1915E-03
520109.38	4257745.4	5636.76328	0.06281	11.08177	0.06279	13.39505	1.13E-03	2.57E-06	3.96E-04	2.57E-06	4.60E-04	1.9902E-03
519912.22	4258379	5633.89166	0.13957	0.78259	0.14276	0.75108	1.13E-03	5.71E-06	2.80E-05	5.85E-06	2.58E-05	1.1936E-03
519786.13	4258724.88	5628.41917	0.14861	0.27919	0.15349	0.27516	1.13E-03	6.08E-06	9.99E-06	6.28E-06	9.45E-06	1.1590E-03
519899.4	4258502.54	5624.42767	0.18249	0.66468	0.19164	0.64247	1.13E-03	7.47E-06	2.38E-05	7.85E-06	2.21E-05	1.1875E-03
519908.99	4258338.33	5608.75925	0.12395	0.7632	0.12582	0.73375	1.12E-03	5.08E-06	2.73E-05	5.15E-06	2.52E-05	1.1859E-03
519827.12	4258646.05	5607.05421	0.16392	0.3647	0.1725	0.35941	1.12E-03	6.71E-06	1.30E-05	7.06E-06	1.23E-05	1.1620E-03
519908.53	4258277.33	5603.05568	0.10698	0.7568	0.1083	0.72747	1.12E-03	4.38E-06	2.71E-05	4.43E-06	2.50E-05	1.1829E-03
520151	4257683.59	5588.13825	0.06037	7.61393	0.05984	4.84238	1.12E-03	2.47E-06	2.72E-04	2.45E-06	1.66E-04	1.5626E-03
520050.37	4257835.22	5588.0365	0.06538	7.08363	0.06782	5.00782	1.12E-03	2.68E-06	2.53E-04	2.78E-06	1.72E-04	1.5498E-03
519774.33	4258744.45	5586.16736	0.14383	0.26068	0.14785	0.2568	1.12E-03	5.89E-06	9.32E-06	6.05E-06	8.82E-06	1.1488E-03
519817.12	4258664.6	5584.90083	0.1598	0.34039	0.16766	0.33575	1.12E-03	6.54E-06	1.22E-05	6.86E-06	1.15E-05	1.1556E-03
520099.56	4257755.37	5581.44768	0.0628	16.28456	0.06304	17.74561	1.12E-03	2.57E-06	5.82E-04	2.58E-06	6.09E-04	2.3146E-03
519839.89	4258619.16	5575.02784	0.16805	0.40085	0.17717	0.39443	1.12E-03	6.88E-06	1.43E-05	7.25E-06	1.35E-05	1.1585E-03
519907.02	4258287.93	5574.88912	0.10916	0.75171	0.11055	0.7224	1.12E-03	4.47E-06	2.69E-05	4.53E-06	2.48E-05	1.1771E-03
519849.81	4258599.73	5572.6712	0.17137	0.43301	0.18103	0.42488	1.12E-03	7.02E-06	1.55E-05	7.41E-06	1.46E-05	1.1605E-03
519909.74	4258457.82	5570.68945	0.17191	0.7452	0.17965	0.71697	1.12E-03	7.04E-06	2.67E-05	7.36E-06	2.46E-05	1.1813E-03
519807.12	4258683.15	5567.22548	0.15569	0.31864	0.16269	0.31437	1.11E-03	6.37E-06	1.14E-05	6.66E-06	1.08E-05	1.1501E-03
519859.73	4258580.29	5562.72329	0.1743	0.46976	0.18402	0.45902	1.11E-03	7.14E-06	1.68E-05	7.53E-06	1.58E-05	1.1612E-03
519889.48	4258521.98	5561.2212	0.18087	0.60621	0.19	0.58805	1.11E-03	7.41E-06	2.17E-05	7.78E-06	2.02E-05	1.1708E-03
520141.18	4257693.56	5560.61506	0.06057	8.72218	0.06012	7.15562	1.11E-03	2.48E-06	3.12E-04	2.46E-06	2.46E-04	1.6762E-03
520060.22	4257815.25	5557.80161	0.06454	11.23243	0.06643	6.81382	1.11E-03	2.64E-06	4.02E-04	2.72E-06	2.34E-04	1.7541E-03
519869.65	4258560.85	5550.2249	0.1768	0.51073	0.18613	0.4974	1.11E-03	7.24E-06	1.83E-05	7.62E-06	1.71E-05	1.1617E-03
519908.89	4258362.83	5550.11267	0.13193	0.76234	0.13442	0.73221	1.11E-03	5.40E-06	2.73E-05	5.50E-06	2.51E-05	1.1748E-03
519911.84	4258404.19	5548.20442	0.14921	0.77484	0.15384	0.74381	1.11E-03	6.11E-06	2.77E-05	6.30E-06	2.55E-05	1.1768E-03
519879.57	4258541.41	5547.00402	0.17906	0.55553	0.18811	0.54018	1.11E-03	7.33E-06	1.99E-05	7.70E-06	1.85E-05	1.1643E-03
519911.41	4258216.21	5541.49149	0.09454	0.77289	0.09547	0.74023	1.11E-03	3.87E-06	2.76E-05	3.91E-06	2.54E-05	1.1706E-03
519912.76	4258205.67	5538.22425	0.09283	0.78033	0.09376	0.7468	1.11E-03	3.80E-06	2.79E-05	3.84E-06	2.56E-05	1.1703E-03
520109.41	4257735.4	5532.5567	0.06183	11.26847	0.0618	13.5215	1.11E-03	2.53E-06	4.03E-04	2.53E-06	4.64E-04	1.9803E-03
519914.02	4258195.16	5527.28621	0.09114	0.78691	0.09209	0.75254	1.11E-03	3.73E-06	2.81E-05	3.77E-06	2.58E-05	1.1684E-03
519911.26	4258429.87	5523.32958	0.1601	0.76488	0.16639	0.73485	1.11E-03	6.56E-06	2.74E-05	6.81E-06	2.52E-05	1.1721E-03
519915.19	4258184.69	5511.52927	0.08949	0.79339	0.09048	0.75806	1.10E-03	3.66E-06	2.84E-05	3.70E-06	2.60E-05	1.1655E-03
519767.72	4258752.54	5500.15061	0.14049	0.25162	0.14418	0.24784	1.10E-03	5.75E-06	9.00E-06	5.90E-06	8.51E-06	1.1306E-03
519800.86	4258692.18	5493.30072	0.15213	0.30664	0.15884	0.30231	1.10E-03	6.23E-06	1.10E-05	6.50E-06	1.04E-05	1.1342E-03

520050.4	4257825.22	5490.44184	0.06434	7.04157	0.06671	4.95263	1.10E-03	2.63E-06	2.52E-04	2.73E-06	1.70E-04	1.5268E-03
519899.36	4258492.84	5488.95467	0.17782	0.66805	0.18639	0.64563	1.10E-03	7.28E-06	2.39E-05	7.63E-06	2.22E-05	1.1602E-03
519905.14	4258323.44	5486.45789	0.11775	0.73813	0.11932	0.71024	1.10E-03	4.82E-06	2.64E-05	4.89E-06	2.44E-05	1.1592E-03
520099.59	4257745.37	5479.06295	0.06182	16.34475	0.06204	17.56877	1.10E-03	2.53E-06	5.85E-04	2.54E-06	6.03E-04	2.2901E-03
519907.96	4258227.62	5476.53414	0.09583	0.75369	0.09676	0.72207	1.10E-03	3.92E-06	2.70E-05	3.96E-06	2.48E-05	1.1564E-03
519906.65	4258238.15	5467.9205	0.09761	0.74568	0.09859	0.71509	1.10E-03	4.00E-06	2.67E-05	4.04E-06	2.45E-05	1.1543E-03
519908.65	4258387.69	5460.97686	0.14068	0.75698	0.1443	0.72712	1.09E-03	5.76E-06	2.71E-05	5.91E-06	2.50E-05	1.1573E-03
520060.25	4257805.25	5459.3937	0.06352	11.16845	0.06534	6.73218	1.09E-03	2.60E-06	3.99E-04	2.68E-06	2.31E-04	1.7292E-03
519795.63	4258699.83	5459.23628	0.14995	0.29719	0.15596	0.2932	1.09E-03	6.14E-06	1.06E-05	6.39E-06	1.01E-05	1.1265E-03
520170.95	4257642.88	5453.89353	0.05827	2.89536	0.0575	2.31914	1.09E-03	2.39E-06	1.04E-04	2.35E-06	7.96E-05	1.2801E-03
520141.21	4257683.56	5452.50819	0.05962	11.84626	0.05918	6.82771	1.09E-03	2.44E-06	4.24E-04	2.42E-06	2.34E-04	1.7549E-03
519905.25	4258248.72	5448.6237	0.09939	0.73499	0.1004	0.70589	1.09E-03	4.07E-06	2.63E-05	4.11E-06	2.42E-05	1.1499E-03
519905.48	4258346.86	5444.62937	0.12478	0.73862	0.12671	0.71069	1.09E-03	5.11E-06	2.64E-05	5.19E-06	2.44E-05	1.1515E-03
520131.41	4257694.33	5431.5384	0.05987	10.61099	0.0595	10.11863	1.09E-03	2.45E-06	3.80E-04	2.44E-06	3.47E-04	1.8195E-03
520109.44	4257725.4	5430.28869	0.06087	11.5751	0.06083	13.75119	1.09E-03	2.49E-06	4.14E-04	2.49E-06	4.72E-04	1.9786E-03
519902.8	4258474.7	5428.78609	0.17317	0.6952	0.18115	0.67071	1.09E-03	7.09E-06	2.49E-05	7.42E-06	2.30E-05	1.1496E-03
519827.12	4258636.77	5427.08861	0.16113	0.36701	0.16955	0.36173	1.09E-03	6.60E-06	1.31E-05	6.94E-06	1.24E-05	1.1259E-03
519903.72	4258259.33	5407.32299	0.10106	0.72252	0.10212	0.69482	1.08E-03	4.14E-06	2.58E-05	4.18E-06	2.39E-05	1.1409E-03
519889.44	4258512.28	5406.55235	0.17644	0.60957	0.18513	0.59116	1.08E-03	7.22E-06	2.18E-05	7.58E-06	2.03E-05	1.1396E-03
519817.12	4258655.32	5401.68744	0.15719	0.34249	0.16506	0.33791	1.08E-03	6.44E-06	1.23E-05	6.76E-06	1.16E-05	1.1188E-03
520050.43	4257815.22	5394.57826	0.06332	6.99578	0.06563	4.88816	1.08E-03	2.59E-06	2.50E-04	2.69E-06	1.68E-04	1.5037E-03
519907.6	4258438.76	5393.22521	0.16112	0.73734	0.16772	0.70963	1.08E-03	6.60E-06	2.64E-05	6.87E-06	2.44E-05	1.1443E-03
519839.85	4258609.46	5391.60087	0.16478	0.40352	0.17369	0.39697	1.08E-03	6.75E-06	1.44E-05	7.11E-06	1.36E-05	1.1217E-03
519908.23	4258412.97	5389.24585	0.15039	0.74848	0.15552	0.71958	1.08E-03	6.16E-06	2.68E-05	6.37E-06	2.47E-05	1.1433E-03
519849.77	4258590.03	5388.73294	0.16776	0.43642	0.17709	0.42767	1.08E-03	6.87E-06	1.56E-05	7.25E-06	1.47E-05	1.1236E-03
519789.09	4258708.1	5382.79455	0.14668	0.28618	0.15204	0.28245	1.08E-03	6.01E-06	1.02E-05	6.23E-06	9.70E-06	1.1101E-03
520099.62	4257735.37	5381.43297	0.06088	16.44561	0.06107	17.75572	1.08E-03	2.49E-06	5.88E-04	2.50E-06	6.10E-04	2.2805E-03
519899.32	4258483.15	5380.60232	0.17351	0.6717	0.18158	0.64894	1.08E-03	7.10E-06	2.40E-05	7.43E-06	2.23E-05	1.1384E-03
519859.69	4258570.59	5380.39528	0.17038	0.47323	0.17942	0.46202	1.08E-03	6.98E-06	1.69E-05	7.35E-06	1.59E-05	1.1246E-03
519807.12	4258673.87	5380.0187	0.15322	0.32049	0.16032	0.31641	1.08E-03	6.27E-06	1.15E-05	6.56E-06	1.09E-05	1.1126E-03
519901.75	4258307.4	5379.89848	0.11194	0.71632	0.11327	0.6897	1.08E-03	4.58E-06	2.56E-05	4.64E-06	2.37E-05	1.1359E-03
519879.52	4258531.72	5376.33212	0.17473	0.55848	0.18332	0.54315	1.08E-03	7.15E-06	2.00E-05	7.51E-06	1.86E-05	1.1300E-03
519905.35	4258371.44	5376.26146	0.13286	0.73739	0.13564	0.70891	1.08E-03	5.44E-06	2.64E-05	5.55E-06	2.43E-05	1.1384E-03
519869.61	4258551.15	5372.27507	0.17265	0.51372	0.18131	0.50042	1.08E-03	7.07E-06	1.84E-05	7.42E-06	1.72E-05	1.1259E-03
520060.28	4257795.25	5364.17896	0.06253	11.09676	0.06429	6.64288	1.07E-03	2.56E-06	3.97E-04	2.63E-06	2.28E-04	1.7044E-03
519902.07	4258270	5357.1414	0.10269	0.7099	0.10377	0.68331	1.07E-03	4.20E-06	2.54E-05	4.25E-06	2.35E-05	1.1301E-03
520170.99	4257632.88	5354.13037	0.05741	2.76676	0.05666	2.19976	1.07E-03	2.35E-06	9.90E-05	2.32E-06	7.55E-05	1.2514E-03
519777.19	4258727.45	5333.2605	0.14186	0.26709	0.1462	0.2635	1.07E-03	5.81E-06	9.55E-06	5.99E-06	9.05E-06	1.0985E-03
520109.48	4257715.4	5328.55012	0.05992	12.08479	0.05987	13.99482	1.07E-03	2.45E-06	4.32E-04	2.45E-06	4.80E-04	1.9847E-03
520161.17	4257642.85	5327.99353	0.0576	3.98627	0.05694	2.83425	1.07E-03	2.36E-06	1.43E-04	2.33E-06	9.73E-05	1.3116E-03
520131.44	4257684.33	5327.58768	0.05893	14.70756	0.05858	10.42492	1.07E-03	2.41E-06	5.26E-04	2.40E-06	3.58E-04	1.9557E-03
519901.48	4258332.33	5325.45035	0.11852	0.71344	0.12008	0.68723	1.07E-03	4.85E-06	2.55E-05	4.92E-06	2.36E-05	1.1254E-03
519899.88	4258280.9	5316.40564	0.10469	0.70308	0.10582	0.67693	1.06E-03	4.29E-06	2.51E-05	4.33E-06	2.32E-05	1.1217E-03
519782.52	4258716.28	5302.61057	0.14336	0.2758	0.14819	0.27222	1.06E-03	5.87E-06	9.86E-06	6.07E-06	9.35E-06	1.0931E-03
520050.46	4257805.22	5300.87792	0.06233	6.94488	0.06457	4.81615	1.06E-03	2.55E-06	2.48E-04	2.64E-06	1.65E-04	1.4805E-03
520121.62	4257694.29	5295.39672	0.05906	12.38549	0.0588	13.06101	1.06E-03	2.42E-06	4.43E-04	2.41E-06	4.48E-04	1.9567E-03
519903.88	4258209.33	5287.07896	0.09106	0.72035	0.09176	0.69047	1.06E-03	3.73E-06	2.58E-05	3.76E-06	2.37E-05	1.1158E-03
519905.07	4258396.38	5286.99712	0.14164	0.73102	0.1457	0.70323	1.06E-03	5.80E-06	2.61E-05	5.97E-06	2.41E-05	1.1208E-03
520099.66	4257725.37	5285.43556	0.05995	16.61795	0.06012	17.73963	1.06E-03	2.45E-06	5.94E-04	2.46E-06	6.09E-04	2.2668E-03
519905.2	4258198.8	5282.65749	0.08945	0.72597	0.09013	0.69535	1.06E-03	3.66E-06	2.60E-05	3.69E-06	2.39E-05	1.1151E-03
519902.47	4258219.9	5281.51115	0.09268	0.71386	0.09342	0.68476	1.06E-03	3.79E-06	2.55E-05	3.82E-06	2.35E-05	1.1144E-03
519901.97	4258355.39	5281.40031	0.12562	0.71535	0.12772	0.68878	1.06E-03	5.14E-06	2.56E-05	5.23E-06	2.36E-05	1.1173E-03
519903.95	4258447.64	5279.8542	0.16198	0.71106	0.16875	0.68549	1.06E-03	6.63E-06	2.54E-05	6.91E-06	2.35E-05	1.1199E-03
519906.43	4258188.31	5272.35569	0.08787	0.73118	0.08856	0.6998	1.06E-03	3.60E-06	2.62E-05	3.63E-06	2.40E-05	1.1133E-03
520060.31	4257785.25	5271.55166	0.06156	11.01676	0.06327	6.54327	1.06E-03	2.52E-06	3.94E-04	2.59E-06	2.25E-04	1.6795E-03
519770.63	4258735.67	5258.43585	0.13871	0.25774	0.14259	0.25427	1.05E-03	5.68E-06	9.22E-06	5.84E-06	8.73E-06	1.0825E-03
519889.4	4258502.58	5257.38938	0.17198	0.6124	0.18014	0.59384	1.05E-03	7.04E-06	2.19E-05	7.38E-06	2.04E-05	1.1096E-03
519904.62	4258421.76	5247.38309	0.15149	0.723	0.15703	0.69608	1.05E-03	6.20E-06	2.59E-05	6.43E-06	2.39E-05	1.1132E-03
519898.13	4258316.2	5237.35146	0.11268	0.69375	0.11398	0.66857	1.05E-03	4.61E-06	2.48E-05	4.67E-06	2.30E-05	1.1059E-03
520109.51	4257705.4	5236.34251	0.05904	12.97293	0.05896	14.90548	1.05E-03	2.42E-06	4.64E-04	2.41E-06	5.12E-04	2.0292E-03
520161.2	4257632.85	5231.76963	0.05676	3.6372	0.05611	2.63495	1.05E-03	2.32E-06	1.30E-04	2.30E-06	9.05E-05	1.2729E-03
519817.12	4258646.05	5231.69251	0.15462	0.34456	0.16242	0.34	1.05E-03	6.33E-06	1.23E-05	6.65E-06	1.17E-05	1.0847E-03
519839.81	4258599.77	5219.38762	0.1615	0.40646	0.17025	0.39947	1.05E-03	6.61E-06	1.45E-05	6.97E-06	1.37E-05	1.0871E-03
519899.28	4258231.21	5219.25772	0.09392	0.69757	0.09472	0.6694	1.05E-03	3.85E-06	2.50E-05	3.88E-06	2.30E-05	1.1009E-03
519879.48	4258522.02	5218.84974	0.17053	0.56125	0.1787	0.54587	1.05E-03	6.98E-06	2.01E-05	7.32E-06	1.87E-05	1.0983E-03
519849.73	4258580.33	5216.80181	0.1642	0.43963	0.17298	0.43035	1.04E-03	6.72E-06	1.57E-05	7.08E-06	1.48E-05	1.0890E-03
519829.89	4258619.2	5214.18465	0.15845	0.37735	0.16672	0.37187	1.04E-03	6.49E-06	1.35E-05	6.83E-06	1.28E-05	1.0838E-03
520050.49	4257795.22	5210.6365	0.06137	6.8861	0.06355	4.73976	1.04E-03	2.51E-06	2.46E-04	2.60E-06	1.63E-04	1.4576E-03
519859.65	4258560.89	5209.82374	0.16655	0.47617	0.17487	0.46482	1.04E-03	6.82E-06	1.70E-05	7.16E-06	1.60E-05	1.0903E-03
519901.81	4258380.04	5206.66578	0.13377	0.71334	0.13692	0.68657	1.04E-03	5.48E-06	2.55E-05	5.61E-06	2.36E-05	1.1029E-03
519869.57	4258541.46	5206.19266	0.16864	0.51643	0.17679	0.50322	1.04E-03	6.90E-06	1.85E-05	7.24E-06	1.73E-05	1.0925E-03
519807.12	4258664.6	5205.83624	0.1508	0.32236	0.15799	0.31836	1.04E-03	6.17E-06	1.15E-05	6.47E-06	1.09E-05	1.0776E-03
519897.91	4258241.76	5202.42018	0.09559	0.68793	0.09642	0.66132	1.04E-03	3.91E-06	2.46E-05	3.95E-06	2.27E-05	1.0970E-03
520121.65	4257684.29	5196.98659	0.05816	16.62935	0.0579	13.67336	1.04E-03	2.38E-06	5.95E-04	2.37E-06	4.69E-04	2.1097E-03
520099.69	4257715.37	5192.78668	0.05906	16.93762	0.0592	17.94943	1.04E-03	2.42E-06	6.06E-04	2.42E-06	6.16E-04	2.2668E-03
520149.08	4257643.96	5186.7296	0.05686	6.74462	0.05631	3.82387	1.04E-03	2.33E-06	2.41E-04	2.31E-06	1.31E-04	1.4159E-03
519900.29	4258456.53	5186.21635	0.16266	0.68597	0.16953	0.66231	1.04E-03	6.66E-06	2.45E-05	6.94E-06	2.27E-05	1.0995E-03
519797.12	4258683.15	5185.51777	0.14698	0.30242	0.15338	0.29873	1.04E-03	6.02E-06	1.08E-05	6.28E-06	1.03E-05	1.0718E-03
519764.04	4258743.81	5183.19988	0.1356	0.24886	0.13908	0.2455	1.04E-03	5.55E-06	8.90E-06	5.69E-06	8.43E-06	1.0666E-03
520060.34	4257775.25	5181.43474	0.06062	10.92579	0.06228	6.43071	1.04E-03	2.48E-06	3.91E-04	2.55E-06	2.21E-04	1.6543E-03
519896.43	4258252.35	5172.4779	0.09725	0.67911	0.09812	0.65358	1.04E-03	3.98E-06	2.43E-05	4.02E-06	2.24E-05	1.0906E-03
519897.82	4258341.21	5163.5989	0.11928	0.69013	0.12093	0.66526	1.03E-03	4.88E-06	2.47E-05	4.95E-06	2.28E-05	1.0914E-03
520109.54	4257695.4	5143.64936	0.05816	14.65391	0.05807	15.99828	1.03E-03	2.38E-06	5.24E-04	2.38E-06	5.49E-04	2.1082E-03
519894.71	4258300.26	5141.5642	0.10732	0.67375	0.10841	0.64951	1.03E-03	4.39E-06	2.41E-05	4.44E-06	2.23E-05	1.0849E-03
519901.5	4258405.07	5132.13555	0.14265	0.70694	0.14716	0.68099	1.03E-03	5.84E-06	2.53E-05	6.03E-06	2.34E-05	1.0883E-03
519898.46	4258363.92	5131.93006	0.12661	0.69488	0.12901	0.66924	1.03E-03	5.18E-06	2.49E-05	5.28E-06	2.30E-05	1.0860E-03
519889.36	4258492.89	5126.46323	0.16774	0.61509	0.17537	0.59637	1.03E-03	6.87E-06	2.20E-05	7.18E-06	2.05E-05	1.0832E-03
519894.84	4258263	5124.80306	0.0988	0.66776	0.09969	0.64342	1.03E-03	4.05E-06	2.39E-05	4.08E-06	2.21E-05	1.0804E-03
520050.52	4257785.22	5123.30913	0.06044	6.81865	0.06256	4.65281	1.03E-03	2.47E-06	2.44E-04	2.56E-06	1.60E-04	1.4347E-03
519896.63	4258465.41	5116.01031	0.16327	0.66249	0.17027	0.64043	1.02E-03	6.68E-06	2.37E-05	6.97E-06	2.20E-05	1.0839E-03
519901	4258430.54	5112.65063	0.15235	0.69778	0.15815	0.67303	1.02E-03	6.24E-06	2.50E-05	6.48E-06	2.31E-05	1.0847E-03
520099.72	4257705.37	5101.71724	0.05818	17.5361	0.0583	18.04929	1.02E-03	2.38E-06	6.27E-04	2.39E-06	6.20E-04	2.2733E-03
520149.12	4257633.96	5095.83945	0.05604	5.26393	0.05549	3.38387	1.02E-03	2.29E-06	1.88E-04	2.27E-06	1.16E-04	1.3295E-03
520060.38	4257765.25	5093.01715	0.05971	10.83271	0.06131	6.30497	1.02E-03	2.44E-06	3.87E-04	2.51E-06	2.16E-04	1.6288E-03
519894.51	4258325.01	5090.75504	0.11341	0.67209	0.11472	0.64824	1.02E-03	4.64E-06	2.40E-05	4.70E-06	2.23E-05	1.0751E-03
519893.11	4258273.7	5082.02602	0.10055	0.65994	0.10145	0.63634	1.02E-03	4.12E-06	2.36E-05	4.15E-06	2.18E-05	1.0715E-03
519785.45	4258699.45	5075.2046	0.14149	0.28247	0.14693	0.27908	1.02E-03	5.79E-06	1.01E-05	6.02E-06	9.58E-06	1.0479E-03
519817.12	4258636.77	5073.6588	0.15208	0.34659	0.15976	0.34203	1.02E-03	6.23E-06	1.24E-05	6.54E-06	1.17E-05	1.0530E-03
519879.44	4258512.32	5073.0554	0.16648	0.56398	0.17427	0.54845	1.02E-03	6.82E-06	2.02E-05	7.14E-06	1.88E-05	1.0689E-03
520139.3	4257643.93	5066.13413	0.05617	9.17068	0.05569	4.83437	1.01E-03	2.30E-06	3.28E-04	2.28E-06	1.66E-04	1.5131E-03
519892.98	4258474.3	5061.46595	0.16365	0.63985	0.17074	0.61936	1.01E-03	6.70E-06	2.29E-05	6.99E-06	2.13E-05	1.0715E-03
519839.77	4258590.07	5058.01824	0.15824	0.40943	0.16669	0.4019	1.01E-03	6.48E-06	1.46E-05	6.82E-06	1.38E-05	1.0547E-03
519849.69	4258570.63	5055.58624	0.16067	0.44254	0.1688	0.43291	1.01E-03	6.58E-06	1.58E-05	6.91E-06	1.49E-05	1.0566E-03
519829.85	4258609.51	5053.87735	0.15548	0.37972	0.1636	0.37409	1.01E-03	6.37E-06	1.36E-05	6.70E-06	1.28E-05	1.0516E-03
520109.57	4257685.4	5051.24348	0.05729	18.11687	0.05719	16.14073	1.01E-03	2.35E-06	6.48E-04	2.34E-06	5.54E-04	2.2184E-03
519869.53	4258531.76	5050.98463	0.16477	0.51894	0.1725	0.5058	1.01E-03	6.75E-06	1.86E-05	7.06E-06	1.74E-05	1.0613E-03
519859.61	4258551.2	5050.06105	0.16282	0.47876	0.17055	0.46742	1.01E-03	6.67E-06	1.71E-05	6.98E-06	1.60E-05	1.0582E-03
519896.37	4258202.44	5046.52187	0.08775	0.67106	0.08826	0.64371	1.01E-03	3.59E-06	2.40E-05	3.61E-06	2.21E-05	1.0639E-03
519898.27	4258388.65	5045.23844	0.13467	0.69031	0.13824	0.66525	1.01E-03	5.51E-06	2.47E-05	5.66E-06	2.28E-05	1.0691E-03
519807.12	4258655.32	5045.12689	0.14845	0.32421	0.15563	0.32026	1.01E-03	6.08E-06	1.16E-05	6.37E-06	1.10E-05	1.0454E-03
519895	4258213	5044.96186	0.08929	0.66667	0.08985	0.63993	1.01E-03	3.66E-06	2.38E-05	3.68E-06	2.20E-05	1.0635E-03
519897.66	4258191.92	5041.85514	0.08623	0.67543	0.08671	0.64737	1.01E-03	3.53E-06	2.42E-05	3.55E-06	2.22E-05	1.0632E-03
520050.56	4257775.22	5038.20556	0.05953	6.7432	0.06159	4.55385	1.01E-03	2.44E-06	2.41E-04	2.52E-06	1.56E-04	1.4115E-03
519893.52	4258223.6	5032.12637	0.0908	0.66181	0.09144	0.63541	1.01E-03	3.72E-06	2.37E-05	3.74E-06	2.18E-05	1.0607E-03
519773.47	4258718.6	5023.96459	0.13689	0.26374	0.14118	0.26059	1.01E-03	5.60E-06	9.43E-06	5.78E-06	8.95E-06	1.0359E-03
519797.12	4258673.87	5020.42155	0.14477	0.30406	0.15126	0.30053	1.01E-03	5.93E-06	1.09E-05	6.19E-06	1.03E-05	1.0387E-03
519889.32	4258483.19	5015.82869	0.16376	0.6179	0.17093	0.599	1.00E-03	6.71E-06	2.21E-05	7.00E-06	2.06E-05	1.0609E-03
520099.75	4257695.37	5013.91724	0.05733	18.73064	0.05742	18.30026	1.00E-03	2.35E-06	6.70E-04	2.35E-06	6.28E-04	2.3070E-03
520060.41	4257755.25	5006.5467	0.05881	10.7165	0.06037	6.15462	1.00E-03	2.41E-06	3.83E-04	2.47E-06	2.11E-04	1.6021E-03
519778.9	4258707.69	5005.64155	0.13847	0.2723	0.14328	0.26914	1.00E-03	5.67E-06	9.74E-06	5.87E-06	9.24E-06	1.0330E-03
519891.12	4258308.98	5004.655	0.10795	0.65265	0.10901	0.62985	1.00E-03	4.42E-06	2.33E-05	4.46E-06	2.16E-05	1.0561E-03
519897.39	4258439.32	4999.58673	0.15313	0.67401	0.1591	0.65114	1.00E-03	6.27E-06	2.41E-05	6.51E-06	2.24E-05	1.0605E-03
519894.17	4258350.1	4998.92315	0.11998	0.66736	0.12181	0.64382	1.00E-03	4.91E-06	2.39E-05	4.99E-06	2.21E-05	1.0570E-03
519897.92	4258413.76	4989.16585	0.14357	0.68352	0.14845	0.65945	9.99E-04	5.88E-06	2.44E-05	6.08E-06	2.26E-05	1.0582E-03
520139.33	4257633.93	4978.67429	0.05537	6.42921	0.05489	4.0221	9.97E-04	2.27E-06	2.30E-04	2.25E-06	1.38E-04	1.3696E-03
519890.59	4258234.79	4973.43861	0.09203	0.646	0.09271	0.6212	9.96E-04	3.77E-06	2.31E-05	3.80E-06	2.13E-05	1.0480E-03
519894.95	4258372.45	4963.07302	0.1273	0.67179	0.13002	0.64796	9.94E-04	5.21E-06	2.40E-05	5.32E-06	2.22E-05	1.0507E-03
519766.94	4258726.88	4956.53647	0.13393	0.25464	0.13775	0.25159	9.93E-04	5.48E-06	9.11E-06	5.64E-06	8.64E-06	1.0215E-03
520129.53	4257644.69	4954.94196	0.05554	10.86743	0.05513	5.82343	9.92E-04	2.27E-06	3.89E-04	2.26E-06	2.00E-04	1.5855E-03
520050.59	4257765.22	4954.64642	0.05865	6.65111	0.06065	4.43773	9.92E-04	2.40E-06	2.38E-04	2.48E-06	1.52E-04	1.3874E-03
519889.16	4258245.37	4949.56427	0.0936	0.638	0.09431	0.61434	9.91E-04	3.83E-06	2.28E-05	3.86E-06	2.11E-05	1.0428E-03
519890.89	4258333.81	4939.75483	0.1141	0.651	0.1155	0.6284	9.89E-04	4.67E-06	2.33E-05	4.73E-06	2.16E-05	1.0435E-03
519879.4	4258502.62	4934.56208	0.16252	0.56645	0.16989	0.55077	9.88E-04	6.65E-06	2.03E-05	6.96E-06	1.89E-05	1.0410E-03
520099.78	4257685.37	4927.36788	0.05649	21.40745	0.05656	17.37709	9.87E-04	2.31E-06	7.66E-04	2.32E-06	5.97E-04	2.3537E-03
520060.44	4257745.25	4922.76009	0.05794	10.57235	0.05945	5.97246	9.86E-04	2.37E-06	3.78E-04	2.43E-06	2.05E-04	1.5739E-03
519887.66	4258293.12	4918.49098	0.103	0.63567	0.10391	0.61312	9.85E-04	4.22E-06	2.27E-05	4.25E-06	2.10E-05	1.0373E-03
519887.62	4258255.99	4909.9268	0.09513	0.62925	0.09586	0.60669	9.83E-04	3.90E-06	2.25E-05	3.92E-06	2.08E-05	1.0344E-03
519839.73	4258580.37	4906.36282	0.15502	0.41215	0.16294	0.40417	9.83E-04	6.35E-06	1.47E-05	6.67E-06	1.39E-05	1.0242E-03
519869.48	4258522.06	4905.52177	0.16099	0.52104	0.16832	0.50801	9.82E-04	6.59E-06	1.86E-05	6.89E-06	1.74E-05	1.0320E-03
519849.65	4258560.94	4903.46845	0.15722	0.44501	0.16469	0.43528	9.82E-04	6.44E-06	1.59E-05	6.74E-06	1.49E-05	1.0260E-03
519829.81	4258599.81	4902.88962	0.15252	0.38229	0.16048	0.37626	9.82E-04	6.24E-06	1.37E-05	6.57E-06	1.29E-05	1.0213E-03
519893.78	4258448.1	4900.70855	0.15371	0.65113	0.15978	0.63002	9.81E-04	6.29E-06	2.33E-05	6.54E-06	2.16E-05	1.0392E-03
519859.57	4258541.5	4899.50746	0.1592	0.4811	0.16648	0.46984	9.81E-04	6.52E-06	1.72E-05	6.82E-06	1.61E-05	1.0279E-03
519807.12	4258646.05	4896.2286	0.14614	0.32603	0.15323	0.32209	9.81E-04	5.98E-06	1.17E-05	6.27E-06	1.11E-05	1.0155E-03
519819.89	4258619.25	4891.11679	0.14969	0.35589	0.15724	0.35117	9.80E-04	6.13E-06	1.27E-05	6.44E-06	1.21E-05	1.0169E-03
519894.73	4258397.25	4889.82136	0.13548	0.66768	0.13944	0.64452	9.79E-04	5.55E-06	2.39E-05	5.71E-06	2.21E-05	1.0365E-03
519760.37	4258735.08	4888.82848	0.131	0.246	0.1344	0.24302	9.79E-04	5.36E-06	8.80E-06	5.50E-06	8.34E-06	1.0071E-03
520050.62	4257755.22	4872.35194	0.05778	6.53993	0.05973	4.30174	9.76E-04	2.37E-06	2.34E-04	2.45E-06	1.48E-04	1.3622E-03
520129.56	4257634.69	4870.14298	0.05475	7.36893	0.05434	4.6029	9.75E-04	2.24E-06	2.64E-04	2.22E-06	1.58E-04	1.4014E-03
519887.53	4258317.71	4867.63233	0.1086	0.63304	0.10968	0.61138	9.75E-04	4.45E-06	2.26E-05	4.49E-06	2.10E-05	1.0274E-03
519797.12	4258664.6	4867.08882	0.14259	0.30571	0.14915	0.30224	9.75E-04	5.84E-06	1.09E-05	6.11E-06	1.04E-05	1.0080E-03
519885.96	4258266.67	4863.96653	0.09668	0.62087	0.09741	0.59913	9.74E-04	3.96E-06	2.22E-05	3.99E-06	2.06E-05	1.0248E-03
519894.35	4258422.45	4854.41331	0.14431	0.66049	0.14943	0.63845	9.72E-04	5.91E-06	2.36E-05	6.12E-06	2.19E-05	1.0297E-03
519890.51	4258358.99	4850.08206	0.12094	0.64819	0.12309	0.62575	9.71E-04	4.95E-06	2.32E-05	5.04E-06	2.15E-05	1.0260E-03
520060.47	4257735.25	4838.22676	0.05707	10.40157	0.05855	5.73766	9.69E-04	2.34E-06	3.72E-04	2.40E-06	1.97E-04	1.5427E-03
520119.74	4257644.66	4837.318	0.05483	11.73883	0.0545	6.34923	9.69E-04	2.24E-06	4.20E-04	2.23E-06	2.18E-04	1.6111E-03
519890.16	4258456.88	4828.21624	0.15427	0.62981	0.16044	0.61008	9.67E-04	6.32E-06	2.25E-05	6.57E-06	2.09E-05	1.0233E-03
519888.9	4258195.54	4826.07505	0.08465	0.62701	0.08501	0.60165	9.66E-04	3.47E-06	2.24E-05	3.48E-06	2.07E-05	1.0165E-03
519887.55	4258206.08	4822.09345	0.08607	0.62231	0.08649	0.59771	9.66E-04	3.52E-06	2.23E-05	3.54E-06	2.05E-05	1.0155E-03
519891.44	4258380.98	4817.50796	0.12821	0.65203	0.13135	0.62951	9.65E-04	5.25E-06	2.33E-05	5.38E-06	2.16E-05	1.0203E-03
519886.11	4258216.67	4813.75052	0.08751	0.61989	0.08802	0.59545	9.64E-04	3.58E-06	2.22E-05	3.60E-06	2.04E-05	1.0138E-03
519879.36	4258492.93	4809.35629	0.15869	0.56872	0.16561	0.55291	9.63E-04	6.50E-06	2.03E-05	6.78E-06	1.90E-05	1.0157E-03
519781.81	4258690.8	4796.12534	0.13662	0.27872	0.14214	0.27557	9.60E-04	5.59E-06	9.97E-06	5.82E-06	9.46E-06	9.9133E-04
519884.57	4258227.29	4794.05464	0.08894	0.61325	0.0895	0.58974	9.60E-04	3.64E-06	2.19E-05	3.66E-06	2.02E-05	1.0096E-03
520050.65	4257745.22	4792.34865	0.05694	6.40236	0.05884	4.1387	9.60E-04	2.33E-06	2.29E-04	2.41E-06	1.42E-04	1.3356E-03
519884.1	4258301.78	4791.67599	0.10357	0.61544	0.10444	0.59445	9.60E-04	4.24E-06	2.20E-05	4.28E-06	2.04E-05	1.0105E-03
519887.27	4258342.61	4788.12954	0.11478	0.63082	0.11636	0.60933	9.59E-04	4.70E-06	2.26E-05	4.76E-06	2.09E-05	1.0118E-03
519869.44	4258512.36	4770.58189	0.15737	0.5234	0.1644	0.51024	9.55E-04	6.44E-06	1.87E-05	6.73E-06	1.75E-05	1.0048E-03
519886.55	4258465.67	4769.32688	0.15464	0.60926	0.16089	0.59089	9.55E-04	6.33E-06	2.18E-05	6.59E-06	2.03E-05	1.0101E-03
519839.69	4258570.67	4763.0889	0.15183	0.41483	0.1592	0.40647	9.54E-04	6.22E-06	1.48E-05	6.52E-06	1.40E-05	9.9540E-04
519829.77	4258590.11	4760.97176	0.14956	0.38493	0.15726	0.37839	9.53E-04	6.12E-06	1.38E-05	6.44E-06	1.30E-05	9.9277E-04
519849.61	4258551.24	4759.38889	0.15385	0.44722	0.16078	0.43752	9.53E-04	6.30E-06	1.60E-05	6.58E-06	1.50E-05	9.9703E-04
520060.5	4257725.25	4758.89458	0.05625	10.16386	0.05768	5.45139	9.53E-04	2.30E-06	3.64E-04	2.36E-06	1.87E-04	1.5084E-03
519807.12	4258636.77	4757.7101	0.14383	0.32781	0.15082	0.32387	9.53E-04	5.89E-06	1.17E-05	6.18E-06	1.11E-05	9.8770E-04
519859.53	4258531.8	4757.49235	0.1557	0.48323	0.16263	0.47204	9.53E-04	6.37E-06	1.73E-05	6.66E-06	1.62E-05	9.9928E-04
519891.19	4258405.86	4756.87477	0.13638	0.64709	0.14071	0.6254	9.53E-04	5.58E-06	2.31E-05	5.76E-06	2.15E-05	1.0086E-03
520119.77	4257634.66	4756.32202	0.05406	7.8718	0.05373	4.83563	9.53E-04	2.21E-06	2.82E-04	2.20E-06	1.66E-04	1.4045E-03
519819.85	4258609.55	4750.92249	0.14701	0.3579	0.1544	0.35307	9.51E-04	6.02E-06	1.28E-05	6.32E-06	1.21E-05	9.8870E-04
519769.75	4258709.75	4740.32326	0.1322	0.26034	0.13654	0.25753	9.49E-04	5.41E-06	9.31E-06	5.59E-06	8.84E-06	9.7847E-04
519890.77	4258431.14	4739.37474	0.14498	0.63875	0.15025	0.61843	9.49E-04	5.94E-06	2.28E-05	6.15E-06	2.12E-05	1.0053E-03
519881.91	4258238.38	4739.11882	0.09016	0.60043	0.09074	0.57827	9.49E-04	3.69E-06	2.15E-05	3.72E-06	1.99E-05	9.9781E-04
519775.28	4258699.1	4733.27977	0.13382	0.26878	0.13871	0.26591	9.48E-04	5.48E-06	9.61E-06	5.68E-06	9.13E-06	9.7781E-04
519883.94	4258326.43	4728.14673	0.10924	0.61421	0.11041	0.59356	9.47E-04	4.47E-06	2.20E-05	4.52E-06	2.04E-05	9.9822E-04
519882.94	4258474.45	4725.57925	0.15486	0.58956	0.1612	0.57247	9.46E-04	6.34E-06	2.11E-05	6.60E-06	1.97E-05	1.0000E-03
519797.12	4258655.32	4725.30273	0.14046	0.30735	0.147	0.3039	9.46E-04	5.75E-06	1.10E-05	6.02E-06	1.04E-05	9.7950E-04
520050.68	4257735.22	4713.08409	0.0561	6.23067	0.05796	3.94142	9.44E-04	2.30E-06	2.23E-04	2.37E-06	1.35E-04	1.3067E-03
519880.42	4258248.98	4707.72097	0.09163	0.59311	0.09222	0.57191	9.43E-04	3.75E-06	2.12E-05	3.78E-06	1.96E-05	9.9116E-04
519880.46	4258286.36	4706.08036	0.09898	0.59826	0.0997	0.57757	9.42E-04	4.05E-06	2.14E-05	4.08E-06	1.98E-05	9.9182E-04
520107.66	4257645.77	4704.74759	0.05401	13.21639	0.05385	6.53769	9.42E-04	2.21E-06	4.73E-04	2.20E-06	2.24E-04	1.6438E-03
519886.85	4258367.87	4704.42742	0.12184	0.6293	0.12438	0.60787	9.42E-04	4.99E-06	2.25E-05	5.09E-06	2.09E-05	9.9558E-04

519879.32	4258483.23	4700.47527	0.15505	0.57095	0.16153	0.555	9.41E-04	6.35E-06	2.04E-05	6.61E-06	1.91E-05	9.9377E-04
520060.53	4257715.25	4681.49453	0.05544	9.83815	0.05683	5.07588	9.38E-04	2.27E-06	3.52E-04	2.33E-06	1.74E-04	1.4683E-03
519763.24	4258718.09	4680.8441	0.12947	0.25142	0.13326	0.24877	9.37E-04	5.30E-06	8.99E-06	5.46E-06	8.54E-06	9.6569E-04
519887.93	4258389.51	4674.44912	0.12901	0.63214	0.13253	0.61108	9.36E-04	5.28E-06	2.26E-05	5.43E-06	2.10E-05	9.9042E-04
519880.54	4258310.43	4663.87262	0.10417	0.59771	0.10506	0.57773	9.34E-04	4.27E-06	2.14E-05	4.30E-06	1.98E-05	9.8378E-04
519878.81	4258259.63	4661.41098	0.09306	0.585	0.09364	0.56476	9.34E-04	3.81E-06	2.09E-05	3.83E-06	1.94E-05	9.8147E-04
519887.2	4258439.83	4647.24839	0.14564	0.61857	0.15103	0.59958	9.31E-04	5.96E-06	2.21E-05	6.18E-06	2.06E-05	9.8553E-04
519869.4	4258502.67	4645.89149	0.15392	0.52577	0.16065	0.51239	9.30E-04	6.30E-06	1.88E-05	6.58E-06	1.76E-05	9.7968E-04
520050.71	4257725.22	4637.13174	0.0553	6.00652	0.05711	3.69932	9.29E-04	2.26E-06	2.15E-04	2.34E-06	1.27E-04	1.2751E-03
519883.65	4258351.41	4634.06165	0.11536	0.61074	0.11722	0.59048	9.28E-04	4.72E-06	2.18E-05	4.80E-06	2.03E-05	9.7967E-04
519887.65	4258414.47	4630.07672	0.13712	0.62657	0.14169	0.60654	9.27E-04	5.61E-06	2.24E-05	5.80E-06	2.08E-05	9.8189E-04
520107.69	4257635.77	4628.28664	0.05327	8.4976	0.05309	4.77496	9.27E-04	2.18E-06	3.04E-04	2.17E-06	1.64E-04	1.3991E-03
519839.65	4258560.98	4626.83009	0.1487	0.41698	0.15548	0.40853	9.27E-04	6.09E-06	1.49E-05	6.37E-06	1.40E-05	9.6798E-04
519829.73	4258580.41	4626.54466	0.14664	0.38739	0.15388	0.3804	9.27E-04	6.00E-06	1.39E-05	6.30E-06	1.31E-05	9.6575E-04
519859.48	4258522.1	4623.23369	0.15231	0.48519	0.15894	0.47403	9.26E-04	6.24E-06	1.74E-05	6.51E-06	1.63E-05	9.7224E-04
519849.57	4258541.54	4622.45572	0.15057	0.44926	0.15711	0.43962	9.26E-04	6.16E-06	1.61E-05	6.43E-06	1.51E-05	9.6947E-04
519880.14	4258199.16	4622.21412	0.08309	0.58416	0.0834	0.56104	9.26E-04	3.40E-06	2.09E-05	3.41E-06	1.93E-05	9.7263E-04
519784.63	4258673.69	4620.12954	0.13519	0.28526	0.14098	0.28229	9.25E-04	5.54E-06	1.02E-05	5.77E-06	9.69E-06	9.5645E-04
519756.7	4258726.35	4618.30897	0.12668	0.24302	0.13009	0.2404	9.25E-04	5.19E-06	8.69E-06	5.33E-06	8.25E-06	9.5234E-04
519819.81	4258599.85	4618.19252	0.14431	0.3602	0.15158	0.35498	9.25E-04	5.91E-06	1.29E-05	6.21E-06	1.22E-05	9.6204E-04
519878.73	4258209.72	4610.99204	0.08443	0.58003	0.0848	0.55762	9.23E-04	3.46E-06	2.07E-05	3.47E-06	1.91E-05	9.7023E-04
520060.56	4257705.25	4606.37598	0.05466	9.36872	0.05601	4.59109	9.22E-04	2.24E-06	3.35E-04	2.29E-06	1.58E-04	1.4197E-03
519809.89	4258619.29	4600.10303	0.14167	0.33622	0.14859	0.33212	9.21E-04	5.80E-06	1.20E-05	6.08E-06	1.14E-05	9.5655E-04
519797.12	4258646.05	4594.75738	0.13836	0.30895	0.14482	0.30551	9.20E-04	5.67E-06	1.11E-05	5.93E-06	1.05E-05	9.5330E-04
519877.23	4258220.33	4590.66411	0.08574	0.57676	0.08621	0.55457	9.19E-04	3.51E-06	2.06E-05	3.53E-06	1.90E-05	9.6605E-04
520097.87	4257645.74	4589.17209	0.05325	13.38336	0.05328	5.66338	9.19E-04	2.18E-06	4.79E-04	2.18E-06	1.94E-04	1.5965E-03
519880.35	4258335.16	4589.13129	0.1099	0.59645	0.11126	0.57675	9.19E-04	4.50E-06	2.13E-05	4.56E-06	1.98E-05	9.6923E-04
519876.77	4258295.33	4587.11759	0.09958	0.5811	0.1003	0.56139	9.19E-04	4.08E-06	2.08E-05	4.11E-06	1.93E-05	9.6687E-04
519883.62	4258448.52	4571.37316	0.14615	0.59916	0.15164	0.58139	9.15E-04	5.98E-06	2.14E-05	6.21E-06	2.00E-05	9.6906E-04
519875.62	4258230.98	4566.52265	0.08711	0.56853	0.08757	0.54773	9.15E-04	3.57E-06	2.03E-05	3.59E-06	1.88E-05	9.6080E-04
520050.74	4257715.22	4563.54471	0.05452	5.70967	0.05628	3.40611	9.14E-04	2.23E-06	2.04E-04	2.30E-06	1.17E-04	1.2396E-03
519883.2	4258376.76	4556.71447	0.12262	0.60989	0.12555	0.58984	9.13E-04	5.02E-06	2.18E-05	5.14E-06	2.02E-05	9.6477E-04
519778.17	4258682.15	4554.94664	0.13235	0.27498	0.13769	0.27221	9.12E-04	5.42E-06	9.84E-06	5.64E-06	9.35E-06	9.4243E-04
520107.72	4257625.77	4552.71353	0.05254	5.96601	0.05234	3.61165	9.12E-04	2.15E-06	2.13E-04	2.14E-06	1.24E-04	1.2534E-03
519884.42	4258398.05	4538.06693	0.12973	0.6126	0.13356	0.59314	9.09E-04	5.31E-06	2.19E-05	5.47E-06	2.04E-05	9.6186E-04
519876.98	4258319.08	4532.69976	0.10474	0.58049	0.10573	0.56144	9.08E-04	4.29E-06	2.08E-05	4.33E-06	1.93E-05	9.5639E-04
520060.59	4257695.25	4532.40613	0.05389	8.67277	0.0552	3.99918	9.08E-04	2.21E-06	3.10E-04	2.26E-06	1.37E-04	1.3597E-03
519869.36	4258492.97	4529.30533	0.15048	0.52773	0.15683	0.5142	9.07E-04	6.16E-06	1.89E-05	6.42E-06	1.77E-05	9.5617E-04
519884.11	4258423.07	4515.20061	0.13773	0.60676	0.14246	0.58827	9.04E-04	5.64E-06	2.17E-05	5.83E-06	2.02E-05	9.5760E-04
519873.22	4258241.96	4514.93519	0.08831	0.55911	0.08877	0.5392	9.04E-04	3.62E-06	2.00E-05	3.63E-06	1.85E-05	9.4994E-04
520097.9	4257635.74	4514.80896	0.05251	8.15428	0.05253	4.11655	9.04E-04	2.15E-06	2.92E-04	2.15E-06	1.41E-04	1.3414E-03
519873.42	4258279.22	4512.69717	0.09517	0.5637	0.09573	0.54466	9.04E-04	3.90E-06	2.02E-05	3.92E-06	1.87E-05	9.5041E-04
519880.05	4258457.2	4512.1099	0.14655	0.58064	0.15213	0.56399	9.04E-04	6.00E-06	2.08E-05	6.23E-06	1.94E-05	9.5597E-04
519880.02	4258360.21	4501.27199	0.11631	0.59477	0.11853	0.57546	9.01E-04	4.76E-06	2.13E-05	4.85E-06	1.98E-05	9.5209E-04
519829.69	4258570.72	4498.74189	0.14374	0.38968	0.15047	0.38237	9.01E-04	5.89E-06	1.39E-05	6.16E-06	1.31E-05	9.4005E-04
519859.44	4258512.41	4497.46069	0.14904	0.48715	0.15543	0.47592	9.01E-04	6.10E-06	1.74E-05	6.36E-06	1.63E-05	9.4691E-04
519839.61	4258551.28	4496.30002	0.14564	0.41886	0.15193	0.41045	9.00E-04	5.96E-06	1.50E-05	6.22E-06	1.41E-05	9.4170E-04
519819.77	4258590.15	4492.7195	0.14163	0.36249	0.14864	0.35681	9.00E-04	5.80E-06	1.30E-05	6.09E-06	1.22E-05	9.3683E-04
519849.53	4258531.84	4492.01431	0.1474	0.45115	0.15366	0.44155	9.00E-04	6.04E-06	1.61E-05	6.29E-06	1.52E-05	9.4321E-04
520050.77	4257705.22	4490.79654	0.05376	5.31856	0.05547	3.06676	8.99E-04	2.20E-06	1.90E-04	2.27E-06	1.05E-04	1.1993E-03
519771.67	4258690.5	4487.7496	0.12948	0.26527	0.13442	0.26262	8.99E-04	5.30E-06	9.49E-06	5.50E-06	9.02E-06	9.2804E-04
519809.85	4258609.59	4477.82481	0.13923	0.33805	0.14603	0.33381	8.97E-04	5.70E-06	1.21E-05	5.98E-06	1.15E-05	9.3198E-04
519766.03	4258700.91	4476.51688	0.12758	0.25692	0.13216	0.25423	8.96E-04	5.22E-06	9.19E-06	5.41E-06	8.73E-06	9.2504E-04
519871.67	4258252.59	4475.38355	0.08969	0.5525	0.09014	0.53337	8.96E-04	3.67E-06	1.98E-05	3.69E-06	1.83E-05	9.4169E-04
519797.12	4258636.77	4473.7978	0.13627	0.3105	0.14263	0.30707	8.96E-04	5.58E-06	1.11E-05	5.84E-06	1.05E-05	9.2901E-04
519876.47	4258465.89	4464.86384	0.14677	0.56265	0.15244	0.54713	8.94E-04	6.01E-06	2.01E-05	6.24E-06	1.88E-05	9.4531E-04
519873.09	4258304.29	4459.83184	0.10011	0.56327	0.10087	0.54473	8.93E-04	4.10E-06	2.01E-05	4.13E-06	1.87E-05	9.4022E-04
520060.63	4257685.25	4459.24021	0.05314	7.6374	0.05441	3.37605	8.93E-04	2.18E-06	2.73E-04	2.23E-06	1.16E-04	1.2865E-03
519787.36	4258656.36	4457.9352	0.13352	0.29196	0.13949	0.28891	8.93E-04	5.47E-06	1.04E-05	5.71E-06	9.92E-06	9.2430E-04
519876.76	4258343.88	4448.17379	0.11051	0.5789	0.11214	0.56021	8.91E-04	4.52E-06	2.07E-05	4.59E-06	1.92E-05	9.3986E-04
520097.93	4257625.74	4442.50073	0.0518	5.53467	0.0518	3.12906	8.90E-04	2.12E-06	1.98E-04	2.12E-06	1.07E-04	1.1993E-03
519872.9	4258474.58	4435.41964	0.14696	0.54565	0.15276	0.53112	8.88E-04	6.02E-06	1.95E-05	6.25E-06	1.82E-05	9.3828E-04
519759.55	4258709.31	4426.40771	0.12517	0.24824	0.12912	0.2458	8.86E-04	5.12E-06	8.88E-06	5.29E-06	8.44E-06	9.1418E-04
519871.37	4258202.78	4422.60091	0.08152	0.5447	0.0818	0.52368	8.86E-04	3.34E-06	1.95E-05	3.35E-06	1.80E-05	9.2983E-04
519869.32	4258483.27	4420.58663	0.14711	0.52945	0.15306	0.51583	8.85E-04	6.02E-06	1.89E-05	6.27E-06	1.77E-05	9.3422E-04
520050.81	4257695.22	4420.5163	0.05301	4.81166	0.05468	2.70871	8.85E-04	2.17E-06	1.72E-04	2.24E-06	9.30E-05	1.1548E-03
519880.57	4258431.68	4420.07131	0.1383	0.58817	0.14314	0.57095	8.85E-04	5.66E-06	2.10E-05	5.86E-06	1.96E-05	9.3734E-04
519880.91	4258406.58	4420.04466	0.13047	0.59461	0.13457	0.57642	8.85E-04	5.34E-06	2.13E-05	5.51E-06	1.98E-05	9.3708E-04
519879.54	4258385.65	4416.96941	0.12338	0.59131	0.12668	0.57265	8.85E-04	5.05E-06	2.12E-05	5.19E-06	1.97E-05	9.3561E-04
519869.91	4258213.37	4405.85927	0.08277	0.54202	0.08312	0.52132	8.82E-04	3.39E-06	1.94E-05	3.40E-06	1.79E-05	9.2641E-04
519873.42	4258327.74	4402.23871	0.10533	0.56431	0.10651	0.54611	8.82E-04	4.31E-06	2.02E-05	4.36E-06	1.87E-05	9.2922E-04
519869.76	4258288.1	4402.16979	0.09573	0.54947	0.09632	0.53099	8.82E-04	3.92E-06	1.97E-05	3.94E-06	1.82E-05	9.2734E-04
519780.97	4258664.98	4395.85791	0.13084	0.28134	0.13647	0.27853	8.80E-04	5.36E-06	1.01E-05	5.59E-06	9.56E-06	9.1090E-04
519868.35	4258224	4381.77522	0.08404	0.53669	0.08441	0.51678	8.78E-04	3.44E-06	1.92E-05	3.46E-06	1.77E-05	9.2135E-04
519859.4	4258502.71	4379.62971	0.14586	0.48898	0.15197	0.47762	8.77E-04	5.97E-06	1.75E-05	6.22E-06	1.64E-05	9.2316E-04
519829.65	4258561.02	4375.67471	0.1409	0.39145	0.14706	0.3841	8.76E-04	5.77E-06	1.40E-05	6.02E-06	1.32E-05	9.1527E-04
519819.73	4258580.46	4373.37667	0.13896	0.36472	0.14559	0.35859	8.76E-04	5.69E-06	1.30E-05	5.96E-06	1.23E-05	9.1284E-04
519753.03	4258717.62	4372.10832	0.12265	0.23995	0.12608	0.23767	8.76E-04	5.02E-06	8.58E-06	5.16E-06	8.16E-06	9.0250E-04
519839.57	4258541.58	4371.23129	0.14266	0.42059	0.1486	0.41223	8.75E-04	5.84E-06	1.50E-05	6.08E-06	1.42E-05	9.1652E-04
519849.48	4258522.15	4367.81373	0.14433	0.4529	0.15036	0.4433	8.75E-04	5.91E-06	1.62E-05	6.16E-06	1.52E-05	9.1820E-04
519876.4	4258369.02	4366.61948	0.11709	0.57792	0.11969	0.55963	8.74E-04	4.79E-06	2.07E-05	4.90E-06	1.92E-05	9.2405E-04
519809.81	4258599.89	4360.87578	0.13678	0.34007	0.14346	0.33547	8.73E-04	5.60E-06	1.22E-05	5.87E-06	1.15E-05	9.0848E-04
520050.84	4257685.22	4349.84048	0.05227	4.20248	0.05391	2.36895	8.71E-04	2.14E-06	1.50E-04	2.21E-06	8.13E-05	1.1071E-03
519866.67	4258234.68	4349.36172	0.08531	0.52975	0.08567	0.51086	8.71E-04	3.49E-06	1.89E-05	3.51E-06	1.75E-05	9.1451E-04
519877.03	4258440.28	4339.01346	0.13874	0.57027	0.14365	0.55422	8.69E-04	5.68E-06	2.04E-05	5.88E-06	1.90E-05	9.1993E-04
519799.89	4258619.33	4337.55388	0.13431	0.31813	0.14066	0.31453	8.69E-04	5.50E-06	1.14E-05	5.76E-06	1.08E-05	9.0209E-04
519774.53	4258673.49	4333.35922	0.12817	0.27128	0.13341	0.26869	8.68E-04	5.25E-06	9.70E-06	5.46E-06	9.22E-06	8.9745E-04
519869.4	4258313.25	4330.59221	0.10065	0.54689	0.10153	0.52929	8.67E-04	4.12E-06	1.96E-05	4.16E-06	1.82E-05	9.1327E-04
519866.37	4258272.08	4327.69683	0.09158	0.53172	0.092	0.51401	8.67E-04	3.75E-06	1.90E-05	3.77E-06	1.76E-05	9.1086E-04
519873.17	4258352.61	4310.33549	0.11113	0.56216	0.11308	0.54454	8.63E-04	4.55E-06	2.01E-05	4.63E-06	1.87E-05	9.1119E-04
519877.4	4258415.11	4309.45263	0.13108	0.57689	0.13535	0.55999	8.63E-04	5.37E-06	2.06E-05	5.54E-06	1.92E-05	9.1379E-04
519864.54	4258245.55	4299.24466	0.08649	0.52182	0.08683	0.5037	8.61E-04	3.54E-06	1.87E-05	3.56E-06	1.73E-05	9.0404E-04
519866.11	4258296.99	4287.76717	0.09628	0.53466	0.09693	0.51695	8.59E-04	3.94E-06	1.91E-05	3.97E-06	1.77E-05	9.0347E-04
519875.89	4258394.53	4285.18656	0.12404	0.57291	0.12761	0.55571	8.58E-04	5.08E-06	2.05E-05	5.22E-06	1.91E-05	9.0804E-04
519873.49	4258448.89	4273.04409	0.13905	0.55309	0.14403	0.53811	8.56E-04	5.69E-06	1.98E-05	5.90E-06	1.85E-05	9.0558E-04
519869.86	4258336.39	4272.47501	0.10594	0.54882	0.10737	0.5315	8.56E-04	4.34E-06	1.96E-05	4.40E-06	1.82E-05	9.0223E-04
519768.05	4258681.91	4270.88926	0.12551	0.26176	0.13036	0.25934	8.55E-04	5.14E-06	9.36E-06	5.34E-06	8.90E-06	8.8405E-04
519859.36	4258493.01	4265.19398	0.1427	0.49053	0.14849	0.47906	8.54E-04	5.84E-06	1.75E-05	6.08E-06	1.64E-05	9.0008E-04
519819.69	4258570.76	4258.494	0.13632	0.36675	0.14248	0.36031	8.53E-04	5.58E-06	1.31E-05	5.83E-06	1.24E-05	8.8972E-04
519829.61	4258551.32	4257.12037	0.13811	0.39315	0.14385	0.38579	8.53E-04	5.65E-06	1.41E-05	5.89E-06	1.32E-05	8.9140E-04
519783.67	4258647.59	4253.65179	0.1292	0.28776	0.1349	0.28486	8.52E-04	5.29E-06	1.03E-05	5.52E-06	9.78E-06	8.8274E-04
519762.31	4258692.06	4252.44885	0.12366	0.25348	0.12814	0.25112	8.52E-04	5.06E-06	9.07E-06	5.25E-06	8.62E-06	8.7961E-04
519839.53	4258531.88	4250.95863	0.13978	0.42221	0.14547	0.41389	8.51E-04	5.72E-06	1.51E-05	5.96E-06	1.42E-05	8.9230E-04
519849.44	4258512.45	4249.97586	0.14137	0.45458	0.1472	0.44492	8.51E-04	5.79E-06	1.63E-05	6.03E-06	1.53E-05	8.9447E-04
519809.77	4258590.2	4249.80862	0.13433	0.34211	0.14079	0.33707	8.51E-04	5.50E-06	1.22E-05	5.76E-06	1.16E-05	8.8616E-04
519872.78	4258377.82	4232.6129	0.11776	0.5608	0.12069	0.5438	8.48E-04	4.82E-06	2.01E-05	4.94E-06	1.87E-05	8.9613E-04
519862.61	4258206.39	4231.48306	0.07995	0.51019	0.08022	0.49069	8.47E-04	3.27E-06	1.82E-05	3.28E-06	1.68E-05	8.8906E-04
519799.85	4258609.63	4229.7244	0.13208	0.3198	0.13834	0.31603	8.47E-04	5.41E-06	1.14E-05	5.66E-06	1.08E-05	8.8042E-04
519862.75	4258280.89	4229.12653	0.09212	0.51891	0.09258	0.50173	8.47E-04	3.77E-06	1.86E-05	3.79E-06	1.72E-05	8.9029E-04
519869.94	4258457.5	4226.96904	0.13935	0.53696	0.14443	0.52284	8.47E-04	5.71E-06	1.92E-05	5.91E-06	1.79E-05	8.9528E-04
519873.89	4258423.64	4213.08971	0.13157	0.55964	0.13594	0.54395	8.44E-04	5.39E-06	2.00E-05	5.57E-06	1.87E-05	8.9337E-04
519861.09	4258217.01	4209.08557	0.08114	0.50604	0.08143	0.48719	8.43E-04	3.32E-06	1.81E-05	3.33E-06	1.67E-05	8.8441E-04
519865.71	4258322.22	4204.03236	0.10124	0.53186	0.10233	0.51505	8.42E-04	4.15E-06	1.90E-05	4.19E-06	1.77E-05	8.8696E-04
519789.93	4258629.07	4201.72767	0.1296	0.30002	0.13547	0.29691	8.41E-04	5.31E-06	1.07E-05	5.55E-06	1.02E-05	8.7323E-04
519777.3	4258656.27	4194.4603	0.12671	0.27741	0.13211	0.27473	8.40E-04	5.19E-06	9.92E-06	5.41E-06	9.43E-06	8.6995E-04
519866.4	4258466.1	4192.84573	0.13952	0.52133	0.14471	0.50811	8.40E-04	5.71E-06	1.86E-05	5.93E-06	1.74E-05	8.8740E-04
519755.85	4258700.52	4192.53086	0.12102	0.245	0.12517	0.24264	8.40E-04	4.96E-06	8.76E-06	5.12E-06	8.33E-06	8.6678E-04
519869.58	4258361.33	4185.12565	0.11191	0.54745	0.11421	0.53081	8.38E-04	4.58E-06	1.96E-05	4.68E-06	1.82E-05	8.8519E-04
519859.47	4258227.66	4179.35828	0.08234	0.50015	0.08262	0.4822	8.37E-04	3.37E-06	1.79E-05	3.38E-06	1.66E-05	8.7817E-04
519862.86	4258474.71	4172.75118	0.13964	0.50641	0.14497	0.49401	8.36E-04	5.72E-06	1.81E-05	5.94E-06	1.70E-05	8.8238E-04
519862.45	4258305.88	4170.11171	0.09681	0.51964	0.09758	0.50283	8.35E-04	3.96E-06	1.86E-05	4.00E-06	1.73E-05	8.7893E-04
520058.71	4257645.62	4167.69053	0.05016	2.92811	0.05137	1.74632	8.35E-04	2.05E-06	1.05E-04	2.10E-06	6.00E-05	1.0035E-03
519872.23	4258403.42	4165.24308	0.12465	0.55552	0.12843	0.53963	8.34E-04	5.10E-06	1.99E-05	5.26E-06	1.85E-05	8.8291E-04
519859.32	4258483.31	4162.74439	0.13967	0.49201	0.14512	0.48042	8.34E-04	5.72E-06	1.76E-05	5.94E-06	1.65E-05	8.7940E-04
519859.32	4258264.95	4156.97802	0.08821	0.50238	0.08853	0.48569	8.32E-04	3.61E-06	1.80E-05	3.62E-06	1.67E-05	8.7437E-04
519819.65	4258561.06	4147.169	0.13373	0.36836	0.13939	0.36184	8.31E-04	5.48E-06	1.32E-05	5.71E-06	1.24E-05	8.6731E-04
519749.35	4258708.89	4144.56978	0.11874	0.23692	0.12233	0.23479	8.30E-04	4.86E-06	8.47E-06	5.01E-06	8.06E-06	8.5641E-04
519866.3	4258345.05	4143.27527	0.10653	0.53369	0.10827	0.51733	8.30E-04	4.36E-06	1.91E-05	4.43E-06	1.78E-05	8.7539E-04
519809.73	4258580.5	4142.8893	0.1319	0.34406	0.138	0.33862	8.30E-04	5.40E-06	1.23E-05	5.65E-06	1.16E-05	8.6465E-04
519857.72	4258238.37	4141.53687	0.08353	0.49453	0.08379	0.47723	8.29E-04	3.42E-06	1.77E-05	3.43E-06	1.64E-05	8.7032E-04
519849.4	4258502.75	4138.78267	0.1385	0.45616	0.14412	0.44639	8.29E-04	5.67E-06	1.63E-05	5.90E-06	1.53E-05	8.7206E-04
519829.57	4258541.62	4136.67272	0.13523	0.3943	0.14058	0.38708	8.28E-04	5.54E-06	1.41E-05	5.76E-06	1.33E-05	8.6711E-04
519839.48	4258522.19	4135.42047	0.13699	0.4237	0.14249	0.41539	8.28E-04	5.61E-06	1.52E-05	5.83E-06	1.43E-05	8.6903E-04
519770.89	4258664.84	4134.97597	0.12421	0.2676	0.12929	0.26512	8.28E-04	5.09E-06	9.57E-06	5.29E-06	9.10E-06	8.5714E-04
519870.38	4258432.17	4130.97221	0.13198	0.54322	0.13642	0.52858	8.27E-04	5.40E-06	1.94E-05	5.59E-06	1.81E-05	8.7585E-04
519799.81	4258599.93	4127.00352	0.12984	0.32158	0.136	0.31748	8.26E-04	5.32E-06	1.15E-05	5.57E-06	1.09E-05	8.5978E-04
519859.12	4258289.71	4121.93993	0.09263	0.50647	0.09318	0.48976	8.25E-04	3.79E-06	1.81E-05	3.82E-06	1.68E-05	8.6801E-04
519869.16	4258386.62	4107.64485	0.1184	0.54456	0.12163	0.52876	8.23E-04	4.85E-06	1.95E-05	4.98E-06	1.82E-05	8.7007E-04
520058.74	4257635.62	4104.91196	0.0495	2.4012	0.05067	1.52317	8.22E-04	2.03E-06	8.59E-05	2.07E-06	5.23E-05	9.6435E-04
519789.89	4258619.37	4100.41114	0.12755	0.30143	0.13335	0.29826	8.21E-04	5.22E-06	1.08E-05	5.46E-06	1.02E-05	8.5287E-04
519862.02	4258331.18	4074.81257	0.10179	0.51689	0.10314	0.50095	8.16E-04	4.17E-06	1.85E-05	4.22E-06	1.72E-05	8.6011E-04
519764.44	4258673.31	4074.7917	0.12171	0.2583	0.12646	0.256	8.16E-04	4.98E-06	9.24E-06	5.18E-06	8.79E-06	8.4422E-04
520048.92	4257645.58	4070.74567	0.04937	2.12672	0.05093	1.39333	8.15E-04	2.02E-06	7.61E-05	2.09E-06	4.78E-05	9.4323E-04
519779.97	4258638.81	4070.21172	0.12509	0.28353	0.13049	0.28079	8.15E-04	5.12E-06	1.01E-05	5.34E-06	9.64E-06	8.4536E-04
519866.87	4258440.7	4063.36958	0.1323	0.52755	0.13681	0.51384	8.14E-04	5.42E-06	1.89E-05	5.60E-06	1.76E-05	8.6127E-04
519865.99	4258370.06	4060.51281	0.11256	0.53234	0.1152	0.51674	8.13E-04	4.61E-06	1.90E-05	4.72E-06	1.77E-05	8.5928E-04
519855.72	4258273.7	4059.13764	0.08866	0.48982	0.08901	0.47377	8.13E-04	3.63E-06	1.75E-05	3.64E-06	1.63E-05	8.5396E-04
519868.57	4258412.31	4058.66696	0.12517	0.53875	0.12909	0.52404	8.13E-04	5.12E-06	1.93E-05	5.29E-06	1.80E-05	8.6048E-04
519758.58	4258683.21	4047.56971	0.11984	0.25006	0.12426	0.24786	8.11E-04	4.91E-06	8.94E-06	5.09E-06	8.51E-06	8.3803E-04
519858.79	4258314.76	4044.36817	0.09727	0.50463	0.09822	0.48881	8.10E-04	3.98E-06	1.80E-05	4.02E-06	1.68E-05	8.5278E-04
519853.84	4258210.01	4044.09141	0.07838	0.47786	0.07863	0.4598	8.10E-04	3.21E-06	1.71E-05	3.22E-06	1.58E-05	8.4919E-04
520058.78	4257625.62	4043.93085	0.04886	1.99942	0.05	1.33716	8.10E-04	2.00E-06	7.15E-05	2.05E-06	4.59E-05	9.3132E-04
519809.69	4258570.8	4039.39043	0.12949	0.3458	0.13515	0.34008	8.09E-04	5.30E-06	1.24E-05	5.53E-06	1.17E-05	8.4382E-04
519819.61	4258551.36	4038.94735	0.13119	0.36981	0.13646	0.36329	8.09E-04	5.37E-06	1.32E-05	5.59E-06	1.25E-05	8.4551E-04
519849.36	4258493.05	4035.05445	0.13571	0.45764	0.14109	0.44771	8.08E-04	5.56E-06	1.64E-05	5.78E-06	1.54E-05	8.5115E-04
519829.53	4258531.93	4031.16769	0.13276	0.39597	0.13796	0.38871	8.07E-04	5.44E-06	1.42E-05	5.65E-06	1.33E-05	8.4589E-04
519799.77	4258590.24	4028.17992	0.1276	0.32341	0.13356	0.31889	8.07E-04	5.22E-06	1.16E-05	5.47E-06	1.09E-05	8.3991E-04
519839.44	4258512.49	4024.93863	0.1343	0.42518	0.13965	0.41681	8.06E-04	5.50E-06	1.52E-05	5.72E-06	1.43E-05	8.4678E-04
519852.27	4258220.65	4020.19017	0.07954	0.47282	0.07976	0.45565	8.05E-04	3.26E-06	1.69E-05	3.27E-06	1.56E-05	8.4418E-04
519862.74	4258353.7	4017.37248	0.10711	0.5191	0.10916	0.50374	8.05E-04	4.39E-06	1.86E-05	4.47E-06	1.73E-05	8.4925E-04
519773.64	4258647.56	4014.06255	0.12277	0.27349	0.12792	0.27092	8.04E-04	5.03E-06	9.78E-06	5.24E-06	9.30E-06	8.3322E-04
519855.49	4258298.53	4011.79595	0.09312	0.49361	0.09381	0.47753	8.03E-04	3.81E-06	1.77E-05	3.84E-06	1.64E-05	8.4512E-04
519863.36	4258449.23	4010.32567	0.13252	0.51253	0.13711	0.49967	8.03E-04	5.43E-06	1.83E-05	5.61E-06	1.72E-05	8.4965E-04
520048.96	4257635.58	4010.23818	0.04873	1.8269	0.05025	1.24384	8.03E-04	2.00E-06	6.53E-05	2.06E-06	4.27E-05	9.1521E-04
519789.85	4258609.67	4005.19333	0.12551	0.30291	0.13124	0.29957	8.02E-04	5.14E-06	1.08E-05	5.37E-06	1.03E-05	8.3373E-04
519852.28	4258257.82	3994.80436	0.08499	0.47449	0.08523	0.45865	8.00E-04	3.48E-06	1.70E-05	3.49E-06	1.57E-05	8.3970E-04
519752.15	4258691.73	3993.62169	0.11745	0.24175	0.12151	0.23966	8.00E-04	4.81E-06	8.65E-06	4.98E-06	8.23E-06	8.2644E-04
519865.54	4258395.42	3990.59922	0.11894	0.52837	0.12235	0.51381	7.99E-04	4.87E-06	1.89E-05	5.01E-06	1.76E-05	8.4559E-04
519850.58	4258231.33	3984.27299	0.08066	0.46723	0.08085	0.4508	7.98E-04	3.30E-06	1.67E-05	3.31E-06	1.55E-05	8.3671E-04
519779.93	4258629.11	3974.28089	0.1232	0.28474	0.12853	0.282	7.96E-04	5.04E-06	1.02E-05	5.26E-06	9.68E-06	8.2608E-04
519859.85	4258457.76	3974.11909	0.13272	0.49832	0.13742	0.4862	7.96E-04	5.43E-06	1.78E-05	5.63E-06	1.67E-05	8.4145E-04
519864.92	4258421.19	3965.35485	0.12559	0.52264	0.12959	0.50898	7.94E-04	5.14E-06	1.87E-05	5.31E-06	1.75E-05	8.4073E-04
519852.12	4258282.45	3962.84296	0.08917	0.47859	0.0896	0.46302	7.94E-04	3.65E-06	1.71E-05	3.67E-06	1.59E-05	8.3395E-04
519767.25	4258656.19	3956.80263	0.12044	0.26392	0.12531	0.26153	7.92E-04	4.93E-06	9.44E-06	5.13E-06	8.98E-06	8.2088E-04
520048.99	4257625.58	3951.69879	0.04811	1.57968	0.04959	1.11508	7.91E-04	1.97E-06	5.65E-05	2.03E-06	3.83E-05	8.9017E-04
519856.34	4258466.29	3946.86408	0.13277	0.48439	0.13757	0.47305	7.90E-04	5.44E-06	1.73E-05	5.63E-06	1.62E-05	8.3505E-04
519858.33	4258340.14	3945.93776	0.10231	0.50222	0.10396	0.48723	7.90E-04	4.19E-06	1.80E-05	4.26E-06	1.67E-05	8.3336E-04
519862.4	4258378.78	3942.90861	0.11317	0.51772	0.11609	0.50315	7.90E-04	4.63E-06	1.85E-05	4.75E-06	1.73E-05	8.3480E-04
519809.65	4258561.1	3938.37828	0.12712	0.34726	0.13234	0.34143	7.89E-04	5.20E-06	1.24E-05	5.42E-06	1.17E-05	8.2348E-04
519745.68	4258700.16	3937.86506	0.11501	0.23388	0.11876	0.2318	7.89E-04	4.71E-06	8.37E-06	4.86E-06	7.96E-06	8.1451E-04
519849.32	4258483.36	3935.90557	0.13294	0.45881	0.13802	0.44877	7.88E-04	5.44E-06	1.64E-05	5.65E-06	1.54E-05	8.3113E-04
519852.83	4258474.82	3934.20221	0.13282	0.47121	0.13775	0.46057	7.88E-04	5.44E-06	1.69E-05	5.64E-06	1.58E-05	8.3162E-04
519799.73	4258580.54	3932.62656	0.12538	0.32511	0.131	0.32021	7.88E-04	5.13E-06	1.16E-05	5.36E-06	1.10E-05	8.2068E-04
519819.57	4258541.67	3931.90811	0.12864	0.37085	0.13358	0.36443	7.87E-04	5.27E-06	1.33E-05	5.47E-06	1.25E-05	8.2393E-04
519829.48	4258522.23	3923.37976	0.13024	0.39736	0.13529	0.39007	7.86E-04	5.33E-06	1.42E-05	5.54E-06	1.34E-05	8.2419E-04
519855.14	4258323.65	3923.01739	0.09778	0.49099	0.09899	0.47599	7.86E-04	4.00E-06	1.76E-05	4.05E-06	1.63E-05	8.2760E-04
519839.4	4258502.79	3919.92276	0.1317	0.42658	0.13689	0.41809	7.85E-04	5.39E-06	1.53E-05	5.60E-06	1.44E-05	8.2563E-04
519789.81	4258599.98	3914.20615	0.12346	0.30449	0.1291	0.30083	7.84E-04	5.05E-06	1.09E-05	5.29E-06	1.03E-05	8.1543E-04
519851.86	4258307.34	3899.53159	0.09362	0.48046	0.09449	0.46522	7.81E-04	3.83E-06	1.72E-05	3.87E-06	1.60E-05	8.2179E-04
519760.82	4258664.72	3899.1662	0.1181	0.25484	0.12268	0.25262	7.81E-04	4.84E-06	9.12E-06	5.02E-06	8.67E-06	8.0851E-04

519859.18	4258362.36	3898.80145	0.10772	0.50542	0.11009	0.49105	7.81E-04	4.41E-06	1.81E-05	4.51E-06	1.69E-05	8.2464E-04
519848.7	4258266.51	3890.18915	0.08516	0.46024	0.08542	0.44511	7.79E-04	3.49E-06	1.65E-05	3.50E-06	1.53E-05	8.1779E-04
519861.26	4258430.08	3889.53006	0.12596	0.50749	0.13004	0.49469	7.79E-04	5.16E-06	1.82E-05	5.32E-06	1.70E-05	8.2455E-04
519779.89	4258619.41	3884.80268	0.12132	0.28599	0.1266	0.28318	7.78E-04	4.97E-06	1.02E-05	5.18E-06	9.72E-06	8.0809E-04
519861.92	4258404.22	3881.35452	0.11937	0.51269	0.1229	0.4993	7.77E-04	4.89E-06	1.83E-05	5.03E-06	1.71E-05	8.2269E-04
519845.08	4258213.63	3871.03495	0.07689	0.44749	0.07706	0.43102	7.75E-04	3.15E-06	1.60E-05	3.16E-06	1.48E-05	8.1233E-04
519754.86	4258674.36	3864.59018	0.11622	0.24668	0.12054	0.24458	7.74E-04	4.76E-06	8.82E-06	4.94E-06	8.40E-06	8.0085E-04
519848.52	4258291.2	3862.82987	0.08966	0.46781	0.09025	0.45269	7.74E-04	3.67E-06	1.67E-05	3.70E-06	1.55E-05	8.1322E-04
519845.09	4258251.01	3852.12449	0.08216	0.45081	0.08235	0.43556	7.71E-04	3.36E-06	1.61E-05	3.37E-06	1.50E-05	8.0925E-04
519769.97	4258638.85	3851.2079	0.119	0.26954	0.1239	0.26708	7.71E-04	4.87E-06	9.64E-06	5.07E-06	9.17E-06	8.0001E-04
519809.61	4258551.41	3839.34812	0.1248	0.34855	0.12966	0.34269	7.69E-04	5.11E-06	1.25E-05	5.31E-06	1.18E-05	8.0353E-04
519799.69	4258570.84	3838.98827	0.12318	0.32661	0.12838	0.32147	7.69E-04	5.04E-06	1.17E-05	5.26E-06	1.10E-05	8.0183E-04
519843.45	4258224.29	3838.50622	0.07796	0.44222	0.0781	0.42652	7.69E-04	3.19E-06	1.58E-05	3.20E-06	1.46E-05	8.0556E-04
519819.53	4258531.97	3830.04031	0.12632	0.37224	0.1311	0.36581	7.67E-04	5.17E-06	1.33E-05	5.37E-06	1.26E-05	8.0343E-04
519858.81	4258387.51	3829.87012	0.11368	0.50306	0.11679	0.48958	7.67E-04	4.65E-06	1.80E-05	4.78E-06	1.68E-05	8.1122E-04
519857.6	4258438.96	3827.62517	0.12622	0.49288	0.13038	0.48089	7.67E-04	5.17E-06	1.76E-05	5.34E-06	1.65E-05	8.1118E-04
519789.77	4258590.28	3825.58183	0.1214	0.30613	0.12687	0.30205	7.66E-04	4.97E-06	1.09E-05	5.19E-06	1.04E-05	7.9761E-04
519854.64	4258349.11	3824.37037	0.1029	0.48877	0.10487	0.47473	7.66E-04	4.21E-06	1.75E-05	4.29E-06	1.63E-05	8.0817E-04
519839.36	4258493.09	3821.08391	0.12917	0.4278	0.13416	0.41918	7.65E-04	5.29E-06	1.53E-05	5.49E-06	1.44E-05	8.0570E-04
519829.44	4258512.53	3819.53858	0.12778	0.39855	0.1327	0.39123	7.65E-04	5.23E-06	1.43E-05	5.43E-06	1.34E-05	8.0327E-04
519748.46	4258682.95	3811.68278	0.11396	0.23856	0.11798	0.23657	7.63E-04	4.67E-06	8.53E-06	4.83E-06	8.12E-06	7.8949E-04
519845.12	4258275.2	3806.93919	0.0858	0.45191	0.08615	0.43724	7.62E-04	3.51E-06	1.62E-05	3.53E-06	1.50E-05	8.0061E-04
519851.48	4258332.54	3806.91152	0.09834	0.47848	0.09985	0.46424	7.62E-04	4.03E-06	1.71E-05	4.09E-06	1.59E-05	8.0355E-04
519779.85	4258609.72	3801.37457	0.11945	0.28726	0.12468	0.2843	7.61E-04	4.89E-06	1.03E-05	5.10E-06	9.76E-06	7.9131E-04
519763.61	4258647.54	3796.03309	0.11682	0.26024	0.12148	0.25792	7.60E-04	4.78E-06	9.31E-06	4.97E-06	8.85E-06	7.8813E-04
519858.29	4258413.02	3794.19963	0.11984	0.49854	0.12349	0.48594	7.60E-04	4.91E-06	1.78E-05	5.06E-06	1.67E-05	8.0432E-04
519855.61	4258371.01	3789.78736	0.10834	0.49268	0.11099	0.47911	7.59E-04	4.44E-06	1.76E-05	4.54E-06	1.64E-05	8.0201E-04
519848.24	4258316.16	3786.64588	0.0941	0.46777	0.09521	0.45333	7.58E-04	3.85E-06	1.67E-05	3.90E-06	1.56E-05	7.9837E-04
519853.95	4258447.85	3779.39162	0.12638	0.47881	0.13062	0.46759	7.57E-04	5.17E-06	1.71E-05	5.35E-06	1.61E-05	8.0058E-04
519769.93	4258629.15	3766.65337	0.11727	0.27061	0.12212	0.26814	7.54E-04	4.80E-06	9.68E-06	5.00E-06	9.21E-06	7.8301E-04
519841.41	4258259.97	3763.11288	0.08257	0.44022	0.08281	0.42551	7.54E-04	3.38E-06	1.57E-05	3.39E-06	1.46E-05	7.9074E-04
519742.01	4258691.44	3761.35006	0.11177	0.23081	0.11542	0.22895	7.53E-04	4.58E-06	8.26E-06	4.73E-06	7.86E-06	7.7868E-04
519844.92	4258299.95	3757.41441	0.09012	0.45649	0.0909	0.44196	7.52E-04	3.69E-06	1.63E-05	3.72E-06	1.52E-05	7.9139E-04
519850.29	4258456.74	3748.82258	0.12653	0.46556	0.13089	0.45498	7.51E-04	5.18E-06	1.67E-05	5.36E-06	1.56E-05	7.9357E-04
519799.65	4258561.14	3746.78149	0.12101	0.32787	0.12581	0.32262	7.50E-04	4.95E-06	1.17E-05	5.15E-06	1.11E-05	7.8325E-04
519809.57	4258541.71	3741.65627	0.12253	0.34964	0.12714	0.34382	7.49E-04	5.02E-06	1.25E-05	5.21E-06	1.18E-05	7.8385E-04
519757.2	4258656.12	3740.99133	0.11464	0.25137	0.11903	0.24921	7.49E-04	4.69E-06	8.99E-06	4.87E-06	8.56E-06	7.7630E-04
519789.73	4258580.58	3739.59975	0.11936	0.30764	0.12452	0.30321	7.49E-04	4.89E-06	1.10E-05	5.10E-06	1.04E-05	7.8030E-04
519819.48	4258522.27	3729.36377	0.12398	0.37345	0.12866	0.36697	7.47E-04	5.08E-06	1.34E-05	5.27E-06	1.26E-05	7.8316E-04
519839.32	4258483.4	3727.95584	0.12666	0.42878	0.1314	0.42003	7.47E-04	5.19E-06	1.53E-05	5.38E-06	1.44E-05	7.8690E-04
519855.22	4258396.23	3727.12778	0.11412	0.48904	0.11737	0.47653	7.46E-04	4.67E-06	1.75E-05	4.81E-06	1.64E-05	7.8974E-04
519846.63	4258465.62	3723.7055	0.12643	0.45224	0.13088	0.44239	7.46E-04	5.18E-06	1.62E-05	5.36E-06	1.52E-05	7.8762E-04
519829.4	4258502.83	3720.18332	0.1254	0.39972	0.13019	0.3923	7.45E-04	5.13E-06	1.43E-05	5.33E-06	1.35E-05	7.8325E-04
519779.81	4258600.02	3720.16493	0.11758	0.28857	0.1227	0.28533	7.45E-04	4.81E-06	1.03E-05	5.02E-06	9.80E-06	7.7497E-04
519841.55	4258283.89	3720.13908	0.08638	0.44329	0.08688	0.42899	7.45E-04	3.54E-06	1.59E-05	3.56E-06	1.47E-05	7.8269E-04
519842.98	4258474.51	3719.36844	0.12653	0.4402	0.13113	0.43095	7.45E-04	5.18E-06	1.57E-05	5.37E-06	1.48E-05	7.8594E-04
519854.67	4258421.83	3716.57041	0.12019	0.4847	0.12393	0.47288	7.44E-04	4.92E-06	1.73E-05	5.07E-06	1.62E-05	7.8786E-04
519850.96	4258358.07	3712.37918	0.10352	0.4764	0.1058	0.46317	7.43E-04	4.24E-06	1.70E-05	4.33E-06	1.59E-05	7.8497E-04
519838.04	4258243.88	3711.70273	0.07935	0.42694	0.07949	0.41239	7.43E-04	3.25E-06	1.53E-05	3.25E-06	1.42E-05	7.7925E-04
519751.14	4258665.52	3701.77493	0.1128	0.2433	0.11694	0.24128	7.41E-04	4.62E-06	8.70E-06	4.79E-06	8.28E-06	7.6772E-04
519836.31	4258217.24	3700.71905	0.07541	0.4192	0.07552	0.40413	7.41E-04	3.09E-06	1.50E-05	3.09E-06	1.39E-05	7.7617E-04
519847.82	4258341.42	3689.02888	0.09884	0.46571	0.10064	0.45238	7.39E-04	4.05E-06	1.67E-05	4.12E-06	1.55E-05	7.7913E-04
519769.89	4258619.46	3688.05895	0.11554	0.2717	0.12036	0.26916	7.39E-04	4.73E-06	9.72E-06	4.93E-06	9.24E-06	7.6720E-04
519852.05	4258379.67	3680.66653	0.10882	0.47956	0.11168	0.46692	7.37E-04	4.46E-06	1.72E-05	4.57E-06	1.60E-05	7.7931E-04
519844.61	4258324.97	3669.95039	0.09453	0.45517	0.09591	0.44164	7.35E-04	3.87E-06	1.63E-05	3.93E-06	1.52E-05	7.7420E-04
519837.73	4258268.92	3669.40876	0.08297	0.42964	0.08329	0.41551	7.35E-04	3.40E-06	1.54E-05	3.41E-06	1.43E-05	7.7129E-04
519799.61	4258551.45	3655.68616	0.11888	0.32897	0.12335	0.32369	7.32E-04	4.87E-06	1.18E-05	5.05E-06	1.11E-05	7.6490E-04
519789.69	4258570.88	3654.88025	0.11734	0.30895	0.12212	0.30429	7.32E-04	4.80E-06	1.11E-05	5.00E-06	1.04E-05	7.6324E-04
519841.32	4258308.7	3650.60525	0.09056	0.44469	0.09157	0.43095	7.31E-04	3.71E-06	1.59E-05	3.75E-06	1.48E-05	7.6924E-04
519759.97	4258638.89	3650.49082	0.11334	0.25657	0.11781	0.2543	7.31E-04	4.64E-06	9.18E-06	4.82E-06	8.73E-06	7.5843E-04
519744.76	4258674.16	3649.80706	0.11067	0.23536	0.11456	0.23345	7.31E-04	4.53E-06	8.42E-06	4.69E-06	8.01E-06	7.5658E-04
519851.05	4258430.63	3649.64506	0.1204	0.47103	0.1242	0.45999	7.31E-04	4.93E-06	1.68E-05	5.09E-06	1.58E-05	7.7355E-04
519809.53	4258532.01	3645.58448	0.12033	0.35064	0.12476	0.34484	7.30E-04	4.93E-06	1.25E-05	5.11E-06	1.18E-05	7.6449E-04
519779.77	4258590.32	3640.62353	0.11567	0.29014	0.12067	0.28646	7.29E-04	4.74E-06	1.04E-05	4.94E-06	9.83E-06	7.5897E-04
519851.63	4258404.96	3634.02745	0.11449	0.47551	0.11783	0.46387	7.28E-04	4.69E-06	1.70E-05	4.82E-06	1.59E-05	7.7021E-04
519819.44	4258512.57	3631.58891	0.12173	0.37447	0.12629	0.36796	7.27E-04	4.98E-06	1.34E-05	5.17E-06	1.26E-05	7.6346E-04
519834.39	4258252.77	3627.41814	0.07972	0.41724	0.07991	0.40321	7.26E-04	3.26E-06	1.49E-05	3.27E-06	1.38E-05	7.6174E-04
519829.36	4258493.14	3626.07207	0.1231	0.40083	0.12775	0.39326	7.26E-04	5.04E-06	1.43E-05	5.23E-06	1.35E-05	7.6428E-04
519837.97	4258292.57	3623.46539	0.08682	0.4333	0.08752	0.41952	7.26E-04	3.55E-06	1.55E-05	3.58E-06	1.44E-05	7.6269E-04
519769.85	4258609.76	3613.77736	0.11382	0.27284	0.1186	0.27014	7.24E-04	4.66E-06	9.76E-06	4.86E-06	9.27E-06	7.5226E-04
519847.27	4258367.04	3600.47184	0.10403	0.46369	0.10656	0.45138	7.21E-04	4.26E-06	1.66E-05	4.36E-06	1.55E-05	7.6175E-04
519753.59	4258647.53	3598.12457	0.11131	0.24792	0.11552	0.2458	7.21E-04	4.56E-06	8.87E-06	4.73E-06	8.44E-06	7.4717E-04
519738.34	4258682.71	3598.09712	0.10853	0.22781	0.11217	0.22597	7.21E-04	4.44E-06	8.15E-06	4.59E-06	7.76E-06	7.4551E-04
519847.43	4258439.43	3596.37869	0.12052	0.45791	0.12438	0.4476	7.20E-04	4.93E-06	1.64E-05	5.09E-06	1.54E-05	7.6200E-04
519830.99	4258236.75	3580.65147	0.0767	0.40473	0.0768	0.39081	7.17E-04	3.14E-06	1.45E-05	3.14E-06	1.34E-05	7.5125E-04
519848.49	4258388.32	3580.44337	0.10923	0.4669	0.11225	0.45509	7.17E-04	4.47E-06	1.67E-05	4.60E-06	1.56E-05	7.5842E-04
519759.93	4258629.19	3576.90525	0.11176	0.25748	0.11618	0.25523	7.16E-04	4.58E-06	9.21E-06	4.76E-06	8.76E-06	7.4363E-04
519844.17	4258350.31	3574.7567	0.09931	0.45334	0.10139	0.44093	7.16E-04	4.07E-06	1.62E-05	4.15E-06	1.51E-05	7.5546E-04
519834.04	4258277.87	3574.40273	0.08337	0.41959	0.08385	0.406	7.16E-04	3.41E-06	1.50E-05	3.43E-06	1.39E-05	7.5162E-04
519789.65	4258561.19	3570.58477	0.11535	0.31005	0.11976	0.30527	7.15E-04	4.72E-06	1.11E-05	4.90E-06	1.05E-05	7.4625E-04
519799.57	4258541.75	3565.28315	0.1168	0.32988	0.12103	0.32463	7.14E-04	4.78E-06	1.18E-05	4.96E-06	1.11E-05	7.4668E-04
519779.73	4258580.62	3562.53845	0.11379	0.2915	0.11851	0.28746	7.13E-04	4.66E-06	1.04E-05	4.85E-06	9.87E-06	7.4325E-04
519843.81	4258448.23	3557.67199	0.12056	0.44538	0.1245	0.43567	7.12E-04	4.94E-06	1.59E-05	5.10E-06	1.50E-05	7.5339E-04
519848.04	4258413.68	3557.28045	0.11485	0.46308	0.11829	0.45208	7.12E-04	4.70E-06	1.66E-05	4.84E-06	1.55E-05	7.5402E-04
519747.42	4258656.67	3554.09694	0.10948	0.23993	0.11346	0.23793	7.12E-04	4.48E-06	8.58E-06	4.65E-06	8.17E-06	7.3763E-04
519840.98	4258333.79	3554.01108	0.09493	0.4428	0.09657	0.43022	7.12E-04	3.89E-06	1.58E-05	3.95E-06	1.48E-05	7.5019E-04
519809.48	4258522.31	3551.03593	0.11819	0.35156	0.1225	0.34576	7.11E-04	4.84E-06	1.26E-05	5.02E-06	1.19E-05	7.4544E-04
519830.73	4258261.65	3543.45299	0.08013	0.40843	0.08042	0.3948	7.10E-04	3.28E-06	1.46E-05	3.29E-06	1.36E-05	7.4436E-04
519769.81	4258600.06	3541.73759	0.11209	0.27406	0.11679	0.27107	7.09E-04	4.59E-06	9.80E-06	4.78E-06	9.31E-06	7.3776E-04
519837.72	4258317.45	3540.66997	0.09096	0.43318	0.09223	0.42028	7.09E-04	3.72E-06	1.55E-05	3.78E-06	1.44E-05	7.4649E-04
519829.32	4258483.44	3538.18745	0.12084	0.40169	0.1253	0.39399	7.09E-04	4.95E-06	1.44E-05	5.13E-06	1.35E-05	7.4654E-04
519819.4	4258502.88	3537.47111	0.11956	0.37541	0.12401	0.36883	7.08E-04	4.90E-06	1.34E-05	5.08E-06	1.27E-05	7.4449E-04
519840.19	4258457.03	3532.41746	0.12055	0.4334	0.1246	0.42425	7.07E-04	4.94E-06	1.55E-05	5.10E-06	1.46E-05	7.4752E-04
519832.94	4258474.64	3525.45211	0.12073	0.41172	0.12505	0.40362	7.06E-04	4.94E-06	1.47E-05	5.12E-06	1.39E-05	7.4467E-04
519834.4	4258301.26	3523.02316	0.08725	0.42351	0.08819	0.41029	7.06E-04	3.57E-06	1.51E-05	3.61E-06	1.41E-05	7.4195E-04
519836.57	4258465.84	3522.38442	0.12062	0.42225	0.12479	0.41364	7.05E-04	4.94E-06	1.51E-05	5.11E-06	1.42E-05	7.4476E-04
519759.89	4258619.5	3507.90104	0.11018	0.25843	0.11457	0.25611	7.03E-04	4.51E-06	9.24E-06	4.69E-06	8.79E-06	7.2974E-04
519741.06	4258665.38	3503.66993	0.10748	0.23219	0.11125	0.23028	7.02E-04	4.40E-06	8.31E-06	4.56E-06	7.91E-06	7.2682E-04
519827.36	4258245.58	3502.41414	0.07706	0.39617	0.07722	0.38271	7.01E-04	3.16E-06	1.42E-05	3.16E-06	1.31E-05	7.3503E-04
519843.58	4258376	3494.04002	0.10446	0.45113	0.10716	0.43972	7.00E-04	4.28E-06	1.61E-05	4.39E-06	1.51E-05	7.3963E-04
519844.45	4258422.41	3490.61464	0.11507	0.45054	0.11857	0.44023	6.99E-04	4.71E-06	1.61E-05	4.85E-06	1.51E-05	7.3984E-04
519844.93	4258396.98	3490.15044	0.1096	0.45435	0.1127	0.44338	6.99E-04	4.49E-06	1.63E-05	4.61E-06	1.52E-05	7.3953E-04
519789.61	4258551.49	3486.42193	0.11339	0.31099	0.1175	0.30618	6.98E-04	4.64E-06	1.11E-05	4.81E-06	1.05E-05	7.2929E-04
519779.69	4258570.93	3485.47186	0.11193	0.29264	0.11631	0.28838	6.98E-04	4.58E-06	1.05E-05	4.76E-06	9.90E-06	7.2773E-04
519830.36	4258286.82	3479.73459	0.0838	0.41014	0.08448	0.39706	6.97E-04	3.43E-06	1.47E-05	3.46E-06	1.36E-05	7.3206E-04
519799.53	4258532.05	3475.42276	0.11478	0.33057	0.11881	0.32539	6.96E-04	4.70E-06	1.18E-05	4.86E-06	1.12E-05	7.2856E-04
519769.77	4258590.36	3469.75195	0.11034	0.2754	0.11491	0.272	6.95E-04	4.52E-06	9.85E-06	4.70E-06	9.34E-06	7.2328E-04
519749.97	4258638.93	3468.59106	0.10812	0.24446	0.11215	0.24238	6.95E-04	4.43E-06	8.74E-06	4.59E-06	8.32E-06	7.2072E-04
519840.51	4258359.2	3467.07227	0.09977	0.44159	0.10208	0.43003	6.94E-04	4.08E-06	1.58E-05	4.18E-06	1.48E-05	7.3315E-04
519823.94	4258229.63	3461.66712	0.07425	0.38475	0.07434	0.37136	6.93E-04	3.04E-06	1.38E-05	3.04E-06	1.27E-05	7.2584E-04
519809.44	4258512.62	3458.90112	0.11613	0.35242	0.12034	0.34658	6.93E-04	4.75E-06	1.26E-05	4.93E-06	1.19E-05	7.2688E-04
519734.66	4258673.98	3454.06173	0.1055	0.22479	0.10903	0.22299	6.92E-04	4.32E-06	8.04E-06	4.46E-06	7.66E-06	7.1620E-04
519827.08	4258270.54	3453.61868	0.0805	0.39918	0.08094	0.38608	6.92E-04	3.30E-06	1.43E-05	3.31E-06	1.33E-05	7.2578E-04
519819.36	4258493.18	3447.56711	0.11745	0.37631	0.12179	0.36959	6.90E-04	4.81E-06	1.35E-05	4.99E-06	1.27E-05	7.2637E-04
519759.85	4258609.8	3442.80668	0.10863	0.25923	0.11291	0.25684	6.89E-04	4.45E-06	9.27E-06	4.62E-06	8.82E-06	7.1663E-04
519837.36	4258342.6	3442.74205	0.0953	0.43106	0.09721	0.41934	6.89E-04	3.90E-06	1.54E-05	3.98E-06	1.44E-05	7.2715E-04
519834.12	4258326.19	3434.25465	0.09137	0.42237	0.09291	0.41027	6.88E-04	3.74E-06	1.51E-05	3.80E-06	1.41E-05	7.2449E-04
519840.86	4258431.13	3433.35948	0.11517	0.43835	0.11873	0.42872	6.88E-04	4.72E-06	1.57E-05	4.86E-06	1.47E-05	7.2755E-04
519823.73	4258254.4	3422.75229	0.07744	0.38807	0.0777	0.375	6.85E-04	3.17E-06	1.39E-05	3.18E-06	1.29E-05	7.1856E-04
519830.82	4258309.95	3421.84187	0.08765	0.41314	0.08884	0.40068	6.85E-04	3.59E-06	1.48E-05	3.64E-06	1.38E-05	7.2103E-04
519743.7	4258647.82	3421.21408	0.1063	0.23656	0.11011	0.23458	6.85E-04	4.35E-06	8.46E-06	4.51E-06	8.05E-06	7.1052E-04
519779.65	4258561.23	3407.97734	0.11009	0.29362	0.11413	0.28922	6.82E-04	4.51E-06	1.05E-05	4.67E-06	9.93E-06	7.1211E-04
519841.37	4258405.63	3407.63991	0.10982	0.44195	0.11298	0.43177	6.82E-04	4.50E-06	1.58E-05	4.63E-06	1.48E-05	7.2218E-04
519749.93	4258629.24	3403.365	0.10665	0.24526	0.11066	0.24317	6.82E-04	4.37E-06	8.77E-06	4.53E-06	8.35E-06	7.0759E-04
519789.57	4258541.79	3402.40903	0.11148	0.31178	0.11536	0.30698	6.81E-04	4.56E-06	1.12E-05	4.72E-06	1.05E-05	7.1236E-04
519769.73	4258580.67	3399.34654	0.10861	0.27659	0.11293	0.27286	6.81E-04	4.45E-06	9.89E-06	4.62E-06	9.37E-06	7.0910E-04
519839.89	4258384.96	3393.95008	0.10479	0.43865	0.10761	0.42811	6.80E-04	4.29E-06	1.57E-05	4.41E-06	1.47E-05	7.1877E-04
519837.27	4258439.86	3389.57149	0.11519	0.42663	0.11881	0.41758	6.79E-04	4.72E-06	1.53E-05	4.86E-06	1.43E-05	7.1798E-04
519799.49	4258522.35	3386.87476	0.11282	0.33144	0.11677	0.32622	6.78E-04	4.62E-06	1.19E-05	4.78E-06	1.12E-05	7.1072E-04
519820.34	4258238.4	3385.43821	0.07456	0.37645	0.0747	0.36354	6.78E-04	3.05E-06	1.35E-05	3.06E-06	1.25E-05	7.1004E-04
519826.67	4258295.78	3381.11355	0.08421	0.40101	0.08514	0.38847	6.77E-04	3.45E-06	1.43E-05	3.49E-06	1.33E-05	7.1173E-04
519759.81	4258600.1	3376.9489	0.10699	0.26057	0.1113	0.25777	6.76E-04	4.38E-06	9.32E-06	4.56E-06	8.85E-06	7.0339E-04
519737.37	4258656.59	3372.5475	0.10444	0.22902	0.10805	0.22711	6.75E-04	4.28E-06	8.19E-06	4.42E-06	7.80E-06	7.0009E-04
519809.4	4258502.92	3369.51521	0.11413	0.3532	0.11826	0.3473	6.75E-04	4.67E-06	1.26E-05	4.84E-06	1.19E-05	7.0886E-04
519836.86	4258368.08	3367.5497	0.1002	0.43044	0.1027	0.41964	6.74E-04	4.10E-06	1.54E-05	4.20E-06	1.44E-05	7.1251E-04
519819.32	4258483.48	3363.12117	0.11539	0.37697	0.11957	0.37015	6.74E-04	4.72E-06	1.35E-05	4.90E-06	1.27E-05	7.0932E-04
519823.42	4258279.43	3362.48989	0.08088	0.39026	0.08152	0.37769	6.73E-04	3.31E-06	1.40E-05	3.34E-06	1.30E-05	7.0696E-04
519833.68	4258448.58	3360.26963	0.11518	0.41556	0.11889	0.40701	6.73E-04	4.72E-06	1.49E-05	4.87E-06	1.40E-05	7.1136E-04
519822.91	4258474.76	3348.99263	0.11534	0.38596	0.11942	0.37878	6.71E-04	4.72E-06	1.38E-05	4.89E-06	1.30E-05	7.0710E-04
519830.09	4258457.31	3344.92387	0.11521	0.40518	0.11904	0.39709	6.70E-04	4.72E-06	1.45E-05	4.87E-06	1.36E-05	7.0758E-04
519833.73	4258351.42	3344.58825	0.09582	0.42109	0.09797	0.41011	6.70E-04	3.92E-06	1.51E-05	4.01E-06	1.41E-05	7.0688E-04
519837.81	4258414.29	3343.93242	0.11011	0.43103	0.11336	0.42135	6.70E-04	4.51E-06	1.54E-05	4.64E-06	1.45E-05	7.0870E-04
519826.5	4258466.03	3342.9893	0.11531	0.39546	0.11927	0.38785	6.69E-04	4.72E-06	1.41E-05	4.88E-06	1.33E-05	7.0654E-04
519749.89	4258619.54	3342.37489	0.1052	0.24609	0.10919	0.24394	6.69E-04	4.31E-06	8.80E-06	4.47E-06	8.37E-06	6.9531E-04
519820.1	4258263.23	3338.1905	0.07779	0.37967	0.0782	0.36709	6.69E-04	3.19E-06	1.36E-05	3.20E-06	1.26E-05	7.0109E-04
519830.52	4258334.94	3331.32794	0.09178	0.41205	0.09358	0.40072	6.67E-04	3.76E-06	1.47E-05	3.83E-06	1.38E-05	7.0323E-04
519779.61	4258551.53	3330.14848	0.10829	0.29444	0.11205	0.29	6.67E-04	4.43E-06	1.05E-05	4.59E-06	9.96E-06	6.9642E-04
519769.69	4258570.97	3328.89253	0.1069	0.27757	0.11089	0.27363	6.67E-04	4.38E-06	9.93E-06	4.54E-06	9.39E-06	6.9490E-04
519730.99	4258665.25	3324.08192	0.10257	0.2218	0.10599	0.21999	6.66E-04	4.20E-06	7.93E-06	4.34E-06	7.55E-06	6.8972E-04
519827.25	4258318.64	3321.60976	0.08804	0.40331	0.08949	0.39158	6.65E-04	3.60E-06	1.44E-05	3.66E-06	1.34E-05	7.0034E-04
519789.53	4258532.09	3318.5155	0.10962	0.31247	0.11335	0.30768	6.65E-04	4.49E-06	1.12E-05	4.64E-06	1.06E-05	6.9545E-04
519759.77	4258590.4	3312.14888	0.10537	0.26173	0.10956	0.25856	6.63E-04	4.31E-06	9.36E-06	4.49E-06	8.88E-06	6.9034E-04
519816.73	4258247.16	3309.76065	0.0749	0.36899	0.07515	0.35646	6.63E-04	3.07E-06	1.32E-05	3.08E-06	1.22E-05	6.9440E-04
519836.2	4258393.93	3309.54537	0.10517	0.42772	0.1081	0.41775	6.63E-04	4.31E-06	1.53E-05	4.43E-06	1.43E-05	7.0115E-04
519739.97	4258638.98	3301.68056	0.10326	0.23316	0.1069	0.23122	6.61E-04	4.23E-06	8.34E-06	4.38E-06	7.94E-06	6.8609E-04
519799.44	4258512.66	3299.75993	0.11091	0.33222	0.1148	0.32694	6.61E-04	4.54E-06	1.19E-05	4.70E-06	1.12E-05	6.9317E-04
519834.25	4258422.94	3285.72557	0.11024	0.41986	0.11355	0.41077	6.58E-04	4.51E-06	1.50E-05	4.65E-06	1.41E-05	6.9629E-04
519809.36	4258493.22	3283.75118	0.11219	0.35389	0.11623	0.34789	6.58E-04	4.59E-06	1.27E-05	4.76E-06	1.19E-05	6.9157E-04
519749.85	4258609.84	3283.32016	0.10373	0.24701	0.10771	0.24467	6.58E-04	4.25E-06	8.84E-06	4.41E-06	8.40E-06	6.8342E-04
519822.99	4258304.73	3281.99145	0.08459	0.39165	0.08579	0.37976	6.57E-04	3.46E-06	1.40E-05	3.51E-06	1.30E-05	6.9129E-04
519833.2	4258376.97	3272.87904	0.10056	0.41939	0.10319	0.40933	6.55E-04	4.12E-06	1.50E-05	4.23E-06	1.41E-05	6.9283E-04
519819.76	4258288.31	3269.17207	0.08126	0.38171	0.08213	0.36971	6.55E-04	3.33E-06	1.37E-05	3.36E-06	1.27E-05	6.8773E-04
519769.65	4258561.27	3257.51774	0.1052	0.27844	0.10888	0.27436	6.52E-04	4.31E-06	9.96E-06	4.46E-06	9.42E-06	6.8051E-04
519733.67	4258647.8	3254.71167	0.10152	0.22581	0.10497	0.22394	6.52E-04	4.16E-06	8.08E-06	4.30E-06	7.69E-06	6.7602E-04
519816.47	4258272.05	3251.94584	0.07814	0.37175	0.07875	0.35966	6.51E-04	3.20E-06	1.33E-05	3.22E-06	1.23E-05	6.8331E-04
519779.57	4258541.83	3251.8307	0.10652	0.29509	0.11008	0.29066	6.51E-04	4.36E-06	1.06E-05	4.51E-06	9.98E-06	6.8063E-04
519830.1	4258360.23	3248.91577	0.09623	0.41092	0.09856	0.40063	6.51E-04	3.94E-06	1.47E-05	4.04E-06	1.38E-05	6.8707E-04
519759.73	4258580.71	3248.27166	0.10378	0.26277	0.10772	0.25928	6.51E-04	4.25E-06	9.40E-06	4.41E-06	8.90E-06	6.7747E-04
519739.93	4258629.28	3244.14896	0.10191	0.23386	0.10553	0.23191	6.50E-04	4.17E-06	8.36E-06	4.32E-06	7.96E-06	6.7451E-04
519830.69	4258431.6	3239.26099	0.11028	0.40906	0.11365	0.40054	6.49E-04	4.52E-06	1.46E-05	4.65E-06	1.38E-05	6.8626E-04
519789.49	4258522.4	3235.24141	0.10781	0.31316	0.11146	0.30834	6.48E-04	4.41E-06	1.12E-05	4.56E-06	1.06E-05	6.7867E-04
519832.52	4258402.89	3233.77683	0.1054	0.41638	0.1084	0.40705	6.48E-04	4.32E-06	1.49E-05	4.44E-06	1.40E-05	6.8523E-04
519826.92	4258343.69	3230.44832	0.09215	0.40183	0.09415	0.39131	6.47E-04	3.77E-06	1.44E-05	3.85E-06	1.34E-05	6.8238E-04
519813.12	4258255.93	3227.64487	0.0752	0.36096	0.07559	0.34893	6.46E-04	3.08E-06	1.29E-05	3.09E-06	1.20E-05	6.7744E-04
519749.81	4258600.14	3225.51257	0.10225	0.24797	0.10617	0.24536	6.46E-04	4.19E-06	8.87E-06	4.35E-06	8.42E-06	6.7178E-04
519823.67	4258327.33	3222.8321	0.08841	0.39363	0.09011	0.38266	6.45E-04	3.62E-06	1.41E-05	3.69E-06	1.31E-05	6.7994E-04
519799.4	4258502.96	3214.80733	0.10907	0.33286	0.11289	0.32751	6.44E-04	4.47E-06	1.19E-05	4.62E-06	1.12E-05	6.7605E-04
519727.32	4258656.52	3207.21888	0.09976	0.21878	0.10303	0.21698	6.42E-04	4.08E-06	7.83E-06	4.22E-06	7.45E-06	6.6587E-04
519827.13	4258440.25	3205.23115	0.11026	0.39873	0.1137	0.39066	6.42E-04	4.51E-06	1.43E-05	4.66E-06	1.34E-05	6.7873E-04
519809.32	4258483.52	3202.65533	0.1103	0.35443	0.11421	0.34831	6.41E-04	4.52E-06	1.27E-05	4.68E-06	1.20E-05	6.7520E-04
519739.89	4258619.58	3190.35147	0.10056	0.23457	0.10418	0.23256	6.39E-04	4.12E-06	8.39E-06	4.27E-06	7.98E-06	6.6367E-04
519812.88	4258474.87	3187.99184	0.11032	0.36257	0.11417	0.35612	6.38E-04	4.52E-06	1.30E-05	4.67E-06	1.22E-05	6.7282E-04
519829.54	4258385.86	3186.84736	0.10086	0.40885	0.10359	0.39942	6.38E-04	4.13E-06	1.46E-05	4.24E-06	1.37E-05	6.7492E-04
519769.61	4258551.57	3185.36684	0.10353	0.27915	0.10696	0.27501	6.38E-04	4.24E-06	9.98E-06	4.38E-06	9.44E-06	6.6596E-04
519759.69	4258571.01	3184.0193	0.1022	0.26364	0.10584	0.25994	6.38E-04	4.18E-06	9.43E-06	4.33E-06	8.92E-06	6.6452E-04
519819.31	4258313.68	3183.33079	0.08497	0.38184	0.0864	0.37077	6.38E-04	3.48E-06	1.37E-05	3.54E-06	1.27E-05	6.7091E-04
519823.57	4258448.9	3183.2995	0.11021	0.38886	0.11374	0.38123	6.37E-04	4.51E-06	1.39E-05	4.66E-06	1.31E-05	6.7367E-04
519816.44	4258466.21	3177.10636	0.11029	0.37097	0.11404	0.36417	6.36E-04	4.52E-06	1.33E-05	4.67E-06	1.25E-05	6.7122E-04
519816.11	4258297.2	3175.19198	0.08162	0.37299	0.08274	0.36163	6.36E-04	3.34E-06	1.33E-05	3.39E-06	1.24E-05	6.6836E-04
519820.01	4258457.56	3174.50747	0.11022	0.37965	0.11386	0.37243	6.36E-04	4.51E-06	1.36E-05	4.66E-06	1.28E-05	6.7128E-04

519779.53	4258532.14	3173.33058	0.10481	0.29567	0.10823	0.29124	6.36E-04	4.29E-06	1.06E-05	4.43E-06	1.00E-05	6.6480E-04
519828.83	4258411.85	3169.94453	0.1056	0.40579	0.10867	0.39698	6.35E-04	4.32E-06	1.45E-05	4.45E-06	1.36E-05	6.7174E-04
519749.77	4258590.45	3167.13969	0.10076	0.24899	0.10456	0.24602	6.34E-04	4.13E-06	8.91E-06	4.28E-06	8.45E-06	6.6002E-04
519812.84	4258280.88	3162.95795	0.07847	0.36325	0.07929	0.35176	6.33E-04	3.21E-06	1.30E-05	3.25E-06	1.21E-05	6.6495E-04
519826.47	4258369.05	3157.39343	0.09657	0.40087	0.09904	0.39125	6.32E-04	3.95E-06	1.43E-05	4.06E-06	1.34E-05	6.6809E-04
519789.44	4258512.7	3152.68636	0.10605	0.31375	0.10964	0.30889	6.31E-04	4.34E-06	1.12E-05	4.49E-06	1.06E-05	6.6203E-04
519729.97	4258639.02	3147.82864	0.09872	0.2226	0.10202	0.22077	6.30E-04	4.04E-06	7.96E-06	4.18E-06	7.58E-06	6.5416E-04
519809.51	4258264.7	3143.23386	0.0755	0.35301	0.07606	0.34153	6.29E-04	3.09E-06	1.26E-05	3.11E-06	1.17E-05	6.6003E-04
519823.32	4258352.44	3137.75841	0.09252	0.39243	0.09471	0.38256	6.28E-04	3.79E-06	1.40E-05	3.88E-06	1.31E-05	6.6322E-04
519739.85	4258609.88	3137.15306	0.09919	0.23539	0.10281	0.23319	6.28E-04	4.06E-06	8.42E-06	4.21E-06	8.01E-06	6.5295E-04
519799.36	4258493.26	3132.87642	0.10729	0.33341	0.11104	0.32798	6.27E-04	4.39E-06	1.19E-05	4.55E-06	1.13E-05	6.5953E-04
519820.1	4258336.02	3123.69275	0.08871	0.38369	0.0906	0.37355	6.26E-04	3.63E-06	1.37E-05	3.71E-06	1.28E-05	6.5945E-04
519759.65	4258561.31	3118.09684	0.10063	0.26437	0.10398	0.26054	6.24E-04	4.12E-06	9.46E-06	4.26E-06	8.94E-06	6.5122E-04
519825.14	4258420.82	3115.79065	0.1057	0.39532	0.10883	0.38703	6.24E-04	4.33E-06	1.41E-05	4.46E-06	1.33E-05	6.6019E-04
519769.57	4258541.88	3112.33325	0.1019	0.27971	0.10515	0.27556	6.23E-04	4.17E-06	1.00E-05	4.31E-06	9.46E-06	6.5123E-04
519825.89	4258394.74	3111.14301	0.10112	0.39892	0.10393	0.38998	6.23E-04	4.14E-06	1.43E-05	4.26E-06	1.34E-05	6.5910E-04
519749.73	4258580.75	3108.54853	0.09928	0.24991	0.10286	0.24664	6.23E-04	4.06E-06	8.94E-06	4.21E-06	8.47E-06	6.4821E-04
519723.65	4258647.79	3102.68024	0.09709	0.21574	0.1002	0.21398	6.21E-04	3.98E-06	7.72E-06	4.10E-06	7.35E-06	6.4449E-04
519729.93	4258629.32	3096.78987	0.09746	0.22321	0.10076	0.22135	6.20E-04	3.99E-06	7.98E-06	4.13E-06	7.60E-06	6.4387E-04
519779.49	4258522.44	3094.79419	0.10313	0.29623	0.10648	0.29177	6.20E-04	4.22E-06	1.06E-05	4.36E-06	1.00E-05	6.4897E-04
519739.81	4258600.19	3084.94291	0.09782	0.23626	0.10139	0.23377	6.18E-04	4.01E-06	8.45E-06	4.15E-06	8.03E-06	6.4243E-04
519815.62	4258322.63	3083.06096	0.08527	0.37205	0.08692	0.36181	6.17E-04	3.49E-06	1.33E-05	3.56E-06	1.24E-05	6.5020E-04
519812.45	4258306.09	3081.34338	0.08196	0.3642	0.08331	0.35355	6.17E-04	3.36E-06	1.30E-05	3.41E-06	1.21E-05	6.4901E-04
519809.21	4258289.7	3074.06559	0.07881	0.35552	0.07987	0.34461	6.16E-04	3.23E-06	1.27E-05	3.27E-06	1.18E-05	6.4667E-04
519822.85	4258377.86	3073.02504	0.09686	0.39122	0.09943	0.38219	6.15E-04	3.97E-06	1.40E-05	4.07E-06	1.31E-05	6.5057E-04
519789.4	4258503	3071.90012	0.10435	0.31423	0.10789	0.30933	6.15E-04	4.27E-06	1.12E-05	4.42E-06	1.06E-05	6.4574E-04
519821.45	4258429.78	3071.88207	0.10568	0.38505	0.10886	0.37729	6.15E-04	4.33E-06	1.38E-05	4.46E-06	1.30E-05	6.5070E-04
519805.91	4258273.47	3058.4204	0.0758	0.34539	0.07657	0.33446	6.12E-04	3.10E-06	1.24E-05	3.14E-06	1.15E-05	6.4257E-04
519799.32	4258483.56	3054.96761	0.10555	0.33383	0.10921	0.32829	6.12E-04	4.32E-06	1.19E-05	4.47E-06	1.13E-05	6.4380E-04
519759.61	4258551.61	3050.95794	0.09908	0.26497	0.10221	0.26108	6.11E-04	4.06E-06	9.48E-06	4.18E-06	8.96E-06	6.3768E-04
519819.72	4258361.19	3049.52275	0.09284	0.38324	0.09516	0.374	6.11E-04	3.80E-06	1.37E-05	3.90E-06	1.28E-05	6.4495E-04
519749.69	4258571.05	3049.34233	0.09781	0.25068	0.10112	0.24719	6.11E-04	4.00E-06	8.97E-06	4.14E-06	8.49E-06	6.3627E-04
519729.89	4258619.62	3048.95626	0.09622	0.22384	0.09951	0.22191	6.11E-04	3.94E-06	8.01E-06	4.07E-06	7.62E-06	6.3423E-04
519822.23	4258403.63	3045.84909	0.1013	0.38899	0.10418	0.38057	6.10E-04	4.15E-06	1.39E-05	4.27E-06	1.31E-05	6.4536E-04
519817.76	4258438.75	3041.44003	0.10562	0.3753	0.10888	0.36796	6.09E-04	4.32E-06	1.34E-05	4.46E-06	1.26E-05	6.4393E-04
519769.53	4258532.18	3038.49978	0.10031	0.28018	0.10344	0.27602	6.09E-04	4.11E-06	1.00E-05	4.24E-06	9.48E-06	6.3634E-04
519803.01	4258474.6	3038.30511	0.10561	0.34146	0.10922	0.33562	6.08E-04	4.32E-06	1.22E-05	4.47E-06	1.15E-05	6.4099E-04
519739.77	4258590.49	3032.6857	0.09645	0.23711	0.09989	0.23432	6.07E-04	3.95E-06	8.48E-06	4.09E-06	8.04E-06	6.3190E-04
519816.52	4258344.71	3029.49519	0.08899	0.37435	0.09103	0.36494	6.07E-04	3.64E-06	1.34E-05	3.73E-06	1.25E-05	6.3999E-04
519814.08	4258447.71	3024.75443	0.10559	0.3662	0.10894	0.35925	6.06E-04	4.32E-06	1.31E-05	4.46E-06	1.23E-05	6.3996E-04
519806.7	4258465.64	3024.00925	0.10558	0.3493	0.10912	0.34313	6.06E-04	4.32E-06	1.25E-05	4.47E-06	1.18E-05	6.3866E-04
519810.39	4258456.67	3018.51572	0.10555	0.35747	0.10899	0.35091	6.04E-04	4.32E-06	1.28E-05	4.46E-06	1.20E-05	6.3812E-04
519779.44	4258512.74	3016.54848	0.10151	0.29669	0.1048	0.29219	6.04E-04	4.16E-06	1.06E-05	4.29E-06	1.00E-05	6.3320E-04
519719.97	4258639.06	3007.03079	0.0945	0.21269	0.09748	0.21097	6.02E-04	3.87E-06	7.61E-06	3.99E-06	7.24E-06	6.2491E-04
519729.85	4258609.93	3001.78637	0.09495	0.22455	0.09825	0.22244	6.01E-04	3.89E-06	8.03E-06	4.02E-06	7.64E-06	6.2473E-04
519819.22	4258386.68	2997.44564	0.09709	0.38198	0.09974	0.37341	6.00E-04	3.98E-06	1.37E-05	4.08E-06	1.28E-05	6.3482E-04
519789.36	4258493.3	2993.61313	0.1027	0.31466	0.10619	0.30967	6.00E-04	4.20E-06	1.13E-05	4.35E-06	1.06E-05	6.2995E-04
519818.57	4258412.51	2991.91503	0.10142	0.37941	0.10437	0.37145	5.99E-04	4.15E-06	1.36E-05	4.27E-06	1.28E-05	6.3392E-04
519808.79	4258314.97	2988.9146	0.08227	0.35568	0.08385	0.34573	5.99E-04	3.37E-06	1.27E-05	3.43E-06	1.19E-05	6.2996E-04
519749.65	4258561.35	2988.21505	0.09636	0.25132	0.0994	0.24769	5.98E-04	3.95E-06	8.99E-06	4.07E-06	8.50E-06	6.2394E-04
519811.94	4258331.59	2987.52236	0.08557	0.36302	0.08741	0.35352	5.98E-04	3.50E-06	1.30E-05	3.58E-06	1.21E-05	6.3050E-04
519805.58	4258298.53	2984.91734	0.07913	0.34756	0.08042	0.3373	5.98E-04	3.24E-06	1.24E-05	3.29E-06	1.16E-05	6.2831E-04
519759.57	4258541.92	2982.55918	0.09757	0.26544	0.10053	0.26153	5.97E-04	3.99E-06	9.49E-06	4.12E-06	8.98E-06	6.2388E-04
519739.73	4258580.79	2978.40776	0.09507	0.23796	0.09832	0.23485	5.96E-04	3.89E-06	8.51E-06	4.03E-06	8.06E-06	6.2096E-04
519802.3	4258282.24	2973.82093	0.07611	0.33807	0.0771	0.32771	5.96E-04	3.12E-06	1.21E-05	3.16E-06	1.13E-05	6.2516E-04
519816.12	4258369.94	2966.7726	0.0931	0.37415	0.09551	0.36548	5.94E-04	3.81E-06	1.34E-05	3.91E-06	1.25E-05	6.2779E-04
519769.49	4258522.48	2964.2809	0.09876	0.28059	0.10182	0.27642	5.94E-04	4.04E-06	1.00E-05	4.17E-06	9.49E-06	6.2138E-04
519719.93	4258629.36	2961.32865	0.09332	0.21322	0.09632	0.21146	5.93E-04	3.82E-06	7.63E-06	3.94E-06	7.26E-06	6.1570E-04
519729.81	4258600.23	2954.48878	0.09368	0.22532	0.09693	0.22294	5.92E-04	3.84E-06	8.06E-06	3.97E-06	7.65E-06	6.1519E-04
519812.95	4258353.4	2948.39118	0.08935	0.36643	0.09154	0.35753	5.90E-04	3.66E-06	1.31E-05	3.75E-06	1.23E-05	6.2324E-04
519814.92	4258421.4	2945.97962	0.10144	0.36994	0.10443	0.36246	5.90E-04	4.15E-06	1.32E-05	4.28E-06	1.24E-05	6.2408E-04
519779.4	4258503.04	2939.60021	0.09994	0.29705	0.10319	0.29251	5.89E-04	4.09E-06	1.06E-05	4.23E-06	1.00E-05	6.1768E-04
519815.59	4258395.49	2931.53107	0.09727	0.37282	0.09998	0.36473	5.87E-04	3.98E-06	1.33E-05	4.09E-06	1.25E-05	6.2101E-04
519749.61	4258551.66	2925.80423	0.09493	0.25181	0.09775	0.24812	5.86E-04	3.89E-06	9.01E-06	4.00E-06	8.52E-06	6.1135E-04
519739.69	4258571.09	2923.81192	0.09371	0.23862	0.0967	0.2353	5.86E-04	3.84E-06	8.54E-06	3.96E-06	8.08E-06	6.0994E-04
519789.32	4258483.61	2918.87987	0.10111	0.31498	0.10452	0.30989	5.85E-04	4.14E-06	1.13E-05	4.28E-06	1.06E-05	6.1487E-04
519719.89	4258619.66	2917.92442	0.09215	0.21379	0.09517	0.21192	5.84E-04	3.77E-06	7.65E-06	3.90E-06	7.28E-06	6.0695E-04
519759.53	4258532.22	2913.08694	0.0961	0.26583	0.09895	0.2619	5.83E-04	3.93E-06	9.51E-06	4.05E-06	8.99E-06	6.0987E-04
519811.26	4258430.29	2910.74808	0.10137	0.36078	0.10442	0.35373	5.83E-04	4.15E-06	1.29E-05	4.28E-06	1.21E-05	6.1639E-04
519729.77	4258590.53	2906.49996	0.0924	0.22609	0.09554	0.2234	5.82E-04	3.78E-06	8.09E-06	3.91E-06	7.67E-06	6.0552E-04
519792.98	4258474.72	2902.46025	0.10121	0.32189	0.10462	0.31655	5.81E-04	4.14E-06	1.15E-05	4.28E-06	1.09E-05	6.1207E-04
519808.26	4258340.54	2900.87464	0.0859	0.35497	0.08791	0.34605	5.81E-04	3.52E-06	1.27E-05	3.60E-06	1.19E-05	6.1263E-04
519801.95	4258307.35	2896.45383	0.07942	0.33963	0.08092	0.33004	5.80E-04	3.25E-06	1.21E-05	3.31E-06	1.13E-05	6.1010E-04
519805.14	4258323.86	2895.43434	0.08253	0.34707	0.08429	0.33786	5.80E-04	3.38E-06	1.24E-05	3.45E-06	1.16E-05	6.1069E-04
519798.69	4258291	2893.4263	0.07646	0.33175	0.0777	0.32187	5.79E-04	3.13E-06	1.19E-05	3.18E-06	1.11E-05	6.0868E-04
519812.52	4258378.69	2891.97589	0.09332	0.36556	0.09581	0.35737	5.79E-04	3.82E-06	1.31E-05	3.92E-06	1.23E-05	6.1225E-04
519769.44	4258512.78	2890.08566	0.09726	0.28092	0.10027	0.27672	5.79E-04	3.98E-06	1.00E-05	4.11E-06	9.50E-06	6.0641E-04
519807.6	4258439.17	2889.96733	0.10136	0.35234	0.10448	0.34565	5.79E-04	4.15E-06	1.26E-05	4.28E-06	1.19E-05	6.1165E-04
519796.64	4258465.83	2886.48232	0.10124	0.32901	0.1046	0.32337	5.78E-04	4.15E-06	1.18E-05	4.28E-06	1.11E-05	6.0936E-04
519803.95	4258448.06	2879.66366	0.10133	0.34425	0.10454	0.33792	5.77E-04	4.15E-06	1.23E-05	4.28E-06	1.16E-05	6.0904E-04
519800.29	4258456.95	2879.60006	0.10131	0.33653	0.1046	0.33055	5.77E-04	4.15E-06	1.20E-05	4.28E-06	1.13E-05	6.0850E-04
519811.97	4258404.31	2875.9916	0.0974	0.36403	0.10017	0.35637	5.76E-04	3.99E-06	1.30E-05	4.10E-06	1.22E-05	6.0930E-04
519719.85	4258609.97	2875.95867	0.09098	0.2144	0.09399	0.21237	5.76E-04	3.73E-06	7.67E-06	3.85E-06	7.29E-06	5.9848E-04
519739.65	4258561.4	2867.32588	0.09236	0.23915	0.09511	0.2357	5.74E-04	3.78E-06	8.55E-06	3.89E-06	8.09E-06	5.9854E-04
519779.36	4258493.35	2864.76398	0.09842	0.29738	0.10163	0.29276	5.74E-04	4.03E-06	1.06E-05	4.16E-06	1.01E-05	6.0259E-04
519809.37	4258362.09	2864.31754	0.08955	0.35764	0.09181	0.34934	5.74E-04	3.67E-06	1.28E-05	3.76E-06	1.20E-05	6.0583E-04
519749.57	4258541.96	2861.71573	0.09352	0.25219	0.0962	0.24848	5.73E-04	3.83E-06	9.02E-06	3.94E-06	8.53E-06	5.9842E-04
519729.73	4258580.83	2857.42892	0.09112	0.22679	0.09407	0.22382	5.72E-04	3.73E-06	8.11E-06	3.85E-06	7.68E-06	5.9562E-04
519759.49	4258522.52	2842.90424	0.09467	0.26611	0.09745	0.26218	5.69E-04	3.88E-06	9.52E-06	3.99E-06	9.00E-06	5.9572E-04
519719.81	4258600.27	2832.99718	0.0898	0.21508	0.09277	0.21278	5.67E-04	3.68E-06	7.69E-06	3.80E-06	7.30E-06	5.8982E-04
519808.34	4258413.13	2830.53639	0.09745	0.35539	0.10028	0.34814	5.67E-04	3.99E-06	1.27E-05	4.11E-06	1.20E-05	5.9961E-04
519808.92	4258387.44	2825.80695	0.09349	0.35732	0.09605	0.34953	5.66E-04	3.83E-06	1.28E-05	3.93E-06	1.20E-05	5.9845E-04
519804.57	4258349.49	2817.66144	0.08617	0.34695	0.0883	0.33858	5.64E-04	3.53E-06	1.24E-05	3.62E-06	1.16E-05	5.9545E-04
519769.4	4258503.09	2816.88657	0.09581	0.2812	0.09878	0.27696	5.64E-04	3.92E-06	1.01E-05	4.04E-06	9.51E-06	5.9165E-04
519795.08	4258299.77	2809.28941	0.07674	0.32457	0.07818	0.31531	5.63E-04	3.14E-06	1.16E-05	3.20E-06	1.08E-05	5.9138E-04
519798.31	4258316.18	2809.10817	0.07968	0.33198	0.08136	0.32303	5.63E-04	3.26E-06	1.19E-05	3.33E-06	1.11E-05	5.9212E-04
519739.61	4258551.7	2808.96413	0.09103	0.23955	0.09358	0.23604	5.63E-04	3.73E-06	8.57E-06	3.83E-06	8.10E-06	5.8676E-04
519801.48	4258332.75	2808.41602	0.08279	0.33915	0.08469	0.33057	5.62E-04	3.39E-06	1.21E-05	3.47E-06	1.13E-05	5.9276E-04
519729.69	4258571.14	2806.97181	0.08986	0.22736	0.09257	0.22419	5.62E-04	3.68E-06	8.13E-06	3.79E-06	7.70E-06	5.8543E-04
519749.53	4258532.26	2796.19653	0.09216	0.25249	0.09473	0.24877	5.60E-04	3.77E-06	9.03E-06	3.88E-06	8.54E-06	5.8520E-04
519805.8	4258370.78	2792.89069	0.08978	0.34987	0.09212	0.34199	5.59E-04	3.68E-06	1.25E-05	3.77E-06	1.17E-05	5.9102E-04
519779.32	4258483.65	2792.8555	0.09694	0.29762	0.10011	0.2929	5.59E-04	3.97E-06	1.06E-05	4.10E-06	1.01E-05	5.8808E-04
519804.71	4258421.94	2792.19074	0.09742	0.34691	0.10029	0.34009	5.59E-04	3.99E-06	1.24E-05	4.11E-06	1.17E-05	5.9135E-04
519719.77	4258590.57	2789.38747	0.08861	0.21575	0.09147	0.21316	5.59E-04	3.63E-06	7.72E-06	3.75E-06	7.32E-06	5.8102E-04
519782.95	4258474.83	2775.18149	0.09708	0.30388	0.10026	0.29895	5.56E-04	3.97E-06	1.09E-05	4.11E-06	1.03E-05	5.8498E-04
519759.44	4258512.82	2772.40317	0.09328	0.26633	0.09601	0.26239	5.55E-04	3.82E-06	9.53E-06	3.93E-06	9.01E-06	5.8150E-04
519805.32	4258396.19	2768.95893	0.09362	0.34922	0.09623	0.34182	5.55E-04	3.83E-06	1.25E-05	3.94E-06	1.17E-05	5.8652E-04
519801.09	4258430.76	2767.76415	0.09741	0.33909	0.10035	0.3326	5.54E-04	3.99E-06	1.21E-05	4.11E-06	1.14E-05	5.8593E-04
519786.58	4258466.02	2759.76419	0.09716	0.31037	0.10033	0.30516	5.53E-04	3.98E-06	1.11E-05	4.11E-06	1.05E-05	5.8234E-04
519729.65	4258561.44	2754.63201	0.08861	0.22779	0.09108	0.2245	5.52E-04	3.63E-06	8.15E-06	3.73E-06	7.71E-06	5.7486E-04
519797.46	4258439.57	2751.9701	0.09735	0.33142	0.10035	0.32528	5.51E-04	3.99E-06	1.19E-05	4.11E-06	1.12E-05	5.8224E-04
519739.57	4258542	2748.93208	0.08973	0.23984	0.09213	0.23631	5.51E-04	3.67E-06	8.58E-06	3.77E-06	8.11E-06	5.7465E-04
519790.2	4258457.2	2748.34177	0.0972	0.31702	0.10032	0.31153	5.50E-04	3.98E-06	1.13E-05	4.11E-06	1.07E-05	5.8051E-04
519769.36	4258493.39	2745.20507	0.09439	0.28143	0.09735	0.27712	5.50E-04	3.86E-06	1.01E-05	3.99E-06	9.51E-06	5.7720E-04
519793.83	4258448.39	2744.8329	0.09725	0.32397	0.10031	0.31816	5.50E-04	3.98E-06	1.16E-05	4.11E-06	1.09E-05	5.8029E-04
519719.73	4258580.87	2743.75184	0.08741	0.21637	0.0901	0.2135	5.49E-04	3.58E-06	7.74E-06	3.69E-06	7.33E-06	5.7181E-04
519800.89	4258358.44	2738.78764	0.08639	0.33904	0.08859	0.33117	5.48E-04	3.54E-06	1.21E-05	3.63E-06	1.14E-05	5.7914E-04
519749.49	4258522.56	2729.76505	0.09083	0.25268	0.09334	0.24896	5.47E-04	3.72E-06	9.04E-06	3.82E-06	8.55E-06	5.7180E-04
519797.82	4258341.63	2728.42498	0.08306	0.33186	0.08507	0.32378	5.46E-04	3.40E-06	1.19E-05	3.48E-06	1.11E-05	5.7627E-04
519802.22	4258379.46	2727.82757	0.08996	0.34239	0.09237	0.33488	5.46E-04	3.68E-06	1.22E-05	3.78E-06	1.15E-05	5.7749E-04
519791.47	4258308.54	2726.87924	0.07699	0.31763	0.07861	0.30897	5.46E-04	3.15E-06	1.14E-05	3.22E-06	1.06E-05	5.7443E-04
519794.68	4258325	2724.28544	0.07991	0.32449	0.08173	0.31617	5.46E-04	3.27E-06	1.16E-05	3.35E-06	1.09E-05	5.7465E-04
519801.72	4258404.94	2721.73848	0.09368	0.34127	0.09635	0.33425	5.45E-04	3.84E-06	1.22E-05	3.94E-06	1.15E-05	5.7653E-04
519759.4	4258503.13	2702.59159	0.09192	0.26656	0.09464	0.26256	5.41E-04	3.76E-06	9.53E-06	3.87E-06	9.01E-06	5.6742E-04
519729.61	4258551.74	2700.05906	0.08737	0.2281	0.08965	0.22476	5.41E-04	3.58E-06	8.16E-06	3.67E-06	7.72E-06	5.6385E-04
519719.69	4258571.18	2696.82986	0.08623	0.21687	0.0887	0.2138	5.40E-04	3.53E-06	7.76E-06	3.63E-06	7.34E-06	5.6234E-04
519739.53	4258532.3	2687.08403	0.08845	0.24006	0.09077	0.23652	5.38E-04	3.62E-06	8.59E-06	3.72E-06	8.12E-06	5.6217E-04
519798.12	4258413.69	2682.66609	0.09369	0.33349	0.09639	0.32684	5.37E-04	3.84E-06	1.19E-05	3.95E-06	1.12E-05	5.6817E-04
519769.32	4258483.69	2676.02857	0.09302	0.28159	0.09595	0.27719	5.36E-04	3.81E-06	1.01E-05	3.93E-06	9.52E-06	5.6324E-04
519798.65	4258388.15	2670.26624	0.09007	0.33493	0.09254	0.32778	5.35E-04	3.69E-06	1.20E-05	3.79E-06	1.13E-05	5.6547E-04
519797.21	4258367.39	2667.46098	0.08657	0.33157	0.08884	0.32413	5.34E-04	3.54E-06	1.19E-05	3.64E-06	1.11E-05	5.6436E-04
519749.44	4258512.87	2662.79248	0.08953	0.25281	0.09201	0.24907	5.33E-04	3.67E-06	9.04E-06	3.77E-06	8.55E-06	5.5829E-04
519772.92	4258474.94	2657.33289	0.09317	0.28722	0.09613	0.28265	5.32E-04	3.81E-06	1.03E-05	3.94E-06	9.70E-06	5.5989E-04
519794.17	4258350.52	2653.82894	0.08329	0.32487	0.08539	0.31723	5.31E-04	3.41E-06	1.16E-05	3.50E-06	1.09E-05	5.6088E-04
519794.52	4258422.44	2652.1601	0.09363	0.32594	0.09637	0.31966	5.31E-04	3.83E-06	1.17E-05	3.95E-06	1.10E-05	5.6154E-04
519719.65	4258561.48	2648.29639	0.08507	0.21721	0.08731	0.21404	5.30E-04	3.48E-06	7.77E-06	3.57E-06	7.35E-06	5.5253E-04
519787.87	4258317.31	2647.03964	0.07723	0.31086	0.07898	0.30276	5.30E-04	3.16E-06	1.11E-05	3.23E-06	1.04E-05	5.5801E-04
519791.05	4258333.83	2645.42798	0.08014	0.31756	0.08206	0.30976	5.30E-04	3.28E-06	1.14E-05	3.36E-06	1.06E-05	5.5842E-04
519729.57	4258542.04	2643.51711	0.08616	0.22831	0.0883	0.22495	5.29E-04	3.53E-06	8.17E-06	3.62E-06	7.72E-06	5.5243E-04
519776.52	4258466.19	2638.99566	0.09323	0.29295	0.09619	0.28815	5.28E-04	3.82E-06	1.05E-05	3.94E-06	9.89E-06	5.5662E-04
519759.36	4258493.43	2633.91542	0.09061	0.26674	0.09332	0.26267	5.27E-04	3.71E-06	9.54E-06	3.82E-06	9.02E-06	5.5357E-04
519790.92	4258431.19	2632.59872	0.09356	0.3188	0.09636	0.31283	5.27E-04	3.83E-06	1.14E-05	3.95E-06	1.07E-05	5.5713E-04
519780.12	4258457.44	2627.22227	0.09334	0.29909	0.09627	0.29402	5.26E-04	3.82E-06	1.07E-05	3.94E-06	1.01E-05	5.5469E-04
519739.49	4258522.61	2624.15856	0.08722	0.2402	0.08948	0.23664	5.26E-04	3.57E-06	8.59E-06	3.66E-06	8.12E-06	5.4947E-04
519787.32	4258439.94	2623.05705	0.0935	0.31202	0.09636	0.30635	5.25E-04	3.83E-06	1.12E-05	3.95E-06	1.05E-05	5.5475E-04
519783.72	4258448.69	2622.52095	0.09345	0.30554	0.09636	0.30016	5.25E-04	3.83E-06	1.09E-05	3.95E-06	1.03E-05	5.5420E-04
519795.07	4258396.84	2621.38852	0.09014	0.32763	0.09266	0.32083	5.25E-04	3.69E-06	1.17E-05	3.79E-06	1.10E-05	5.5519E-04
519793.52	4258376.35	2603.58669	0.08671	0.32449	0.08904	0.31737	5.21E-04	3.55E-06	1.16E-05	3.65E-06	1.09E-05	5.5110E-04
519719.61	4258551.78	2597.32998	0.08393	0.21745	0.08598	0.21422	5.20E-04	3.44E-06	7.78E-06	3.52E-06	7.35E-06	5.4224E-04
519749.4	4258503.17	2596.10117	0.08828	0.25295	0.09074	0.24917	5.20E-04	3.61E-06	9.05E-06	3.72E-06	8.55E-06	5.4484E-04
519729.53	4258532.35	2585.10238	0.08498	0.22843	0.08704	0.22506	5.18E-04	3.48E-06	8.17E-06	3.56E-06	7.73E-06	5.4064E-04
519790.51	4258359.41	2583.28654	0.08345	0.31789	0.08561	0.31066	5.17E-04	3.42E-06	1.14E-05	3.51E-06	1.07E-05	5.4630E-04
519791.5	4258405.53	2579.86089	0.09014	0.32036	0.09269	0.31391	5.17E-04	3.69E-06	1.15E-05	3.80E-06	1.08E-05	5.4637E-04
519787.42	4258342.66	2573.31031	0.08036	0.31114	0.08236	0.30374	5.15E-04	3.29E-06	1.11E-05	3.37E-06	1.04E-05	5.4356E-04
519784.26	4258326.08	2570.38637	0.07743	0.30439	0.07928	0.2968	5.15E-04	3.17E-06	1.09E-05	3.25E-06	1.02E-05	5.4225E-04
519759.32	4258483.73	2567.38439	0.08933	0.26685	0.09204	0.26268	5.14E-04	3.66E-06	9.54E-06	3.77E-06	9.02E-06	5.4014E-04
519739.44	4258512.91	2560.32911	0.08601	0.24026	0.08824	0.23669	5.13E-04	3.52E-06	8.59E-06	3.61E-06	8.13E-06	5.3659E-04
519762.9	4258475.04	2548.20231	0.08951	0.27203	0.09225	0.26772	5.10E-04	3.66E-06	9.73E-06	3.78E-06	9.19E-06	5.3668E-04
519789.84	4258385.3	2548.17805	0.0868	0.31728	0.08916	0.31054	5.10E-04	3.55E-06	1.13E-05	3.65E-06	1.07E-05	5.3952E-04
519787.92	4258414.22	2546.47371	0.09008	0.31332	0.09266	0.30722	5.10E-04	3.69E-06	1.12E-05	3.79E-06	1.05E-05	5.3920E-04
519719.57	4258542.08	2543.85403	0.08279	0.2176	0.08472	0.21435	5.09E-04	3.39E-06	7.78E-06	3.47E-06	7.36E-06	5.3144E-04
519766.47	4258466.35	2530.37646	0.08961	0.27713	0.09237	0.27264	5.07E-04	3.67E-06	9.91E-06	3.78E-06	9.36E-06	5.3347E-04
519749.36	4258493.47	2529.99234	0.08705	0.25306	0.08952	0.24921	5.07E-04	3.56E-06	9.05E-06	3.67E-06	8.56E-06	5.3150E-04
519729.49	4258522.65	2525.34666	0.08383	0.2285	0.08583	0.22512	5.06E-04	3.43E-06	8.17E-06	3.51E-06	7.73E-06	5.2858E-04
519784.35	4258422.91	2524.13649	0.09004	0.30673	0.09265	0.30092	5.05E-04	3.69E-06	1.10E-05	3.79E-06	1.03E-05	5.3428E-04
519786.86	4258368.29	2519.84952	0.08358	0.31117	0.08579	0.30429	5.05E-04	3.42E-06	1.11E-05	3.51E-06	1.04E-05	5.3315E-04
519770.05	4258457.67	2514.57164	0.08967	0.28251	0.09242	0.2778	5.04E-04	3.67E-06	1.01E-05	3.78E-06	9.54E-06	5.3067E-04
519780.77	4258431.6	2510.47683	0.08997	0.30038	0.09263	0.29484	5.03E-04	3.68E-06	1.07E-05	3.79E-06	1.01E-05	5.3110E-04
519773.62	4258448.98	2504.43037	0.08972	0.28807	0.09244	0.28308	5.02E-04	3.67E-06	1.03E-05	3.78E-06	9.72E-06	5.2903E-04
519783.79	4258351.48	2504.38108	0.08052	0.3047	0.08257	0.29769	5.02E-04	3.30E-06	1.09E-05	3.38E-06	1.02E-05	5.2933E-04
519777.2	4258440.29	2503.86965	0.08985	0.29413	0.09255	0.28887	5.01E-04	3.68E-06	1.05E-05	3.79E-06	9.92E-06	5.2934E-04
519786.16	4258394.25	2501.61541	0.08684	0.31041	0.08925	0.30399	5.01E-04	3.56E-06	1.11E-05	3.65E-06	1.04E-05	5.2973E-04
519780.65	4258334.84	2497.902	0.07762	0.29836	0.07954	0.29117	5.00E-04	3.18E-06	1.07E-05	3.26E-06	1.00E-05	5.2734E-04
519739.4	4258503.21	2496.61173	0.08484	0.2403	0.08706	0.2367	5.00E-04	3.47E-06	8.60E-06	3.56E-06	8.13E-06	5.2374E-04
519719.53	4258532.39	2488.75978	0.08169	0.21767	0.08353	0.21442	4.98E-04	3.34E-06	7.79E-06	3.42E-06	7.36E-06	5.2032E-04
519749.32	4258483.77	2465.6966	0.08586	0.2531	0.08834	0.24916	4.94E-04	3.52E-06	9.05E-06	3.62E-06	8.55E-06	5.1853E-04
519729.45	4258512.95	2464.59666	0.0827	0.22851	0.08469	0.22512	4.94E-04	3.39E-06	8.17E-06	3.47E-06	7.73E-06	5.1632E-04
519783.2	4258377.18	2463.79622	0.08366	0.30456	0.0859	0.29801	4.93E-04	3.43E-06	1.09E-05	3.52E-06	1.02E-05	5.2148E-04
519782.47	4258403.2	2461.82593	0.08681	0.3035	0.08924	0.29742	4.93E-04	3.55E-06	1.09E-05	3.65E-06	1.02E-05	5.2129E-04
519753.01	4258474.82	2445.89051	0.08605	0.25805	0.08858	0.25396	4.90E-04	3.52E-06	9.23E-06	3.63E-06	8.72E-06	5.1492E-04
519780.16	4258360.31	2440.81364	0.08062	0.29831	0.08271	0.29165	4.89E-04	3.30E-06	1.07E-05	3.39E-06	1.00E-05	5.1618E-04
519739.36	4258493.51	2433.20432	0.0837	0.24032	0.08593	0.23667	4.87E-04	3.43E-06	8.60E-06	3.52E-06	8.13E-06	5.1095E-04
519719.49	4258522.69	2432.0626	0.08061	0.21767	0.08241	0.21442	4.87E-04	3.30E-06	7.79E-06	3.37E-06	7.36E-06	5.0888E-04
519778.79	4258412.16	2431.35582	0.08675	0.29692	0.08919	0.29116	4.87E-04	3.55E-06	1.06E-05	3.65E-06	1.00E-05	5.1473E-04
519777.04	4258343.61	2430.21622	0.07776	0.29237	0.07974	0.28555	4.87E-04	3.18E-06	1.05E-05	3.26E-06	9.80E-06	5.1339E-04
519756.69	4258465.87	2427.93142	0.08622	0.26306	0.08879	0.2588	4.86E-04	3.53E-06	9.41E-06	3.64E-06	8.88E-06	5.1169E-04
519779.54	4258386.06	2414.27571	0.08368	0.298	0.08594	0.29178	4.83E-04	3.43E-06	1.07E-05	3.52E-06	1.00E-05	5.1111E-04
519760.37	4258456.92	2413.74048	0.08635	0.26818	0.08894	0.26371	4.83E-04	3.54E-06	9.59E-06	3.64E-06	9.05E-06	5.0921E-04
519775.11	4258421.11	2411.17304	0.08668	0.2907	0.08916	0.28521	4.83E-04	3.55E-06	1.04E-05	3.65E-06	9.79E-06	5.1026E-04
519729.4	4258503.25	2403.52773	0.08161	0.22845	0.08359	0.22504	4.81E-04	3.34E-06	8.17E-06	3.42E-06	7.73E-06	5.0400E-04

519771.42	4258430.06	2399.8724	0.0866	0.28472	0.08911	0.2795	4.81E-04	3.55E-06	1.02E-05	3.65E-06	9.60E-06	5.0758E-04
519764.06	4258447.97	2399.81748	0.08638	0.27328	0.08894	0.26859	4.81E-04	3.54E-06	9.77E-06	3.64E-06	9.22E-06	5.0677E-04
519767.74	4258439.01	2395.58991	0.08648	0.27884	0.08901	0.27388	4.80E-04	3.54E-06	9.97E-06	3.64E-06	9.40E-06	5.0631E-04
519776.53	4258369.13	2382.50395	0.08067	0.292	0.08278	0.28569	4.77E-04	3.30E-06	1.04E-05	3.39E-06	9.81E-06	5.0407E-04
519719.45	4258512.99	2374.25395	0.07957	0.21762	0.08134	0.21436	4.75E-04	3.26E-06	7.78E-06	3.33E-06	7.36E-06	4.9721E-04
519775.89	4258394.95	2372.55906	0.08365	0.29165	0.08593	0.28575	4.75E-04	3.42E-06	1.04E-05	3.52E-06	9.81E-06	5.0232E-04
519739.32	4258483.82	2371.17797	0.08259	0.2403	0.08484	0.23657	4.75E-04	3.38E-06	8.60E-06	3.47E-06	8.12E-06	4.9843E-04
519773.44	4258352.38	2368.06425	0.07786	0.28625	0.07985	0.27979	4.74E-04	3.19E-06	1.02E-05	3.27E-06	9.61E-06	5.0054E-04
519742.98	4258474.93	2350.48331	0.08277	0.24486	0.0851	0.24098	4.71E-04	3.39E-06	8.76E-06	3.48E-06	8.27E-06	4.9462E-04
519729.36	4258493.56	2343.09279	0.08055	0.22837	0.08253	0.22493	4.69E-04	3.30E-06	8.17E-06	3.38E-06	7.72E-06	4.9180E-04
519772.23	4258403.84	2342.16965	0.08365	0.28582	0.08596	0.28018	4.69E-04	3.42E-06	1.02E-05	3.52E-06	9.62E-06	4.9584E-04
519772.9	4258377.96	2333.6632	0.08071	0.28615	0.08285	0.28012	4.67E-04	3.30E-06	1.02E-05	3.39E-06	9.62E-06	4.9390E-04
519746.64	4258466.04	2332.51522	0.08295	0.24945	0.08533	0.24542	4.67E-04	3.40E-06	8.92E-06	3.49E-06	8.43E-06	4.9136E-04
519768.57	4258412.72	2319.96276	0.08361	0.28014	0.08595	0.27474	4.65E-04	3.42E-06	1.00E-05	3.52E-06	9.43E-06	4.9100E-04
519750.29	4258457.16	2317.139	0.08311	0.25415	0.08552	0.24994	4.64E-04	3.40E-06	9.09E-06	3.50E-06	8.58E-06	4.8861E-04
519719.4	4258503.29	2316.07056	0.07855	0.21749	0.08032	0.21422	4.64E-04	3.22E-06	7.78E-06	3.29E-06	7.35E-06	4.8546E-04
519769.83	4258361.15	2309.39887	0.07789	0.2803	0.0799	0.27417	4.62E-04	3.19E-06	1.00E-05	3.27E-06	9.41E-06	4.8839E-04
519753.95	4258448.27	2305.51174	0.08323	0.2589	0.08564	0.25448	4.62E-04	3.41E-06	9.26E-06	3.51E-06	8.74E-06	4.8662E-04
519764.92	4258421.61	2303.79627	0.08351	0.27442	0.08586	0.2693	4.61E-04	3.42E-06	9.82E-06	3.52E-06	9.25E-06	4.8736E-04
519757.6	4258439.38	2297.40502	0.08332	0.26385	0.08572	0.2592	4.60E-04	3.41E-06	9.44E-06	3.51E-06	8.90E-06	4.8534E-04
519761.26	4258430.5	2296.18568	0.0834	0.26897	0.08577	0.26409	4.60E-04	3.41E-06	9.62E-06	3.51E-06	9.07E-06	4.8546E-04
519769.27	4258386.78	2293.43835	0.08074	0.28058	0.08291	0.2748	4.59E-04	3.31E-06	1.00E-05	3.39E-06	9.43E-06	4.8546E-04
519729.32	4258483.86	2283.80703	0.07952	0.22826	0.08152	0.22477	4.57E-04	3.26E-06	8.16E-06	3.34E-06	7.72E-06	4.7984E-04
519732.95	4258475.03	2262.28749	0.07969	0.23247	0.08178	0.22882	4.53E-04	3.26E-06	8.32E-06	3.35E-06	7.86E-06	4.7584E-04
519765.63	4258395.61	2260.89422	0.08074	0.27516	0.08292	0.26962	4.53E-04	3.31E-06	9.84E-06	3.40E-06	9.26E-06	4.7857E-04
519766.22	4258369.92	2260.71855	0.07795	0.27495	0.07998	0.26907	4.53E-04	3.19E-06	9.83E-06	3.27E-06	9.24E-06	4.7828E-04
519719.36	4258493.6	2258.25475	0.07756	0.21731	0.07933	0.21403	4.52E-04	3.18E-06	7.77E-06	3.25E-06	7.35E-06	4.7379E-04
519736.59	4258466.21	2243.60563	0.07987	0.23672	0.08203	0.23292	4.49E-04	3.27E-06	8.47E-06	3.36E-06	8.00E-06	4.7241E-04
519762	4258404.43	2234.38784	0.08068	0.26972	0.08287	0.26444	4.47E-04	3.30E-06	9.65E-06	3.39E-06	9.08E-06	4.7289E-04
519740.22	4258457.38	2227.21575	0.08004	0.24107	0.08226	0.23709	4.46E-04	3.28E-06	8.62E-06	3.37E-06	8.14E-06	4.6944E-04
519762.61	4258378.68	2220.06425	0.07799	0.26988	0.08004	0.26423	4.45E-04	3.19E-06	9.65E-06	3.28E-06	9.07E-06	4.6979E-04
519758.37	4258413.26	2214.66665	0.08057	0.26434	0.08277	0.25933	4.44E-04	3.30E-06	9.46E-06	3.39E-06	8.90E-06	4.6856E-04
519743.85	4258448.56	2214.54633	0.08019	0.24554	0.08244	0.24136	4.43E-04	3.28E-06	8.78E-06	3.38E-06	8.29E-06	4.6722E-04
519747.48	4258439.73	2206.4442	0.08033	0.25001	0.08258	0.24564	4.42E-04	3.29E-06	8.94E-06	3.38E-06	8.43E-06	4.6592E-04
519754.74	4258422.08	2205.28914	0.08051	0.25942	0.08272	0.25462	4.42E-04	3.30E-06	9.28E-06	3.39E-06	8.74E-06	4.6634E-04
519751.11	4258430.91	2203.2458	0.08043	0.25467	0.08267	0.25007	4.41E-04	3.29E-06	9.11E-06	3.38E-06	8.59E-06	4.6560E-04
519719.32	4258483.9	2201.16208	0.0766	0.21711	0.07838	0.2138	4.41E-04	3.14E-06	7.77E-06	3.21E-06	7.34E-06	4.6226E-04
519759.01	4258387.45	2184.93117	0.07798	0.26481	0.08005	0.25941	4.38E-04	3.19E-06	9.47E-06	3.28E-06	8.91E-06	4.6241E-04
519722.93	4258475.13	2180.00946	0.07678	0.2209	0.07865	0.21748	4.37E-04	3.14E-06	7.90E-06	3.22E-06	7.47E-06	4.5831E-04
519726.54	4258466.36	2160.15815	0.07695	0.22484	0.07891	0.22126	4.33E-04	3.15E-06	8.04E-06	3.23E-06	7.60E-06	4.5462E-04
519755.4	4258396.22	2156.92051	0.07794	0.25985	0.08001	0.25468	4.32E-04	3.19E-06	9.29E-06	3.28E-06	8.74E-06	4.5646E-04
519730.15	4258457.6	2143.41654	0.07712	0.22883	0.07915	0.22509	4.29E-04	3.16E-06	8.18E-06	3.24E-06	7.73E-06	4.5156E-04
519751.79	4258404.99	2136.22348	0.07787	0.25498	0.07995	0.25003	4.28E-04	3.19E-06	9.12E-06	3.27E-06	8.58E-06	4.5197E-04
519733.75	4258448.83	2129.43933	0.07729	0.23288	0.07935	0.22896	4.26E-04	3.16E-06	8.33E-06	3.25E-06	7.86E-06	4.4905E-04
519748.18	4258413.76	2122.55666	0.07778	0.25023	0.07986	0.2455	4.25E-04	3.18E-06	8.95E-06	3.27E-06	8.43E-06	4.4890E-04
519737.36	4258440.06	2119.6705	0.07744	0.23708	0.07953	0.23296	4.24E-04	3.17E-06	8.48E-06	3.26E-06	8.00E-06	4.4740E-04
519744.58	4258422.52	2115.61456	0.07769	0.24571	0.07977	0.24119	4.24E-04	3.18E-06	8.79E-06	3.27E-06	8.28E-06	4.4720E-04
519740.97	4258431.29	2114.83994	0.07757	0.24131	0.07966	0.237	4.24E-04	3.18E-06	8.63E-06	3.26E-06	8.14E-06	4.4673E-04
CONCUNIT ug/	m^3											
DEPUNIT g/m^	2											

OEHHA Cancer/BAAQMD Risk Methodology

Cancer Risk = DPM x CPF x ASF x DBR x ED x EF x TAH x AF/ AT

Cancer Risk = probability of an individual contracting cancer out of a population of 1 million people over a lifetime exposure duration of 30 years

DPM = long-term average concentration of diesel PM as predicted by the air dispersion model (ug/m3)

CPF = cancer potency factor for DPM (mg.ke-day)

ASF = age sensitivity factors that are dependent on the age of the exposed individual (unitless)

DBR = daily breathing rates that are dependent on the age of the exposed individual (liters/kg-day)

ED = exposure duration (years)

EF = exposure frequency (days/year)

TAH = time at home factors that are dependent on the age of the exposed individual (%)

AT = averaging time over the lifetime of an individual (days)

AF = adjustment factor for workers and students (unitless)

Cancer Risk Equation Values as recommended by the California Office of Environmental Health Hazards Assessment

Cancer Risk Calculations Using OEHHA/BAAQMD Cancer Risk Assumptions
City of Santa Rosa—Stonebridge Subdivision Project
Cancer Risk Impacts from Construction at the Maximum Impacted Sensitive Receptor - Infant
UTM: 520285.95 4258692.95

Cancer Potency Factor: 1.1 $(mg/kg\text{-}day)^{-1}$
Exposure Frequency 350 days/year
Averaging Period 25550 days

Construction Annual DPM Emissions (as PM2.5 Exhaust) Unmitigated

Age	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Cancer Risk (/million)
3rd Trimester	0.114827949	10	361	0.85	0.25	1.3
0-1	0.114827949	10	1090	0.85	1.00	16.0
1-<2	0.114827949	10	1090	0.85	1.00	16.0
2-<3	0.114827949	3	572	0.72	0.30	0.6
					Total	34.03

Construction Annual DPM Emissions (as PM2.5 Exhaust) Mitigated

Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Cancer Risk (/million)
3rd Trimester	0.030463338	10	361	0.85	0.25	0.4
0-1	0.030463338	10	1090	0.85	1.00	4.3
1-<2	0.030463338	10	1090	0.85	1.00	4.3
2-<3	0.030463338	3	572	0.72	0.30	0.2
					Total	9.03

Cancer Risk Impacts from Construction at the Maximum Impacted Sensitive Receptor - Child
UTM: 520285.95 4258692.95

Cancer Potency Factor: 1.1 $(mg/kg\text{-}day)^{-1}$
Exposure Frequency 350 days/year
Averaging Period 25550 days

Construction Annual DPM Emissions (as PM2.5 Exhaust) Unmitigated

Construction Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor $(ug/m3)^{-1}$
1	0.114827949	3	572	1	1.00	3.0
2	0.114827949	3	572	1	1.00	3.0
3	0.114827949	3	572	1	0.55	1.6
					Total	7.57

Construction Annual DPM Emissions (as PM2.5 Exhaust) Mitigated

Construction Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor $(ug/m3)^{-1}$
1	0.030463338	3	572	1	1.00	0.8
2	0.030463338	3	572	1	1.00	0.8
3	0.030463338	3	572	1	0.55	0.4
					Total	2.01

Cancer Risk Impacts from Construction at the Maximum Impacted Sensitive Receptor - Adult
UTM: 520285.95 4258692.95

Cancer Potency Factor: 1.1 $(mg/kg\text{-}day)^{-1}$
Exposure Frequency 350 days/year
Averaging Period 25550 days

Construction Annual DPM Emissions (as PM2.5 Exhaust) Unmitigated

Construction Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor $(ug/m3)^{-1}$
1	0.114827949	1	261	0.73	1.00	0.3
2	0.114827949	1	261	0.73	1.00	0.3
3	0.114827949	1	261	0.73	0.55	0.2
					Total	0.84

Construction Annual DPM Emissions (as PM2.5 Exhaust) Mitigated

Construction Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor $(ug/m3)^{-1}$
1	0.030463338	1	261	0.73	1.00	0.1
2	0.030463338	1	261	0.73	1.00	0.1
3	0.030463338	1	261	0.73	0.55	0.0
					Total	0.223

City of Santa Rosa—Stonebridge Subdivision Project

UTM: 520285.95 4258692.95

Estimates of Chronic Non-Cancer Hazard Index (CNCHI)

Unmitigated

Chronic Non-Cancer Hazard Index at the Maximum Impacted Sensitive Receptor

Reference Exposure Level (REL) for DPM: 5 ug/m3

CNCHI = DPM/REL

X (m)	Y (m)	Average DPM (ug/m3)	Max DPM (ug/m3)	CNCHI
520285.95	4258692.95	0.1148	0.1148	0.02297

Unmitigated

Annual PM2.5 Total (Exhaust + Fugitive Dust)

X (m)	Y (m)	Average PM2.5 Total (ug/m3)	Max PM2.5 (ug/m3)
520285.95	4258692.95	0.1327	0.1327

Mitigated

Chronic Non-Cancer Hazard Index at the Maximum Impacted Sensitive Receptor

Reference Exposure Level (REL) for DPM: 5 ug/m3

CNCHI = DPM/REL

X (m)	Y (m)	Average DPM (ug/m3)	Max DPM (ug/m3)	CNCHI
520285.95	4258692.95	0.0305	0.0305	0.00609

Mitigated

Annual PM2.5 Total (Exhaust + Fugitive Dust)

X (m)	Y (m)	Average PM2.5 Total (ug/m3)	Max PM2.5 (ug/m3)
520285.95	4258692.95	0.0305	0.0305

City of Santa Rosa—Stonebridge Subdivision Project

Project Site

Construction Annual DPM Emissions (PM2.5 Exhaust) **Mitigated Concentrations**

Annual Average Onsite Total PM2.5 Emission Rate (grams/m2/sec):	1.90E-08
Annual Average Offsite Total PM2.5 Emission Rate - Road Segment 1 (grams/sec):	2.35E-06
Annual Average Offsite Total PM2.5 Emission Rate - Road Segment 2 (grams/sec):	2.05E-06
Annual Average Offsite Total PM2.5 Emission Rate - Road Segment 3 (grams/sec):	2.35E-06
Annual Average Offsite Total PM2.5 Emission Rate - Road Segment 4 (grams/sec):	1.97E-06

Mitigated DPM Concentrations		
Maximum DPM (ug/m3)	**MIR UTM** X	Y
1.2589E-02	520285.95	4258692.95

X	Y	Onsite Project Site Unit Emissions VALUES AVERAGED AVERAGE CONC	Offsite-Road Segment 1 Unit Emissions VALUES AVERAGED AVERAGE CONC	Offsite-Road Segment 2 Unit Emissions VALUES AVERAGED AVERAGE CONC	Offsite-Road Segment 3 Unit Emissions VALUES AVERAGED AVERAGE CONC	Offsite-Road Segment 4 Unit Emissions VALUES AVERAGED AVERAGE CONC	Onsite Project Site Annual DPM Exhaust w/Actual Emissions (ug/m3)	Offsite-Road Segment 1 Annual DPM Exhaust w/Actual Emissions (ug/m3)	Offsite-Road Segment 2 Annual DPM Exhaust w/Actual Emissions (ug/m3)	Offsite-Road Segment 3 Annual DPM Exhaust w/Actual Emissions (ug/m3)	Offsite-Road Segment 4 Annual DPM Exhaust w/Actual Emissions (ug/m3)	**Total DPM (ug/m3)**
520285.95	4258692.95	662010.4627	0.70541	0.47948	0.67924	0.51632	1.26E-02	1.66E-06	9.83E-07	1.59E-06	1.02E-06	1.2589E-02
520276.05	4258692.97	661730.7007	0.7558	0.50671	0.7262	0.54656	1.26E-02	1.77E-06	1.04E-06	1.70E-06	1.08E-06	1.2584E-02
520266.15	4258692.98	661237.0252	0.81334	0.53678	0.77956	0.57991	1.26E-02	1.91E-06	1.10E-06	1.83E-06	1.14E-06	1.2575E-02
520295.85	4258692.94	660914.3292	0.66038	0.45448	0.63708	0.4886	1.26E-02	1.55E-06	9.32E-07	1.50E-06	9.62E-07	1.2568E-02
520256.24	4258693	658495.184	0.87811	0.56962	0.83922	0.61631	1.25E-02	2.06E-06	1.17E-06	1.97E-06	1.21E-06	1.2523E-02
520305.75	4258692.92	656765.0041	0.61928	0.43121	0.59835	0.46286	1.25E-02	1.45E-06	8.84E-07	1.40E-06	9.11E-07	1.2489E-02
520246.34	4258693.02	654632.1663	0.95238	0.60592	0.90721	0.65636	1.24E-02	2.24E-06	1.24E-06	2.13E-06	1.29E-06	1.2450E-02
520315.65	4258692.9	650173.4768	0.58193	0.40963	0.56299	0.43904	1.24E-02	1.37E-06	8.40E-07	1.32E-06	8.64E-07	1.2363E-02
520236.44	4258693.03	647446.2042	1.03669	0.64581	0.9838	0.70018	1.23E-02	2.43E-06	1.32E-06	2.31E-06	1.38E-06	1.2314E-02
520325.55	4258692.89	642068.381	0.54847	0.38984	0.53118	0.41722	1.22E-02	1.29E-06	8.00E-07	1.25E-06	8.21E-07	1.2209E-02
520226.54	4258693.05	639146.7769	1.1371	0.69147	1.07491	0.74946	1.21E-02	2.67E-06	1.42E-06	2.52E-06	1.48E-06	1.2157E-02
520285.96	4258702.95	630959.6637	0.71756	0.46523	0.69024	0.50115	1.20E-02	1.68E-06	9.54E-07	1.62E-06	9.87E-07	1.1999E-02
520276.06	4258702.97	630957.2012	0.7694	0.49114	0.73836	0.52988	1.20E-02	1.81E-06	1.01E-06	1.73E-06	1.04E-06	1.1999E-02
520335.45	4258692.87	630938.432	0.51801	0.37153	0.50211	0.39707	1.20E-02	1.22E-06	7.62E-07	1.18E-06	7.82E-07	1.1997E-02
520266.16	4258702.98	630036.8694	0.82794	0.51957	0.79239	0.56129	1.20E-02	1.94E-06	1.07E-06	1.86E-06	1.10E-06	1.1982E-02
520295.86	4258702.94	629016.2959	0.6711	0.44135	0.64686	0.47468	1.20E-02	1.58E-06	9.05E-07	1.52E-06	9.34E-07	1.1961E-02
520256.26	4258703	627344.6224	0.89421	0.55071	0.85319	0.59556	1.19E-02	2.10E-06	1.13E-06	2.00E-06	1.17E-06	1.1931E-02
520216.64	4258693.07	626935.9391	1.2529	0.74154	1.17902	0.80314	1.19E-02	2.94E-06	1.52E-06	2.77E-06	1.58E-06	1.1926E-02
520305.77	4258702.92	624933.273	0.62914	0.41927	0.60745	0.45023	1.19E-02	1.48E-06	8.60E-07	1.43E-06	8.86E-07	1.1884E-02
520246.36	4258703.02	622952.3412	0.96996	0.58507	0.92233	0.63309	1.18E-02	2.28E-06	1.20E-06	2.17E-06	1.25E-06	1.1848E-02
520315.67	4258702.9	618385.3726	0.59112	0.39882	0.57155	0.42761	1.18E-02	1.39E-06	8.18E-07	1.34E-06	8.42E-07	1.1759E-02
520236.46	4258703.03	616231.652	1.05663	0.62291	1.00088	0.67408	1.17E-02	2.48E-06	1.28E-06	2.35E-06	1.33E-06	1.1721E-02
520345.35	4258692.85	615114.5187	0.48991	0.35441	0.47519	0.37827	1.17E-02	1.15E-06	7.27E-07	1.12E-06	7.45E-07	1.1696E-02
520206.74	4258693.08	611044.6617	1.39025	0.79675	1.30102	0.86205	1.16E-02	3.26E-06	1.63E-06	3.05E-06	1.70E-06	1.1625E-02
520325.57	4258702.89	610001.1955	0.5568	0.37996	0.53899	0.40674	1.16E-02	1.31E-06	7.79E-07	1.27E-06	8.01E-07	1.1599E-02
520226.56	4258703.05	607387.9481	1.15843	0.6654	1.09288	0.71947	1.15E-02	2.72E-06	1.36E-06	2.57E-06	1.42E-06	1.1553E-02
520335.47	4258702.87	599219.393	0.52565	0.36253	0.50934	0.3875	1.14E-02	1.23E-06	7.44E-07	1.20E-06	7.63E-07	1.1394E-02
520216.66	4258703.07	595412.1692	1.27692	0.71237	1.19948	0.76912	1.13E-02	3.00E-06	1.46E-06	2.82E-06	1.51E-06	1.1326E-02
520355.25	4258692.84	594099.7587	0.46433	0.33858	0.45059	0.36092	1.13E-02	1.09E-06	6.94E-07	1.06E-06	7.10E-07	1.1296E-02
520196.84	4258693.1	589909.9555	1.55429	0.85851	1.44609	0.92722	1.12E-02	3.65E-06	1.76E-06	3.39E-06	1.83E-06	1.1224E-02
520345.37	4258702.85	583195.2902	0.49683	0.34617	0.48175	0.36946	1.11E-02	1.17E-06	7.10E-07	1.13E-06	7.27E-07	1.1089E-02
520206.76	4258703.08	579527.2475	1.4173	0.76346	1.32431	0.82309	1.10E-02	3.33E-06	1.57E-06	3.11E-06	1.62E-06	1.1025E-02
520157.12	4258646.05	572750.5551	2.41391	1.62136	2.20438	1.77451	1.09E-02	5.67E-06	3.33E-06	5.18E-06	3.49E-06	1.0905E-02
520365.15	4258692.82	564099.0537	0.44038	0.32363	0.42748	0.34458	1.07E-02	1.03E-06	6.64E-07	1.00E-06	6.78E-07	1.0726E-02
520355.27	4258702.84	562308.3214	0.4705	0.33099	0.45646	0.35275	1.07E-02	1.10E-06	6.79E-07	1.07E-06	6.94E-07	1.0692E-02
520186.94	4258693.12	561775.8411	1.75507	0.92751	1.62237	0.99969	1.07E-02	4.12E-06	1.90E-06	3.81E-06	1.97E-06	1.0690E-02
520157.12	4258655.32	561759.9611	2.48739	1.52577	2.26179	1.65906	1.07E-02	5.84E-06	3.13E-06	5.31E-06	3.27E-06	1.0696E-02
520196.86	4258703.1	558250.8976	1.58571	0.81999	1.47332	0.88255	1.06E-02	3.72E-06	1.68E-06	3.46E-06	1.74E-06	1.0622E-02
520147.12	4258646.05	551368.5226	2.90149	1.83714	2.61828	2.00195	1.05E-02	6.81E-06	3.77E-06	6.15E-06	3.94E-06	1.0501E-02
520147.12	4258655.32	539010.2038	2.98985	1.71437	2.6866	1.85484	1.02E-02	7.02E-06	3.52E-06	6.31E-06	3.65E-06	1.0266E-02
520365.17	4258702.82	534151.4274	0.44628	0.31685	0.4331	0.33721	1.02E-02	1.05E-06	6.50E-07	1.02E-06	6.64E-07	1.0157E-02
520157.12	4258664.6	531634.1877	2.55475	1.43574	2.31624	1.55154	1.01E-02	6.00E-06	2.94E-06	5.44E-06	3.05E-06	1.0123E-02
520186.96	4258703.12	529735.306	1.79066	0.88188	1.65298	0.94795	1.01E-02	4.20E-06	1.81E-06	3.88E-06	1.87E-06	1.0081E-02
520177.04	4258693.13	525404.7531	2.00342	1.00358	1.83797	1.07998	9.99E-03	4.70E-06	2.06E-06	4.31E-06	2.13E-06	1.0000E-02
520137.12	4258646.05	525153.9319	3.57866	2.09768	3.18247	2.27288	9.98E-03	8.40E-06	4.30E-06	7.47E-06	4.47E-06	1.0007E-02
520375.05	4258692.8	523276.3796	0.41865	0.30989	0.40644	0.32958	9.95E-03	9.83E-07	6.36E-07	9.54E-07	6.49E-07	9.9498E-03
520137.12	4258655.32	512025.5326	3.6851	1.93506	3.26165	2.08215	9.73E-03	8.65E-06	3.97E-06	7.66E-06	4.10E-06	9.7571E-03
520276.1	4258722.97	505674.2331	0.79371	0.46183	0.75976	0.49782	9.61E-03	1.86E-06	9.47E-07	1.78E-06	9.80E-07	9.6175E-03
520286	4258722.95	505256.639	0.73952	0.43808	0.70971	0.47189	9.60E-03	1.74E-06	8.98E-07	1.67E-06	9.29E-07	9.6092E-03
520266.2	4258722.98	504669.1133	0.85464	0.48778	0.8158	0.52592	9.59E-03	2.01E-06	1.00E-06	1.92E-06	1.04E-06	9.5988E-03
520295.9	4258722.94	503301.2402	0.69121	0.41641	0.66492	0.44806	9.57E-03	1.62E-06	8.54E-07	1.56E-06	8.82E-07	9.5718E-03
520147.12	4258664.6	502477.166	3.06715	1.599	2.74954	1.72011	9.55E-03	7.20E-06	3.28E-06	6.46E-06	3.39E-06	9.5715E-03
520256.29	4258723	502068.1672	0.92375	0.51606	0.87902	0.55632	9.54E-03	2.17E-06	1.06E-06	2.06E-06	1.10E-06	9.5498E-03
520305.8	4258722.92	499711.4967	0.64774	0.39649	0.6244	0.42605	9.50E-03	1.52E-06	8.13E-07	1.47E-06	8.39E-07	9.5033E-03
520246.39	4258723.02	497859.4119	1.00257	0.54684	0.95073	0.58917	9.46E-03	2.35E-06	1.12E-06	2.23E-06	1.16E-06	9.4703E-03
520375.07	4258702.8	495316.0666	0.42383	0.30359	0.41136	0.32267	9.42E-03	9.95E-07	6.23E-07	9.66E-07	6.35E-07	9.4183E-03
520315.7	4258722.9	493976.8157	0.60825	0.37772	0.58724	0.40533	9.39E-03	1.43E-06	7.75E-07	1.38E-06	7.98E-07	9.3940E-03
520157.12	4258673.87	493534.2778	2.61469	1.34986	2.36669	1.45215	9.38E-03	6.14E-06	2.77E-06	5.56E-06	2.86E-06	9.3985E-03
520127.12	4258646.05	492895.6744	4.55641	2.41345	3.98368	2.59237	9.37E-03	1.07E-05	4.95E-06	9.35E-06	5.10E-06	9.3992E-03
520236.49	4258723.03	491916.287	1.09317	0.58035	1.03274	0.62471	9.35E-03	2.57E-06	1.19E-06	2.42E-06	1.23E-06	9.3579E-03
520177.05	4258703.13	491915.5288	2.04404	0.94969	1.87246	1.02006	9.35E-03	4.80E-06	1.95E-06	4.40E-06	2.01E-06	9.3636E-03
520325.6	4258722.89	485086.5142	0.57235	0.36042	0.55332	0.38619	9.22E-03	1.34E-06	7.39E-07	1.30E-06	7.60E-07	9.2248E-03
520226.59	4258723.05	483881.6868	1.19826	0.61692	1.12752	0.66328	9.20E-03	2.81E-06	1.27E-06	2.65E-06	1.31E-06	9.2057E-03
520127.12	4258655.32	480354.9216	4.68376	2.19799	4.07203	2.34136	9.13E-03	1.10E-05	4.51E-06	9.56E-06	4.61E-06	9.1604E-03
520167.14	4258693.15	479970.9033	2.31789	1.08767	2.10702	1.16908	9.12E-03	5.44E-06	2.23E-06	4.95E-06	2.30E-06	9.1383E-03
520335.5	4258722.87	473811.8752	0.53964	0.34439	0.52227	0.36844	9.01E-03	1.27E-06	7.06E-07	1.23E-06	7.25E-07	9.0102E-03
520137.12	4258664.6	473513.4601	3.77541	1.78691	3.33266	1.91154	9.00E-03	8.86E-06	3.66E-06	7.82E-06	3.76E-06	9.0247E-03
520216.69	4258723.07	473418.3444	1.32151	0.65686	1.23821	0.70529	9.00E-03	3.10E-06	1.35E-06	2.91E-06	1.39E-06	9.0076E-03
520384.96	4258692.79	467816.7544	0.39843	0.29701	0.38682	0.31554	8.89E-03	9.35E-07	6.09E-07	9.08E-07	6.21E-07	8.8954E-03
520157.12	4258683.15	461931.6033	2.67282	1.26628	2.40997	1.36004	8.78E-03	6.27E-06	2.60E-06	5.66E-06	2.68E-06	8.7977E-03
520206.79	4258723.08	459749.9231	1.46709	0.69966	1.36788	0.75072	8.74E-03	3.44E-06	1.43E-06	3.21E-06	1.48E-06	8.7486E-03
520345.4	4258722.85	459676.8086	0.50982	0.32951	0.49383	0.35197	8.74E-03	1.20E-06	6.76E-07	1.16E-06	6.93E-07	8.7413E-03
520147.12	4258673.87	458448.1957	3.13449	1.49094	2.80621	1.59781	8.71E-03	7.36E-06	3.06E-06	6.59E-06	3.15E-06	8.7344E-03
520117.12	4258646.05	453337.2361	6.02456	2.80275	5.18464	2.95182	8.62E-03	1.41E-05	5.75E-06	1.22E-05	5.81E-06	8.6550E-03
520384.97	4258702.79	444201.6386	0.40308	0.2912	0.39121	0.30911	8.44E-03	9.46E-07	5.97E-07	9.18E-07	6.08E-07	8.4465E-03
520286.01	4258732.95	443470.6967	0.74861	0.42495	0.71744	0.45747	8.43E-03	1.76E-06	8.72E-07	1.68E-06	9.01E-07	8.4348E-03
520276.11	4258732.97	443321.6464	0.80306	0.44739	0.76758	0.48176	8.43E-03	1.89E-06	9.18E-07	1.80E-06	9.48E-07	8.4323E-03
520295.91	4258732.94	443194.7901	0.70049	0.40463	0.67307	0.43525	8.42E-03	1.64E-06	8.30E-07	1.58E-06	8.57E-07	8.4292E-03
520117.12	4258655.32	442679.2421	6.17731	2.51752	5.27774	2.61964	8.41E-03	1.45E-05	5.16E-06	1.24E-05	5.16E-06	8.4517E-03
520196.89	4258723.1	441936.3227	1.64127	0.74603	1.52191	0.80023	8.40E-03	3.85E-06	1.53E-06	3.57E-06	1.58E-06	8.4109E-03
520266.21	4258732.98	441922.7961	0.8643	0.47181	0.82376	0.50799	8.40E-03	2.03E-06	9.68E-07	1.93E-06	1.00E-06	8.4061E-03
520355.3	4258722.84	441578.9503	0.48248	0.31564	0.46764	0.33663	8.39E-03	1.13E-06	6.47E-07	1.10E-06	6.63E-07	8.3972E-03
520127.12	4258664.6	441242.8549	4.78308	2.01127	4.15275	2.12313	8.39E-03	1.12E-05	4.12E-06	9.75E-06	4.18E-06	8.4165E-03
520256.31	4258733	440473.4092	0.93504	0.49867	0.88843	0.53664	8.37E-03	2.20E-06	1.02E-06	2.09E-06	1.06E-06	8.3790E-03
520305.82	4258732.92	439595.7048	0.65618	0.3856	0.63191	0.41433	8.36E-03	1.54E-06	7.91E-07	1.48E-06	8.16E-07	8.3605E-03
520246.41	4258733.02	436140.439	1.01423	0.52751	0.96051	0.56717	8.29E-03	2.38E-06	1.08E-06	2.25E-06	1.12E-06	8.2971E-03
520236.51	4258733.03	430262.5705	1.10508	0.55874	1.04291	0.60012	8.18E-03	2.59E-06	1.15E-06	2.45E-06	1.18E-06	8.1859E-03
520315.72	4258732.9	430094.4625	0.61423	0.36682	0.59234	0.39379	8.18E-03	1.44E-06	7.52E-07	1.39E-06	7.75E-07	8.1797E-03
520226.61	4258733.05	425077.4163	1.2144	0.59309	1.14168	0.63637	8.08E-03	2.85E-06	1.22E-06	2.68E-06	1.25E-06	8.0880E-03
520137.12	4258673.87	425012.9196	3.84051	1.65525	3.3984	1.75984	8.08E-03	9.02E-06	3.39E-06	7.98E-06	3.46E-06	8.1026E-03
520325.62	4258732.89	422924.2617	0.57832	0.35049	0.55854	0.37573	8.04E-03	1.36E-06	7.19E-07	1.31E-06	7.40E-07	8.0432E-03
520147.12	4258683.15	422825.3067	3.20665	1.38833	2.8509	1.48633	8.04E-03	7.53E-06	2.85E-06	6.69E-06	2.93E-06	8.0571E-03
520160.07	4258700.23	421059.4477	2.63003	1.10318	2.36922	1.18257	8.00E-03	6.17E-06	2.26E-06	5.56E-06	2.33E-06	8.0199E-03
520365.2	4258722.82	419786.6962	0.45753	0.30285	0.44368	0.32246	7.98E-03	1.07E-06	6.21E-07	1.04E-06	6.35E-07	7.9828E-03
520186.99	4258723.12	418859.9409	1.85237	0.79609	1.70623	0.85397	7.96E-03	4.35E-06	1.63E-06	4.01E-06	1.68E-06	7.9734E-03
520216.71	4258733.07	416895.7376	1.34162	0.6299	1.25594	0.67537	7.92E-03	3.15E-06	1.29E-06	2.95E-06	1.33E-06	7.9332E-03
520335.52	4258732.87	412508.9499	0.5451	0.33513	0.5271	0.35875	7.84E-03	1.28E-06	6.87E-07	1.24E-06	7.06E-07	7.8450E-03
520117.12	4258664.6	405962.6887	6.2821	2.2804	5.36663	2.34026	7.72E-03	1.47E-05	4.68E-06	1.26E-05	4.61E-06	7.7532E-03
520107.12	4258646.05	405286.502	8.29137	3.27618	7.12267	3.30505	7.70E-03	1.95E-05	6.72E-06	1.67E-05	6.51E-06	7.7532E-03
520206.81	4258733.08	403304.9696	1.48556	0.66809	1.38397	0.71652	7.67E-03	3.49E-06	1.37E-06	3.25E-06	1.41E-06	7.6756E-03
520394.86	4258692.77	402093.9677	0.37942	0.28482	0.36831	0.30228	7.64E-03	8.91E-07	5.84E-07	8.65E-07	5.95E-07	7.6460E-03
520345.42	4258732.85	398873.3084	0.51451	0.32073	0.498	0.34282	7.58E-03	1.21E-06	6.58E-07	1.17E-06	6.75E-07	7.5856E-03
520107.12	4258655.32	396695.3815	8.46977	2.89289	7.213	2.87536	7.54E-03	1.99E-05	5.93E-06	1.69E-05	5.66E-06	7.5889E-03
520276.13	4258742.97	393455.3145	0.81425	0.43442	0.77748	0.46701	7.48E-03	1.91E-06	8.91E-07	1.83E-06	9.19E-07	7.4844E-03
520286.03	4258742.95	393424.8123	0.75885	0.41304	0.72651	0.44405	7.48E-03	1.78E-06	8.47E-07	1.71E-06	8.74E-07	7.4835E-03
520295.93	4258742.94	392026.7775	0.70941	0.3935	0.68093	0.42289	7.45E-03	1.67E-06	8.07E-07	1.60E-06	8.32E-07	7.4566E-03
520127.12	4258673.87	392001.7998	4.82933	1.85072	4.22761	1.93337	7.45E-03	1.13E-05	3.80E-06	9.93E-06	3.81E-06	7.4801E-03
520266.23	4258742.98	391799.814	0.87593	0.45746	0.83403	0.49154	7.45E-03	2.06E-06	9.38E-07	1.96E-06	9.68E-07	7.4533E-03
520375.11	4258722.8	390522.566	0.43414	0.29067	0.42107	0.30901	7.42E-03	1.02E-06	5.96E-07	9.89E-07	6.08E-07	7.4263E-03
520256.33	4258743	390273.9548	0.94759	0.48275	0.89956	0.51832	7.42E-03	2.22E-06	9.90E-07	2.11E-06	1.02E-06	7.4247E-03
520177.09	4258723.13	390188.0308	2.11218	0.85123	1.93009	0.91256	7.42E-03	4.96E-06	1.75E-06	4.53E-06	1.80E-06	7.4298E-03
520305.83	4258742.92	388393.5673	0.66434	0.37519	0.6391	0.40297	7.38E-03	1.56E-06	7.69E-07	1.50E-06	7.93E-07	7.3873E-03
520137.12	4258683.15	388111.7385	3.93849	1.53176	3.44433	1.62481	7.38E-03	9.25E-06	3.14E-06	8.09E-06	3.20E-06	7.4010E-03
520246.43	4258743.02	386888.3886	1.02862	0.50985	0.9734	0.54694	7.35E-03	2.41E-06	1.05E-06	2.29E-06	1.08E-06	7.3609E-03
520196.91	4258733.1	386868.8806	1.65823	0.70949	1.53631	0.76131	7.35E-03	3.89E-06	1.46E-06	3.61E-06	1.50E-06	7.3641E-03
520394.87	4258702.77	383280.803	0.38378	0.27957	0.37241	0.29641	7.29E-03	9.01E-07	5.73E-07	8.74E-07	5.83E-07	7.2884E-03
520355.32	4258732.84	382917.3022	0.48694	0.30754	0.47163	0.32819	7.28E-03	1.14E-06	6.31E-07	1.11E-06	6.46E-07	7.2821E-03
520236.53	4258743.03	382285.2374	1.12206	0.539	1.05818	0.57776	7.27E-03	2.63E-06	1.11E-06	2.48E-06	1.14E-06	7.2739E-03
520315.73	4258742.9	379516.2051	0.6214	0.357	0.59862	0.38323	7.21E-03	1.46E-06	7.32E-07	1.41E-06	7.54E-07	7.2183E-03
520226.63	4258743.05	377159.099	1.23258	0.57048	1.15802	0.61121	7.17E-03	2.89E-06	1.17E-06	2.72E-06	1.20E-06	7.1771E-03
520325.63	4258742.89	372767.896	0.58501	0.34135	0.56444	0.36601	7.09E-03	1.37E-06	7.00E-07	1.33E-06	7.20E-07	7.0898E-03
520216.72	4258743.07	369290.478	1.36068	0.60388	1.2729	0.64707	7.02E-03	3.19E-06	1.24E-06	2.99E-06	1.27E-06	7.0282E-03
520187.01	4258733.12	367383.6721	1.86951	0.75494	1.7206	0.81017	6.98E-03	4.39E-06	1.55E-06	4.04E-06	1.59E-06	6.9949E-03
520107.12	4258664.6	364666.488	8.58552	2.58252	7.30115	2.52874	6.93E-03	2.02E-05	5.30E-06	1.71E-05	4.98E-06	6.9792E-03
520365.22	4258732.82	364491.551	0.46206	0.29545	0.44773	0.31478	6.93E-03	1.08E-06	6.06E-07	1.05E-06	6.20E-07	6.9317E-03
520335.53	4258742.87	363255.4372	0.55134	0.32663	0.53264	0.34978	6.90E-03	1.29E-06	6.70E-07	1.25E-06	6.89E-07	6.9087E-03
520117.12	4258673.87	358682.5779	6.27831	2.08017	5.44927	2.10424	6.82E-03	1.47E-05	4.27E-06	1.28E-05	4.14E-06	6.8538E-03
520206.82	4258743.08	357457.2179	1.50677	0.63879	1.40259	0.68501	6.79E-03	3.54E-06	1.31E-06	3.29E-06	1.35E-06	6.8041E-03
520142.99	4258697.3	357304.0426	3.5693	1.30295	3.14066	1.38187	6.79E-03	8.38E-06	2.67E-06	7.37E-06	2.72E-06	6.8128E-03
520127.12	4258683.15	356214.8165	4.97931	1.70276	4.27691	1.76981	6.77E-03	1.17E-05	3.49E-06	1.00E-05	3.48E-06	6.7997E-03
520385.01	4258722.79	354960.1158	0.41245	0.27924	0.40003	0.2964	6.75E-03	9.68E-07	5.73E-07	9.39E-07	5.83E-07	6.7502E-03
520345.44	4258742.85	351174.4886	0.52041	0.31286	0.50328	0.33457	6.68E-03	1.22E-06	6.42E-07	1.18E-06	6.59E-07	6.6789E-03
520276.15	4258752.97	350226.7969	0.82382	0.42162	0.78592	0.45238	6.66E-03	1.93E-06	8.65E-07	1.85E-06	8.91E-07	6.6627E-03
520286.05	4258752.95	349840.2368	0.76761	0.40127	0.73414	0.43073	6.65E-03	1.80E-06	8.23E-07	1.72E-06	8.48E-07	6.6550E-03
520266.25	4258752.98	349714.4292	0.8874	0.44361	0.84432	0.47567	6.65E-03	2.08E-06	9.10E-07	1.98E-06	9.36E-07	6.6534E-03
520295.95	4258752.94	348899.204	0.71784	0.38263	0.68827	0.41072	6.63E-03	1.69E-06	7.85E-07	1.62E-06	8.08E-07	6.6368E-03
520256.34	4258753	348163.1831	0.95986	0.46728	0.91064	0.50068	6.62E-03	2.25E-06	9.58E-07	2.14E-06	9.86E-07	6.6243E-03
520097.12	4258646.05	347956.3173	11.65187	3.77005	10.63734	3.54717	6.61E-03	2.74E-05	7.73E-06	2.50E-05	6.98E-06	6.6811E-03
520305.85	4258752.92	345341.9954	0.67218	0.36519	0.64593	0.39188	6.56E-03	1.58E-06	7.49E-07	1.52E-06	7.71E-07	6.5689E-03
520246.44	4258753.02	345010.8408	1.04171	0.49242	0.98527	0.52729	6.56E-03	2.45E-06	1.01E-06	2.31E-06	1.04E-06	6.5648E-03
520177.1	4258733.13	344232.1051	2.13034	0.80545	1.94512	0.86335	6.54E-03	5.00E-06	1.65E-06	4.57E-06	1.70E-06	6.5561E-03
520196.92	4258743.1	343214.1268	1.68112	0.67672	1.5561	0.72611	6.52E-03	3.95E-06	1.39E-06	3.65E-06	1.43E-06	6.5343E-03
520097.12	4258655.32	340656.94	11.84468	3.25763	10.70451	3.03674	6.48E-03	2.78E-05	6.68E-06	2.51E-05	5.98E-06	6.5409E-03
520236.54	4258753.03	340539.5144	1.13551	0.51913	1.07039	0.55578	6.47E-03	2.67E-06	1.06E-06	2.51E-06	1.09E-06	6.4804E-03
520375.12	4258732.8	338741.735	0.43783	0.28355	0.42435	0.30163	6.44E-03	1.03E-06	5.82E-07	9.96E-07	5.94E-07	6.4421E-03
520315.75	4258752.9	337567.1678	0.62872	0.34781	0.60503	0.37316	6.42E-03	1.48E-06	7.13E-07	1.42E-06	7.35E-07	6.4209E-03
520355.34	4258742.84	336783.4346	0.49229	0.30014	0.47644	0.32047	6.40E-03	1.16E-06	6.16E-07	1.12E-06	6.31E-07	6.4052E-03
520226.64	4258753.05	335861.3664	1.24752	0.54802	1.1714	0.58689	6.38E-03	2.93E-06	1.12E-06	2.75E-06	1.16E-06	6.3921E-03
520325.65	4258752.89	330900.4631	0.5915	0.33265	0.5701	0.35662	6.29E-03	1.39E-06	6.82E-07	1.34E-06	7.02E-07	6.2939E-03
520216.74	4258753.07	329414.4198	1.37801	0.57874	1.28823	0.62015	6.26E-03	3.24E-06	1.19E-06	3.02E-06	1.22E-06	6.2702E-03
520187.02	4258743.12	326444.1806	1.89284	0.71852	1.74055	0.7707	6.21E-03	4.44E-06	1.47E-06	4.09E-06	1.52E-06	6.2166E-03
520117.12	4258683.15	324716.8062	6.51238	1.89936	5.5032	1.90713	6.17E-03	1.53E-05	3.90E-06	1.29E-05	3.75E-06	6.2081E-03
520335.55	4258752.87	322074.6451	0.55725	0.31843	0.53781	0.34105	6.12E-03	1.31E-06	6.53E-07	1.26E-06	6.71E-07	6.1260E-03
520107.12	4258673.87	321083.8887	8.40645	2.32693	7.38238	2.24471	6.10E-03	1.97E-05	4.77E-06	1.73E-05	4.42E-06	6.1495E-03
520365.24	4258742.82	320208.0844	0.46676	0.28843	0.45197	0.30747	6.09E-03	1.10E-06	5.92E-07	1.06E-06	6.05E-07	6.0899E-03
520206.84	4258753.08	318642.7183	1.52406	0.61073	1.41773	0.65507	6.06E-03	3.58E-06	1.25E-06	3.33E-06	1.29E-06	6.0663E-03
520167.2	4258733.15	318486.6464	2.45598	0.86208	2.22171	0.92062	6.05E-03	5.77E-06	1.77E-06	5.22E-06	1.81E-06	6.0684E-03
520276.16	4258762.97	313868.4802	0.83324	0.40924	0.79438	0.43826	5.97E-03	1.96E-06	8.39E-07	1.86E-06	8.63E-07	5.9716E-03
520266.26	4258762.98	313520.6912	0.89759	0.42988	0.85357	0.46009	5.96E-03	2.11E-06	8.82E-07	2.00E-06	9.06E-07	5.9654E-03
520286.06	4258762.95	313078.043	0.77594	0.38991	0.74151	0.41779	5.95E-03	1.82E-06	8.00E-07	1.74E-06	8.22E-07	5.9562E-03
520097.12	4258664.6	312508.3724	11.80095	2.85555	10.77015	2.63932	5.94E-03	2.77E-05	5.86E-06	2.53E-05	5.20E-06	6.0043E-03
520295.96	4258762.94	312494.4961	0.72614	0.37234	0.69561	0.39906	5.94E-03	1.70E-06	7.64E-07	1.63E-06	7.86E-07	5.9448E-03
520256.36	4258763	311613.6424	0.96948	0.45157	0.91945	0.48313	5.92E-03	2.28E-06	9.26E-07	2.16E-06	9.51E-07	5.9295E-03
520135.92	4258704.38	311567.5546	4.18531	1.32404	3.635	1.38081	5.92E-03	9.83E-06	2.72E-06	8.53E-06	2.72E-06	5.9461E-03
520345.45	4258752.85	311480.473	0.5261	0.30528	0.50829	0.32656	5.92E-03	1.24E-06	6.26E-07	1.19E-06	6.43E-07	5.9244E-03
520314.49	4258473.05	309388.376	0.4091	0.59145	0.40726	0.64915	5.88E-03	9.60E-07	1.21E-06	9.56E-07	1.28E-06	5.8853E-03
520324.28	4258473.08	309380.531	0.3929	0.55447	0.39097	0.60731	5.88E-03	9.22E-07	1.14E-06	9.18E-07	1.20E-06	5.8849E-03
520385.02	4258732.79	309128.6763	0.41544	0.27236	0.40266	0.2893	5.88E-03	9.75E-07	5.59E-07	9.45E-07	5.69E-07	5.8790E-03
520305.87	4258762.92	309021.4444	0.67971	0.35555	0.65248	0.3811	5.87E-03	1.60E-06	7.29E-07	1.53E-06	7.50E-07	5.8785E-03
520246.46	4258763.02	308951.7955	1.05222	0.47477	0.99494	0.50793	5.87E-03	2.47E-06	9.74E-07	2.34E-06	1.00E-06	5.8794E-03
520334.07	4258473.11	308859.1791	0.37762	0.52078	0.37559	0.56927	5.87E-03	8.87E-07	1.07E-06	8.82E-07	1.12E-06	5.8748E-03
520304.7	4258473.02	308781.8041	0.42627	0.63235	0.4245	0.69548	5.87E-03	1.00E-06	1.30E-06	9.97E-07	1.37E-06	5.8740E-03
520158.35	4258729.5	307585.4136	2.82364	0.93886	2.52774	0.9971	5.85E-03	6.63E-06	1.93E-06	5.93E-06	1.96E-06	5.8631E-03
520294.91	4258472.99	307507.9439	0.44459	0.67825	0.44285	0.74746	5.85E-03	1.04E-06	1.39E-06	1.04E-06	1.47E-06	5.8501E-03

520177.12	4258743.13	307433.964	2.15529	0.76532	1.96619	0.81915	5.84E-03	5.06E-06	1.57E-06	4.62E-06	1.61E-06	5.8566E-03
520343.86	4258473.14	307369.3703	0.36323	0.49071	0.36119	0.53516	5.84E-03	8.53E-07	1.01E-06	8.48E-07	1.05E-06	5.8463E-03
520196.94	4258753.1	306508.537	1.7	0.64589	1.57248	0.69295	5.83E-03	3.99E-06	1.32E-06	3.69E-06	1.36E-06	5.8365E-03
520285.12	4258472.96	305923.0394	0.46418	0.72976	0.46237	0.80594	5.82E-03	1.09E-06	1.50E-06	1.09E-06	1.59E-06	5.8203E-03
520236.56	4258763.03	305242.9034	1.14743	0.49943	1.08134	0.53454	5.80E-03	2.69E-06	1.02E-06	2.54E-06	1.05E-06	5.8094E-03
520353.64	4258473.18	304906.1484	0.34956	0.46374	0.34766	0.50442	5.80E-03	8.21E-07	9.51E-07	8.16E-07	9.93E-07	5.7993E-03
520120.79	4258692	304057.1432	5.94848	1.6873	5.04001	1.70436	5.78E-03	1.40E-05	3.46E-06	1.18E-05	3.36E-06	5.8122E-03
520275.33	4258472.93	303845.8375	0.48512	0.7875	0.48306	0.87185	5.78E-03	1.14E-06	1.62E-06	1.13E-06	1.72E-06	5.7812E-03
520315.77	4258762.9	302711.3836	0.6364	0.33922	0.61179	0.3636	5.75E-03	1.49E-06	6.96E-07	1.44E-06	7.16E-07	5.7583E-03
520265.55	4258472.9	301433.2026	0.50759	0.85278	0.50514	0.94681	5.73E-03	1.19E-06	1.75E-06	1.19E-06	1.86E-06	5.7357E-03
520226.66	4258763.05	301251.3709	1.2613	0.52631	1.18384	0.5637	5.73E-03	2.96E-06	1.08E-06	2.78E-06	1.11E-06	5.7342E-03
520411.9	4258689.91	301035.6197	0.34861	0.26683	0.33828	0.28283	5.72E-03	8.18E-07	5.47E-07	7.94E-07	5.57E-07	5.7249E-03
520363.43	4258473.21	300053.3675	0.33664	0.43866	0.3348	0.47603	5.70E-03	7.90E-07	9.00E-07	7.86E-07	9.37E-07	5.7069E-03
520375.14	4258742.8	298699.69	0.4422	0.277	0.42831	0.29484	5.68E-03	1.04E-06	5.68E-07	1.01E-06	5.80E-07	5.6809E-03
520355.35	4258752.84	298671.9701	0.49749	0.293	0.48105	0.313	5.68E-03	1.17E-06	6.01E-07	1.13E-06	6.16E-07	5.6807E-03
520255.76	4258472.87	298393.792	0.53165	0.92636	0.52869	1.03215	5.67E-03	1.25E-06	1.90E-06	1.24E-06	2.03E-06	5.6783E-03
520325.67	4258762.89	296118.0267	0.59816	0.32449	0.57593	0.34765	5.63E-03	1.40E-06	6.66E-07	1.35E-06	6.84E-07	5.6328E-03
520216.76	4258763.07	295750.1791	1.39413	0.55483	1.30253	0.59474	5.62E-03	3.27E-06	1.14E-06	3.06E-06	1.17E-06	5.6303E-03
520245.97	4258472.84	294852.677	0.55746	1.01014	0.55415	1.13019	5.60E-03	1.31E-06	2.07E-06	1.30E-06	2.22E-06	5.6115E-03
520373.22	4258473.24	294038.7965	0.32441	0.41565	0.32263	0.45004	5.59E-03	7.62E-07	8.52E-07	7.57E-07	8.86E-07	5.5924E-03
520149.5	4258725.84	293506.6039	3.28357	1.02766	2.90592	1.08172	5.58E-03	7.71E-06	2.11E-06	6.82E-06	2.13E-06	5.5978E-03
520324.31	4258463.08	292757.9722	0.38593	0.5623	0.38497	0.61518	5.56E-03	9.06E-07	1.15E-06	9.04E-07	1.21E-06	5.5690E-03
520314.52	4258463.05	292651.8782	0.40143	0.60011	0.40051	0.65781	5.56E-03	9.42E-07	1.23E-06	9.40E-07	1.29E-06	5.5672E-03
520187.04	4258753.12	292520.9451	1.91434	0.68489	1.75888	0.73404	5.56E-03	4.49E-06	1.40E-06	4.13E-06	1.44E-06	5.5718E-03
520334.1	4258463.11	292254.7825	0.37132	0.52792	0.37021	0.57656	5.56E-03	8.72E-07	1.08E-06	8.69E-07	1.13E-06	5.5592E-03
520304.73	4258463.02	292020.5697	0.41787	0.64196	0.41688	0.70515	5.55E-03	9.81E-07	1.32E-06	9.79E-07	1.39E-06	5.5554E-03
520343.89	4258463.14	291048.6843	0.35748	0.4969	0.35625	0.54166	5.53E-03	8.39E-07	1.02E-06	8.36E-07	1.07E-06	5.5361E-03
520294.94	4258462.99	290883.374	0.43532	0.68855	0.43413	0.75807	5.53E-03	1.02E-06	1.41E-06	1.02E-06	1.49E-06	5.5341E-03
520107.12	4258683.15	290861.2075	8.83842	2.10028	7.43733	2.01516	5.53E-03	2.07E-05	4.31E-06	1.75E-05	3.97E-06	5.5752E-03
520236.18	4258472.81	290657.2599	0.58527	1.1071	0.58213	1.24422	5.52E-03	1.37E-06	2.27E-06	1.37E-06	2.45E-06	5.5323E-03
520408.97	4258706.94	290326.3214	0.36	0.26211	0.34908	0.27735	5.52E-03	8.45E-07	5.38E-07	8.20E-07	5.46E-07	5.5213E-03
520383.01	4258473.27	289318.9019	0.31291	0.39405	0.31103	0.42588	5.50E-03	7.35E-07	8.08E-07	7.30E-07	8.38E-07	5.5025E-03
520285.15	4258462.96	289266.1503	0.45389	0.74076	0.45236	0.81766	5.50E-03	1.07E-06	1.52E-06	1.06E-06	1.61E-06	5.5037E-03
520353.67	4258463.18	288080.5409	0.34433	0.46911	0.34309	0.51022	5.48E-03	8.08E-07	9.62E-07	8.05E-07	1.00E-06	5.4795E-03
520124.46	4258700.84	287791.9041	5.46281	1.5151	4.65242	1.53607	5.47E-03	1.28E-05	3.11E-06	1.09E-05	3.02E-06	5.5003E-03
520335.57	4258762.87	287744.711	0.56307	0.31067	0.54287	0.33264	5.47E-03	1.32E-06	6.37E-07	1.27E-06	6.55E-07	5.4734E-03
520275.37	4258462.93	287212.9599	0.47366	0.79909	0.47168	0.88478	5.46E-03	1.11E-06	1.64E-06	1.11E-06	1.74E-06	5.4650E-03
520167.22	4258743.15	286402.3925	2.48069	0.81779	2.2428	0.87084	5.44E-03	5.82E-06	1.68E-06	5.27E-06	1.71E-06	5.4585E-03
520206.86	4258763.08	286348.8114	1.54078	0.58452	1.43237	0.62704	5.44E-03	3.62E-06	1.20E-06	3.36E-06	1.23E-06	5.4524E-03
520226.39	4258472.78	286111.8106	0.61498	1.21923	0.61294	1.37703	5.44E-03	1.44E-06	2.50E-06	1.44E-06	2.71E-06	5.4466E-03
520265.58	4258462.9	284685.1689	0.49476	0.86524	0.49241	0.96126	5.41E-03	1.16E-06	1.77E-06	1.16E-06	1.89E-06	5.4173E-03
520365.25	4258752.82	284157.1373	0.47148	0.28169	0.45617	0.30045	5.40E-03	1.11E-06	5.78E-07	1.07E-06	5.91E-07	5.4047E-03
520276.18	4258772.97	283031.5062	0.84253	0.39716	0.80285	0.42461	5.38E-03	1.98E-06	8.15E-07	1.88E-06	8.36E-07	5.3854E-03
520087.12	4258646.05	283013.5226	12.31595	4.06718	18.58445	3.57844	5.38E-03	2.89E-05	8.34E-06	4.36E-05	7.04E-06	5.4675E-03
520266.28	4258772.98	282825.0237	0.90763	0.41643	0.8628	0.44508	5.38E-03	2.13E-06	8.54E-07	2.03E-06	8.76E-07	5.3819E-03
520363.46	4258463.21	282783.7456	0.33183	0.44359	0.3306	0.48138	5.38E-03	7.79E-07	9.10E-07	7.76E-07	9.48E-07	5.3786E-03
520286.08	4258772.95	282097.4704	0.78437	0.37894	0.74909	0.40532	5.36E-03	1.84E-06	7.77E-07	1.76E-06	7.98E-07	5.3673E-03
520255.79	4258462.87	281707.685	0.51729	0.93988	0.51479	1.04838	5.35E-03	1.21E-06	1.93E-06	1.21E-06	2.06E-06	5.3612E-03
520295.98	4258772.94	281385.0976	0.73397	0.36229	0.70254	0.38765	5.35E-03	1.72E-06	7.43E-07	1.65E-06	7.63E-07	5.3535E-03
520256.38	4258773	281346.1068	0.98064	0.43661	0.92975	0.46668	5.35E-03	2.30E-06	8.95E-07	2.18E-06	9.19E-07	5.3542E-03
520216.6	4258472.75	280661.851	0.64685	1.35315	0.64745	1.53474	5.33E-03	1.52E-06	2.78E-06	1.52E-06	3.02E-06	5.3437E-03
520097.12	4258673.87	279503.5641	11.5555	2.53205	10.81178	2.32385	5.31E-03	2.71E-05	5.19E-06	2.54E-05	4.57E-06	5.3751E-03
520246.48	4258773.02	279058.8694	1.06435	0.45804	1.00612	0.48985	5.30E-03	2.50E-06	9.39E-07	2.36E-06	9.64E-07	5.3112E-03
520087.12	4258636.77	278780.6896	12.06758	4.90768	18.62203	4.29346	5.30E-03	2.83E-05	1.01E-05	4.37E-05	8.45E-06	5.3897E-03
520392.8	4258473.3	278682.2932	0.30146	0.37277	0.29946	0.40235	5.30E-03	7.08E-07	7.65E-07	7.03E-07	7.92E-07	5.3002E-03
520345.47	4258762.85	278260.8142	0.53149	0.29799	0.51299	0.31876	5.29E-03	1.25E-06	6.11E-07	1.20E-06	6.27E-07	5.2929E-03
520246	4258462.84	278246.16	0.54133	1.02533	0.53925	1.14862	5.29E-03	1.27E-06	2.10E-06	1.27E-06	2.26E-06	5.2959E-03
520305.88	4258772.92	278160.5985	0.68702	0.34635	0.65894	0.37069	5.29E-03	1.61E-06	7.10E-07	1.55E-06	7.30E-07	5.2919E-03
520373.25	4258463.24	277646.9467	0.32002	0.42011	0.31875	0.45492	5.28E-03	7.51E-07	8.62E-07	7.48E-07	8.96E-07	5.2808E-03
520158.72	4258739.64	277462.8778	2.82169	0.88491	2.52898	0.9364	5.27E-03	6.62E-06	1.81E-06	5.94E-06	1.84E-06	5.2903E-03
520394.92	4258732.77	277030.9398	0.39498	0.26204	0.38276	0.2779	5.27E-03	9.27E-07	5.37E-07	8.99E-07	5.47E-07	5.2688E-03
520087.12	4258655.32	276702.3044	12.56411	3.45081	18.52842	3.04927	5.26E-03	2.95E-05	7.08E-06	4.35E-05	6.00E-06	5.3457E-03
520177.14	4258753.13	276595.2914	2.17715	0.72846	1.98474	0.77824	5.26E-03	5.11E-06	1.49E-06	4.66E-06	1.53E-06	5.2704E-03
520196.96	4258763.1	275708.4444	1.71663	0.61707	1.58692	0.66189	5.24E-03	4.03E-06	1.27E-06	3.73E-06	1.30E-06	5.2510E-03
520236.58	4258773.03	275511.2312	1.15945	0.48051	1.09237	0.51441	5.24E-03	2.72E-06	9.85E-07	2.56E-06	1.01E-06	5.2443E-03
520383.04	4258463.27	275426.5107	0.30893	0.39812	0.30743	0.43041	5.24E-03	7.25E-07	8.17E-07	7.22E-07	8.47E-07	5.2385E-03
520110.64	4258691.64	274769.7589	7.983	1.86847	6.69281	1.80934	5.22E-03	1.87E-05	3.83E-06	1.57E-05	3.56E-06	5.2647E-03
520206.81	4258472.72	274695.927	0.68054	1.51192	0.68543	1.72239	5.22E-03	1.60E-06	3.10E-06	1.61E-06	3.39E-06	5.2312E-03
520236.21	4258462.81	274259.0701	0.56692	1.1244	0.56619	1.26495	5.21E-03	1.33E-06	2.31E-06	1.33E-06	2.49E-06	5.2206E-03
520385.04	4258742.79	274102.0419	0.41932	0.26616	0.40616	0.28287	5.21E-03	9.84E-07	5.46E-07	9.54E-07	5.57E-07	5.2132E-03
520315.78	4258772.9	273086.3503	0.64383	0.33096	0.61843	0.35429	5.19E-03	1.51E-06	6.79E-07	1.45E-06	6.97E-07	5.1952E-03
520226.68	4258773.05	272257.0151	1.27559	0.50576	1.19673	0.54191	5.18E-03	2.99E-06	1.04E-06	2.81E-06	1.07E-06	5.1830E-03
520226.42	4258462.78	269761.4276	0.5941	1.23954	0.59577	1.40085	5.13E-03	1.39E-06	2.54E-06	1.40E-06	2.76E-06	5.1358E-03
520197.03	4258472.69	268126.0373	0.71572	1.70184	0.72647	1.94878	5.10E-03	1.68E-06	3.49E-06	1.71E-06	3.84E-06	5.1073E-03
520216.77	4258773.07	267204.2347	1.40914	0.53231	1.3158	0.57082	5.08E-03	3.31E-06	1.09E-06	3.09E-06	1.12E-06	5.0877E-03
520150.22	4258736.13	266751.1142	3.24743	0.96146	2.88296	1.00781	5.07E-03	7.62E-06	1.97E-06	6.77E-06	1.98E-06	5.0888E-03
520355.37	4258762.84	266747.0139	0.50227	0.28605	0.48521	0.30565	5.07E-03	1.18E-06	5.87E-07	1.14E-06	6.02E-07	5.0739E-03
520325.68	4258772.89	266699.392	0.6047	0.31669	0.58166	0.33898	5.07E-03	1.42E-06	6.50E-07	1.37E-06	6.67E-07	5.0736E-03
520343.92	4258453.14	266266.6656	0.35164	0.50334	0.35122	0.54809	5.06E-03	8.26E-07	1.03E-06	8.25E-07	1.08E-06	5.0650E-03
520402.59	4258473.33	266153.5945	0.2911	0.35503	0.28913	0.38244	5.06E-03	6.83E-07	7.28E-07	6.79E-07	7.53E-07	5.0619E-03
520375.16	4258752.8	265915.2296	0.44653	0.27068	0.43217	0.28827	5.05E-03	1.05E-06	5.55E-07	1.01E-06	5.67E-07	5.0578E-03
520392.83	4258463.3	265844.8651	0.29798	0.37658	0.29628	0.40661	5.05E-03	7.00E-07	7.72E-07	6.96E-07	8.00E-07	5.0562E-03
520216.63	4258462.75	264630.2358	0.62262	1.37672	0.62815	1.56159	5.03E-03	1.46E-06	2.82E-06	1.47E-06	3.07E-06	5.0390E-03
520187.06	4258763.12	263888.1242	1.93265	0.65366	1.77452	0.69983	5.02E-03	4.54E-06	1.34E-06	4.17E-06	1.38E-06	5.0275E-03
520353.71	4258453.18	262862.6688	0.33899	0.47476	0.33853	0.51597	5.00E-03	7.96E-07	9.74E-07	7.95E-07	1.02E-06	5.0001E-03
520114.16	4258700.13	261162.3457	7.24378	1.67766	6.08165	1.63611	4.96E-03	1.70E-05	3.44E-06	1.43E-05	3.22E-06	5.0022E-03
520187.24	4258472.66	260427.5878	0.75188	1.93561	0.76986	2.22636	4.95E-03	1.77E-06	3.97E-06	1.81E-06	4.38E-06	4.9622E-03
520335.58	4258772.87	259144.4665	0.56913	0.30342	0.54817	0.32464	4.93E-03	1.34E-06	6.22E-07	1.29E-06	6.39E-07	4.9298E-03
520206.87	4258773.08	259050.9688	1.55684	0.56011	1.44638	0.60083	4.92E-03	3.65E-06	1.15E-06	3.40E-06	1.18E-06	4.9335E-03
520363.49	4258453.21	258977.3742	0.32698	0.44862	0.32645	0.48664	4.92E-03	7.68E-07	9.20E-07	7.66E-07	9.58E-07	4.9261E-03
520206.85	4258462.72	258866.4044	0.65224	1.53977	0.6628	1.75299	4.92E-03	1.53E-06	3.16E-06	1.56E-06	3.45E-06	4.9303E-03
520087.12	4258664.6	258363.6032	12.74651	2.981	18.45586	2.64286	4.91E-03	2.99E-05	6.11E-06	4.33E-05	5.20E-06	4.9956E-03
520276.2	4258782.97	256676.296	0.85189	0.38539	0.81148	0.41149	4.88E-03	2.00E-06	7.90E-07	1.91E-06	8.10E-07	4.8845E-03
520141.73	4258732.63	256623.9795	3.83162	1.05025	3.35374	1.08578	4.88E-03	9.00E-06	2.15E-06	7.87E-06	2.14E-06	4.8991E-03
520266.3	4258782.98	256470.7656	0.91741	0.40324	0.87187	0.43061	4.88E-03	2.15E-06	8.27E-07	2.05E-06	8.48E-07	4.8809E-03
520286.1	4258782.95	255805.192	0.79317	0.36835	0.75714	0.39339	4.86E-03	1.86E-06	7.55E-07	1.78E-06	7.74E-07	4.8676E-03
520402.62	4258463.33	255598.8879	0.2879	0.35852	0.28618	0.38632	4.86E-03	6.76E-07	7.35E-07	6.72E-07	7.60E-07	4.8613E-03
520256.39	4258783	255383.1981	0.99169	0.42204	0.94	0.45097	4.85E-03	2.33E-06	8.66E-07	2.21E-06	8.88E-07	4.8607E-03
520296	4258782.94	254762.9701	0.74166	0.35254	0.70949	0.37661	4.84E-03	1.74E-06	7.23E-07	1.67E-06	7.41E-07	4.8475E-03
520373.28	4258453.24	254623.1671	0.31558	0.42463	0.31492	0.45975	4.84E-03	7.41E-07	8.71E-07	7.39E-07	9.05E-07	4.8432E-03
520246.49	4258783.02	253428.8549	1.07633	0.44189	1.01717	0.47267	4.82E-03	2.53E-06	9.06E-07	2.39E-06	9.30E-07	4.8240E-03
520097.12	4258683.15	253416.173	12.10931	2.26049	10.86067	2.07137	4.82E-03	2.84E-05	4.64E-06	2.55E-05	4.08E-06	4.8796E-03
520365.27	4258762.82	253285.2267	0.47519	0.27482	0.45935	0.29328	4.81E-03	1.12E-06	5.64E-07	1.08E-06	5.77E-07	4.8178E-03
520158.97	4258749.74	252598.3106	2.83966	0.83794	2.54412	0.88279	4.80E-03	6.67E-06	1.72E-06	5.97E-06	1.74E-06	4.8175E-03
520197.06	4258462.69	252291.6997	0.68262	1.73545	0.69883	1.98428	4.80E-03	1.60E-06	3.56E-06	1.64E-06	3.91E-06	4.8063E-03
520168.27	4258756.76	252093.1011	2.47285	0.75827	2.23646	0.8046	4.79E-03	5.81E-06	1.56E-06	5.25E-06	1.58E-06	4.8060E-03
520421.9	4258689.97	251744.1056	0.33274	0.25629	0.32273	0.27138	4.79E-03	7.81E-07	5.26E-07	7.58E-07	5.34E-07	4.7878E-03
520305.9	4258782.92	251702.0506	0.69403	0.3374	0.6652	0.36056	4.78E-03	1.63E-06	6.92E-07	1.56E-06	7.10E-07	4.7890E-03
520177.45	4258472.63	251409.8641	0.78793	2.22526	0.81346	2.56992	4.78E-03	1.85E-06	4.56E-06	1.91E-06	5.06E-06	4.7922E-03
520412.38	4258473.36	250663.1889	0.2812	0.33854	0.27923	0.36398	4.76E-03	6.60E-07	6.94E-07	6.56E-07	7.16E-07	4.7674E-03
520177.15	4258763.13	250529.6518	2.19726	0.69461	2.0017	0.74042	4.76E-03	5.16E-06	1.42E-06	4.70E-06	1.46E-06	4.7749E-03
520345.49	4258772.85	250493.5783	0.53688	0.2911	0.51768	0.31126	4.76E-03	1.26E-06	5.97E-07	1.22E-06	6.13E-07	4.7651E-03
520236.59	4258783.03	250375.0473	1.17258	0.46282	1.10432	0.4957	4.76E-03	2.75E-06	9.49E-07	2.59E-06	9.76E-07	4.7664E-03
520196.97	4258773.1	249691.0664	1.73257	0.59042	1.60063	0.63293	4.75E-03	4.07E-06	1.21E-06	3.76E-06	1.25E-06	4.7565E-03
520394.94	4258742.77	248131.206	0.39856	0.25623	0.38599	0.27189	4.72E-03	9.36E-07	5.26E-07	9.06E-07	5.35E-07	4.7194E-03
520226.69	4258783.05	247488.3872	1.2898	0.48642	1.20948	0.52142	4.70E-03	3.03E-06	9.98E-07	2.84E-06	1.03E-06	4.7122E-03
520315.8	4258782.9	247326.6836	0.6505	0.32281	0.62439	0.34507	4.70E-03	1.53E-06	6.62E-07	1.47E-06	6.79E-07	4.7056E-03
520416.03	4258714.03	245546.9875	0.35091	0.2519	0.34006	0.26619	4.67E-03	8.24E-07	5.17E-07	7.98E-07	5.24E-07	4.6701E-03
520409	4258726.94	245313.165	0.36732	0.25203	0.35587	0.2666	4.66E-03	8.62E-07	5.17E-07	8.35E-07	5.25E-07	4.6657E-03
520385.06	4258752.79	245159.6552	0.42313	0.26012	0.40956	0.27664	4.66E-03	9.93E-07	5.33E-07	9.62E-07	5.45E-07	4.6631E-03
520187.27	4258462.66	244788.8737	0.71282	1.97383	0.73481	2.26647	4.65E-03	1.67E-06	4.05E-06	1.73E-06	4.46E-06	4.6649E-03
520412.41	4258463.36	242978.2668	0.27828	0.34184	0.27654	0.36759	4.62E-03	6.53E-07	7.01E-07	6.49E-07	7.24E-07	4.6213E-03
520216.79	4258783.07	242787.2272	1.42308	0.51119	1.32805	0.54828	4.61E-03	3.34E-06	1.05E-06	3.12E-06	1.08E-06	4.6235E-03
520325.7	4258782.89	241450.8261	0.61084	0.30912	0.58709	0.33048	4.59E-03	1.43E-06	6.34E-07	1.38E-06	6.51E-07	4.5936E-03
520324.37	4258443.08	241223.2356	0.37195	0.57686	0.37164	0.62995	4.59E-03	8.73E-07	1.18E-06	8.72E-07	1.24E-06	4.5894E-03
520167.66	4258472.59	241140.7983	0.82249	2.58344	0.85457	3.00397	4.58E-03	1.93E-06	5.30E-06	2.01E-06	5.91E-06	4.5988E-03
520314.58	4258443.05	241009.1733	0.38607	0.61572	0.38544	0.67405	4.58E-03	9.06E-07	1.26E-06	9.05E-07	1.33E-06	4.5855E-03
520334.16	4258443.11	240904.8753	0.35857	0.54146	0.35845	0.59009	4.58E-03	8.42E-07	1.11E-06	8.42E-07	1.16E-06	4.5831E-03
520355.39	4258772.84	240272.4157	0.5072	0.27954	0.48948	0.29865	4.57E-03	1.19E-06	5.73E-07	1.15E-06	5.88E-07	4.5706E-03
520343.95	4258443.14	240008.861	0.34581	0.50959	0.34585	0.55425	4.56E-03	8.12E-07	1.05E-06	8.12E-07	1.09E-06	4.5659E-03
520187.07	4258773.12	239428.0909	1.94813	0.62463	1.78773	0.66779	4.55E-03	4.57E-06	1.28E-06	4.20E-06	1.31E-06	4.5625E-03
520295.01	4258442.99	239152.214	0.41672	0.70592	0.41535	0.77776	4.55E-03	9.78E-07	1.45E-06	9.75E-07	1.53E-06	4.5508E-03
520375.17	4258762.8	238062.0925	0.45019	0.26429	0.43534	0.28165	4.53E-03	1.06E-06	5.42E-07	1.02E-06	5.54E-07	4.5283E-03
520285.22	4258442.96	237575.2974	0.43336	0.75904	0.43185	0.83938	4.52E-03	1.02E-06	1.56E-06	1.01E-06	1.65E-06	4.5211E-03
520087.12	4258673.87	236446.3864	12.85658	2.6129	18.37158	2.32301	4.49E-03	3.02E-05	5.36E-06	4.31E-05	4.57E-06	4.5777E-03
520353.74	4258443.18	236268.6616	0.33357	0.4807	0.3338	0.5217	4.49E-03	7.83E-07	9.86E-07	7.84E-07	1.03E-06	4.4946E-03
520142.45	4258742.92	236238.9639	3.81046	0.98381	3.33999	1.01135	4.49E-03	8.95E-06	2.02E-06	7.84E-06	1.99E-06	4.5113E-03
520177.48	4258462.63	236179.818	0.74183	2.26684	0.76908	2.61455	4.49E-03	1.74E-06	4.65E-06	1.81E-06	5.15E-06	4.5027E-03
520206.89	4258783.08	235761.4634	1.5723	0.53741	1.45975	0.57633	4.48E-03	3.69E-06	1.10E-06	3.43E-06	1.13E-06	4.4908E-03
520275.43	4258442.93	235583.6796	0.45095	0.81889	0.44968	0.90908	4.48E-03	1.06E-06	1.68E-06	1.06E-06	1.79E-06	4.4836E-03
520335.6	4258782.87	234839.5472	0.57503	0.29643	0.55335	0.31687	4.46E-03	1.35E-06	6.08E-07	1.30E-06	6.24E-07	4.4678E-03
520103.97	4258699.66	233834.4791	9.93242	1.8214	8.39205	1.70369	4.44E-03	2.33E-05	3.74E-06	1.97E-05	3.35E-06	4.4949E-03
520266.31	4258792.98	233803.0397	0.92743	0.39044	0.88119	0.41683	4.44E-03	2.18E-06	8.01E-07	2.07E-06	8.21E-07	4.4500E-03
520363.53	4258443.21	233771.3798	0.32207	0.45387	0.32219	0.49182	4.44E-03	7.56E-07	9.31E-07	7.56E-07	9.68E-07	4.4470E-03
520276.21	4258792.97	233694.8542	0.86063	0.37373	0.81961	0.39873	4.44E-03	2.02E-06	7.66E-07	1.92E-06	7.85E-07	4.4476E-03
520265.64	4258442.9	233179.6908	0.46951	0.88695	0.46905	0.98842	4.43E-03	1.10E-06	1.82E-06	1.10E-06	1.95E-06	4.4383E-03
520286.11	4258792.95	232953.0811	0.80159	0.35789	0.76493	0.38178	4.43E-03	1.88E-06	7.34E-07	1.80E-06	7.52E-07	4.4332E-03
520403.39	4258739.27	232943.7265	0.38078	0.25008	0.36874	0.26497	4.43E-03	8.94E-07	5.13E-07	8.66E-07	5.22E-07	4.4306E-03
520422.16	4258473.39	232829.0632	0.27168	0.32303	0.26967	0.34671	4.43E-03	6.38E-07	6.63E-07	6.33E-07	6.82E-07	4.4283E-03
520256.41	4258793	232768.9396	1.00186	0.40774	0.94943	0.4358	4.42E-03	2.35E-06	8.36E-07	2.23E-06	8.58E-07	4.4308E-03
520296.01	4258792.94	231797.9577	0.7492	0.34303	0.71644	0.36593	4.41E-03	1.76E-06	7.04E-07	1.68E-06	7.20E-07	4.4109E-03
520246.51	4258793.02	230914.2593	1.08642	0.42603	1.02646	0.45598	4.39E-03	2.55E-06	8.74E-07	2.41E-06	8.98E-07	4.3960E-03
520159.16	4258759.81	230587.4727	2.85039	0.79497	2.55429	0.83382	4.38E-03	6.69E-06	1.63E-06	6.00E-06	1.64E-06	4.3990E-03
520255.85	4258442.87	230341.5274	0.48905	0.96474	0.49007	1.07913	4.38E-03	1.15E-06	1.98E-06	1.15E-06	2.12E-06	4.3848E-03
520373.31	4258443.24	230013.8374	0.31109	0.42939	0.31108	0.46455	4.37E-03	7.30E-07	8.81E-07	7.30E-07	9.14E-07	4.3754E-03
520157.87	4258472.56	229140.277	0.85374	3.03701	0.8927	3.56187	4.36E-03	2.00E-06	6.23E-06	2.10E-06	7.01E-06	4.3729E-03
520305.92	4258792.92	228842.1676	0.70076	0.32862	0.67128	0.35066	4.35E-03	1.65E-06	6.74E-07	1.58E-06	6.90E-07	4.3545E-03
520236.61	4258793.03	228491.5316	1.18452	0.44589	1.11517	0.47783	4.34E-03	2.78E-06	9.14E-07	2.62E-06	9.41E-07	4.3505E-03
520365.29	4258772.82	228327.6826	0.47952	0.26858	0.46309	0.28666	4.34E-03	1.13E-06	5.51E-07	1.09E-06	5.64E-07	4.3434E-03
520177.17	4258773.13	228256.5295	2.21527	0.66344	2.01675	0.70527	4.34E-03	5.20E-06	1.36E-06	4.73E-06	1.39E-06	4.3514E-03
520196.99	4258783.1	227712.5389	1.75002	0.56616	1.61535	0.6063	4.33E-03	4.11E-06	1.16E-06	3.79E-06	1.19E-06	4.3387E-03
520422.2	4258463.39	227705.8089	0.269	0.32608	0.26722	0.35	4.33E-03	6.32E-07	6.69E-07	6.27E-07	6.89E-07	4.3309E-03
520246.06	4258442.84	227052.7191	0.50951	1.05432	0.51275	1.18354	4.32E-03	1.20E-06	2.16E-06	1.20E-06	2.33E-06	4.3228E-03
520345.5	4258782.85	226910.6315	0.54213	0.28449	0.52224	0.304	4.31E-03	1.27E-06	5.83E-07	1.23E-06	5.98E-07	4.3168E-03
520167.69	4258462.59	226238.5309	0.76877	2.62853	0.80065	3.0537	4.30E-03	1.80E-06	5.39E-06	1.88E-06	6.01E-06	4.3155E-03
520226.71	4258793.05	225764.1542	1.30163	0.46798	1.22008	0.50184	4.29E-03	3.06E-06	9.60E-07	2.86E-06	9.88E-07	4.2992E-03
520315.82	4258792.9	224130.7746	0.65586	0.31449	0.62901	0.33572	4.26E-03	1.54E-06	6.45E-07	1.48E-06	6.61E-07	4.2646E-03
520394.96	4258752.77	223767.045	0.40208	0.25056	0.38913	0.26605	4.25E-03	9.44E-07	5.14E-07	9.14E-07	5.24E-07	4.2563E-03
520236.27	4258442.81	223291.0252	0.53079	1.15843	0.53698	1.30468	4.24E-03	1.25E-06	2.38E-06	1.26E-06	2.57E-06	4.2518E-03
520392.89	4258443.3	221798.9432	0.2908	0.38462	0.29005	0.41532	4.22E-03	6.83E-07	7.89E-07	6.81E-07	8.18E-07	4.2190E-03
520216.81	4258793.07	221662.4421	1.436	0.49141	1.33936	0.52708	4.21E-03	3.37E-06	1.01E-06	3.14E-06	1.04E-06	4.2220E-03
520385.07	4258762.79	221118.3891	0.42697	0.25436	0.41294	0.27067	4.20E-03	1.00E-06	5.22E-07	9.69E-07	5.33E-07	4.2061E-03
520426.01	4258704.08	220862.7594	0.3315	0.24669	0.32114	0.26063	4.20E-03	7.78E-07	5.06E-07	7.54E-07	5.13E-07	4.2008E-03
520226.49	4258442.78	219018.0638	0.55269	1.27989	0.56239	1.44609	4.16E-03	1.30E-06	2.62E-06	1.32E-06	2.85E-06	4.1712E-03
520325.72	4258792.89	218891.2945	0.61568	0.30145	0.59127	0.32185	4.16E-03	1.45E-06	6.18E-07	1.39E-06	6.34E-07	4.1648E-03
520187.09	4258783.12	218757.3466	1.96588	0.59838	1.80244	0.63844	4.16E-03	4.62E-06	1.23E-06	4.23E-06	1.26E-06	4.1695E-03
520355.4	4258782.84	217930.9565	0.5121	0.27335	0.49373	0.29192	4.14E-03	1.20E-06	5.61E-07	1.16E-06	5.75E-07	4.1460E-03
520142.97	4258753.13	217463.9697	3.79356	0.9257	3.33086	0.94615	4.13E-03	8.91E-06	1.90E-06	7.82E-06	1.86E-06	4.1541E-03
520324.4	4258433.08	217204.7836	0.36503	0.58297	0.36442	0.63679	4.13E-03	8.57E-07	1.20E-06	8.56E-07	1.25E-06	4.1328E-03
520334.19	4258433.11	216985.9437	0.35223	0.54727	0.35193	0.5963	4.12E-03	8.27E-07	1.12E-06	8.26E-07	1.17E-06	4.1285E-03
520314.61	4258433.05	216942.0134	0.37848	0.62238	0.37759	0.68177	4.12E-03	8.89E-07	1.28E-06	8.86E-07	1.34E-06	4.1281E-03
520411.84	4258735.77	216446.8957	0.36466	0.24449	0.35306	0.25863	4.11E-03	8.56E-07	5.01E-07	8.29E-07	5.09E-07	4.1170E-03
520343.98	4258433.14	216272.2938	0.33999	0.51552	0.34005	0.56023	4.11E-03	7.98E-07	1.06E-06	7.98E-07	1.10E-06	4.1147E-03
520167.27	4258773.15	216191.532	2.5482	0.70685	2.29926	0.74437	4.11E-03	5.98E-06	1.45E-06	5.40E-06	1.47E-06	4.1237E-03
520087.12	4258683.15	216011.222	14.7983	2.31685	18.28647	2.06507	4.11E-03	3.47E-05	4.75E-06	4.29E-05	4.07E-06	4.1925E-03
520206.91	4258793.08	215451.7602	1.5854	0.51609	1.4711	0.5532	4.10E-03	3.72E-06	1.06E-06	3.45E-06	1.09E-06	4.1047E-03
520295.04	4258432.99	215024.443	0.40759	0.71318	0.40645	0.78698	4.09E-03	9.57E-07	1.46E-06	9.54E-07	1.55E-06	4.0921E-03
520375.19	4258772.8	214824.5348	0.45377	0.25819	0.4384	0.27526	4.08E-03	1.07E-06	5.30E-07	1.03E-06	5.42E-07	4.0866E-03
520157.9	4258462.56	214683.9316	0.79189	3.08685	0.8307	3.61551	4.08E-03	1.86E-06	6.33E-06	1.95E-06	7.12E-06	4.0980E-03
520216.7	4258442.75	214173.0169	0.57494	1.42304	0.58844	1.61302	4.07E-03	1.35E-06	2.92E-06	1.38E-06	3.18E-06	4.0799E-03

520148.08	4258472.53	214158.7477	0.87805	3.61933	0.92759	4.29585	4.07E-03	2.06E-06	7.42E-06	2.18E-06	8.46E-06	4.0909E-03
520431.9	4258690.02	214080.6618	0.31853	0.24697	0.30884	0.26121	4.07E-03	7.48E-07	5.07E-07	7.25E-07	5.14E-07	4.0718E-03
520402.68	4258443.33	214077.0715	0.28121	0.36553	0.2803	0.39405	4.07E-03	6.60E-07	7.50E-07	6.58E-07	7.76E-07	4.0721E-03
520266.33	4258802.98	213740.7791	0.93603	0.3777	0.88919	0.40336	4.06E-03	2.20E-06	7.75E-07	2.09E-06	7.94E-07	4.0687E-03
520431.95	4258473.42	213557.8253	0.26262	0.30869	0.26057	0.33076	4.06E-03	6.17E-07	6.33E-07	6.12E-07	6.51E-07	4.0619E-03
520276.23	4258802.97	213446.4269	0.86832	0.36209	0.82678	0.38626	4.06E-03	2.04E-06	7.43E-07	1.94E-06	7.60E-07	4.0627E-03
520285.25	4258432.96	213441.1795	0.42328	0.7668	0.42252	0.84945	4.06E-03	9.94E-07	1.57E-06	9.92E-07	1.67E-06	4.0624E-03
520335.62	4258792.87	213154.6843	0.57976	0.28938	0.55742	0.30897	4.05E-03	1.36E-06	5.93E-07	1.31E-06	6.08E-07	4.0556E-03
520353.77	4258433.18	212840.5526	0.32816	0.4865	0.32868	0.5273	4.05E-03	7.70E-07	9.98E-07	7.72E-07	1.04E-06	4.0493E-03
520256.43	4258803	212799.6083	1.01055	0.39372	0.95747	0.42108	4.04E-03	2.37E-06	8.07E-07	2.25E-06	8.29E-07	4.0512E-03
520286.13	4258802.95	212483.1326	0.80825	0.34726	0.77113	0.37019	4.04E-03	1.90E-06	7.12E-07	1.81E-06	7.29E-07	4.0441E-03
520296.03	4258802.94	211715.2387	0.75628	0.33358	0.72299	0.35547	4.02E-03	1.78E-06	6.84E-07	1.70E-06	7.00E-07	4.0292E-03
520275.46	4258432.93	211392.3176	0.43976	0.82738	0.43986	0.92014	4.02E-03	1.03E-06	1.70E-06	1.03E-06	1.81E-06	4.0238E-03
520246.53	4258803.02	211116.0914	1.09511	0.4107	1.03444	0.43987	4.01E-03	2.57E-06	8.42E-07	2.43E-06	8.66E-07	4.0196E-03
520158.16	4258769.39	210946.5181	2.9192	0.76407	2.61193	0.79631	4.01E-03	6.85E-06	1.57E-06	6.13E-06	1.57E-06	4.0258E-03
520363.56	4258433.21	210907.3024	0.31713	0.45922	0.31765	0.49697	4.01E-03	7.45E-07	9.42E-07	7.46E-07	9.78E-07	4.0124E-03
520114.24	4258724.43	210876.955	7.37375	1.3774	6.20592	1.31766	4.01E-03	1.73E-05	2.82E-06	1.46E-05	2.59E-06	4.0457E-03
520431.98	4258463.42	210554.9306	0.26019	0.31163	0.25838	0.33387	4.00E-03	6.11E-07	6.39E-07	6.07E-07	6.57E-07	4.0048E-03
520265.67	4258432.9	209118.5107	0.45712	0.8971	0.4587	1.00122	3.97E-03	1.07E-06	1.84E-06	1.08E-06	1.97E-06	3.9809E-03
520236.63	4258803.03	209053.606	1.1939	0.42946	1.12368	0.46047	3.97E-03	2.80E-06	8.81E-07	2.64E-06	9.06E-07	3.9810E-03
520177.19	4258783.13	209003.0659	2.23167	0.6347	2.03036	0.67263	3.97E-03	5.24E-06	1.30E-06	4.77E-06	1.32E-06	3.9854E-03
520305.93	4258802.92	208960.6583	0.70728	0.32002	0.67727	0.34104	3.97E-03	1.66E-06	6.56E-07	1.59E-06	6.71E-07	3.9765E-03
520423.08	4258721.11	208727.7454	0.34177	0.24207	0.33093	0.25552	3.97E-03	8.02E-07	4.96E-07	7.77E-07	5.03E-07	3.9701E-03
520206.91	4258442.72	208708.8656	0.59705	1.59306	0.61427	1.81164	3.97E-03	1.40E-06	3.27E-06	1.44E-06	3.57E-06	3.9769E-03
520197.01	4258793.1	208512.9188	1.76477	0.54344	1.62783	0.58119	3.96E-03	4.14E-06	1.11E-06	3.82E-06	1.14E-06	3.9737E-03
520373.35	4258433.24	207710.5792	0.30655	0.43428	0.30705	0.46927	3.95E-03	7.20E-07	8.91E-07	7.21E-07	9.24E-07	3.9515E-03
520365.3	4258782.82	207489.7631	0.48412	0.26279	0.46705	0.28042	3.94E-03	1.14E-06	5.39E-07	1.10E-06	5.52E-07	3.9473E-03
520226.73	4258803.05	206564.5714	1.31089	0.45032	1.22841	0.48309	3.93E-03	3.08E-06	9.24E-07	2.88E-06	9.51E-07	3.9343E-03
520255.88	4258432.87	206349.1248	0.47518	0.97679	0.4788	1.09379	3.92E-03	1.12E-06	2.00E-06	1.12E-06	2.15E-06	3.9287E-03
520345.52	4258792.85	206066.8463	0.54641	0.27788	0.52589	0.29664	3.92E-03	1.28E-06	5.70E-07	1.23E-06	5.84E-07	3.9206E-03
520093.83	4258699.33	205898.5203	13.79158	1.91017	12.67456	1.72941	3.91E-03	3.24E-05	3.92E-06	2.98E-05	3.40E-06	3.9832E-03
520412.47	4258443.36	204975.2615	0.2721	0.3481	0.27103	0.37458	3.90E-03	6.39E-07	7.14E-07	6.36E-07	7.37E-07	3.8989E-03
520149.06	4258765.63	204575.5117	3.3925	0.82859	3.00749	0.85155	3.89E-03	7.96E-06	1.70E-06	7.06E-06	1.68E-06	3.9070E-03
520315.83	4258802.9	203792.3235	0.66007	0.30613	0.63274	0.32637	3.87E-03	1.55E-06	6.28E-07	1.49E-06	6.42E-07	3.8780E-03
520216.82	4258803.07	203255.2472	1.44832	0.47297	1.35013	0.50718	3.86E-03	3.40E-06	9.70E-07	3.17E-06	9.98E-07	3.8721E-03
520394.97	4258762.77	203214.8005	0.40563	0.24514	0.39227	0.26045	3.86E-03	9.52E-07	5.03E-07	9.21E-07	5.13E-07	3.8656E-03
520246.09	4258432.84	203127.0727	0.49386	1.06829	0.50005	1.20013	3.86E-03	1.16E-06	2.19E-06	1.17E-06	2.36E-06	3.8680E-03
520197.12	4258442.69	202538.6745	0.61856	1.79595	0.63886	2.05024	3.85E-03	1.45E-06	3.68E-06	1.50E-06	4.04E-06	3.8606E-03
520148.11	4258462.53	200932.1458	0.80881	3.67784	0.8592	4.35665	3.82E-03	1.90E-06	7.54E-06	2.02E-06	8.58E-06	3.8394E-03
520187.11	4258793.12	200787.8364	1.98234	0.57412	1.81606	0.61108	3.82E-03	4.65E-06	1.18E-06	4.26E-06	1.20E-06	3.8279E-03
520385.09	4258772.79	200559.1487	0.43046	0.24868	0.41595	0.26476	3.81E-03	1.01E-06	5.10E-07	9.77E-07	5.21E-07	3.8153E-03
520392.92	4258433.3	200428.8146	0.287	0.3886	0.28681	0.41934	3.81E-03	6.74E-07	7.97E-07	6.73E-07	8.25E-07	3.8128E-03
520236.31	4258432.81	199462.4937	0.51298	1.17466	0.52217	1.32345	3.79E-03	1.20E-06	2.41E-06	1.23E-06	2.61E-06	3.7989E-03
520325.73	4258802.89	199273.7708	0.61991	0.29381	0.59498	0.31331	3.79E-03	1.46E-06	6.03E-07	1.40E-06	6.17E-07	3.7919E-03
520167.29	4258783.15	198863.2449	2.5697	0.67594	2.31665	0.70867	3.78E-03	6.03E-06	1.39E-06	5.44E-06	1.40E-06	3.7943E-03
520139.95	4258761.88	198290.2813	4.05938	0.9026	3.54853	0.91046	3.77E-03	9.53E-06	1.85E-06	8.33E-06	1.79E-06	3.7906E-03
520355.42	4258792.84	198013.5413	0.51587	0.26707	0.4969	0.28501	3.76E-03	1.21E-06	5.48E-07	1.17E-06	5.61E-07	3.7674E-03
520206.92	4258803.08	197749.7573	1.59789	0.49629	1.4819	0.53155	3.76E-03	3.75E-06	1.02E-06	3.48E-06	1.05E-06	3.7682E-03
520138.29	4258472.5	197255.1718	0.8949	4.40995	0.96146	5.28675	3.75E-03	2.10E-06	9.04E-06	2.26E-06	1.04E-05	3.7733E-03
520324.43	4258423.08	196417.2477	0.35814	0.58896	0.35734	0.6438	3.73E-03	8.41E-07	1.21E-06	8.39E-07	1.27E-06	3.7377E-03
520334.22	4258423.11	196290.9018	0.3459	0.5531	0.34533	0.60277	3.73E-03	8.12E-07	1.13E-06	8.11E-07	1.19E-06	3.7351E-03
520266.35	4258812.98	196118.2727	0.94412	0.36537	0.8967	0.39043	3.73E-03	2.22E-06	7.49E-07	2.11E-06	7.69E-07	3.7337E-03
520314.65	4258423.05	196098.8963	0.37096	0.62869	0.3701	0.68944	3.73E-03	8.71E-07	1.29E-06	8.69E-07	1.36E-06	3.7319E-03
520276.25	4258812.97	196025.8747	0.87684	0.35098	0.83472	0.3745	3.73E-03	2.06E-06	7.20E-07	1.96E-06	7.37E-07	3.7316E-03
520344.01	4258423.14	195698.1136	0.33417	0.5211	0.334	0.56615	3.72E-03	7.85E-07	1.07E-06	7.84E-07	1.11E-06	3.7236E-03
520375.21	4258782.8	195572.2458	0.45779	0.25264	0.44185	0.26935	3.72E-03	1.07E-06	5.18E-07	1.04E-06	5.30E-07	3.7206E-03
520187.33	4258442.66	195557.629	0.63883	2.04026	0.66172	2.33996	3.72E-03	1.50E-06	4.18E-06	1.55E-06	4.61E-06	3.7290E-03
520256.44	4258813	195392.1453	1.01941	0.38046	0.96562	0.40718	3.71E-03	2.39E-06	7.80E-07	2.27E-06	8.02E-07	3.7203E-03
520226.52	4258432.78	195301.4102	0.53233	1.29889	0.54473	1.46757	3.71E-03	1.25E-06	2.66E-06	1.28E-06	2.89E-06	3.7204E-03
520286.15	4258812.95	195224.8841	0.81657	0.33721	0.7789	0.35942	3.71E-03	1.92E-06	6.92E-07	1.83E-06	7.08E-07	3.7160E-03
520158.43	4258779.5	194741.8635	2.93539	0.72792	2.6243	0.75473	3.70E-03	6.89E-06	1.49E-06	6.16E-06	1.49E-06	3.7177E-03
520422.26	4258443.39	194401.6065	0.2634	0.33214	0.26221	0.3567	3.70E-03	6.18E-07	6.81E-07	6.16E-07	7.02E-07	3.6978E-03
520295.07	4258422.99	194161.071	0.39858	0.72086	0.39837	0.7965	3.69E-03	9.36E-07	1.48E-06	9.35E-07	1.57E-06	3.6956E-03
520296.05	4258812.94	194111.846	0.76305	0.32425	0.72932	0.34532	3.69E-03	1.79E-06	6.65E-07	1.71E-06	6.80E-07	3.6946E-03
520246.54	4258813.02	194066.3475	1.10517	0.39663	1.04359	0.42505	3.69E-03	2.59E-06	8.13E-07	2.45E-06	8.37E-07	3.6955E-03
520335.64	4258802.87	193919.9266	0.58328	0.28217	0.56043	0.30093	3.69E-03	1.37E-06	5.79E-07	1.32E-06	5.92E-07	3.6899E-03
520402.71	4258433.33	193422.1501	0.27762	0.36874	0.27722	0.39741	3.68E-03	6.52E-07	7.56E-07	6.51E-07	7.82E-07	3.6794E-03
520353.8	4258423.18	192785.843	0.32278	0.49193	0.32321	0.53277	3.66E-03	7.58E-07	1.01E-06	7.59E-07	1.05E-06	3.6681E-03
520285.28	4258422.96	192546.662	0.41332	0.77507	0.41402	0.85974	3.66E-03	9.70E-07	1.59E-06	9.72E-07	1.69E-06	3.6652E-03
520441.74	4258473.45	192412.8908	0.25395	0.29529	0.25184	0.31591	3.66E-03	5.96E-07	6.06E-07	5.91E-07	6.22E-07	3.6598E-03
520236.64	4258813.03	192406.3744	1.20554	0.41461	1.13412	0.4447	3.66E-03	2.83E-06	8.50E-07	2.66E-06	8.75E-07	3.6645E-03
520177.2	4258793.13	192359.1079	2.25003	0.60857	2.04536	0.64265	3.66E-03	5.28E-06	1.25E-06	4.80E-06	1.27E-06	3.6690E-03
520197.02	4258803.1	191554.9598	1.77648	0.52204	1.63785	0.55739	3.64E-03	4.17E-06	1.07E-06	3.85E-06	1.10E-06	3.6513E-03
520305.95	4258812.92	191547.2	0.71344	0.31148	0.68294	0.33162	3.64E-03	1.67E-06	6.39E-07	1.60E-06	6.53E-07	3.6455E-03
520363.59	4258423.21	191338.3338	0.31222	0.46434	0.31276	0.50201	3.64E-03	7.33E-07	9.52E-07	7.34E-07	9.88E-07	3.6404E-03
520216.73	4258432.75	190597.7787	0.55157	1.44442	0.56698	1.63709	3.62E-03	1.29E-06	2.96E-06	1.33E-06	3.22E-06	3.6317E-03
520275.49	4258422.93	190546.8685	0.42873	0.83705	0.43084	0.9318	3.62E-03	1.01E-06	1.72E-06	1.01E-06	1.83E-06	3.6275E-03
520226.74	4258813.05	190151.7661	1.32287	0.43432	1.23901	0.46592	3.61E-03	3.11E-06	8.91E-07	2.91E-06	9.17E-07	3.6223E-03
520149.58	4258775.84	189356.0931	3.38696	0.78499	3.00326	0.80261	3.60E-03	7.95E-06	1.61E-06	7.05E-06	1.58E-06	3.6175E-03
520436.01	4258704.14	189056.4673	0.31698	0.23785	0.30691	0.251	3.59E-03	7.44E-07	4.88E-07	7.21E-07	4.94E-07	3.5961E-03
520365.32	4258792.82	188808.2097	0.48746	0.2568	0.46983	0.27391	3.59E-03	1.14E-06	5.27E-07	1.10E-06	5.39E-07	3.5922E-03
520373.38	4258423.24	188580.9163	0.30203	0.43911	0.3027	0.47394	3.58E-03	7.09E-07	9.01E-07	7.11E-07	9.33E-07	3.5878E-03
520265.7	4258422.9	188322.7336	0.44481	0.90838	0.44882	1.01438	3.58E-03	1.04E-06	1.86E-06	1.05E-06	2.00E-06	3.5856E-03
520177.54	4258442.63	187623.7884	0.65717	2.33796	0.68318	2.69635	3.57E-03	1.54E-06	4.79E-06	1.60E-06	5.31E-06	3.5796E-03
520345.54	4258802.85	187559.4304	0.54951	0.27108	0.52846	0.28911	3.57E-03	1.29E-06	5.56E-07	1.24E-06	5.69E-07	3.5688E-03
520216.84	4258813.07	187056.5774	1.4594	0.45568	1.35981	0.48841	3.56E-03	3.43E-06	9.35E-07	3.19E-06	9.61E-07	3.5641E-03
520315.85	4258812.9	186296.7234	0.66429	0.2979	0.63655	0.31725	3.54E-03	1.56E-06	6.11E-07	1.49E-06	6.25E-07	3.5455E-03
520255.91	4258422.87	185610.8294	0.46134	0.98995	0.46765	1.10865	3.53E-03	1.08E-06	2.03E-06	1.10E-06	2.18E-06	3.5345E-03
520412.5	4258433.36	185599.7911	0.26877	0.3509	0.26818	0.37761	3.53E-03	6.31E-07	7.20E-07	6.30E-07	7.43E-07	3.5306E-03
520107.24	4258731.68	185526.4428	9.09798	1.35343	7.68892	1.26197	3.53E-03	2.14E-05	2.78E-06	1.81E-05	2.48E-06	3.5712E-03
520394.99	4258772.77	185488.7999	0.40896	0.23983	0.39515	0.25495	3.53E-03	9.60E-07	4.92E-07	9.28E-07	5.02E-07	3.5287E-03
520206.94	4258432.72	185320.941	0.57034	1.61671	0.58823	1.83868	3.52E-03	1.34E-06	3.32E-06	1.38E-06	3.62E-06	3.5323E-03
520138.33	4258462.5	184931.8488	0.81745	4.47154	0.88319	5.34522	3.52E-03	1.92E-06	9.17E-06	2.07E-06	1.05E-05	3.5389E-03
520187.12	4258803.12	184864.8822	1.99526	0.55126	1.82697	0.5852	3.51E-03	4.68E-06	1.13E-06	4.29E-06	1.15E-06	3.5252E-03
520140.73	4258772.19	184062.2678	4.01535	0.85006	3.51661	0.85345	3.50E-03	9.43E-06	1.74E-06	8.26E-06	1.68E-06	3.5198E-03
520167.3	4258793.15	183624.4795	2.59056	0.64743	2.3335	0.67564	3.49E-03	6.08E-06	1.33E-06	5.48E-06	1.33E-06	3.5046E-03
520411.07	4258756.11	183390.5332	0.37236	0.23475	0.36004	0.24865	3.49E-03	8.74E-07	4.81E-07	8.45E-07	4.89E-07	3.4886E-03
520385.11	4258782.79	183112.6465	0.43397	0.24332	0.41893	0.25912	3.48E-03	1.02E-06	4.99E-07	9.84E-07	5.10E-07	3.4837E-03
520428.73	4258728.78	183090.0379	0.33535	0.23381	0.32447	0.2466	3.48E-03	7.87E-07	4.80E-07	7.62E-07	4.85E-07	3.4827E-03
520246.13	4258422.84	182472.2597	0.47819	1.08341	0.48707	1.21672	3.47E-03	1.12E-06	2.22E-06	1.14E-06	2.40E-06	3.4754E-03
520206.94	4258813.08	182365.2289	1.61136	0.47811	1.49342	0.51146	3.47E-03	3.78E-06	9.81E-07	3.51E-06	1.01E-06	3.4757E-03
520325.75	4258812.89	182321.7009	0.62409	0.28635	0.59869	0.30498	3.47E-03	1.47E-06	5.87E-07	1.41E-06	6.00E-07	3.4697E-03
520392.95	4258423.3	182104.9377	0.2832	0.39288	0.28343	0.42344	3.46E-03	6.65E-07	8.06E-07	6.65E-07	8.34E-07	3.4645E-03
520441.9	4258690.08	182084.2742	0.30469	0.23783	0.29524	0.25126	3.46E-03	7.15E-07	4.88E-07	6.93E-07	4.95E-07	3.4635E-03
520432.05	4258443.42	181597.4737	0.25502	0.31715	0.25371	0.33999	3.45E-03	5.99E-07	6.50E-07	5.96E-07	6.69E-07	3.4544E-03
520121.74	4258754.36	180686.7276	6.0718	1.06469	5.19645	1.02563	3.43E-03	1.43E-05	2.18E-06	1.22E-05	2.02E-06	3.4652E-03
520266.36	4258822.98	180554.3231	0.95179	0.35353	0.90379	0.37807	3.43E-03	2.23E-06	7.25E-07	2.12E-06	7.44E-07	3.4378E-03
520276.26	4258822.97	180362.9385	0.88393	0.33997	0.84131	0.36299	3.43E-03	2.08E-06	6.97E-07	1.98E-06	7.15E-07	3.4338E-03
520355.44	4258802.84	180360.7595	0.51855	0.26062	0.49906	0.27791	3.43E-03	1.22E-06	5.35E-07	1.17E-06	5.47E-07	3.4318E-03
520158.65	4258789.58	180244.5667	2.9486	0.69461	2.63478	0.71656	3.43E-03	6.92E-06	1.42E-06	6.19E-06	1.41E-06	3.4421E-03
520256.46	4258823	180052.9254	1.02791	0.36787	0.9734	0.39397	3.42E-03	2.41E-06	7.54E-07	2.29E-06	7.76E-07	3.4287E-03
520286.16	4258822.95	179581.7543	0.82329	0.32711	0.78517	0.34875	3.41E-03	1.93E-06	6.71E-07	1.84E-06	6.87E-07	3.4187E-03
520197.15	4258432.69	179375.9124	0.58818	1.82128	0.60795	2.08036	3.41E-03	1.38E-06	3.74E-06	1.43E-06	4.10E-06	3.4203E-03
520246.56	4258823.02	178911.4446	1.11408	0.38319	1.05167	0.41085	3.40E-03	2.62E-06	7.86E-07	2.47E-06	8.09E-07	3.4075E-03
520236.34	4258422.81	178899.4429	0.49521	1.19195	0.50678	1.34212	3.40E-03	1.16E-06	2.44E-06	1.19E-06	2.64E-06	3.4080E-03
520375.22	4258792.8	178707.6055	0.46125	0.24713	0.44474	0.26342	3.40E-03	1.08E-06	5.07E-07	1.04E-06	5.19E-07	3.4001E-03
520324.47	4258413.08	178558.975	0.35132	0.59455	0.35068	0.65067	3.39E-03	8.25E-07	1.22E-06	8.23E-07	1.28E-06	3.3982E-03
520167.75	4258442.59	178540.1828	0.67267	2.70649	0.70409	3.14241	3.39E-03	1.58E-06	5.55E-06	1.65E-06	6.19E-06	3.4087E-03
520334.25	4258413.11	178513.645	0.33964	0.55841	0.33896	0.60909	3.39E-03	7.97E-07	1.15E-06	7.96E-07	1.20E-06	3.3972E-03
520296.06	4258822.94	178423.8032	0.76924	0.31493	0.73501	0.33537	3.39E-03	1.81E-06	6.46E-07	1.73E-06	6.60E-07	3.3964E-03
520314.68	4258413.05	178189.4228	0.36353	0.6349	0.36323	0.69712	3.39E-03	8.53E-07	1.30E-06	8.53E-07	1.37E-06	3.3914E-03
520344.04	4258413.14	178031.8951	0.32842	0.52604	0.32797	0.57184	3.38E-03	7.71E-07	1.08E-06	7.70E-07	1.13E-06	3.3878E-03
520177.22	4258803.13	177491.675	2.26229	0.58368	2.05577	0.61415	3.37E-03	5.31E-06	1.20E-06	4.83E-06	1.21E-06	3.3863E-03
520335.65	4258812.87	177422.0426	0.58695	0.2752	0.56361	0.29315	3.37E-03	1.38E-06	5.64E-07	1.32E-06	5.77E-07	3.3763E-03
520236.66	4258823.03	177393.4506	1.21438	0.40017	1.14205	0.42932	3.37E-03	2.85E-06	8.21E-07	2.68E-06	8.45E-07	3.3791E-03
520128.51	4258472.47	177073.1248	0.89933	5.50615	0.98413	6.65546	3.37E-03	2.11E-06	1.13E-05	2.31E-06	1.31E-05	3.3947E-03
520197.04	4258813.1	177018.7617	1.79251	0.50297	1.65129	0.53586	3.36E-03	4.21E-06	1.03E-06	3.88E-06	1.05E-06	3.3750E-03
520422.29	4258433.39	176898.9115	0.26043	0.3349	0.25967	0.35974	3.36E-03	6.11E-07	6.87E-07	6.10E-07	7.08E-07	3.3651E-03
520295.1	4258412.99	176221.1654	0.38967	0.72871	0.39092	0.80597	3.35E-03	9.15E-07	1.49E-06	9.18E-07	1.59E-06	3.3546E-03
520305.97	4258822.92	176139.1127	0.71918	0.30297	0.6882	0.32239	3.35E-03	1.69E-06	6.21E-07	1.62E-06	6.35E-07	3.3526E-03
520402.74	4258423.33	176057.6708	0.27412	0.37259	0.2742	0.40118	3.35E-03	6.44E-07	7.64E-07	6.44E-07	7.90E-07	3.3494E-03
520149.99	4258786	175979.8141	3.3971	0.74655	3.00982	0.75915	3.35E-03	7.98E-06	1.53E-06	7.07E-06	1.49E-06	3.3631E-03
520353.83	4258413.18	175928.4883	0.31752	0.49677	0.31759	0.5381	3.34E-03	7.45E-07	1.02E-06	7.46E-07	1.06E-06	3.3477E-03
520226.76	4258823.05	175469.4524	1.33266	0.41906	1.24767	0.44949	3.34E-03	3.13E-06	8.59E-07	2.93E-06	8.85E-07	3.3432E-03
520226.55	4258422.78	174863.0099	0.51212	1.31832	0.5262	1.48842	3.32E-03	1.20E-06	2.70E-06	1.24E-06	2.93E-06	3.3319E-03
520448.95	4258466.52	174759.6949	0.24639	0.28787	0.2444	0.30754	3.32E-03	5.78E-07	5.90E-07	5.74E-07	6.05E-07	3.3242E-03
520285.31	4258412.96	174654.1498	0.4035	0.78409	0.40608	0.87038	3.32E-03	9.47E-07	1.61E-06	9.53E-07	1.71E-06	3.3251E-03
520363.62	4258413.21	174273.3874	0.30729	0.46916	0.30762	0.50697	3.31E-03	7.21E-07	9.62E-07	7.22E-07	9.98E-07	3.3160E-03
520216.86	4258823.07	172748.7269	1.46987	0.43952	1.36893	0.47074	3.28E-03	3.45E-06	9.01E-07	3.21E-06	9.27E-07	3.2921E-03
520275.52	4258412.93	172748.4598	0.41784	0.84773	0.42215	0.94393	3.28E-03	9.81E-07	1.74E-06	9.91E-07	1.86E-06	3.2892E-03
520187.36	4258432.66	172682.1728	0.60461	2.0672	0.62643	2.3736	3.28E-03	1.42E-06	4.24E-06	1.47E-06	4.67E-06	3.2942E-03
520365.34	4258802.82	172275.3653	0.48991	0.25067	0.47175	0.26722	3.27E-03	1.15E-06	5.14E-07	1.11E-06	5.26E-07	3.2779E-03
520373.41	4258413.24	172051.1507	0.29751	0.44371	0.29805	0.47851	3.27E-03	6.98E-07	9.10E-07	7.00E-07	9.42E-07	3.2736E-03
520345.55	4258812.85	171701.9901	0.55278	0.26454	0.53123	0.28181	3.26E-03	1.30E-06	5.43E-07	1.25E-06	5.55E-07	3.2674E-03
520141.34	4258782.43	171316.7144	3.99191	0.80372	3.499	0.80306	3.26E-03	9.37E-06	1.65E-06	8.21E-06	1.58E-06	3.2772E-03
520315.87	4258822.9	171206.8967	0.66902	0.29001	0.64089	0.30857	3.25E-03	1.57E-06	5.95E-07	1.50E-06	6.07E-07	3.2586E-03
520187.14	4258813.12	171038.6619	2.0109	0.53058	1.83994	0.5615	3.25E-03	4.72E-06	1.09E-06	4.32E-06	1.11E-06	3.2624E-03
520112.64	4258750.6	170812.8866	7.73874	1.14697	6.58766	1.0782	3.25E-03	1.82E-05	2.35E-06	1.55E-05	2.12E-06	3.2850E-03
520265.73	4258412.9	170470.5302	0.43256	0.92029	0.43891	1.02762	3.24E-03	1.02E-06	1.89E-06	1.03E-06	2.02E-06	3.2463E-03
520216.76	4258422.75	170324.4876	0.52863	1.46615	0.54474	1.6604	3.24E-03	1.24E-06	3.01E-06	1.28E-06	3.27E-06	3.2464E-03
520395.01	4258782.77	170101.21	0.4121	0.23468	0.39781	0.24959	3.23E-03	9.67E-07	4.81E-07	9.34E-07	4.91E-07	3.2362E-03
520167.32	4258803.15	170085.5932	2.60848	0.62079	2.34812	0.64485	3.23E-03	6.12E-06	1.27E-06	5.51E-06	1.27E-06	3.2472E-03
520123.03	4258764.88	169650.1673	5.91506	0.99028	5.07327	0.95204	3.22E-03	1.39E-05	2.03E-06	1.19E-05	1.87E-06	3.2544E-03
520412.53	4258423.36	169270.4521	0.26552	0.35428	0.26542	0.38099	3.22E-03	6.23E-07	7.27E-07	6.23E-07	7.50E-07	3.2202E-03
520206.96	4258823.08	168588.3456	1.62215	0.46092	1.50271	0.49234	3.20E-03	3.81E-06	9.45E-07	3.53E-06	9.69E-07	3.2138E-03
520448.99	4258456.52	168176.5417	0.24425	0.29059	0.24248	0.31039	3.20E-03	5.73E-07	5.96E-07	5.69E-07	6.11E-07	3.1991E-03
520157.97	4258442.56	168175.3924	0.68413	3.17201	0.72439	3.71008	3.20E-03	1.61E-06	6.51E-06	1.70E-06	7.30E-06	3.2138E-03
520095.99	4258728.64	167844.6442	13.01932	1.43916	11.69057	1.308	3.19E-03	3.06E-05	2.95E-06	2.74E-05	2.57E-06	3.2540E-03
520255.94	4258412.87	167810.0799	0.44755	1.00335	0.45614	1.12326	3.19E-03	1.05E-06	2.06E-06	1.07E-06	2.21E-06	3.1962E-03
520385.12	4258792.79	167801.9582	0.43703	0.23802	0.42147	0.25348	3.19E-03	1.03E-06	4.88E-07	9.89E-07	4.99E-07	3.1926E-03
520325.77	4258822.89	167592.0061	0.62843	0.27911	0.60261	0.29695	3.19E-03	1.48E-06	5.72E-07	1.41E-06	5.85E-07	3.1897E-03
520158.82	4258799.64	167248.0655	2.96039	0.66389	2.64439	0.68145	3.18E-03	6.95E-06	1.36E-06	6.21E-06	1.34E-06	3.1949E-03
520266.38	4258832.98	167014.778	0.96043	0.34253	0.91171	0.36654	3.17E-03	2.25E-06	7.03E-07	2.14E-06	7.22E-07	3.1805E-03
520256.48	4258833	166650.4863	1.03734	0.35623	0.98198	0.3817	3.17E-03	2.44E-06	7.31E-07	2.31E-06	7.51E-07	3.1739E-03
520276.28	4258832.97	166579.6272	0.89102	0.32946	0.84787	0.35203	3.17E-03	2.09E-06	6.76E-07	1.99E-06	6.93E-07	3.1718E-03
520392.99	4258413.3	166319.7852	0.27935	0.39712	0.27976	0.42746	3.16E-03	6.56E-07	8.14E-07	6.57E-07	8.41E-07	3.1644E-03
520432.08	4258433.42	166042.6971	0.25226	0.31954	0.25132	0.34269	3.16E-03	5.92E-07	6.55E-07	5.90E-07	6.75E-07	3.1587E-03
520128.54	4258462.47	166017.3467	0.81489	5.56852	0.89267	6.7114	3.16E-03	1.91E-06	1.14E-05	2.10E-06	1.32E-05	3.1843E-03
520440.71	4258716.85	165790.251	0.31395	0.22879	0.30358	0.24104	3.15E-03	7.37E-07	4.69E-07	7.13E-07	4.74E-07	3.1538E-03
520246.58	4258833.02	165601.0368	1.12363	0.37077	1.06028	0.39766	3.15E-03	2.64E-06	7.60E-07	2.49E-06	7.83E-07	3.1544E-03
520286.18	4258832.95	165523.6448	0.82878	0.31709	0.79028	0.3383	3.15E-03	1.95E-06	6.50E-07	1.86E-06	6.66E-07	3.1514E-03
520355.45	4258812.84	165244.8812	0.52143	0.25445	0.50143	0.27103	3.14E-03	1.22E-06	5.22E-07	1.18E-06	5.34E-07	3.1445E-03
520206.97	4258422.72	165243.8241	0.54445	1.64045	0.56203	1.86453	3.14E-03	1.28E-06	3.36E-06	1.32E-06	3.67E-06	3.1506E-03
520452.1	4258479.64	165136.3289	0.24649	0.28079	0.24413	0.29995	3.14E-03	5.79E-07	5.76E-07	5.73E-07	5.90E-07	3.1413E-03
520177.57	4258432.63	165120.2584	0.61897	2.36679	0.64439	2.73397	3.14E-03	1.45E-06	4.85E-06	1.51E-06	5.38E-06	3.1518E-03
520246.16	4258412.84	164755.4324	0.46261	1.09873	0.4735	1.23306	3.13E-03	1.09E-06	2.25E-06	1.11E-06	2.43E-06	3.1386E-03
520177.24	4258813.13	164454.3171	2.27649	0.56091	2.06759	0.5879	3.13E-03	5.34E-06	1.15E-06	4.85E-06	1.16E-06	3.1385E-03
520296.08	4258832.94	164409.6044	0.7747	0.30571	0.73998	0.32568	3.13E-03	1.82E-06	6.27E-07	1.74E-06	6.41E-07	3.1300E-03
520138.36	4258452.5	164374.3073	0.74903	4.52758	0.81237	5.38973	3.12E-03	1.76E-06	9.29E-06	1.91E-06	1.06E-05	3.1480E-03
520444.24	4258708.41	164095.5656	0.30669	0.22924	0.29667	0.24158	3.12E-03	7.20E-07	4.70E-07	6.96E-07	4.76E-07	3.1215E-03
520099.76	4258737.74	164077.586	11.48798	1.32281	10.0204	1.21026	3.12E-03	2.70E-05	2.71E-06	2.35E-05	2.38E-06	3.1744E-03
520236.68	4258833.03	164049.9859	1.22257	0.38655	1.14938	0.41475	3.12E-03	2.87E-06	7.93E-07	2.70E-06	8.16E-07	3.1255E-03
520197.06	4258823.1	163855.5012	1.80361	0.48461	1.66075	0.51509	3.11E-03	4.23E-06	9.94E-07	3.90E-06	1.01E-06	3.1247E-03
520375.24	4258802.8	163729.2594	0.46398	0.24155	0.44694	0.25735	3.11E-03	1.09E-06	4.95E-07	1.05E-06	5.07E-07	3.1153E-03
520150.32	4258796.13	163574.4795	3.39472	0.71058	3.00881	0.71903	3.11E-03	7.97E-06	1.46E-06	7.06E-06	1.42E-06	3.1272E-03
520335.67	4258822.87	163213.9116	0.59103	0.26856	0.56723	0.28574	3.10E-03	1.39E-06	5.51E-07	1.33E-06	5.62E-07	3.1062E-03
520334.28	4258403.11	163172.4698	0.33345	0.56347	0.33306	0.61533	3.10E-03	7.83E-07	1.16E-06	7.82E-07	1.21E-06	3.1055E-03
520324.5	4258403.08	163133.9297	0.3446	0.59997	0.34459	0.65744	3.10E-03	8.09E-07	1.23E-06	8.09E-07	1.29E-06	3.1050E-03
520344.07	4258403.14	162790.5604	0.32274	0.53044	0.32223	0.5773	3.09E-03	7.58E-07	1.09E-06	7.56E-07	1.14E-06	3.0981E-03
520314.71	4258403.05	162714.8931	0.3562	0.64098	0.35693	0.70462	3.09E-03	8.36E-07	1.31E-06	8.38E-07	1.39E-06	3.0973E-03

520226.78	4258833.05	162372.7783	1.34136	0.40467	1.25535	0.43391	3.09E-03	3.15E-06	8.30E-07	2.95E-06	8.54E-07	3.0942E-03
520305.98	4258832.92	162337.9309	0.72446	0.29454	0.69304	0.31342	3.09E-03	1.70E-06	6.04E-07	1.63E-06	6.17E-07	3.0903E-03
520427.16	4258749.44	162079.8507	0.34395	0.22567	0.3324	0.23827	3.08E-03	8.07E-07	4.63E-07	7.80E-07	4.69E-07	3.0834E-03
520422.32	4258423.39	161721.2167	0.2574	0.33785	0.25712	0.36279	3.07E-03	6.04E-07	6.93E-07	6.04E-07	7.14E-07	3.0766E-03
520353.86	4258403.18	161425.883	0.31233	0.50109	0.31211	0.54328	3.07E-03	7.33E-07	1.03E-06	7.33E-07	1.07E-06	3.0720E-03
520236.37	4258412.81	161287.0097	0.4776	1.20912	0.49059	1.36027	3.07E-03	1.12E-06	2.48E-06	1.15E-06	2.68E-06	3.0732E-03
520447.78	4258699.98	161212.7576	0.2996	0.22936	0.28994	0.24187	3.06E-03	7.03E-07	4.70E-07	6.81E-07	4.76E-07	3.0667E-03
520114.17	4258761.23	161131.605	7.43267	1.06019	6.346	0.99672	3.06E-03	1.74E-05	2.17E-06	1.49E-05	1.96E-06	3.0993E-03
520402.77	4258413.33	161116.7456	0.2706	0.37655	0.27097	0.40492	3.06E-03	6.35E-07	7.72E-07	6.36E-07	7.97E-07	3.0654E-03
520295.13	4258402.99	160729.2521	0.3808	0.73683	0.38381	0.8154	3.06E-03	8.94E-07	1.51E-06	9.01E-07	1.61E-06	3.0601E-03
520216.87	4258833.07	160163.0211	1.48145	0.4246	1.37893	0.45427	3.04E-03	3.48E-06	8.71E-07	3.24E-06	8.94E-07	3.0529E-03
520141.83	4258792.63	159775.9844	3.97828	0.7621	3.48837	0.75788	3.04E-03	9.34E-06	1.56E-06	8.19E-06	1.49E-06	3.0576E-03
520197.18	4258422.69	159541.8069	0.55917	1.84696	0.57814	2.10875	3.03E-03	1.31E-06	3.79E-06	1.36E-06	4.15E-06	3.0432E-03
520363.65	4258403.21	159531.3285	0.30239	0.47358	0.30246	0.51182	3.03E-03	7.10E-07	9.71E-07	7.10E-07	1.01E-06	3.0358E-03
520285.34	4258402.96	159193.7486	0.39371	0.79378	0.39828	0.88119	3.03E-03	9.24E-07	1.63E-06	9.35E-07	1.73E-06	3.0312E-03
520124.03	4258775.29	159146.0857	5.7937	0.92604	4.98121	0.88817	3.03E-03	1.36E-05	1.90E-06	1.17E-05	1.75E-06	3.0540E-03
520436.03	4258735.77	158942.7222	0.32625	0.22491	0.31536	0.23699	3.02E-03	7.66E-07	4.61E-07	7.40E-07	4.67E-07	3.0236E-03
520187.16	4258823.12	158731.8014	2.02555	0.51127	1.85211	0.53929	3.02E-03	4.76E-06	1.05E-06	4.35E-06	1.06E-06	3.0284E-03
520365.35	4258812.82	158366.3472	0.49307	0.24513	0.47438	0.26106	3.01E-03	1.16E-06	5.03E-07	1.11E-06	5.14E-07	3.0135E-03
520315.88	4258832.9	158232.7206	0.67475	0.28265	0.64622	0.3006	3.01E-03	1.58E-06	5.80E-07	1.52E-06	5.92E-07	3.0120E-03
520167.34	4258813.15	158102.953	2.62789	0.59619	2.36368	0.61634	3.01E-03	6.17E-06	1.22E-06	5.55E-06	1.21E-06	3.0194E-03
520345.57	4258822.85	157987.8639	0.55628	0.25831	0.53427	0.27483	3.00E-03	1.31E-06	5.30E-07	1.25E-06	5.41E-07	3.0067E-03
520373.44	4258403.24	157685.0845	0.29299	0.44797	0.29326	0.483	3.00E-03	6.88E-07	9.19E-07	6.88E-07	9.51E-07	3.0006E-03
520226.58	4258412.78	157379.4303	0.49225	1.33715	0.50691	1.50844	2.99E-03	1.16E-06	2.74E-06	1.19E-06	2.97E-06	2.9996E-03
520275.55	4258402.93	157313.0647	0.40691	0.85871	0.4133	0.95587	2.99E-03	9.55E-07	1.76E-06	9.70E-07	1.88E-06	2.9958E-03
520451.31	4258691.54	157296.8495	0.29278	0.22925	0.28349	0.24191	2.99E-03	6.87E-07	4.70E-07	6.66E-07	4.76E-07	2.9922E-03
520410.65	4258776.29	156891.8701	0.37934	0.22539	0.36622	0.23904	2.98E-03	8.91E-07	4.62E-07	8.60E-07	4.71E-07	2.9849E-03
520395.02	4258792.77	156600.8931	0.41499	0.22968	0.4002	0.24431	2.98E-03	9.74E-07	4.71E-07	9.40E-07	4.81E-07	2.9796E-03
520167.78	4258432.59	156542.6314	0.63036	2.73836	0.66219	3.1838	2.98E-03	1.48E-06	5.62E-06	1.55E-06	6.27E-06	2.9905E-03
520206.97	4258833.08	156386.236	1.63337	0.44502	1.51231	0.47449	2.97E-03	3.83E-06	9.13E-07	3.55E-06	9.34E-07	2.9819E-03
520158.97	4258809.7	155740.5579	2.97708	0.63577	2.65712	0.64928	2.96E-03	6.99E-06	1.30E-06	6.24E-06	1.28E-06	2.9762E-03
520412.56	4258413.36	155285.7442	0.26227	0.35794	0.26255	0.38448	2.95E-03	6.16E-07	7.34E-07	6.16E-07	7.57E-07	2.9544E-03
520266.4	4258842.98	155169.1058	0.96982	0.33221	0.92032	0.3557	2.95E-03	2.28E-06	6.81E-07	2.16E-06	7.00E-07	2.9553E-03
520265.76	4258402.9	155076.7948	0.42032	0.93265	0.42866	1.04078	2.95E-03	9.87E-07	1.91E-06	1.01E-06	2.05E-06	2.9537E-03
520256.49	4258843	155005.8279	1.0485	0.34551	0.99208	0.37032	2.95E-03	2.46E-06	7.09E-07	2.33E-06	7.29E-07	2.9526E-03
520325.78	4258832.89	154878.9495	0.6335	0.2723	0.60727	0.28947	2.94E-03	1.49E-06	5.58E-07	1.43E-06	5.70E-07	2.9480E-03
520276.3	4258842.97	154621.7359	0.89926	0.31966	0.85547	0.34181	2.94E-03	2.11E-06	6.56E-07	2.01E-06	6.73E-07	2.9445E-03
520385.14	4258802.79	154372.2649	0.4398	0.23287	0.42371	0.24791	2.93E-03	1.03E-06	4.78E-07	9.95E-07	4.88E-07	2.9373E-03
520246.59	4258843.02	154194.1161	1.13672	0.35969	1.07197	0.38576	2.93E-03	2.67E-06	7.38E-07	2.52E-06	7.59E-07	2.9376E-03
520286.2	4258842.95	153511.0574	0.83603	0.30785	0.797	0.32868	2.92E-03	1.96E-06	6.31E-07	1.87E-06	6.47E-07	2.9231E-03
520187.39	4258422.66	153131.1284	0.57229	2.09389	0.59361	2.40414	2.91E-03	1.34E-06	4.29E-06	1.39E-06	4.73E-06	2.9225E-03
520216.79	4258412.75	153005.3456	0.50633	1.48665	0.52215	1.68252	2.91E-03	1.19E-06	3.05E-06	1.23E-06	3.31E-06	2.9171E-03
520177.25	4258823.13	152950.1348	2.2935	0.54014	2.08145	0.56381	2.91E-03	5.38E-06	1.11E-06	4.89E-06	1.11E-06	2.9198E-03
520432.11	4258423.42	152715.0051	0.24953	0.32239	0.24904	0.34568	2.90E-03	5.86E-07	6.61E-07	5.85E-07	6.80E-07	2.9053E-03
520393.02	4258403.3	152650.5683	0.27549	0.40122	0.27581	0.43145	2.90E-03	6.47E-07	8.23E-07	6.48E-07	8.49E-07	2.9046E-03
520150.6	4258806.24	152594.4842	3.40298	0.67815	3.01447	0.68275	2.90E-03	7.99E-06	1.39E-06	7.08E-06	1.34E-06	2.9183E-03
520118.72	4258472.44	152517.7663	0.88627	7.08298	0.98015	8.6398	2.90E-03	2.08E-06	1.45E-05	2.30E-06	1.70E-05	2.9350E-03
520255.98	4258402.87	152479.5048	0.43378	1.01708	0.44409	1.13767	2.90E-03	1.02E-06	2.09E-06	1.04E-06	2.24E-06	2.9047E-03
520105.32	4258757.57	152319.2289	9.64774	1.12318	8.28691	1.03584	2.90E-03	2.26E-05	2.30E-06	1.95E-05	2.04E-06	2.9418E-03
520355.47	4258822.84	152261.0484	0.5247	0.24869	0.50422	0.26459	2.89E-03	1.23E-06	5.10E-07	1.18E-06	5.21E-07	2.8977E-03
520296.1	4258842.93	152128.5715	0.78016	0.29684	0.74504	0.31643	2.89E-03	1.83E-06	6.09E-07	1.75E-06	6.23E-07	2.8965E-03
520197.07	4258833.1	152076.1735	1.81341	0.46736	1.66914	0.49548	2.89E-03	4.26E-06	9.59E-07	3.92E-06	9.75E-07	2.9008E-03
520115.37	4258771.71	151797.9818	7.19456	0.98609	6.16503	0.92653	2.89E-03	1.69E-05	2.02E-06	1.45E-05	1.82E-06	2.9206E-03
520335.69	4258832.87	150912.5228	0.59563	0.2623	0.5714	0.2788	2.87E-03	1.40E-06	5.38E-07	1.34E-06	5.49E-07	2.8724E-03
520375.26	4258812.8	150745.3246	0.46671	0.23626	0.44915	0.25151	2.87E-03	1.10E-06	4.85E-07	1.05E-06	4.95E-07	2.8685E-03
520403.63	4258789.21	150703.0679	0.39625	0.22455	0.38219	0.23857	2.86E-03	9.30E-07	4.61E-07	8.97E-07	4.70E-07	2.8674E-03
520306	4258842.92	150059.4357	0.7292	0.28624	0.69737	0.30469	2.85E-03	1.71E-06	5.87E-07	1.64E-06	6.00E-07	2.8569E-03
520334.32	4258393.11	149836.3786	0.32734	0.56833	0.32764	0.6214	2.85E-03	7.68E-07	1.17E-06	7.69E-07	1.22E-06	2.8520E-03
520324.53	4258393.08	149731.3687	0.33795	0.60557	0.33899	0.66426	2.85E-03	7.93E-07	1.24E-06	7.96E-07	1.31E-06	2.8503E-03
520344.1	4258393.14	149561.6051	0.3171	0.53508	0.31699	0.583	2.84E-03	7.44E-07	1.10E-06	7.44E-07	1.15E-06	2.8466E-03
520246.19	4258402.84	149510.9677	0.44716	1.11435	0.45927	1.24924	2.84E-03	1.05E-06	2.29E-06	1.08E-06	2.46E-06	2.8488E-03
520124.83	4258785.61	149407.023	5.70462	0.86974	4.91249	0.83206	2.84E-03	1.34E-05	1.78E-06	1.15E-05	1.64E-06	2.8683E-03
520314.74	4258393.05	149259.6493	0.34894	0.64708	0.351	0.71199	2.84E-03	8.19E-07	1.33E-06	8.24E-07	1.40E-06	2.8415E-03
520422.35	4258413.39	148739.318	0.25437	0.34109	0.25452	0.36593	2.83E-03	5.97E-07	7.00E-07	5.98E-07	7.20E-07	2.8299E-03
520353.89	4258393.18	148320.4757	0.3071	0.50536	0.307	0.54844	2.82E-03	7.21E-07	1.04E-06	7.21E-07	1.08E-06	2.8229E-03
520402.81	4258403.33	148209.2501	0.26704	0.38042	0.26744	0.40858	2.82E-03	6.27E-07	7.80E-07	6.28E-07	8.04E-07	2.8200E-03
520207	4258412.72	148124.6982	0.51959	1.66261	0.53638	1.88887	2.82E-03	1.22E-06	3.41E-06	1.26E-06	3.72E-06	2.8252E-03
520089.13	4258736.23	147759.5812	14.58609	1.353	16.51823	1.22199	2.81E-03	3.42E-05	2.77E-06	3.88E-05	2.41E-06	2.8868E-03
520187.17	4258833.12	147742.7018	2.04028	0.49331	1.86429	0.51852	2.81E-03	4.79E-06	1.01E-06	4.38E-06	1.02E-06	2.8195E-03
520295.16	4258392.99	147251.6963	0.37198	0.74494	0.37672	0.82458	2.80E-03	8.73E-07	1.53E-06	8.84E-07	1.62E-06	2.8039E-03
520167.35	4258823.15	147232.621	2.64254	0.57292	2.37578	0.58956	2.80E-03	6.20E-06	1.18E-06	5.58E-06	1.16E-06	2.8127E-03
520363.68	4258393.21	146970.5411	0.29761	0.47749	0.29752	0.51653	2.79E-03	6.99E-07	9.79E-07	6.98E-07	1.02E-06	2.7970E-03
520158	4258432.56	146868.2895	0.63772	3.208	0.67847	3.75427	2.79E-03	1.50E-06	6.58E-06	1.59E-06	7.39E-06	2.8088E-03
520128.57	4258452.47	146806.0032	0.74182	5.61888	0.81118	6.77607	2.79E-03	1.74E-06	1.15E-05	1.90E-06	1.33E-05	2.8190E-03
520365.37	4258822.82	146433.9009	0.49672	0.24002	0.47749	0.25536	2.78E-03	1.17E-06	4.92E-07	1.12E-06	5.03E-07	2.7867E-03
520236.4	4258402.81	146149.1926	0.46027	1.22624	0.47378	1.37808	2.78E-03	1.08E-06	2.51E-06	1.11E-06	2.71E-06	2.7855E-03
520345.59	4258832.85	146123.3206	0.56026	0.25245	0.5378	0.2683	2.78E-03	1.32E-06	5.18E-07	1.26E-06	5.28E-07	2.7812E-03
520177.6	4258422.63	145965.4693	0.58334	2.3962	0.60919	2.7671	2.77E-03	1.37E-06	4.91E-06	1.43E-06	5.45E-06	2.7877E-03
520285.37	4258392.96	145733.2519	0.3839	0.80313	0.39026	0.89145	2.77E-03	9.01E-07	1.65E-06	9.16E-07	1.75E-06	2.7753E-03
520092.8	4258745.07	145700.3488	14.41568	1.25954	13.64284	1.1415	2.77E-03	3.38E-05	2.58E-06	3.20E-05	2.25E-06	2.8402E-03
520447.67	4258724.17	145607.6892	0.30628	0.22066	0.29593	0.23215	2.77E-03	7.19E-07	4.53E-07	6.95E-07	4.57E-07	2.7701E-03
520133.86	4258799.33	145336.9438	4.70309	0.77217	4.08184	0.7506	2.76E-03	1.10E-05	1.58E-06	9.58E-06	1.48E-06	2.7863E-03
520373.47	4258393.24	145177.8448	0.28851	0.45185	0.28854	0.48738	2.76E-03	6.77E-07	9.27E-07	6.77E-07	9.59E-07	2.7628E-03
520158.34	4258819.43	145164.6811	3.02864	0.61309	2.69901	0.62224	2.76E-03	7.11E-06	1.26E-06	6.34E-06	1.22E-06	2.7752E-03
520395.04	4258802.77	144655.2246	0.41761	0.22481	0.40231	0.23911	2.75E-03	9.80E-07	4.61E-07	9.44E-07	4.71E-07	2.7525E-03
520106.71	4258768.14	144267.2424	9.24548	1.04026	7.94914	0.96037	2.74E-03	2.17E-05	2.13E-06	1.87E-05	1.89E-06	2.7867E-03
520412.23	4258785.64	144109.9565	0.37892	0.2198	0.36547	0.23318	2.74E-03	8.90E-07	4.51E-07	8.58E-07	4.59E-07	2.7419E-03
520256.51	4258853	143994.6232	1.05529	0.33473	0.99821	0.3589	2.74E-03	2.48E-06	6.87E-07	2.34E-06	7.06E-07	2.7433E-03
520275.58	4258392.93	143886.9739	0.39597	0.86949	0.40407	0.96736	2.74E-03	9.30E-07	1.78E-06	9.49E-07	1.90E-06	2.7406E-03
520266.41	4258852.98	143881.1911	0.9751	0.32184	0.92508	0.34479	2.73E-03	2.29E-06	6.60E-07	2.17E-06	6.79E-07	2.7407E-03
520246.61	4258853.02	143460.7105	1.14511	0.34847	1.07948	0.37376	2.73E-03	2.69E-06	7.15E-07	2.53E-06	7.36E-07	2.7336E-03
520276.31	4258852.97	143365.0733	0.90441	0.30987	0.86017	0.33157	2.73E-03	2.12E-06	6.36E-07	2.02E-06	6.53E-07	2.7305E-03
520412.59	4258403.36	143282.624	0.25903	0.36178	0.25948	0.38806	2.72E-03	6.08E-07	7.42E-07	6.09E-07	7.64E-07	2.7263E-03
520118.75	4258462.44	143271.7126	0.79869	7.14588	0.87893	8.69378	2.72E-03	1.88E-06	1.47E-05	2.06E-06	1.71E-05	2.7590E-03
520116.33	4258782.1	143012.7395	7.01585	0.92162	6.0282	0.86517	2.72E-03	1.65E-05	1.89E-06	1.42E-05	1.70E-06	2.7526E-03
520385.16	4258812.79	142821.9101	0.44286	0.22812	0.42623	0.24273	2.71E-03	1.04E-06	4.68E-07	1.00E-06	4.78E-07	2.7178E-03
520177.27	4258833.13	142729.3566	2.31241	0.52096	2.09661	0.54146	2.71E-03	5.43E-06	1.07E-06	4.92E-06	1.07E-06	2.7255E-03
520197.21	4258412.69	142672.4125	0.53165	1.87099	0.55001	2.13525	2.71E-03	1.25E-06	3.84E-06	1.29E-06	4.20E-06	2.7225E-03
520138.39	4258442.5	142657.91	0.68865	4.57433	0.74783	5.43922	2.71E-03	1.62E-06	9.38E-06	1.76E-06	1.07E-05	2.7351E-03
520454.54	4258707.77	142606.7493	0.29284	0.22125	0.28307	0.23294	2.71E-03	6.87E-07	4.54E-07	6.65E-07	4.59E-07	2.7130E-03
520286.21	4258852.95	142430.0322	0.84145	0.29869	0.80198	0.31916	2.71E-03	1.98E-06	6.13E-07	1.88E-06	6.28E-07	2.7124E-03
520434.59	4258756.37	142410.519	0.33416	0.21726	0.32269	0.22918	2.71E-03	7.85E-07	4.46E-07	7.58E-07	4.51E-07	2.7094E-03
520149.33	4258815.71	142385.9726	3.51531	0.6561	3.10369	0.65532	2.71E-03	8.25E-06	1.35E-06	7.29E-06	1.29E-06	2.7247E-03
520226.61	4258402.78	142367.2333	0.47287	1.35524	0.48729	1.52767	2.71E-03	1.11E-06	2.78E-06	1.14E-06	3.01E-06	2.7142E-03
520236.71	4258853.03	142269.1917	1.24608	0.36321	1.17011	0.3894	2.70E-03	2.93E-06	7.45E-07	2.75E-06	7.67E-07	2.7115E-03
520426.3	4258769.81	142267.4914	0.35103	0.21718	0.33877	0.22961	2.70E-03	8.24E-07	4.45E-07	7.95E-07	4.52E-07	2.7068E-03
520265.8	4258392.9	141700.6337	0.40808	0.94469	0.41788	1.05338	2.69E-03	9.58E-07	1.94E-06	9.81E-07	2.07E-06	2.6994E-03
520432.14	4258413.42	141174.8786	0.24675	0.32547	0.24673	0.34871	2.68E-03	5.79E-07	6.68E-07	5.79E-07	6.86E-07	2.6860E-03
520462.09	4258480.02	141035.9007	0.23838	0.2691	0.23593	0.28703	2.68E-03	5.60E-07	5.52E-07	5.54E-07	5.65E-07	2.6831E-03
520355.49	4258832.84	141023.7697	0.52843	0.2433	0.50747	0.25856	2.68E-03	1.24E-06	4.99E-07	1.19E-06	5.09E-07	2.6840E-03
520296.11	4258852.93	140917.674	0.78436	0.28806	0.74891	0.30732	2.68E-03	1.84E-06	5.91E-07	1.76E-06	6.05E-07	2.6834E-03
520393.05	4258393.3	140791.5988	0.27164	0.40505	0.27171	0.43536	2.68E-03	6.38E-07	8.31E-07	6.38E-07	8.57E-07	2.6792E-03
520226.81	4258853.05	140481.4378	1.36095	0.37912	1.27246	0.40583	2.67E-03	3.20E-06	7.78E-07	2.99E-06	7.99E-07	2.6781E-03
520403.49	4258799.27	139665.9496	0.39905	0.21989	0.38449	0.23366	2.65E-03	9.37E-07	4.51E-07	9.03E-07	4.60E-07	2.6575E-03
520443.25	4258742.78	139587.5631	0.31748	0.21657	0.30657	0.228	2.65E-03	7.45E-07	4.44E-07	7.20E-07	4.49E-07	2.6557E-03
520375.27	4258822.8	139465.0613	0.46963	0.23127	0.45156	0.24598	2.65E-03	1.10E-06	4.74E-07	1.06E-06	4.84E-07	2.6541E-03
520256.01	4258392.87	139166.3522	0.4201	1.03052	0.43144	1.15162	2.65E-03	9.86E-07	2.11E-06	1.01E-06	2.27E-06	2.6517E-03
520140.31	4258811.99	139122.2474	4.15809	0.7018	3.6317	0.68838	2.64E-03	9.76E-06	1.44E-06	8.53E-06	1.36E-06	2.6655E-03
520306.02	4258852.92	138843.0467	0.73238	0.27785	0.70031	0.29598	2.64E-03	1.72E-06	5.70E-07	1.64E-06	5.83E-07	2.6437E-03
520216.91	4258853.07	138400.9526	1.49709	0.39695	1.39255	0.42351	2.63E-03	3.51E-06	8.14E-07	3.27E-06	8.34E-07	2.6392E-03
520334.35	4258383.11	138164.5991	0.32128	0.57345	0.32263	0.62756	2.63E-03	7.54E-07	1.18E-06	7.57E-07	1.24E-06	2.6302E-03
520216.82	4258402.75	138153.5114	0.48481	1.50581	0.49989	1.7034	2.63E-03	1.14E-06	3.09E-06	1.17E-06	3.35E-06	2.6348E-03
520324.56	4258383.08	137987.982	0.33135	0.61116	0.33366	0.67092	2.62E-03	7.78E-07	1.25E-06	7.83E-07	1.32E-06	2.6270E-03
520344.14	4258383.14	137982.1753	0.31152	0.53962	0.31216	0.58858	2.62E-03	7.31E-07	1.11E-06	7.33E-07	1.16E-06	2.6265E-03
520167.82	4258422.59	137901.49	0.59132	2.76904	0.62407	3.21885	2.62E-03	1.39E-06	5.68E-06	1.47E-06	6.34E-06	2.6361E-03
520422.38	4258403.39	137622.618	0.25136	0.34464	0.25177	0.36922	2.62E-03	5.90E-07	7.07E-07	5.91E-07	7.27E-07	2.6186E-03
520167.37	4258833.15	137565.2154	2.66022	0.55139	2.38977	0.56474	2.61E-03	6.25E-06	1.13E-06	5.61E-06	1.11E-06	2.6290E-03
520314.77	4258383.05	137473.7618	0.34171	0.65347	0.34521	0.71938	2.61E-03	8.02E-07	1.34E-06	8.10E-07	1.42E-06	2.6175E-03
520402.84	4258393.33	137050.4745	0.26351	0.3842	0.26374	0.41228	2.61E-03	6.19E-07	7.88E-07	6.19E-07	8.12E-07	2.6079E-03
520353.92	4258383.18	136894.2414	0.30194	0.50946	0.30231	0.5535	2.60E-03	7.09E-07	1.04E-06	7.10E-07	1.09E-06	2.6057E-03
520187.42	4258412.66	136565.0515	0.54202	2.11907	0.56347	2.43245	2.60E-03	1.27E-06	4.35E-06	1.32E-06	4.79E-06	2.6076E-03
520098.06	4258764.57	136488.3389	12.19537	1.08323	10.84106	0.98809	2.59E-03	2.86E-05	2.22E-06	2.55E-05	1.95E-06	2.6526E-03
520461.41	4258691.37	136482.9838	0.2803	0.22107	0.27118	0.23304	2.59E-03	6.58E-07	4.53E-07	6.37E-07	4.59E-07	2.5965E-03
520315.92	4258852.9	136399.7536	0.68563	0.26819	0.65635	0.28528	2.59E-03	1.61E-06	5.50E-07	1.54E-06	5.62E-07	2.5970E-03
520107.83	4258778.6	136345.7679	8.89636	0.96813	7.67971	0.89436	2.59E-03	2.09E-05	1.99E-06	1.80E-05	1.76E-06	2.6343E-03
520246.22	4258392.84	136285.3693	0.43189	1.1292	0.44444	1.26464	2.59E-03	1.01E-06	2.32E-06	1.04E-06	2.49E-06	2.5974E-03
520345.6	4258842.85	136031.8228	0.56551	0.24719	0.54258	0.26248	2.59E-03	1.33E-06	5.07E-07	1.27E-06	5.17E-07	2.5893E-03
520207.01	4258853.08	135947.9031	1.65914	0.41677	1.53403	0.44227	2.58E-03	3.90E-06	8.55E-07	3.60E-06	8.71E-07	2.5933E-03
520148.21	4258432.53	135940.7685	0.63945	3.8176	0.68936	4.48555	2.58E-03	1.50E-06	7.83E-06	1.62E-06	8.83E-06	2.6038E-03
520363.71	4258383.21	135914.2793	0.29288	0.48118	0.29293	0.52116	2.58E-03	6.88E-07	9.87E-07	6.88E-07	1.03E-06	2.5869E-03
520365.39	4258832.82	135910.9158	0.50037	0.23508	0.48063	0.24985	2.58E-03	1.17E-06	4.82E-07	1.13E-06	4.92E-07	2.5867E-03
520158.52	4258829.5	135605.914	3.03022	0.58761	2.70086	0.59377	2.58E-03	7.11E-06	1.21E-06	6.34E-06	1.17E-06	2.5935E-03
520295.19	4258382.99	135448.0817	0.36313	0.75356	0.36947	0.83387	2.57E-03	8.53E-07	1.55E-06	8.67E-07	1.64E-06	2.5795E-03
520117.12	4258792.42	134902.8232	6.89148	0.86492	5.92645	0.81104	2.56E-03	1.62E-05	1.77E-06	1.39E-05	1.60E-06	2.5977E-03
520395.06	4258812.77	134428.9506	0.42068	0.22043	0.40485	0.23438	2.56E-03	9.88E-07	4.52E-07	9.50E-07	4.61E-07	2.5581E-03
520373.5	4258383.24	134317.1297	0.28411	0.45537	0.28408	0.49166	2.55E-03	6.67E-07	9.34E-07	6.67E-07	9.68E-07	2.5564E-03
520411.94	4258795.77	134241.0409	0.38205	0.21543	0.36813	0.22865	2.55E-03	8.97E-07	4.42E-07	8.64E-07	4.50E-07	2.5543E-03
520285.4	4258382.96	133948.8798	0.37407	0.81303	0.38194	0.90182	2.55E-03	8.78E-07	1.67E-06	8.97E-07	1.78E-06	2.5513E-03
520325.82	4258852.89	133574.651	0.64338	0.25898	0.61643	0.27516	2.54E-03	1.51E-06	5.31E-07	1.45E-06	5.42E-07	2.5430E-03
520256.53	4258863	133566.2145	1.05717	0.3238	0.99989	0.34734	2.54E-03	2.48E-06	6.64E-07	2.35E-06	6.84E-07	2.5450E-03
520207.03	4258402.72	133480.2583	0.49588	1.68355	0.51198	1.91182	2.54E-03	1.16E-06	3.45E-06	1.20E-06	3.76E-06	2.5468E-03
520266.43	4258862.98	133441.2596	0.97719	0.31142	0.92697	0.33385	2.54E-03	2.29E-06	6.39E-07	2.18E-06	6.57E-07	2.5422E-03
520459.82	4258441.13	133383.6994	0.23253	0.28047	0.23097	0.29917	2.54E-03	5.46E-07	5.75E-07	5.42E-07	5.89E-07	2.5376E-03
520149.67	4258825.84	133257.7514	3.50448	0.62675	3.0957	0.62338	2.53E-03	8.23E-06	1.29E-06	7.27E-06	1.23E-06	2.5510E-03
520246.63	4258863.02	133137.1734	1.14678	0.33697	1.08098	0.3615	2.53E-03	2.69E-06	6.91E-07	2.54E-06	7.12E-07	2.5373E-03
520236.43	4258392.81	133035.7203	0.44329	1.24248	0.4566	1.39504	2.53E-03	1.04E-06	2.55E-06	1.07E-06	2.75E-06	2.5362E-03
520276.33	4258862.97	132905.4437	0.90642	0.29993	0.86198	0.3212	2.53E-03	2.13E-06	6.15E-07	2.02E-06	6.32E-07	2.5317E-03
520197.11	4258853.1	132828.7304	1.84852	0.43809	1.69795	0.46146	2.52E-03	4.34E-06	8.98E-07	3.99E-06	9.08E-07	2.5350E-03
520059.93	4258627.94	132802.8499	5.59286	4.642	12.35612	3.75046	2.52E-03	1.31E-05	9.52E-06	2.90E-05	7.38E-06	2.5834E-03
520412.63	4258393.36	132635.8445	0.2557	0.36515	0.25606	0.39128	2.52E-03	6.00E-07	7.49E-07	6.01E-07	7.70E-07	2.5239E-03
520385.17	4258822.79	132514.9772	0.44565	0.22346	0.4285	0.2376	2.52E-03	1.05E-06	4.58E-07	1.01E-06	4.68E-07	2.5218E-03
520275.62	4258382.93	132135.461	0.38502	0.8805	0.39439	0.97869	2.51E-03	9.04E-07	1.81E-06	9.26E-07	1.93E-06	2.5172E-03
520466.13	4258469.97	132120.1216	0.23335	0.26655	0.23113	0.28405	2.51E-03	5.48E-07	5.47E-07	5.43E-07	5.59E-07	2.5136E-03
520236.73	4258863.03	132112.3092	1.24726	0.35101	1.1712	0.37624	2.51E-03	2.93E-06	7.20E-07	2.75E-06	7.41E-07	2.5184E-03
520286.23	4258862.95	132024.313	0.84359	0.2893	0.80391	0.30941	2.51E-03	1.98E-06	5.93E-07	1.89E-06	6.09E-07	2.5146E-03
520355.5	4258842.84	131450.8379	0.5333	0.23846	0.51183	0.25319	2.50E-03	1.25E-06	4.89E-07	1.20E-06	4.98E-07	2.5021E-03
520432.17	4258403.42	130978.2417	0.24392	0.32853	0.24423	0.35158	2.49E-03	5.73E-07	6.74E-07	5.73E-07	6.92E-07	2.4922E-03
520057.12	4258655.32	130734.2964	5.70157	2.80164	10.94094	2.46113	2.49E-03	1.34E-05	5.75E-06	2.57E-05	4.84E-06	2.5347E-03
520140.81	4258822.19	130661.148	4.14003	0.6681	3.61552	0.65295	2.48E-03	9.72E-06	1.37E-06	8.49E-06	1.29E-06	2.5045E-03
520296.13	4258862.93	130625.9686	0.7865	0.27915	0.75084	0.29811	2.48E-03	1.85E-06	5.73E-07	1.76E-06	5.87E-07	2.4877E-03
520226.83	4258863.05	130576.0649	1.36202	0.36625	1.27347	0.39167	2.48E-03	3.20E-06	7.51E-07	2.99E-06	7.71E-07	2.4897E-03
520393.08	4258383.3	130406.5107	0.26781	0.4084	0.26763	0.43905	2.48E-03	6.29E-07	8.38E-07	6.28E-07	8.64E-07	2.4818E-03
520057.12	4258664.6	130193.9881	5.88804	2.46504	11.27206	2.19759	2.47E-03	1.38E-05	5.06E-06	2.65E-05	4.33E-06	2.5244E-03
520429.44	4258778.52	130181.936	0.34806	0.21117	0.33559	0.22327	2.47E-03	8.17E-07	4.33E-07	7.88E-07	4.40E-07	2.4770E-03
520403.38	4258809.32	130089.266	0.4021	0.21563	0.38702	0.22913	2.47E-03	9.44E-07	4.42E-07	9.09E-07	4.51E-07	2.4755E-03
520122.29	4258804.55	130081.4844	6.10089	0.79324	5.24665	0.74935	2.47E-03	1.43E-05	1.63E-06	1.23E-05	1.48E-06	2.5024E-03
520265.83	4258382.9	129999.0607	0.39589	0.95716	0.40662	1.06602	2.47E-03	9.29E-07	1.96E-06	9.55E-07	2.10E-06	2.4770E-03
520099.33	4258775.09	129874.4156	11.71094	1.0061	10.34697	0.91907	2.47E-03	2.75E-05	2.06E-06	2.43E-05	1.81E-06	2.5243E-03
520177.64	4258412.63	129802.1145	0.55028	2.42296	0.57697	2.79704	2.47E-03	1.29E-06	4.97E-06	1.35E-06	5.51E-06	2.4804E-03
520375.29	4258832.8	129595.1651	0.47274	0.22656	0.45416	0.24073	2.46E-03	1.11E-06	4.65E-07	1.07E-06	4.74E-07	2.4665E-03
520057.12	4258646.05	129559.9686	5.48912	3.22165	10.57322	2.77667	2.46E-03	1.29E-05	6.61E-06	2.48E-05	5.47E-06	2.5125E-03
520226.64	4258392.78	129390.869	0.45412	1.37258	0.46786	1.54617	2.46E-03	1.07E-06	2.82E-06	1.10E-06	3.04E-06	2.4675E-03
520187.21	4258853.12	129258.4221	2.07616	0.46119	1.89315	0.48107	2.46E-03	4.87E-06	9.46E-07	4.44E-06	9.47E-07	2.4682E-03
520108.75	4258788.97	129114.4304	8.66986	0.9053	7.4867	0.83655	2.45E-03	2.04E-05	1.86E-06	1.76E-05	1.65E-06	2.4957E-03
520158.03	4258422.56	128932.8088	0.59548	3.24352	0.63631	3.79087	2.45E-03	1.40E-06	6.65E-06	1.49E-06	7.46E-06	2.4678E-03
520216.92	4258863.07	128716.6999	1.49732	0.38336	1.39294	0.40836	2.45E-03	3.52E-06	7.86E-07	3.27E-06	8.04E-07	2.4550E-03
520306.03	4258862.92	128696.6476	0.73437	0.2694	0.7021	0.2872	2.45E-03	1.72E-06	5.53E-07	1.65E-06	5.65E-07	2.4508E-03
520060.71	4258691.8	128620.7213	7.29848	1.83533	16.66343	1.67402	2.44E-03	1.71E-05	3.76E-06	3.91E-05	3.30E-06	2.5082E-03
520197.24	4258402.69	128274.2611	0.50567	1.89307	0.52391	2.15985	2.44E-03	1.19E-06	3.88E-06	1.23E-06	4.25E-06	2.4488E-03
520458.02	4258723.39	128226.9709	0.2923	0.21323	0.28215	0.22407	2.44E-03	6.86E-07	4.37E-07	6.62E-07	4.41E-07	2.4396E-03

520057.12	4258673.87	128011.2239	6.04053	2.19197	11.57685	1.97632	2.43E-03	1.42E-05	4.50E-06	2.72E-05	3.89E-06	2.4830E-03
520334.38	4258373.11	127864.2489	0.31527	0.57846	0.31781	0.63352	2.43E-03	7.40E-07	1.19E-06	7.46E-07	1.25E-06	2.4344E-03
520422.41	4258393.39	127823.5263	0.2483	0.34808	0.24875	0.37241	2.43E-03	5.83E-07	7.14E-07	5.84E-07	7.33E-07	2.4323E-03
520059.89	4258618.24	127798.949	5.0988	5.70599	11.54337	4.35416	2.43E-03	1.20E-05	1.17E-05	2.71E-05	8.57E-06	2.4886E-03
520344.17	4258373.14	127770.2899	0.306	0.5441	0.30764	0.59402	2.43E-03	7.18E-07	1.12E-06	7.22E-07	1.17E-06	2.4324E-03
520324.59	4258373.08	127629.4557	0.32477	0.61704	0.32841	0.67763	2.43E-03	7.62E-07	1.27E-06	7.71E-07	1.33E-06	2.4301E-03
520256.04	4258382.87	127533.4671	0.40657	1.0442	0.41831	1.16547	2.42E-03	9.54E-07	2.14E-06	9.82E-07	2.29E-06	2.4306E-03
520158.67	4258839.55	127217.8379	3.04657	0.5646	2.71257	0.56785	2.42E-03	7.15E-06	1.16E-06	6.37E-06	1.12E-06	2.4340E-03
520402.87	4258383.33	127188.3482	0.25996	0.38752	0.25992	0.41576	2.42E-03	6.10E-07	7.95E-07	6.10E-07	8.18E-07	2.4205E-03
520314.8	4258373.05	127073.5358	0.33447	0.66008	0.33936	0.72674	2.42E-03	7.85E-07	1.35E-06	7.97E-07	1.43E-06	2.4198E-03
520459.13	4258430.83	126994.4416	0.23085	0.28358	0.22957	0.30264	2.41E-03	5.42E-07	5.82E-07	5.39E-07	5.96E-07	2.4162E-03
520353.96	4258373.18	126877.1818	0.29684	0.51347	0.29798	0.55847	2.41E-03	6.97E-07	1.05E-06	7.00E-07	1.10E-06	2.4153E-03
520118.78	4258452.44	126849.2885	0.72405	7.19521	0.79178	8.75012	2.41E-03	1.70E-06	1.48E-05	1.86E-06	1.72E-05	2.4467E-03
520057.12	4258636.77	126816.4181	5.22246	3.7567	10.15607	3.15456	2.41E-03	1.23E-05	7.70E-06	2.38E-05	6.21E-06	2.4606E-03
520365.4	4258842.82	126667.0159	0.5043	0.23037	0.48408	0.24458	2.41E-03	1.18E-06	4.72E-07	1.14E-06	4.81E-07	2.4110E-03
520128.6	4258442.47	126557.8477	0.67831	5.65848	0.73882	6.83124	2.41E-03	1.59E-06	1.16E-05	1.73E-06	1.34E-05	2.4340E-03
520207.02	4258863.08	126553.3572	1.65869	0.40251	1.53401	0.42625	2.41E-03	3.89E-06	8.26E-07	3.60E-06	8.39E-07	2.4147E-03
520315.93	4258862.9	126408.9243	0.68729	0.26019	0.65784	0.27692	2.40E-03	1.61E-06	5.34E-07	1.54E-06	5.45E-07	2.4070E-03
520363.74	4258373.21	126036.6049	0.28817	0.48485	0.28874	0.52573	2.40E-03	6.77E-07	9.94E-07	6.78E-07	1.03E-06	2.3991E-03
520441.94	4258763.34	126023.0079	0.32461	0.2093	0.31324	0.22058	2.40E-03	7.62E-07	4.29E-07	7.35E-07	4.34E-07	2.3978E-03
520411.7	4258805.88	125442.1413	0.38516	0.2113	0.37073	0.22431	2.38E-03	9.04E-07	4.33E-07	8.70E-07	4.42E-07	2.3871E-03
520216.85	4258392.75	125343.656	0.46422	1.52426	0.47857	1.72346	2.38E-03	1.09E-06	3.13E-06	1.12E-06	3.39E-06	2.3913E-03
520177.3	4258853.13	125241.4161	2.35245	0.48594	2.12804	0.50067	2.38E-03	5.52E-06	9.97E-07	5.00E-06	9.86E-07	2.3931E-03
520395.07	4258822.77	125156.8251	0.42336	0.21606	0.407	0.22961	2.38E-03	9.94E-07	4.43E-07	9.56E-07	4.52E-07	2.3818E-03
520149.95	4258835.95	125051.7093	3.50389	0.59985	3.09445	0.59418	2.38E-03	8.23E-06	1.23E-06	7.26E-06	1.17E-06	2.3949E-03
520464.75	4258707.32	125010.7697	0.28009	0.21349	0.27043	0.22459	2.38E-03	6.58E-07	4.38E-07	6.35E-07	4.42E-07	2.3784E-03
520246.25	4258382.84	124735.8452	0.41691	1.14371	0.42928	1.27958	2.37E-03	9.79E-07	2.35E-06	1.01E-06	2.52E-06	2.3779E-03
520108.93	4258472.41	124717.3121	0.85546	9.53156	0.9477	11.54478	2.37E-03	2.01E-06	1.95E-05	2.22E-06	2.27E-05	2.4172E-03
520373.53	4258373.24	124685.1433	0.27974	0.45874	0.27998	0.49586	2.37E-03	6.57E-07	9.41E-07	6.57E-07	9.76E-07	2.3733E-03
520113.27	4258800.83	124659.5734	7.65586	0.83441	6.58663	0.77545	2.37E-03	1.80E-05	1.71E-06	1.55E-05	1.53E-06	2.4062E-03
520057.12	4258683.15	124562.5859	6.15111	1.96683	11.85848	1.78869	2.37E-03	1.44E-05	4.03E-06	2.78E-05	3.52E-06	2.4175E-03
520256.54	4258873	124507.0312	1.06138	0.3138	1.00363	0.33667	2.37E-03	2.49E-06	6.44E-07	2.36E-06	6.63E-07	2.3728E-03
520266.45	4258872.98	124422.7199	0.98177	0.30202	0.93109	0.32389	2.37E-03	2.30E-06	6.19E-07	2.19E-06	6.38E-07	2.3708E-03
520246.64	4258873.02	124089.674	1.15037	0.32634	1.08414	0.35001	2.36E-03	2.70E-06	6.69E-07	2.55E-06	6.89E-07	2.3653E-03
520276.35	4258872.97	123866.2553	0.91055	0.29095	0.86572	0.31171	2.35E-03	2.14E-06	5.97E-07	2.03E-06	6.14E-07	2.3599E-03
520325.83	4258862.89	123863.4979	0.64508	0.25156	0.61794	0.26735	2.35E-03	1.51E-06	5.16E-07	1.45E-06	5.26E-07	2.3584E-03
520197.12	4258863.1	123802.2529	1.84733	0.42292	1.69753	0.44431	2.35E-03	4.34E-06	8.67E-07	3.99E-06	8.75E-07	2.3633E-03
520450.43	4258749.82	123731.0592	0.30901	0.20868	0.29808	0.21952	2.35E-03	7.25E-07	4.28E-07	7.00E-07	4.32E-07	2.3542E-03
520138.42	4258432.5	123640.5487	0.63542	4.61588	0.68931	5.48525	2.35E-03	1.49E-06	9.47E-06	1.62E-06	1.08E-05	2.3736E-03
520285.44	4258372.96	123553.217	0.36419	0.82329	0.37322	0.91214	2.35E-03	8.55E-07	1.69E-06	8.76E-07	1.80E-06	2.3537E-03
520100.38	4258785.51	123490.5115	11.32571	0.93852	9.96805	0.85837	2.35E-03	2.66E-05	1.92E-06	2.34E-05	1.69E-06	2.4009E-03
520412.66	4258383.36	123347.5167	0.25241	0.36841	0.25253	0.39453	2.34E-03	5.93E-07	7.56E-07	5.93E-07	7.77E-07	2.3473E-03
520385.19	4258832.79	123269.4833	0.44817	0.21888	0.43052	0.23251	2.34E-03	1.05E-06	4.49E-07	1.01E-06	4.58E-07	2.3461E-03
520236.74	4258873.03	123266.9844	1.25177	0.34004	1.17514	0.36416	2.34E-03	2.94E-06	6.97E-07	2.76E-06	7.17E-07	2.3502E-03
520286.25	4258872.95	122910.5116	0.84671	0.28057	0.80674	0.30022	2.34E-03	1.99E-06	5.75E-07	1.89E-06	5.91E-07	2.3414E-03
520123.11	4258814.88	122889.9973	6.00755	0.74906	5.16491	0.70674	2.34E-03	1.41E-05	1.54E-06	1.21E-05	1.39E-06	2.3651E-03
520428.83	4258788.78	122863.8962	0.3517	0.20737	0.33885	0.21939	2.34E-03	8.26E-07	4.25E-07	7.96E-07	4.32E-07	2.3379E-03
520090.84	4258771.58	122794.2832	15.24834	1.03275	15.16187	0.93849	2.33E-03	3.58E-05	2.12E-06	3.56E-05	1.85E-06	2.4095E-03
520141.24	4258832.36	122738.3269	4.11508	0.63694	3.59592	0.62044	2.33E-03	9.66E-06	1.31E-06	8.44E-06	1.22E-06	2.3537E-03
520355.52	4258852.84	122620.1712	0.53727	0.23336	0.51538	0.24756	2.33E-03	1.26E-06	4.79E-07	1.21E-06	4.87E-07	2.3342E-03
520438.05	4258774.96	122523.0276	0.33344	0.20713	0.32155	0.21859	2.33E-03	7.83E-07	4.25E-07	7.55E-07	4.30E-07	2.3313E-03
520187.46	4258402.66	122499.8936	0.51377	2.14294	0.53585	2.4586	2.33E-03	1.21E-06	4.40E-06	1.26E-06	4.84E-06	2.3402E-03
520059.85	4258608.54	122497.0667	4.51414	7.14133	10.43773	5.02645	2.33E-03	1.06E-05	1.46E-05	2.45E-05	9.89E-06	2.3881E-03
520167.85	4258412.59	122261.8449	0.55552	2.79837	0.58896	3.25095	2.32E-03	1.30E-06	5.74E-06	1.38E-06	6.40E-06	2.3388E-03
520432.2	4258393.42	122061.6155	0.24109	0.33187	0.24155	0.35465	2.32E-03	5.66E-07	6.81E-07	5.67E-07	6.98E-07	2.3227E-03
520226.84	4258873.05	122014.593	1.36825	0.35504	1.27886	0.37911	2.32E-03	3.21E-06	7.28E-07	3.00E-06	7.46E-07	2.3270E-03
520275.65	4258372.93	121771.3296	0.37405	0.89211	0.3843	0.99014	2.31E-03	8.78E-07	1.83E-06	9.02E-07	1.95E-06	2.3202E-03
520296.15	4258872.93	121617.8877	0.78957	0.27088	0.75363	0.28945	2.31E-03	1.85E-06	5.56E-07	1.77E-06	5.70E-07	2.3165E-03
520236.46	4258382.81	121593.4244	0.42678	1.25777	0.43947	1.41116	2.31E-03	1.00E-06	2.58E-06	1.03E-06	2.78E-06	2.3187E-03
520393.11	4258373.3	121253.9375	0.26402	0.41161	0.26375	0.44278	2.30E-03	6.20E-07	8.44E-07	6.19E-07	8.72E-07	2.3078E-03
520335.74	4258862.87	121188.9067	0.60747	0.24357	0.58222	0.25859	2.30E-03	1.43E-06	5.00E-07	1.37E-06	5.09E-07	2.3074E-03
520375.31	4258842.8	121077.8574	0.47653	0.22226	0.45742	0.23595	2.30E-03	1.12E-06	4.56E-07	1.07E-06	4.64E-07	2.3046E-03
520167.4	4258853.15	120919.4209	2.6963	0.51213	2.4177	0.51978	2.30E-03	6.33E-06	1.05E-06	5.68E-06	1.02E-06	2.3125E-03
520207.06	4258392.72	120866.9456	0.47337	1.70277	0.48916	1.93316	2.30E-03	1.11E-06	3.49E-06	1.15E-06	3.81E-06	2.3070E-03
520187.22	4258863.12	120643.1101	2.07393	0.44494	1.89218	0.46268	2.29E-03	4.87E-06	9.13E-07	4.44E-06	9.11E-07	2.3043E-03
520216.94	4258873.07	120314.5132	1.50282	0.37138	1.39768	0.39474	2.29E-03	3.53E-06	7.62E-07	3.28E-06	7.77E-07	2.2953E-03
520458.69	4258420.62	120293.4796	0.22892	0.28646	0.22804	0.3058	2.29E-03	5.37E-07	5.88E-07	5.35E-07	6.02E-07	2.2888E-03
520306.05	4258872.92	120006.4859	0.73826	0.26184	0.70565	0.27935	2.28E-03	1.73E-06	5.37E-07	1.66E-06	5.50E-07	2.2856E-03
520265.86	4258372.9	119685.5135	0.38375	0.96991	0.39492	1.07853	2.28E-03	9.01E-07	1.99E-06	9.27E-07	2.12E-06	2.2809E-03
520471.48	4258691.25	119469.2905	0.26859	0.2134	0.25965	0.2247	2.27E-03	6.31E-07	4.38E-07	6.10E-07	4.42E-07	2.2730E-03
520422.44	4258383.39	119137.8277	0.24523	0.35132	0.24553	0.37553	2.26E-03	5.76E-07	7.21E-07	5.76E-07	7.39E-07	2.2672E-03
520104.26	4258797.11	119008.5514	9.94722	0.86876	8.66777	0.79766	2.26E-03	2.34E-05	1.78E-06	2.03E-05	1.57E-06	2.3092E-03
520148.24	4258422.53	118946.8435	0.59435	3.85489	0.64165	4.52308	2.26E-03	1.40E-06	7.91E-06	1.51E-06	8.90E-06	2.2807E-03
520472.09	4258480.39	118941.9821	0.23055	0.25794	0.22798	0.27476	2.26E-03	5.41E-07	5.29E-07	5.35E-07	5.41E-07	2.2630E-03
520334.41	4258363.11	118723.8996	0.30926	0.58396	0.31302	0.63968	2.26E-03	7.26E-07	1.20E-06	7.35E-07	1.26E-06	2.2606E-03
520344.2	4258363.15	118714.9168	0.3005	0.54881	0.30327	0.59951	2.26E-03	7.05E-07	1.13E-06	7.12E-07	1.18E-06	2.2603E-03
520402.9	4258373.33	118499.1541	0.25646	0.39065	0.25622	0.41926	2.25E-03	6.02E-07	8.01E-07	6.02E-07	8.25E-07	2.2553E-03
520324.62	4258363.08	118431.6281	0.31817	0.62327	0.32308	0.68443	2.25E-03	7.47E-07	1.28E-06	7.58E-07	1.35E-06	2.2553E-03
520207.04	4258873.08	118305.8339	1.66248	0.38948	1.53735	0.41136	2.25E-03	3.90E-06	7.99E-07	3.61E-06	8.10E-07	2.2579E-03
520114.26	4258811.23	118282.1445	7.49525	0.78532	6.43349	0.72982	2.25E-03	1.76E-05	1.61E-06	1.51E-05	1.44E-06	2.2841E-03
520226.67	4258382.78	118088.6024	0.43605	1.38894	0.44908	1.56372	2.24E-03	1.02E-06	2.85E-06	1.05E-06	3.08E-06	2.2527E-03
520353.99	4258363.18	117991.5186	0.2918	0.51758	0.29388	0.56342	2.24E-03	6.85E-07	1.06E-06	6.90E-07	1.11E-06	2.2464E-03
520365.42	4258852.82	117893.5438	0.50668	0.22518	0.48605	0.23885	2.24E-03	1.19E-06	4.62E-07	1.14E-06	4.70E-07	2.2442E-03
520315.95	4258872.9	117844.9876	0.6906	0.25298	0.66088	0.26944	2.24E-03	1.62E-06	5.19E-07	1.55E-06	5.30E-07	2.2442E-03
520314.83	4258363.05	117836.5265	0.3272	0.66702	0.33333	0.73415	2.24E-03	7.68E-07	1.37E-06	7.83E-07	1.45E-06	2.2442E-03
520108.96	4258462.41	117707.6003	0.76902	9.58585	0.84506	11.61428	2.24E-03	1.81E-06	1.97E-05	1.98E-06	2.29E-05	2.2837E-03
520092.01	4258782.06	117339.7232	14.77259	0.96193	14.31826	0.87563	2.23E-03	3.47E-05	1.97E-06	3.36E-05	1.72E-06	2.3024E-03
520256.07	4258372.87	117291.683	0.39319	1.05805	0.40488	1.17914	2.23E-03	9.23E-07	2.17E-06	9.51E-07	2.32E-06	2.2359E-03
520363.78	4258363.21	117140.166	0.28344	0.48863	0.28484	0.53025	2.23E-03	6.65E-07	1.00E-06	6.69E-07	1.04E-06	2.2300E-03
520177.32	4258863.13	117045.5749	2.34694	0.4682	2.12485	0.48074	2.22E-03	5.51E-06	9.60E-07	4.99E-06	9.46E-07	2.2372E-03
520305.04	4258363.02	116949.1769	0.3363	0.71606	0.34369	0.78974	2.22E-03	7.90E-07	1.47E-06	8.07E-07	1.55E-06	2.2276E-03
520059.81	4258598.85	116771.6907	3.78442	8.9405	8.72421	5.65802	2.22E-03	8.88E-06	1.83E-05	2.05E-05	1.11E-05	2.2785E-03
520467.75	4258434.52	116731.7623	0.22541	0.27218	0.22389	0.29004	2.22E-03	5.29E-07	5.58E-07	5.26E-07	5.71E-07	2.2210E-03
520395.09	4258832.77	116684.092	0.42556	0.21167	0.40871	0.22477	2.22E-03	9.99E-07	4.34E-07	9.60E-07	4.42E-07	2.2208E-03
520256.56	4258883	116508.0465	1.06715	0.30473	1.00873	0.32694	2.21E-03	2.51E-06	6.25E-07	2.37E-06	6.44E-07	2.2207E-03
520266.46	4258882.98	116398.5835	0.98726	0.29337	0.936	0.3147	2.21E-03	2.32E-06	6.02E-07	2.20E-06	6.19E-07	2.2183E-03
520473.34	4258463.05	116296.5474	0.22668	0.26021	0.22457	0.27691	2.21E-03	5.32E-07	5.34E-07	5.27E-07	5.45E-07	2.2127E-03
520246.66	4258883.02	116209.6131	1.15714	0.317	1.09006	0.33983	2.21E-03	2.72E-06	6.50E-07	2.56E-06	6.69E-07	2.2155E-03
520123.81	4258825.16	116178.2826	5.9324	0.70926	5.09729	0.66833	2.21E-03	1.39E-05	1.45E-06	1.20E-05	1.32E-06	2.2370E-03
520177.67	4258402.63	116133.059	0.51969	2.44863	0.54728	2.82496	2.21E-03	1.22E-06	5.02E-06	1.28E-06	5.56E-06	2.2206E-03
520437.28	4258785.28	116101.0763	0.3371	0.2034	0.3248	0.21483	2.21E-03	7.91E-07	4.17E-07	7.63E-07	4.23E-07	2.2093E-03
520373.56	4258363.24	116071.2179	0.27541	0.4621	0.27622	0.50001	2.21E-03	6.47E-07	9.48E-07	6.48E-07	9.84E-07	2.2095E-03
520197.28	4258392.69	115919.7878	0.48122	1.91323	0.49983	2.18238	2.20E-03	1.13E-06	3.92E-06	1.17E-06	4.30E-06	2.2139E-03
520276.36	4258882.97	115911.415	0.91613	0.28281	0.87076	0.30314	2.20E-03	2.15E-06	5.80E-07	2.04E-06	5.97E-07	2.2086E-03
520197.14	4258873.1	115852.6276	1.85088	0.40896	1.70073	0.42832	2.20E-03	4.35E-06	8.39E-07	3.99E-06	8.43E-07	2.2122E-03
520428.34	4258798.99	115832.2635	0.35498	0.20357	0.34171	0.21551	2.20E-03	8.33E-07	4.18E-07	8.02E-07	4.24E-07	2.2042E-03
520295.26	4258362.99	115774.6334	0.34538	0.77105	0.35399	0.85194	2.20E-03	8.11E-07	1.58E-06	8.31E-07	1.68E-06	2.2056E-03
520061.21	4258717.12	115629.3663	7.55732	1.43669	17.63332	1.32556	2.20E-03	1.77E-05	2.95E-06	4.14E-05	2.61E-06	2.2626E-03
520236.76	4258883.03	115514.2898	1.25938	0.33035	1.18172	0.35342	2.20E-03	2.96E-06	6.78E-07	2.77E-06	6.96E-07	2.2028E-03
520325.85	4258872.89	115430.1794	0.64775	0.24468	0.62038	0.26017	2.19E-03	1.52E-06	5.02E-07	1.46E-06	5.12E-07	2.1981E-03
520385.21	4258842.79	115283.0009	0.45132	0.21471	0.43315	0.22789	2.19E-03	1.06E-06	4.40E-07	1.02E-06	4.49E-07	2.1943E-03
520412.69	4258373.36	115118.8841	0.24913	0.37137	0.249	0.3977	2.19E-03	5.85E-07	7.62E-07	5.85E-07	7.83E-07	2.1909E-03
520461.66	4258738.63	115079.7257	0.29129	0.20514	0.28079	0.2154	2.19E-03	6.84E-07	4.21E-07	6.59E-07	4.24E-07	2.1896E-03
520286.26	4258882.95	115048.4904	0.85223	0.27289	0.81175	0.29219	2.19E-03	2.00E-06	5.60E-07	1.91E-06	5.75E-07	2.1919E-03
520446.65	4258771.39	114729.1854	0.31949	0.20296	0.30806	0.21383	2.18E-03	7.50E-07	4.16E-07	7.23E-07	4.21E-07	2.1831E-03
520246.28	4258372.84	114583.7415	0.40223	1.15847	0.41415	1.29436	2.18E-03	9.44E-07	2.38E-06	9.72E-07	2.55E-06	2.1849E-03
520226.86	4258883.05	114461.5989	1.37748	0.34503	1.28674	0.36784	2.18E-03	3.23E-06	7.08E-07	3.02E-06	7.24E-07	2.1834E-03
520285.47	4258362.96	114312.6785	0.35438	0.83305	0.36409	0.92197	2.17E-03	8.32E-07	1.71E-06	8.55E-07	1.81E-06	2.1781E-03
520216.88	4258382.75	114210.6964	0.44456	1.54172	0.4585	1.74241	2.17E-03	1.04E-06	3.16E-06	1.08E-06	3.43E-06	2.1797E-03
520355.54	4258862.84	114171.6069	0.53935	0.22771	0.51713	0.24142	2.17E-03	1.27E-06	4.67E-07	1.21E-06	4.75E-07	2.1736E-03
520432.23	4258383.42	114138.1713	0.23822	0.3349	0.23863	0.35747	2.17E-03	5.59E-07	6.87E-07	5.60E-07	7.04E-07	2.1721E-03
520158.06	4258412.56	113992.7823	0.55714	3.27538	0.59706	3.82522	2.17E-03	1.31E-06	6.72E-06	1.40E-06	7.53E-06	2.1838E-03
520296.17	4258882.93	113799.9688	0.79439	0.26351	0.758	0.28177	2.16E-03	1.86E-06	5.40E-07	1.78E-06	5.55E-07	2.1679E-03
520057.69	4258708.63	113753.036	6.34969	1.52196	12.77138	1.40367	2.16E-03	1.49E-05	3.12E-06	3.00E-05	2.76E-06	2.2130E-03
520468.29	4258722.81	113634.1804	0.27939	0.20604	0.26937	0.21631	2.16E-03	6.56E-07	4.23E-07	6.32E-07	4.26E-07	2.1621E-03
520095.25	4258793.39	113564.9744	13.38444	0.89426	12.31441	0.8159	2.16E-03	3.14E-05	1.83E-06	2.89E-05	1.61E-06	2.2224E-03
520105.4	4258807.57	113368.8308	9.64865	0.8156	8.36747	0.74953	2.15E-03	2.27E-05	1.67E-06	1.96E-05	1.48E-06	2.2004E-03
520167.42	4258863.15	113200.2549	2.6881	0.49288	2.41305	0.49842	2.15E-03	6.31E-06	1.01E-06	5.67E-06	9.81E-07	2.1657E-03
520393.14	4258363.3	113124.7898	0.26027	0.4146	0.26016	0.44641	2.15E-03	6.11E-07	8.50E-07	6.11E-07	8.79E-07	2.1532E-03
520335.75	4258872.87	113121.0629	0.61057	0.23733	0.58502	0.25204	2.15E-03	1.43E-06	4.87E-07	1.37E-06	4.96E-07	2.1540E-03
520187.24	4258873.12	113085.4786	2.07894	0.43009	1.89657	0.44569	2.15E-03	4.88E-06	8.82E-07	4.45E-06	8.77E-07	2.1606E-03
520375.32	4258852.8	113051.7155	0.47921	0.21762	0.45964	0.2308	2.15E-03	1.13E-06	4.46E-07	1.08E-06	4.54E-07	2.1520E-03
520216.96	4258883.07	112997.6094	1.51405	0.36097	1.40714	0.38286	2.15E-03	3.55E-06	7.40E-07	3.30E-06	7.54E-07	2.1562E-03
520275.68	4258362.93	112554.0575	0.36322	0.90282	0.37377	1.00087	2.14E-03	8.53E-07	1.85E-06	8.77E-07	1.97E-06	2.1450E-03
520306.07	4258882.92	112345.7591	0.74299	0.25488	0.70996	0.27216	2.14E-03	1.74E-06	5.23E-07	1.67E-06	5.36E-07	2.1400E-03
520467.07	4258424.21	112253.5207	0.22381	0.27506	0.22259	0.29327	2.13E-03	5.25E-07	5.64E-07	5.23E-07	5.77E-07	2.1359E-03
520115.09	4258821.56	112176.9083	7.35523	0.74127	6.30434	0.68881	2.13E-03	1.73E-05	1.52E-06	1.48E-05	1.36E-06	2.1672E-03
520158.32	4258859.39	111975.3068	3.0764	0.52349	2.73854	0.52181	2.13E-03	7.22E-06	1.07E-06	6.43E-06	1.03E-06	2.1442E-03
520054.16	4258700.13	111611.0321	5.6169	1.61282	9.94732	1.4881	2.12E-03	1.32E-05	3.31E-06	2.34E-05	2.93E-06	2.1643E-03
520236.49	4258372.81	111551.4125	0.41079	1.27314	0.42285	1.42697	2.12E-03	9.64E-07	2.61E-06	9.93E-07	2.81E-06	2.1278E-03
520422.48	4258373.39	111421.2067	0.24214	0.35441	0.24221	0.37863	2.12E-03	5.68E-07	7.27E-07	5.69E-07	7.45E-07	2.1205E-03
520207.06	4258883.08	111194.6568	1.67487	0.37838	1.54764	0.39854	2.11E-03	3.93E-06	7.76E-07	3.63E-06	7.85E-07	2.1227E-03
520402.93	4258363.33	110719.4093	0.25298	0.3936	0.25273	0.42274	2.10E-03	5.94E-07	8.07E-07	5.93E-07	8.32E-07	2.1074E-03
520059.77	4258589.15	110619.6087	3.04233	10.75058	6.37004	6.12036	2.10E-03	7.14E-06	2.20E-05	1.50E-05	1.20E-05	2.1589E-03
520344.23	4258353.15	110583.159	0.29496	0.55398	0.29889	0.60518	2.10E-03	6.92E-07	1.14E-06	7.02E-07	1.19E-06	2.1057E-03
520334.44	4258353.11	110557.5662	0.3032	0.58982	0.30814	0.64597	2.10E-03	7.12E-07	1.21E-06	7.23E-07	1.27E-06	2.1054E-03
520457.59	4258756.86	110540.1485	0.30083	0.20117	0.28985	0.21147	2.10E-03	7.06E-07	4.13E-07	6.80E-07	4.16E-07	2.1034E-03
520265.89	4258362.9	110498.9696	0.37183	0.98157	0.38289	1.09021	2.10E-03	8.73E-07	2.01E-06	8.99E-07	2.15E-06	2.1063E-03
520187.49	4258392.66	110470.0993	0.48739	2.16548	0.51034	2.48305	2.10E-03	1.14E-06	4.44E-06	1.20E-06	4.89E-06	2.1115E-03
520474.91	4258707	110392.3136	0.26822	0.20602	0.25862	0.2166	2.10E-03	6.30E-07	4.23E-07	6.07E-07	4.26E-07	2.1004E-03
520149.21	4258855.63	110360.0392	3.57183	0.55559	3.15019	0.54508	2.10E-03	8.39E-06	1.14E-06	7.40E-06	1.07E-06	2.1157E-03
520315.97	4258882.9	110339.6568	0.69493	0.24637	0.6648	0.26262	2.10E-03	1.63E-06	5.05E-07	1.56E-06	5.17E-07	2.1016E-03
520324.65	4258353.08	110210.8729	0.31153	0.62975	0.31756	0.69123	2.09E-03	7.31E-07	1.29E-06	7.46E-07	1.36E-06	2.0990E-03
520411.34	4258826.04	110123.8349	0.39062	0.20336	0.37519	0.21581	2.09E-03	9.17E-07	4.17E-07	8.81E-07	4.25E-07	2.0959E-03
520354.02	4258353.18	109968.9373	0.28672	0.52192	0.28988	0.56838	2.09E-03	6.73E-07	1.07E-06	6.81E-07	1.12E-06	2.0939E-03
520207.1	4258382.72	109942.8235	0.45206	1.721	0.46803	1.95303	2.09E-03	1.06E-06	3.53E-06	1.10E-06	3.84E-06	2.0993E-03
520436.66	4258795.55	109918.7996	0.34042	0.19962	0.32765	0.21101	2.09E-03	7.99E-07	4.09E-07	7.69E-07	4.15E-07	2.0918E-03
520124.41	4258835.4	109877.6637	5.86404	0.67307	5.03704	0.63345	2.09E-03	1.38E-05	1.38E-06	1.18E-05	1.25E-06	2.1168E-03
520177.34	4258873.13	109849.1619	2.35113	0.45201	2.1287	0.46237	2.09E-03	5.52E-06	9.27E-07	5.00E-06	9.10E-07	2.1004E-03
520128.63	4258432.47	109660.6478	0.62363	5.70127	0.67586	6.87447	2.08E-03	1.46E-06	1.17E-05	1.59E-06	1.35E-05	2.1127E-03
520314.86	4258353.05	109582.5538	0.31989	0.67437	0.32705	0.74167	2.08E-03	7.51E-07	1.38E-06	7.68E-07	1.46E-06	2.0873E-03
520365.44	4258862.82	109551.8987	0.50733	0.21951	0.48644	0.23259	2.08E-03	1.19E-06	4.50E-07	1.14E-06	4.58E-07	2.0856E-03
520118.81	4258442.44	109491.883	0.65995	7.23077	0.71673	8.80412	2.08E-03	1.55E-06	1.48E-05	1.68E-06	1.73E-05	2.1166E-03
520363.81	4258353.21	109351.7298	0.27881	0.49237	0.28113	0.53474	2.08E-03	6.55E-07	1.01E-06	6.60E-07	1.05E-06	2.0820E-03
520445.73	4258781.78	109336.8365	0.32322	0.19948	0.31142	0.21033	2.08E-03	7.59E-07	4.09E-07	7.31E-07	4.14E-07	2.0806E-03
520395.11	4258842.77	109318.4382	0.42825	0.20766	0.4109	0.22034	2.08E-03	1.01E-06	4.26E-07	9.65E-07	4.34E-07	2.0808E-03
520167.88	4258402.59	109133.1497	0.52272	2.82683	0.55632	3.28049	2.07E-03	1.23E-06	5.80E-06	1.31E-06	6.46E-06	2.0892E-03
520256.58	4258893	109097.975	1.07085	0.29585	1.01194	0.3173	2.07E-03	2.51E-06	6.07E-07	2.38E-06	6.25E-07	2.0799E-03
520266.48	4258892.98	109039.7121	0.99155	0.28501	0.93978	0.30576	2.07E-03	2.33E-06	5.85E-07	2.21E-06	6.02E-07	2.0784E-03
520197.16	4258883.1	108976.5265	1.86432	0.39699	1.71173	0.41442	2.07E-03	4.38E-06	8.14E-07	4.02E-06	8.16E-07	2.0815E-03
520246.68	4258893.02	108890.01	1.16146	0.30782	1.09377	0.32972	2.07E-03	2.73E-06	6.31E-07	2.57E-06	6.49E-07	2.0764E-03
520305.08	4258353.02	108677.0272	0.32825	0.72392	0.33647	0.7977	2.07E-03	7.71E-07	1.48E-06	7.90E-07	1.57E-06	2.0704E-03
520276.38	4258892.97	108578.5093	0.9203	0.27483	0.87446	0.2947	2.06E-03	2.16E-06	5.64E-07	2.05E-06	5.80E-07	2.0692E-03
520096.55	4258803.92	108559.0269	12.84618	0.83818	11.65184	0.76577	2.06E-03	3.02E-05	1.72E-06	2.74E-05	1.51E-06	2.1243E-03
520373.6	4258353.24	108477.3664	0.27114	0.46536	0.27269	0.50407	2.06E-03	6.37E-07	9.54E-07	6.40E-07	9.92E-07	2.0652E-03
520236.78	4258893.03	108363.0097	1.26515	0.32096	1.18665	0.34293	2.06E-03	2.97E-06	6.58E-07	2.79E-06	6.75E-07	2.0669E-03
520050.64	4258691.64	108241.8075	4.88251	1.71325	7.92564	1.57659	2.06E-03	1.15E-05	3.51E-06	1.86E-05	3.10E-06	2.0942E-03
520256.1	4258362.87	108204.8804	0.38014	1.0705	0.39136	1.19179	2.06E-03	8.92E-07	2.20E-06	9.19E-07	2.35E-06	2.0631E-03
520226.7	4258372.78	108187.3722	0.4187	1.40551	0.43132	1.58084	2.06E-03	9.83E-07	2.88E-06	1.01E-06	3.11E-06	2.0644E-03
520325.87	4258882.89	108174.3618	0.65204	0.23852	0.62427	0.25384	2.06E-03	1.53E-06	4.89E-07	1.47E-06	5.00E-07	2.0602E-03
520138.45	4258422.5	107950.0865	0.5883	4.65338	0.63638	5.52632	2.05E-03	1.38E-06	9.54E-06	1.49E-06	1.09E-05	2.0752E-03
520385.22	4258852.79	107913.0372	0.45392	0.21044	0.43528	0.22315	2.05E-03	1.07E-06	4.32E-07	1.02E-06	4.39E-07	2.0542E-03
520412.72	4258363.36	107844.4084	0.24591	0.37424	0.24564	0.40096	2.05E-03	5.77E-07	7.68E-07	5.77E-07	7.89E-07	2.0526E-03
520106.37	4258817.97	107795.6467	9.36398	0.76774	8.10522	0.70615	2.05E-03	2.20E-05	1.57E-06	1.90E-05	1.39E-06	2.0930E-03
520286.28	4258892.95	107775.2143	0.85625	0.26531	0.81535	0.28421	2.05E-03	2.01E-06	5.44E-07	1.91E-06	5.59E-07	2.0536E-03
520295.29	4258352.99	107493.4041	0.33656	0.77902	0.34568	0.86015	2.04E-03	7.90E-07	1.60E-06	8.12E-07	1.69E-06	2.0481E-03
520226.88	4258893.05	107451.5452	1.38403	0.33523	1.2923	0.35672	2.04E-03	3.25E-06	6.88E-07	3.03E-06	7.02E-07	2.0501E-03
520466.58	4258413.99	107394.1519	0.22203	0.27781	0.2212	0.29627	2.04E-03	5.21E-07	5.70E-07	5.19E-07	5.83E-07	2.0436E-03
520086.23	4258789.67	107325.5708	13.91869	0.908	19.87962	0.82876	2.04E-03	3.27E-05	1.86E-06	4.67E-05	1.63E-06	2.1229E-03
520455.26	4258767.83	107226.7585	0.30641	0.19872	0.29522	0.20906	2.04E-03	7.19E-07	4.08E-07	6.93E-07	4.12E-07	2.0404E-03

520432.26	4258373.42	107067.715	0.23536	0.33782	0.23556	0.3603	2.04E-03	5.53E-07	6.93E-07	5.53E-07	7.09E-07	2.0377E-03
520355.55	4258872.84	106709.0299	0.54181	0.22231	0.51927	0.23561	2.03E-03	1.27E-06	4.56E-07	1.22E-06	4.64E-07	2.0318E-03
520296.18	4258892.93	106623.0072	0.79831	0.25631	0.76152	0.27423	2.03E-03	1.87E-06	5.26E-07	1.79E-06	5.40E-07	2.0314E-03
520187.26	4258883.12	106453.2689	2.0928	0.41698	1.90775	0.43047	2.02E-03	4.91E-06	8.55E-07	4.48E-06	8.47E-07	2.0346E-03
520167.44	4258873.15	106406.0295	2.69201	0.47522	2.41676	0.47871	2.02E-03	6.32E-06	9.75E-07	5.67E-06	9.42E-07	2.0365E-03
520115.81	4258831.85	106378.5908	7.22662	0.7014	6.18938	0.65165	2.02E-03	1.70E-05	1.44E-06	1.45E-05	1.28E-06	2.0563E-03
520216.97	4258893.07	106151.8843	1.52146	0.35064	1.41338	0.37101	2.02E-03	3.57E-06	7.19E-07	3.32E-06	7.30E-07	2.0261E-03
520285.5	4258352.96	106055.4397	0.34467	0.84233	0.35458	0.93131	2.02E-03	8.09E-07	1.73E-06	8.32E-07	1.83E-06	2.0211E-03
520335.77	4258882.87	106038.401	0.61442	0.23151	0.5885	0.24602	2.02E-03	1.44E-06	4.75E-07	1.38E-06	4.84E-07	2.0194E-03
520403.77	4258839.18	105909.5252	0.40774	0.20277	0.39124	0.21512	2.01E-03	9.57E-07	4.16E-07	9.19E-07	4.23E-07	2.0159E-03
520393.17	4258353.3	105856.5985	0.25656	0.41739	0.25687	0.4499	2.01E-03	6.02E-07	8.56E-07	6.03E-07	8.86E-07	2.0151E-03
520476.37	4258438.21	105718.0657	0.22008	0.26173	0.21837	0.27844	2.01E-03	5.17E-07	5.37E-07	5.13E-07	5.48E-07	2.0116E-03
520246.31	4258362.84	105586.6476	0.38802	1.17167	0.39931	1.308	2.01E-03	9.11E-07	2.40E-06	9.37E-07	2.57E-06	2.0138E-03
520481.53	4258691.19	105423.489	0.25765	0.20602	0.2488	0.21672	2.00E-03	6.05E-07	4.23E-07	5.84E-07	4.27E-07	2.0059E-03
520375.34	4258862.8	105343.3661	0.48022	0.21249	0.46033	0.22512	2.00E-03	1.13E-06	4.36E-07	1.08E-06	4.43E-07	2.0055E-03
520158.47	4258869.45	105318.7525	3.07054	0.50323	2.73468	0.49986	2.00E-03	7.21E-06	1.03E-06	6.42E-06	9.84E-07	2.0176E-03
520197.31	4258382.69	105251.7771	0.45826	1.93329	0.47762	2.20383	2.00E-03	1.08E-06	3.97E-06	1.12E-06	4.34E-06	2.0111E-03
520306.08	4258892.92	105188.2415	0.74609	0.24788	0.71271	0.26484	2.00E-03	1.75E-06	5.08E-07	1.67E-06	5.21E-07	2.0039E-03
520108.99	4258452.41	104957.4952	0.69593	9.62409	0.75893	11.66282	2.00E-03	1.63E-06	1.97E-05	1.78E-06	2.30E-05	2.0412E-03
520148.27	4258412.53	104917.3067	0.55391	3.88845	0.59761	4.55859	1.99E-03	1.30E-06	7.97E-06	1.40E-06	8.97E-06	2.0139E-03
520047.12	4258664.6	104619.5494	3.95167	2.24575	6.12433	2.00939	1.99E-03	9.28E-06	4.61E-06	1.44E-05	3.96E-06	2.0208E-03
520047.12	4258673.87	104568.0113	4.08627	2.01746	6.30665	1.82703	1.99E-03	9.59E-06	4.14E-06	1.48E-05	3.60E-06	2.0198E-03
520207.07	4258893.08	104534.2599	1.68286	0.36735	1.55434	0.38582	1.99E-03	3.95E-06	7.53E-07	3.65E-06	7.59E-07	1.9961E-03
520422.51	4258363.39	104515.5423	0.2391	0.35692	0.23894	0.38141	1.99E-03	5.61E-07	7.32E-07	5.61E-07	7.51E-07	1.9893E-03
520177.7	4258392.63	104510.0708	0.49135	2.47247	0.51958	2.85055	1.99E-03	1.15E-06	5.07E-06	1.22E-06	5.61E-06	1.9996E-03
520216.92	4258372.75	104482.2261	0.42579	1.55912	0.43984	1.76035	1.99E-03	1.00E-06	3.20E-06	1.03E-06	3.47E-06	1.9947E-03
520061.4	4258741.7	104436.9872	8.15642	1.16717	18.12166	1.08754	1.99E-03	1.91E-05	2.39E-06	4.25E-05	2.14E-06	2.0514E-03
520275.71	4258352.93	104339.997	0.3526	0.91256	0.36293	1.01087	1.98E-03	8.28E-07	1.87E-06	8.52E-07	1.99E-06	1.9889E-03
520436.14	4258805.77	104073.9263	0.34345	0.19604	0.33029	0.20734	1.98E-03	8.06E-07	4.02E-07	7.75E-07	4.08E-07	1.9806E-03
520444.98	4258792.1	104015.6237	0.32663	0.19589	0.31436	0.20672	1.98E-03	7.67E-07	4.02E-07	7.38E-07	4.07E-07	1.9795E-03
520059.73	4258579.45	103971.4385	2.5146	12.03481	4.53985	6.47735	1.98E-03	5.90E-06	2.47E-05	1.07E-05	1.28E-05	2.0303E-03
520149.5	4258865.74	103872.5981	3.54739	0.5323	3.13273	0.52077	1.97E-03	8.33E-06	1.09E-06	7.35E-06	1.03E-06	1.9922E-03
520402.96	4258353.33	103748.6003	0.24953	0.39613	0.2495	0.42591	1.97E-03	5.86E-07	8.12E-07	5.86E-07	8.38E-07	1.9749E-03
520097.66	4258814.37	103621.0435	12.38413	0.78784	11.10901	0.72069	1.97E-03	2.91E-05	1.62E-06	2.61E-05	1.42E-06	2.0278E-03
520177.35	4258883.13	103568.4087	2.36872	0.4379	2.14252	0.44608	1.97E-03	5.56E-06	8.98E-07	5.03E-06	8.78E-07	1.9810E-03
520047.12	4258683.15	103482.8226	4.19826	1.82437	6.46955	1.66827	1.97E-03	9.86E-06	3.74E-06	1.52E-05	3.28E-06	1.9991E-03
520047.12	4258655.32	103478.4047	3.79612	2.51763	5.91625	2.21941	1.97E-03	8.91E-06	5.16E-06	1.39E-05	4.37E-06	1.9993E-03
520315.98	4258892.9	103434.6094	0.69843	0.23986	0.66793	0.25589	1.97E-03	1.64E-06	4.92E-07	1.57E-06	5.04E-07	1.9703E-03
520475.44	4258427.8	103394.8956	0.21877	0.2646	0.2173	0.28169	1.97E-03	5.14E-07	5.43E-07	5.10E-07	5.55E-07	1.9675E-03
520344.26	4258343.15	103174.9312	0.28938	0.55925	0.2944	0.61077	1.96E-03	6.79E-07	1.15E-06	6.91E-07	1.20E-06	1.9649E-03
520087.7	4258800.27	103108.3497	15.27936	0.85111	18.13949	0.77763	1.96E-03	3.59E-05	1.75E-06	4.26E-05	1.53E-06	2.0416E-03
520427.58	4258819.32	103072.2303	0.36076	0.19626	0.34662	0.20788	1.96E-03	8.47E-07	4.03E-07	8.14E-07	4.09E-07	1.9617E-03
520334.47	4258343.11	103047.2009	0.29705	0.59599	0.30309	0.65224	1.96E-03	6.97E-07	1.22E-06	7.12E-07	1.28E-06	1.9627E-03
520471.95	4258738	103012.2162	0.27837	0.19848	0.26801	0.20816	1.96E-03	6.54E-07	4.07E-07	6.29E-07	4.10E-07	1.9602E-03
520412.44	4258835.59	102951.565	0.39053	0.19895	0.37471	0.21102	1.96E-03	9.17E-07	4.08E-07	8.80E-07	4.15E-07	1.9595E-03
520121.89	4258844.36	102915.4704	6.22361	0.64937	5.33522	0.60765	1.96E-03	1.46E-05	1.33E-06	1.25E-05	1.20E-06	1.9859E-03
520354.05	4258343.18	102803.3622	0.28167	0.52636	0.28584	0.57331	1.95E-03	6.61E-07	1.08E-06	6.71E-07	1.13E-06	1.9576E-03
520454.18	4258778.28	102766.0557	0.31017	0.19553	0.2987	0.20584	1.95E-03	7.28E-07	4.01E-07	7.01E-07	4.05E-07	1.9556E-03
520324.68	4258343.08	102669.037	0.30477	0.63673	0.31182	0.69817	1.95E-03	7.16E-07	1.31E-06	7.32E-07	1.37E-06	1.9557E-03
520236.52	4258362.81	102668.3307	0.39539	1.28719	0.40697	1.44165	1.95E-03	9.28E-07	2.64E-06	9.55E-07	2.84E-06	1.9589E-03
520107.21	4258828.3	102646.0596	9.16981	0.72505	7.89922	0.66729	1.95E-03	2.15E-05	1.49E-06	1.85E-05	1.31E-06	1.9940E-03
520395.12	4258852.77	102622.6404	0.43079	0.2037	0.41295	0.21596	1.95E-03	1.01E-06	4.18E-07	9.69E-07	4.25E-07	1.9535E-03
520197.17	4258893.1	102577.8239	1.87423	0.38527	1.71993	0.40085	1.95E-03	4.40E-06	7.90E-07	4.04E-06	7.89E-07	1.9598E-03
520466.23	4258403.82	102494.768	0.22011	0.28062	0.21973	0.29916	1.95E-03	5.17E-07	5.76E-07	5.16E-07	5.89E-07	1.9504E-03
520256.59	4258903	102451.8826	1.0755	0.2877	1.01595	0.30841	1.95E-03	2.52E-06	5.90E-07	2.39E-06	6.07E-07	1.9535E-03
520140.53	4258862.04	102449.5091	4.20634	0.56284	3.66819	0.54172	1.95E-03	9.88E-06	1.15E-06	8.61E-06	1.07E-06	1.9681E-03
520365.45	4258872.82	102433.8188	0.50922	0.21442	0.48803	0.22705	1.95E-03	1.20E-06	4.40E-07	1.15E-06	4.47E-07	1.9503E-03
520265.92	4258352.9	102357.4291	0.36024	0.99195	0.37073	1.10107	1.95E-03	8.46E-07	2.03E-06	8.70E-07	2.17E-06	1.9515E-03
520266.5	4258902.98	102331.456	0.99535	0.27706	0.94307	0.29721	1.95E-03	2.34E-06	5.68E-07	2.21E-06	5.85E-07	1.9508E-03
520246.69	4258903.02	102285.0237	1.16641	0.29933	1.098	0.32031	1.94E-03	2.74E-06	6.14E-07	2.58E-06	6.31E-07	1.9508E-03
520363.84	4258343.21	102212.8483	0.27412	0.49638	0.27745	0.53923	1.94E-03	6.44E-07	1.02E-06	6.51E-07	1.06E-06	1.9463E-03
520054.46	4258724.97	102212.1665	5.84044	1.29142	10.27215	1.20498	1.94E-03	1.37E-05	2.65E-06	2.41E-05	2.37E-06	1.9857E-03
520481.25	4258457.95	102067.906	0.22008	0.25294	0.21801	0.2688	1.94E-03	5.17E-07	5.19E-07	5.12E-07	5.29E-07	1.9422E-03
520314.9	4258343.05	102018.4452	0.31246	0.68205	0.32049	0.74915	1.94E-03	7.34E-07	1.40E-06	7.52E-07	1.47E-06	1.9435E-03
520049.93	4258627.98	101877.4904	3.5615	3.85492	5.93579	3.16212	1.94E-03	8.36E-06	7.91E-06	1.39E-05	6.22E-06	1.9729E-03
520276.4	4258902.97	101863.42	0.92367	0.26717	0.8774	0.28653	1.94E-03	2.17E-06	5.48E-07	2.06E-06	5.64E-07	1.9416E-03
520236.79	4258903.03	101795.6751	1.26989	0.312	1.19066	0.33283	1.93E-03	2.98E-06	6.40E-07	2.80E-06	6.55E-07	1.9420E-03
520158.09	4258402.56	101540.4031	0.52226	3.305	0.56041	3.85602	1.93E-03	1.23E-06	6.78E-06	1.32E-06	7.59E-06	1.9470E-03
520325.88	4258892.89	101515.8007	0.65572	0.23245	0.62755	0.2476	1.93E-03	1.54E-06	4.77E-07	1.47E-06	4.87E-07	1.9336E-03
520373.63	4258343.24	101460.076	0.26681	0.46894	0.2693	0.50817	1.93E-03	6.26E-07	9.62E-07	6.32E-07	1.00E-06	1.9318E-03
520047.12	4258646.05	101298.2705	3.6197	2.84111	5.6737	2.46016	1.93E-03	8.50E-06	5.83E-06	1.33E-05	4.84E-06	1.9580E-03
520478.49	4258722.38	101292.2787	0.26744	0.19906	0.25746	0.20883	1.93E-03	6.28E-07	4.08E-07	6.04E-07	4.11E-07	1.9274E-03
520412.75	4258353.36	101230.0018	0.24269	0.37677	0.24249	0.40401	1.92E-03	5.70E-07	7.73E-07	5.69E-07	7.95E-07	1.9269E-03
520305.11	4258343.02	101165.3938	0.32013	0.73251	0.32897	0.80597	1.92E-03	7.52E-07	1.50E-06	7.72E-07	1.59E-06	1.9276E-03
520286.3	4258902.95	101138.7125	0.85974	0.25804	0.81842	0.27654	1.92E-03	2.02E-06	5.29E-07	1.92E-06	5.44E-07	1.9275E-03
520459.98	4258391.14	101047.8738	0.22138	0.29213	0.22161	0.31117	1.92E-03	5.20E-07	5.99E-07	5.20E-07	6.13E-07	1.9230E-03
520482.08	4258480.77	101039.6651	0.22306	0.24739	0.22034	0.2632	1.92E-03	5.24E-07	5.07E-07	5.17E-07	5.18E-07	1.9226E-03
520226.89	4258903.05	100976.7171	1.38884	0.32576	1.29635	0.34593	1.92E-03	3.26E-06	6.68E-07	3.04E-06	6.81E-07	1.9270E-03
520385.24	4258862.79	100771.2254	0.45495	0.20567	0.43594	0.21787	1.92E-03	1.07E-06	4.22E-07	1.02E-06	4.29E-07	1.9184E-03
520432.3	4258363.42	100707.6038	0.2325	0.34044	0.23246	0.36301	1.91E-03	5.46E-07	6.98E-07	5.46E-07	7.15E-07	1.9168E-03
520167.45	4258883.15	100473.3836	2.71315	0.45972	2.43274	0.46111	1.91E-03	6.37E-06	9.43E-07	5.71E-06	9.08E-07	1.9237E-03
520207.13	4258372.72	100415.6138	0.43186	1.73948	0.44851	1.97188	1.91E-03	1.01E-06	3.57E-06	1.05E-06	3.88E-06	1.9182E-03
520050.99	4258716.6	100360.4099	5.04562	1.36055	8.33612	1.26831	1.91E-03	1.18E-05	2.79E-06	1.96E-05	2.50E-06	1.9444E-03
520187.27	4258893.12	100264.0608	2.10211	0.40414	1.91544	0.41571	1.91E-03	4.94E-06	8.29E-07	4.50E-06	8.18E-07	1.9169E-03
520355.57	4258882.84	100166.7392	0.54498	0.21725	0.52207	0.23026	1.90E-03	1.28E-06	4.46E-07	1.23E-06	4.53E-07	1.9074E-03
520187.52	4258382.66	100126.9752	0.46278	2.18714	0.48658	2.5058	1.90E-03	1.09E-06	4.49E-06	1.14E-06	4.93E-06	1.9149E-03
520463.86	4258764.27	100122.8658	0.2941	0.19456	0.28311	0.20441	1.90E-03	6.90E-07	3.99E-07	6.65E-07	4.02E-07	1.9053E-03
520256.13	4258352.87	100102.2724	0.36753	1.08138	0.37802	1.20346	1.90E-03	8.63E-07	2.22E-06	8.87E-07	2.37E-06	1.9091E-03
520295.32	4258342.99	100070.3491	0.32768	0.78871	0.33712	0.8694	1.90E-03	7.69E-07	1.62E-06	7.91E-07	1.71E-06	1.9070E-03
520296.2	4258902.93	100040.4885	0.8014	0.24933	0.76424	0.26689	1.90E-03	1.88E-06	5.11E-07	1.79E-06	5.25E-07	1.9063E-03
520216.99	4258903.07	99766.34423	1.52518	0.34043	1.41652	0.3593	1.90E-03	3.58E-06	6.98E-07	3.33E-06	7.07E-07	1.9047E-03
520335.79	4258892.87	99569.04779	0.61787	0.22577	0.59158	0.24011	1.89E-03	1.45E-06	4.63E-07	1.39E-06	4.73E-07	1.8964E-03
520112.79	4258840.6	99549.78366	7.83442	0.67476	6.70481	0.62417	1.89E-03	1.84E-05	1.38E-06	1.57E-05	1.23E-06	1.9290E-03
520226.74	4258362.78	99446.65237	0.40209	1.42016	0.41463	1.59626	1.89E-03	9.44E-07	2.91E-06	9.73E-07	3.14E-06	1.8983E-03
520158.6	4258879.5	99427.12015	3.08084	0.4851	2.74193	0.48003	1.89E-03	7.23E-06	9.95E-07	6.44E-06	9.45E-07	1.9055E-03
520450.83	4258377.21	99387.2402	0.22394	0.30882	0.22445	0.32853	1.89E-03	5.26E-07	6.33E-07	5.27E-07	6.47E-07	1.8915E-03
520393.2	4258343.3	99321.91859	0.25289	0.42024	0.25381	0.4534	1.89E-03	5.94E-07	8.62E-07	5.96E-07	8.93E-07	1.8909E-03
520088.94	4258810.77	98905.23773	14.80654	0.80001	16.84123	0.73174	1.88E-03	3.48E-05	1.64E-06	3.95E-05	1.44E-06	1.9574E-03
520098.61	4258824.75	98787.58034	11.97909	0.7426	10.65881	0.68011	1.88E-03	2.81E-05	1.52E-06	2.50E-05	1.34E-06	1.9338E-03
520306.1	4258902.92	98708.47935	0.74899	0.24121	0.71527	0.25787	1.88E-03	1.76E-06	4.95E-07	1.68E-06	5.08E-07	1.8807E-03
520285.53	4258342.96	98604.7512	0.33495	0.85228	0.34485	0.94089	1.87E-03	7.86E-07	1.75E-06	8.10E-07	1.85E-06	1.8795E-03
520375.36	4258872.8	98579.24005	0.48174	0.20768	0.46151	0.21984	1.87E-03	1.13E-06	4.26E-07	1.08E-06	4.33E-07	1.8769E-03
520207.09	4258903.08	98325.10969	1.68687	0.35647	1.55776	0.37332	1.87E-03	3.96E-06	7.31E-07	3.66E-06	7.35E-07	1.8781E-03
520047.12	4258636.77	98308.77144	3.40868	3.22763	5.38755	2.73211	1.87E-03	8.00E-06	6.62E-06	1.26E-05	5.38E-06	1.9013E-03
520422.54	4258353.39	98308.45848	0.23607	0.35944	0.23585	0.38431	1.87E-03	5.54E-07	7.37E-07	5.54E-07	7.57E-07	1.8713E-03
520453.3	4258788.66	98245.48509	0.31359	0.19221	0.30178	0.20251	1.87E-03	7.36E-07	3.94E-07	7.08E-07	3.99E-07	1.8697E-03
520149.75	4258875.84	98159.67812	3.54914	0.51159	3.13225	0.4989	1.87E-03	8.33E-06	1.05E-06	7.35E-06	9.82E-07	1.8836E-03
520047.53	4258708.24	98153.1564	4.46991	1.43458	6.94217	1.33547	1.87E-03	1.05E-05	2.94E-06	1.63E-05	2.63E-06	1.8981E-03
520485.03	4258706.76	98123.54788	0.25708	0.19896	0.24758	0.20903	1.87E-03	6.04E-07	4.08E-07	5.81E-07	4.11E-07	1.8672E-03
520167.91	4258392.59	97976.36693	0.49244	2.85066	0.52544	3.30648	1.86E-03	1.16E-06	5.85E-06	1.23E-06	6.51E-06	1.8771E-03
520177.37	4258893.13	97752.05313	2.3831	0.4242	2.15391	0.43042	1.86E-03	5.59E-06	8.70E-07	5.06E-06	8.47E-07	1.8705E-03
520122.59	4258854.64	97660.61767	6.13487	0.61749	5.25412	0.57754	1.86E-03	1.44E-05	1.27E-06	1.23E-05	1.14E-06	1.8855E-03
520246.34	4258352.84	97576.4535	0.37436	1.18341	0.38503	1.32072	1.85E-03	8.79E-07	2.43E-06	9.04E-07	2.60E-06	1.8616E-03
520402.99	4258343.33	97479.05858	0.24611	0.39891	0.24654	0.42928	1.85E-03	5.78E-07	8.18E-07	5.79E-07	8.45E-07	1.8557E-03
520049.89	4258618.28	97427.77614	3.2211	4.48042	5.4233	3.53232	1.85E-03	7.56E-06	9.19E-06	1.27E-05	6.95E-06	1.8884E-03
520316	4258902.9	97054.46901	0.70092	0.23345	0.6701	0.2492	1.84E-03	1.65E-06	4.79E-07	1.57E-06	4.91E-07	1.8490E-03
520275.74	4258342.93	96964.02415	0.34206	0.92293	0.35204	1.02109	1.84E-03	8.03E-07	1.89E-06	8.26E-07	2.01E-06	1.8486E-03
520484.73	4258467.07	96942.34573	0.21905	0.24725	0.2167	0.26279	1.84E-03	5.14E-07	5.07E-07	5.09E-07	5.17E-07	1.8447E-03
520140.9	4258872.19	96884.88333	4.18811	0.53913	3.65181	0.5177	1.84E-03	9.83E-06	1.11E-06	8.57E-06	1.02E-06	1.8621E-03
520256.61	4258913	96780.93946	1.08535	0.28092	1.02462	0.30095	1.84E-03	2.55E-06	5.76E-07	2.41E-06	5.92E-07	1.8458E-03
520059.69	4258569.75	96770.19266	2.12571	12.82806	3.33569	6.85191	1.84E-03	4.99E-06	2.63E-05	7.83E-06	1.35E-05	1.8920E-03
520246.71	4258913.02	96640.07475	1.17725	0.29227	1.10745	0.31237	1.84E-03	2.76E-06	5.99E-07	2.60E-06	6.15E-07	1.8435E-03
520197.19	4258903.1	96583.35762	1.87886	0.37364	1.72392	0.38753	1.84E-03	4.41E-06	7.66E-07	4.05E-06	7.63E-07	1.8459E-03
520266.51	4258912.98	96565.97827	1.00328	0.27035	0.95008	0.28997	1.84E-03	2.36E-06	5.54E-07	2.23E-06	5.71E-07	1.8413E-03
520395.14	4258862.77	96475.16064	0.43306	0.19975	0.41474	0.21159	1.83E-03	1.02E-06	4.10E-07	9.74E-07	4.17E-07	1.8366E-03
520462.63	4258774.79	96469.64031	0.29787	0.19164	0.28667	0.20146	1.83E-03	6.99E-07	3.93E-07	6.73E-07	3.97E-07	1.8359E-03
520365.47	4258882.82	96389.89334	0.51261	0.20991	0.49098	0.22223	1.83E-03	1.20E-06	4.31E-07	1.15E-06	4.37E-07	1.8354E-03
520236.81	4258913.03	96202.71595	1.28187	0.30459	1.201	0.32434	1.83E-03	3.01E-06	6.25E-07	2.82E-06	6.38E-07	1.8357E-03
520429.77	4258828.42	96168.81832	0.35875	0.19166	0.34439	0.20294	1.83E-03	8.42E-07	3.93E-07	8.09E-07	3.99E-07	1.8304E-03
520276.41	4258912.97	96131.87099	0.93106	0.26073	0.88399	0.27971	1.83E-03	2.19E-06	5.35E-07	2.08E-06	5.51E-07	1.8326E-03
520099.14	4258472.38	96100.00321	0.81096	13.82781	0.89932	15.73937	1.83E-03	1.90E-06	2.84E-05	2.11E-06	3.10E-05	1.8900E-03
520459.61	4258380.96	96049.70161	0.21926	0.29533	0.21967	0.31414	1.83E-03	5.15E-07	6.06E-07	5.16E-07	6.18E-07	1.8280E-03
520103.68	4258836.84	96035.98539	10.23108	0.69487	8.8498	0.63807	1.83E-03	2.40E-05	1.43E-06	2.08E-05	1.26E-06	1.8729E-03
520128.66	4258422.47	95988.43063	0.57589	5.74265	0.62063	6.9111	1.82E-03	1.35E-06	1.18E-05	1.46E-06	1.36E-05	1.8528E-03
520197.34	4258372.69	95982.38955	0.4366	1.9531	0.45696	2.22342	1.82E-03	1.02E-06	4.01E-06	1.07E-06	4.38E-06	1.8349E-03
520468.95	4258394.98	95962.84011	0.21646	0.27936	0.21636	0.29751	1.82E-03	5.08E-07	5.73E-07	5.08E-07	5.86E-07	1.8263E-03
520216.95	4258362.75	95908.00982	0.408	1.57452	0.42245	1.77681	1.82E-03	9.58E-07	3.23E-06	9.92E-07	3.50E-06	1.8317E-03
520226.91	4258913.05	95462.97781	1.40215	0.31791	1.3077	0.33681	1.81E-03	3.29E-06	6.52E-07	3.07E-06	6.63E-07	1.8223E-03
520286.31	4258912.95	95452.19103	0.86655	0.25185	0.82453	0.27004	1.81E-03	2.03E-06	5.17E-07	1.94E-06	5.32E-07	1.8194E-03
520325.9	4258902.89	95330.93257	0.65834	0.2264	0.62983	0.24133	1.81E-03	1.55E-06	4.64E-07	1.48E-06	4.75E-07	1.8160E-03
520412.78	4258343.36	95268.7575	0.23951	0.37947	0.23961	0.40725	1.81E-03	5.62E-07	7.78E-07	5.63E-07	8.02E-07	1.8136E-03
520138.48	4258412.5	95164.07803	0.54639	4.68896	0.58872	5.55751	1.81E-03	1.28E-06	9.62E-06	1.38E-06	1.09E-05	1.8321E-03
520118.84	4258432.44	95079.08181	0.60527	7.26911	0.65297	8.84459	1.81E-03	1.42E-06	1.49E-05	1.53E-06	1.74E-05	1.8426E-03
520265.95	4258342.9	95033.395	0.34881	1.00283	0.35877	1.112	1.81E-03	8.19E-07	2.06E-06	8.42E-07	2.19E-06	1.8123E-03
520432.33	4258353.42	94959.85164	0.22968	0.34268	0.22947	0.36555	1.81E-03	5.39E-07	7.03E-07	5.39E-07	7.20E-07	1.8075E-03
520167.47	4258893.15	94939.90425	2.72872	0.44463	2.44473	0.4442	1.80E-03	6.41E-06	9.12E-07	5.74E-06	8.74E-07	1.8186E-03
520090.01	4258821.21	94777.94513	15.57065	0.75393	15.80948	0.69034	1.80E-03	3.66E-05	1.55E-06	3.71E-05	1.36E-06	1.8781E-03
520113.61	4258850.93	94725.20389	7.6777	0.64018	6.55437	0.59239	1.80E-03	1.80E-05	1.31E-06	1.54E-05	1.17E-06	1.8364E-03
520236.55	4258352.81	94654.0795	0.38056	1.30048	0.39202	1.45535	1.80E-03	8.93E-07	2.67E-06	9.20E-07	2.86E-06	1.8065E-03
520060.74	4258764.21	94591.0113	8.11071	0.98555	17.28105	0.92384	1.80E-03	1.90E-05	2.02E-06	4.06E-05	1.82E-06	1.8615E-03
520177.73	4258382.63	94575.47412	0.46512	2.49617	0.49356	2.87457	1.80E-03	1.09E-06	5.12E-06	1.16E-06	5.66E-06	1.8107E-03
520385.26	4258872.79	94516.84468	0.45654	0.20125	0.43714	0.21299	1.80E-03	1.07E-06	4.13E-07	1.03E-06	4.19E-07	1.7995E-03
520187.29	4258903.12	94495.58484	2.10671	0.39158	1.91948	0.40142	1.80E-03	4.95E-06	8.03E-07	4.51E-06	7.90E-07	1.8072E-03
520383.45	4258333.27	94411.5019	0.25578	0.44691	0.25831	0.48346	1.79E-03	6.00E-07	9.17E-07	6.06E-07	9.52E-07	1.7977E-03
520296.22	4258912.93	94405.93509	0.80743	0.24336	0.76965	0.26069	1.79E-03	1.90E-06	4.99E-07	1.81E-06	5.13E-07	1.7992E-03
520217.01	4258913.07	94336.38261	1.53933	0.33203	1.42844	0.34949	1.79E-03	3.61E-06	6.81E-07	3.35E-06	6.88E-07	1.8015E-03
520355.59	4258892.84	94295.79229	0.54837	0.21236	0.52506	0.22517	1.79E-03	1.29E-06	4.36E-07	1.23E-06	4.43E-07	1.7958E-03
520403.59	4258859.27	94234.63085	0.41386	0.1958	0.39632	0.20741	1.79E-03	9.72E-07	4.02E-07	9.30E-07	4.08E-07	1.7939E-03
520483.82	4258431.38	94233.45435	0.21381	0.25482	0.21214	0.27086	1.79E-03	5.02E-07	5.23E-07	4.98E-07	5.33E-07	1.7933E-03
520158.72	4258889.54	94204.99318	3.10761	0.46867	2.76018	0.46189	1.79E-03	7.30E-06	9.61E-07	6.48E-06	9.09E-07	1.8063E-03
520057	4258755.21	94155.39162	6.90518	1.03206	12.50685	0.97063	1.79E-03	1.62E-05	2.12E-06	2.94E-05	1.91E-06	1.8393E-03
520450.7	4258367.14	94065.73775	0.22151	0.31166	0.22188	0.33121	1.79E-03	5.20E-07	6.39E-07	5.21E-07	6.52E-07	1.7904E-03
520443.83	4258812.59	94029.4416	0.33247	0.18913	0.31956	0.19982	1.79E-03	7.81E-07	3.88E-07	7.50E-07	3.93E-07	1.7896E-03
520452.57	4258798.97	93776.5796	0.31674	0.18877	0.30448	0.19906	1.78E-03	7.44E-07	3.87E-07	7.15E-07	3.92E-07	1.7848E-03
520491.57	4258691.14	93631.08516	0.24734	0.1991	0.2386	0.20921	1.78E-03	5.81E-07	4.08E-07	5.60E-07	4.12E-07	1.7817E-03
520335.8	4258902.87	93523.20073	0.62025	0.21996	0.59359	0.23413	1.78E-03	1.46E-06	4.51E-07	1.39E-06	4.61E-07	1.7815E-03
520476.06	4258752.12	93395.89096	0.27638	0.19123	0.26582	0.20047	1.78E-03	6.49E-07	3.92E-07	6.24E-07	3.95E-07	1.7773E-03
520053.27	4258746.2	93380.67328	5.9247	1.08283	9.71313	1.02061	1.77E-03	1.39E-05	2.22E-06	2.28E-05	2.01E-06	1.8159E-03
520148.3	4258402.53	93359.99135	0.51753	3.91894	0.55708	4.59149	1.77E-03	1.21E-06	8.04E-06	1.31E-06	9.04E-06	1.7942E-03
520306.12	4258912.92	93147.42905	0.7544	0.23547	0.7201	0.25193	1.77E-03	1.77E-06	4.83E-07	1.69E-06	4.96E-07	1.7750E-03
520149.97	4258885.93	93072.65149	3.5719	0.49286	3.1453	0.47897	1.77E-03	8.39E-06	1.01E-06	7.38E-06	9.43E-07	1.7869E-03
520479.66	4258743.53	93054.92787	0.2704	0.19196	0.26012	0.2011	1.77E-03	6.35E-07	3.94E-07	6.11E-07	3.96E-07	1.7708E-03
520207.11	4258913.08	93027.7612	1.70279	0.34741	1.57098	0.36267	1.77E-03	4.00E-06	7.13E-07	3.69E-06	7.14E-07	1.7774E-03
520256.16	4258342.87	92849.88229	0.35523	1.09264	0.36518	1.21509	1.76E-03	8.34E-07	2.24E-06	8.57E-07	2.39E-06	1.7712E-03
520375.37	4258882.8	92798.45871	0.48452	0.20339	0.46387	0.21519	1.76E-03	1.14E-06	4.17E-07	1.09E-06	4.24E-07	1.7670E-03
520422.57	4258343.39	92689.30869	0.23309	0.36168	0.233	0.38705	1.76E-03	5.47E-07	7.42E-07	5.47E-07	7.62E-07	1.7645E-03
520049.85	4258608.59	92638.5658	2.83555	5.1694	4.76511	3.89594	1.76E-03	6.66E-06	1.06E-05	1.12E-05	7.67E-06	1.7970E-03
520483	4258421.02	92534.7754	0.21252	0.25755	0.21111	0.27392	1.76E-03	4.99E-07	5.28E-07	4.96E-07	5.39E-07	1.7610E-03
520483.26	4258734.93	92399.39344	0.26458	0.19244	0.25453	0.20157	1.76E-03	6.21E-07	3.95E-07	5.98E-07	3.97E-07	1.7584E-03
520177.39	4258903.13	92268.602	2.38984	0.41073	2.15967	0.41524	1.75E-03	5.61E-06	8.42E-07	5.07E-06	8.17E-07	1.7662E-03
520207.16	4258362.72	92050.87449	0.41285	1.75571	0.43026	1.98927	1.75E-03	9.69E-07	3.60E-06	1.01E-06	3.92E-06	1.7592E-03
520049.53	4258737.19	92023.02838	5.01796	1.14028	7.85534	1.07397	1.75E-03	1.18E-05	2.34E-06	1.84E-05	2.11E-06	1.7839E-03
520468.39	4258384.72	91871.16622	0.21461	0.28257	0.21482	0.30057	1.75E-03	5.04E-07	5.80E-07	5.04E-07	5.92E-07	1.7485E-03
520438.43	4258824.83	91870.75003	0.34343	0.18789	0.32973	0.19873	1.75E-03	8.06E-07	3.85E-07	7.74E-07	3.91E-07	1.7487E-03
520099.17	4258462.38	91804.13437	0.72841	13.82615	0.80114	15.79152	1.75E-03	1.71E-06	2.84E-05	1.88E-06	3.11E-05	1.8081E-03
520141.23	4258882.32	91796.71595	4.18074	0.51719	3.64263	0.49553	1.74E-03	9.82E-06	1.06E-06	8.55E-06	9.75E-07	1.7653E-03
520412.04	4258855.77	91759.18868	0.3961	0.19203	0.3793	0.20339	1.74E-03	9.30E-07	3.94E-07	8.90E-07	4.00E-07	1.7468E-03
520395.16	4258872.77	91691.52456	0.43729	0.19657	0.41853	0.20801	1.74E-03	1.03E-06	4.03E-07	9.83E-07	4.09E-07	1.7457E-03
520316.02	4258912.9	91593.31162	0.70579	0.22792	0.6744	0.2435	1.74E-03	1.66E-06	4.67E-07	1.58E-06	4.79E-07	1.7452E-03
520226.77	4258352.78	91592.27534	0.38625	1.43397	0.39908	1.61074	1.74E-03	9.07E-07	2.94E-06	9.37E-07	3.17E-06	1.7490E-03

520104.64	4258847.23	91579.267	9.91839	0.65803	8.54143	0.60481	1.74E-03	2.33E-05	1.35E-06	2.01E-05	1.19E-06	1.7866E-03
520486.85	4258726.34	91411.10498	0.25897	0.19266	0.2491	0.20187	1.74E-03	6.08E-07	3.95E-07	5.85E-07	3.97E-07	1.7395E-03
520256.63	4258923	91396.63196	1.09222	0.27398	1.03056	0.2932	1.74E-03	2.56E-06	5.62E-07	2.42E-06	5.77E-07	1.7434E-03
520197.21	4258913.1	91393.22591	1.89496	0.36365	1.73707	0.37581	1.74E-03	4.45E-06	7.46E-07	4.08E-06	7.40E-07	1.7472E-03
520109.02	4258442.41	91391.429	0.63348	9.64666	0.68592	11.70149	1.74E-03	1.49E-06	1.98E-05	1.61E-06	2.30E-05	1.7831E-03
520459.32	4258370.83	91338.06871	0.21706	0.29842	0.21748	0.31699	1.74E-03	5.10E-07	6.12E-07	5.11E-07	6.24E-07	1.7384E-03
520488.6	4258472.02	91304.88749	0.21703	0.2424	0.2145	0.25759	1.74E-03	5.10E-07	4.97E-07	5.04E-07	5.07E-07	1.7376E-03
520246.73	4258923.02	91279.6848	1.18471	0.28502	1.11386	0.30415	1.74E-03	2.78E-06	5.85E-07	2.61E-06	5.99E-07	1.7416E-03
520266.53	4258922.98	91214.15312	1.01004	0.26375	0.956	0.28273	1.73E-03	2.37E-06	5.41E-07	2.24E-06	5.57E-07	1.7395E-03
520187.55	4258372.66	91182.60501	0.43965	2.20928	0.46427	2.52605	1.73E-03	1.03E-06	4.53E-06	1.09E-06	4.97E-06	1.7448E-03
520040.59	4258691.51	91174.47535	3.44682	1.60192	4.93618	1.47694	1.73E-03	8.09E-06	3.29E-06	1.16E-05	2.91E-06	1.7589E-03
520429.32	4258838.61	91109.0773	0.36149	0.18826	0.34661	0.19931	1.73E-03	8.49E-07	3.86E-07	8.14E-07	3.92E-07	1.7343E-03
520158.12	4258392.56	91090.32943	0.49052	3.33074	0.5261	3.88495	1.73E-03	1.15E-06	6.83E-06	1.24E-06	7.65E-06	1.7483E-03
520365.49	4258892.82	90964.66024	0.51628	0.20555	0.49419	0.21766	1.73E-03	1.21E-06	4.22E-07	1.16E-06	4.28E-07	1.7323E-03
520236.83	4258923.03	90917.19894	1.29041	0.29701	1.20831	0.31563	1.73E-03	3.03E-06	6.09E-07	2.84E-06	6.21E-07	1.7353E-03
520276.43	4258922.97	90754.39344	0.93672	0.25428	0.88898	0.27276	1.73E-03	2.20E-06	5.22E-07	2.09E-06	5.37E-07	1.7304E-03
520471.08	4258771.29	90502.74106	0.28623	0.18789	0.27533	0.19724	1.72E-03	6.72E-07	3.85E-07	6.46E-07	3.88E-07	1.7224E-03
520246.37	4258342.84	90414.12545	0.36117	1.19492	0.37152	1.33295	1.72E-03	8.48E-07	2.45E-06	8.72E-07	2.62E-06	1.7254E-03
520344.32	4258323.15	90306.55992	0.27797	0.57035	0.28482	0.62162	1.72E-03	6.53E-07	1.17E-06	6.69E-07	1.22E-06	1.7203E-03
520354.11	4258323.18	90305.3834	0.27136	0.53591	0.27733	0.58313	1.72E-03	6.37E-07	1.10E-06	6.51E-07	1.15E-06	1.7201E-03
520226.93	4258923.05	90214.92463	1.41082	0.30982	1.31505	0.32744	1.71E-03	3.31E-06	6.35E-07	3.09E-06	6.45E-07	1.7225E-03
520045.8	4258728.19	90190.3446	4.30977	1.20126	6.51248	1.12936	1.71E-03	1.01E-05	2.46E-06	1.53E-05	2.22E-06	1.7444E-03
520477.93	4258398.82	90168.37894	0.21157	0.26766	0.21111	0.28486	1.71E-03	4.97E-07	5.49E-07	4.96E-07	5.61E-07	1.7160E-03
520482.39	4258410.74	90164.668	0.21104	0.26014	0.20999	0.27677	1.71E-03	4.95E-07	5.34E-07	4.93E-07	5.45E-07	1.7159E-03
520114.34	4258861.23	90160.59153	7.54222	0.60858	6.42382	0.56332	1.71E-03	1.77E-05	1.25E-06	1.51E-05	1.11E-06	1.7489E-03
520325.92	4258912.89	90075.15973	0.66334	0.22124	0.63427	0.23605	1.71E-03	1.56E-06	4.54E-07	1.49E-06	4.65E-07	1.7161E-03
520334.53	4258323.11	90069.56293	0.28457	0.6084	0.29223	0.66411	1.71E-03	6.68E-07	1.25E-06	6.86E-07	1.31E-06	1.7160E-03
520286.33	4258922.95	90048.57052	0.87107	0.24553	0.8285	0.26332	1.71E-03	2.04E-06	5.04E-07	1.95E-06	5.18E-07	1.7167E-03
520490.45	4258717.75	90047.13237	0.25353	0.19258	0.24382	0.20195	1.71E-03	5.95E-07	3.95E-07	5.72E-07	3.98E-07	1.7136E-03
520432.36	4258343.42	89740.79249	0.22688	0.34492	0.22667	0.36818	1.71E-03	5.33E-07	7.07E-07	5.32E-07	7.25E-07	1.7083E-03
520167.49	4258903.15	89736.84271	2.7367	0.42994	2.45142	0.428	1.71E-03	6.42E-06	8.82E-07	5.76E-06	8.43E-07	1.7196E-03
520324.75	4258323.08	89512.95878	0.29103	0.65064	0.29948	0.71103	1.70E-03	6.83E-07	1.33E-06	7.03E-07	1.40E-06	1.7056E-03
520187.31	4258913.12	89485.2593	2.12464	0.38069	1.93382	0.38874	1.70E-03	4.99E-06	7.81E-07	4.54E-06	7.65E-07	1.7120E-03
520217.02	4258923.07	89284.40069	1.55144	0.32363	1.43865	0.33967	1.70E-03	3.64E-06	6.64E-07	3.38E-06	6.69E-07	1.7055E-03
520403.52	4258869.31	89246.1977	0.41708	0.19247	0.39907	0.20369	1.70E-03	9.79E-07	3.95E-07	9.37E-07	4.01E-07	1.6991E-03
520450.6	4258357.08	89231.29642	0.21908	0.31417	0.21921	0.33373	1.70E-03	5.14E-07	6.44E-07	5.15E-07	6.57E-07	1.6985E-03
520385.27	4258882.79	89160.50774	0.45927	0.19732	0.43942	0.2087	1.69E-03	1.08E-06	4.05E-07	1.03E-06	4.11E-07	1.6977E-03
520296.23	4258922.93	89132.05118	0.81224	0.23743	0.77392	0.25444	1.69E-03	1.91E-06	4.87E-07	1.82E-06	5.01E-07	1.6990E-03
520420.49	4258852.28	89090.57918	0.37957	0.1884	0.36345	0.19948	1.69E-03	8.91E-07	3.86E-07	8.53E-07	3.93E-07	1.6960E-03
520059.65	4258560.06	89049.42614	1.77752	13.22401	2.51946	7.13694	1.69E-03	4.17E-06	2.71E-05	5.91E-06	1.40E-05	1.7439E-03
520158.83	4258899.58	88988.80677	3.10129	0.45178	2.75656	0.44394	1.69E-03	7.28E-06	9.27E-07	6.47E-06	8.74E-07	1.7071E-03
520355.6	4258902.84	88837.2435	0.55113	0.2074	0.52743	0.22004	1.69E-03	1.29E-06	4.25E-07	1.24E-06	4.33E-07	1.6920E-03
520167.94	4258382.59	88598.34995	0.46478	2.87664	0.49659	3.3318	1.68E-03	1.09E-06	5.90E-06	1.17E-06	6.56E-06	1.6988E-03
520314.96	4258323.05	88545.19382	0.2972	0.69777	0.30643	0.76297	1.68E-03	6.98E-07	1.43E-06	7.19E-07	1.50E-06	1.6874E-03
520095.67	4258843.53	88450.65162	13.18314	0.67038	11.92996	0.61488	1.68E-03	3.09E-05	1.37E-06	2.80E-05	1.21E-06	1.7428E-03
520216.98	4258352.75	88323.72354	0.39123	1.58806	0.40619	1.79221	1.68E-03	9.18E-07	3.26E-06	9.54E-07	3.53E-06	1.6875E-03
520494.05	4258709.16	88318.59411	0.24823	0.19246	0.23878	0.202	1.68E-03	5.83E-07	3.95E-07	5.61E-07	3.98E-07	1.6807E-03
520085.47	4258829.33	88286.42159	15.98889	0.71469	20.56115	0.65689	1.68E-03	3.75E-05	1.47E-06	4.83E-05	1.29E-06	1.7667E-03
520335.82	4258912.87	88245.9786	0.62385	0.21475	0.59673	0.22877	1.68E-03	1.46E-06	4.40E-07	1.40E-06	4.50E-07	1.6812E-03
520150.18	4258896	88098.71859	3.56582	0.47428	3.14053	0.45972	1.67E-03	8.37E-06	9.73E-07	7.37E-06	9.05E-07	1.6922E-03
520042.06	4258719.18	88079.22885	3.81068	1.26618	5.52515	1.18798	1.67E-03	8.95E-06	2.60E-06	1.30E-05	2.34E-06	1.7011E-03
520306.13	4258922.92	88011.20841	0.75927	0.22988	0.72444	0.24607	1.67E-03	1.78E-06	4.71E-07	1.70E-06	4.84E-07	1.6774E-03
520207.12	4258923.08	88004.07784	1.71365	0.3382	1.58003	0.35194	1.67E-03	4.02E-06	6.94E-07	3.71E-06	6.93E-07	1.6819E-03
520467.94	4258374.52	87897.41161	0.21265	0.28581	0.21301	0.30356	1.67E-03	4.99E-07	5.86E-07	5.00E-07	5.98E-07	1.6730E-03
520197.37	4258362.69	87841.00388	0.41632	1.97076	0.43748	2.2416	1.67E-03	9.77E-07	4.04E-06	1.03E-06	4.41E-06	1.6802E-03
520305.17	4258323.02	87817.86469	0.30366	0.74945	0.31313	0.82111	1.67E-03	7.13E-07	1.54E-06	7.35E-07	1.62E-06	1.6739E-03
520375.39	4258892.8	87732.05128	0.48809	0.19941	0.46695	0.21097	1.67E-03	1.15E-06	4.09E-07	1.10E-06	4.15E-07	1.6707E-03
520049.81	4258598.89	87562.19374	2.42919	5.83157	3.9813	4.20921	1.66E-03	5.70E-06	1.20E-05	9.35E-06	8.29E-06	1.6997E-03
520236.59	4258342.81	87547.55459	0.36642	1.31245	0.37799	1.46802	1.66E-03	8.60E-07	2.69E-06	8.87E-07	2.89E-06	1.6714E-03
520447.1	4258821.24	87541.10433	0.32898	0.18428	0.31596	0.19464	1.66E-03	7.72E-07	3.78E-07	7.42E-07	3.83E-07	1.6663E-03
520491.66	4258459.42	87478.20388	0.21308	0.24206	0.21086	0.2569	1.66E-03	5.00E-07	4.96E-07	4.95E-07	5.06E-07	1.6648E-03
520177.4	4258913.13	87409.09588	2.40783	0.39855	2.17371	0.40135	1.66E-03	5.65E-06	8.17E-07	5.10E-06	7.90E-07	1.6739E-03
520105.49	4258857.57	87372.27633	9.66473	0.62454	8.28388	0.57452	1.66E-03	2.27E-05	1.28E-06	1.94E-05	1.13E-06	1.7053E-03
520469.94	4258781.77	87327.94343	0.28969	0.18498	0.27853	0.19432	1.66E-03	6.80E-07	3.79E-07	6.54E-07	3.83E-07	1.6620E-03
520437.87	4258835.07	87317.46788	0.34624	0.18461	0.33204	0.19528	1.66E-03	8.13E-07	3.79E-07	7.80E-07	3.84E-07	1.6621E-03
520141.52	4258892.43	87086.77204	4.17626	0.49676	3.63679	0.47496	1.66E-03	9.80E-06	1.02E-06	8.54E-06	9.35E-07	1.6757E-03
520477.17	4258388.48	87075.35925	0.20999	0.27079	0.20991	0.28797	1.66E-03	4.93E-07	5.55E-07	4.93E-07	5.67E-07	1.6573E-03
520459.09	4258360.72	86962.16101	0.21484	0.30114	0.21509	0.3196	1.65E-03	5.04E-07	6.18E-07	5.05E-07	6.29E-07	1.6552E-03
520411.88	4258865.85	86891.71084	0.39885	0.1887	0.38158	0.19969	1.65E-03	9.36E-07	3.87E-07	8.96E-07	3.93E-07	1.6543E-03
520492.07	4258481.14	86835.28691	0.21587	0.23761	0.21301	0.25246	1.65E-03	5.07E-07	4.87E-07	5.00E-07	4.97E-07	1.6526E-03
520295.38	4258322.99	86753.41351	0.30983	0.80705	0.31937	0.88589	1.65E-03	7.27E-07	1.66E-06	7.50E-07	1.74E-06	1.6539E-03
520316.03	4258922.9	86716.32667	0.71144	0.22283	0.67948	0.23821	1.65E-03	1.67E-06	4.57E-07	1.60E-06	4.69E-07	1.6525E-03
520395.17	4258882.77	86698.81126	0.43949	0.19317	0.42076	0.20419	1.65E-03	1.03E-06	3.96E-07	9.88E-07	4.02E-07	1.6508E-03
520197.22	4258923.1	86477.99166	1.90566	0.35362	1.74591	0.36421	1.64E-03	4.47E-06	7.25E-07	4.10E-06	7.17E-07	1.6538E-03
520428.93	4258848.78	86388.47358	0.36403	0.18499	0.34867	0.19577	1.64E-03	8.55E-07	3.79E-07	8.19E-07	3.85E-07	1.6445E-03
520037.12	4258683.15	86313.46727	3.00815	1.69355	4.21178	1.54866	1.64E-03	7.06E-06	3.47E-06	9.89E-06	3.05E-06	1.6641E-03
520497.64	4258700.57	86271.46949	0.2431	0.19251	0.23404	0.20212	1.64E-03	5.71E-07	3.95E-07	5.49E-07	3.98E-07	1.6418E-03
520037.12	4258673.87	86096.63812	2.90821	1.85608	4.08675	1.68053	1.64E-03	6.83E-06	3.81E-06	9.59E-06	3.31E-06	1.6601E-03
520256.65	4258933	86042.7521	1.09249	0.26659	1.03055	0.28505	1.64E-03	2.56E-06	5.47E-07	2.42E-06	5.61E-07	1.6416E-03
520057.47	4258780.46	86029.12259	7.2075	0.87184	13.11518	0.82308	1.64E-03	1.69E-05	1.79E-06	3.08E-05	1.62E-06	1.6864E-03
520177.76	4258372.63	86025.76706	0.44063	2.52017	0.46895	2.89536	1.64E-03	1.03E-06	5.17E-06	1.10E-06	5.70E-06	1.6482E-03
520246.74	4258933.02	85910.82024	1.18414	0.27722	1.11313	0.29545	1.63E-03	2.78E-06	5.69E-07	2.61E-06	5.82E-07	1.6396E-03
520266.55	4258932.98	85866.65109	1.01048	0.25663	0.95612	0.27498	1.63E-03	2.37E-06	5.26E-07	2.24E-06	5.41E-07	1.6379E-03
520114.98	4258871.48	85837.87886	7.42133	0.57961	6.31078	0.53665	1.63E-03	1.74E-05	1.19E-06	1.48E-05	1.06E-06	1.6661E-03
520365.5	4258902.82	85798.09204	0.51889	0.20095	0.49639	0.21286	1.63E-03	1.22E-06	4.12E-07	1.17E-06	4.19E-07	1.6341E-03
520053.81	4258771.61	85731.45593	6.21284	0.90891	10.19945	0.86073	1.63E-03	1.46E-05	1.86E-06	2.39E-05	1.69E-06	1.6717E-03
520236.84	4258933.03	85622.1762	1.29024	0.28892	1.20801	0.30652	1.63E-03	3.03E-06	5.93E-07	2.84E-06	6.03E-07	1.6346E-03
520285.59	4258322.96	85538.141	0.31585	0.87097	0.3252	0.95849	1.63E-03	7.42E-07	1.79E-06	7.63E-07	1.89E-06	1.6311E-03
520276.45	4258932.97	85463.26966	0.93767	0.24747	0.88956	0.26544	1.62E-03	2.20E-06	5.08E-07	2.09E-06	5.23E-07	1.6298E-03
520038.33	4258710.17	85274.87608	3.35222	1.33676	4.70555	1.24884	1.62E-03	7.87E-06	2.74E-06	1.10E-05	2.46E-06	1.6450E-03
520325.93	4258922.89	85245.59613	0.66805	0.21621	0.63846	0.23081	1.62E-03	1.57E-06	4.43E-07	1.50E-06	4.54E-07	1.6243E-03
520354.14	4258313.18	85182.76945	0.26637	0.54042	0.27281	0.58796	1.62E-03	6.25E-07	1.11E-06	6.40E-07	1.16E-06	1.6227E-03
520050.14	4258762.77	85136.84696	5.39066	0.94867	8.26461	0.90042	1.62E-03	1.27E-05	1.95E-06	1.94E-05	1.77E-06	1.6541E-03
520037.12	4258664.6	85112.04839	2.79532	2.04192	3.94425	1.82776	1.62E-03	6.56E-06	4.19E-06	9.26E-06	3.60E-06	1.6414E-03
520167.5	4258913.15	85079.41046	2.7555	0.41645	2.4657	0.41302	1.62E-03	6.47E-06	8.54E-07	5.79E-06	8.13E-07	1.6311E-03
520460.08	4258805.86	85022.84143	0.30734	0.18211	0.29512	0.19189	1.62E-03	7.22E-07	3.73E-07	6.93E-07	3.78E-07	1.6183E-03
520363.93	4258313.21	85003.97983	0.26019	0.50869	0.26584	0.55255	1.62E-03	6.11E-07	1.04E-06	6.24E-07	1.09E-06	1.6191E-03
520344.35	4258313.15	84955.34521	0.27238	0.57569	0.2797	0.62693	1.61E-03	6.39E-07	1.18E-06	6.57E-07	1.23E-06	1.6186E-03
520226.94	4258933.05	84908.49075	1.40791	0.30099	1.3125	0.31752	1.61E-03	3.31E-06	6.17E-07	3.08E-06	6.25E-07	1.6216E-03
520128.69	4258412.47	84869.28826	0.53388	5.78203	0.57204	6.93622	1.61E-03	1.25E-06	1.19E-05	1.34E-06	1.37E-05	1.6413E-03
520086.7	4258839.83	84846.84843	15.5131	0.67659	18.79702	0.62227	1.61E-03	3.64E-05	1.39E-06	4.41E-05	1.22E-06	1.6959E-03
520483.06	4258759.36	84829.09194	0.26959	0.18473	0.25902	0.19354	1.61E-03	6.33E-07	3.79E-07	6.08E-07	3.81E-07	1.6144E-03
520420.24	4258862.39	84813.92287	0.38247	0.18536	0.36599	0.19612	1.61E-03	8.98E-07	3.80E-07	8.59E-07	3.86E-07	1.6147E-03
520286.35	4258932.95	84772.50759	0.8717	0.23888	0.82879	0.25625	1.61E-03	2.05E-06	4.90E-07	1.95E-06	5.04E-07	1.6164E-03
520187.32	4258923.12	84741.35392	2.13655	0.36982	1.94354	0.37629	1.61E-03	5.02E-06	7.58E-07	4.56E-06	7.41E-07	1.6219E-03
520138.51	4258402.5	84689.81628	0.50906	4.72078	0.54585	5.58806	1.61E-03	1.20E-06	9.68E-06	1.28E-06	1.10E-05	1.6330E-03
520207.19	4258352.72	84675.16876	0.39503	1.7698	0.41307	2.00566	1.61E-03	9.27E-07	3.63E-06	9.70E-07	3.95E-06	1.6190E-03
520096.64	4258853.92	84649.24094	12.79461	0.63582	11.3963	0.58375	1.61E-03	3.00E-05	1.30E-06	2.68E-05	1.15E-06	1.6683E-03
520226.8	4258342.78	84608.7405	0.37117	1.44683	0.38455	1.62425	1.61E-03	8.71E-07	2.97E-06	9.03E-07	3.20E-06	1.6162E-03
520486.59	4258750.92	84584.79065	0.26399	0.18544	0.25367	0.19413	1.61E-03	6.20E-07	3.80E-07	5.96E-07	3.82E-07	1.6098E-03
520334.57	4258313.11	84577.71676	0.27838	0.61442	0.28644	0.66981	1.61E-03	6.54E-07	1.26E-06	6.72E-07	1.32E-06	1.6116E-03
520373.72	4258313.24	84481.01086	0.25395	0.47998	0.25888	0.52032	1.61E-03	5.96E-07	9.84E-07	6.08E-07	1.02E-06	1.6090E-03
520158.45	4258909.41	84423.11546	3.14453	0.43791	2.78975	0.42853	1.60E-03	7.38E-06	8.98E-07	6.55E-06	8.44E-07	1.6204E-03
520385.29	4258892.79	84420.26823	0.46258	0.19364	0.44224	0.20474	1.60E-03	1.09E-06	3.97E-07	1.04E-06	4.03E-07	1.6076E-03
520046.47	4258753.92	84226.81337	4.706	0.99228	6.88273	0.94258	1.60E-03	1.10E-05	2.04E-06	1.62E-05	1.86E-06	1.6321E-03
520217.04	4258933.07	84164.13002	1.55042	0.31456	1.43789	0.32938	1.60E-03	3.64E-06	6.45E-07	3.38E-06	6.48E-07	1.6081E-03
520490.12	4258742.49	84094.04676	0.25851	0.18602	0.24843	0.19465	1.60E-03	6.07E-07	3.82E-07	5.83E-07	3.83E-07	1.6004E-03
520467.58	4258364.35	84072.84981	0.21063	0.28877	0.21095	0.30631	1.60E-03	4.94E-07	5.92E-07	4.95E-07	6.03E-07	1.6003E-03
520324.78	4258313.08	84043.90616	0.28434	0.65718	0.29295	0.71726	1.60E-03	6.68E-07	1.35E-06	6.88E-07	1.41E-06	1.6016E-03
520469	4258792.16	84036.50388	0.29284	0.18196	0.28137	0.19129	1.60E-03	6.87E-07	3.73E-07	6.61E-07	3.77E-07	1.5995E-03
520296.25	4258932.93	83924.57811	0.81299	0.23103	0.77432	0.24769	1.60E-03	1.91E-06	4.74E-07	1.82E-06	4.88E-07	1.5999E-03
520501.24	4258691.98	83912.43596	0.23812	0.19253	0.22946	0.20211	1.60E-03	5.59E-07	3.95E-07	5.39E-07	3.98E-07	1.5969E-03
520486.91	4258402.66	83895.79415	0.20675	0.25673	0.2059	0.27297	1.59E-03	4.85E-07	5.27E-07	4.83E-07	5.37E-07	1.5967E-03
520476.56	4258378.21	83890.01941	0.20826	0.27413	0.20848	0.2911	1.59E-03	4.89E-07	5.62E-07	4.89E-07	5.73E-07	1.5967E-03
520275.8	4258322.93	83879.73668	0.32137	0.94295	0.33071	1.03988	1.59E-03	7.54E-07	1.93E-06	7.76E-07	2.05E-06	1.5999E-03
520355.62	4258912.84	83849.80489	0.55374	0.20256	0.52963	0.21506	1.59E-03	1.30E-06	4.15E-07	1.24E-06	4.23E-07	1.5972E-03
520383.51	4258313.27	83845.36076	0.24786	0.45358	0.25198	0.49083	1.59E-03	5.82E-07	9.30E-07	5.92E-07	9.66E-07	1.5968E-03
520062.79	4258799.98	83784.65051	9.1055	0.78993	17.2231	0.74233	1.59E-03	2.14E-05	1.62E-06	4.04E-05	1.46E-06	1.6575E-03
520118.87	4258422.44	83548.15397	0.55801	7.30821	0.59824	8.88098	1.59E-03	1.31E-06	1.50E-05	1.40E-06	1.75E-05	1.6233E-03
520446.42	4258831.53	83485.86277	0.33184	0.18118	0.31839	0.19143	1.59E-03	7.79E-07	3.72E-07	7.47E-07	3.77E-07	1.5892E-03
520149.41	4258905.68	83439.71275	3.62542	0.45927	3.18866	0.44337	1.59E-03	8.51E-06	9.42E-07	7.49E-06	8.73E-07	1.6039E-03
520187.58	4258362.66	83355.63517	0.41815	2.22831	0.44301	2.54502	1.58E-03	9.82E-07	4.57E-06	1.04E-06	5.01E-06	1.5960E-03
520037.12	4258655.32	83343.36916	2.66772	2.25418	3.78072	1.99134	1.58E-03	6.26E-06	4.62E-06	8.88E-06	3.92E-06	1.6079E-03
520314.99	4258313.05	83342.88378	0.29021	0.70441	0.29916	0.76989	1.58E-03	6.81E-07	1.44E-06	7.02E-07	1.52E-06	1.5885E-03
520493.65	4258734.05	83340.7498	0.25318	0.18641	0.24332	0.19506	1.58E-03	5.94E-07	3.82E-07	5.71E-07	3.84E-07	1.5861E-03
520099.2	4258452.38	83321.50609	0.65953	13.82893	0.72015	15.83704	1.58E-03	1.55E-06	2.84E-05	1.69E-06	3.12E-05	1.6466E-03
520106.23	4258867.87	83315.69847	9.42837	0.59373	8.05927	0.54667	1.58E-03	2.21E-05	1.22E-06	1.89E-05	1.08E-06	1.6270E-03
520495	4258468.18	83231.41901	0.21203	0.23691	0.20952	0.2515	1.58E-03	4.98E-07	4.86E-07	4.92E-07	4.95E-07	1.5840E-03
520455.76	4258817.66	83217.08052	0.31543	0.18071	0.30293	0.19061	1.58E-03	7.41E-07	3.71E-07	7.11E-07	3.75E-07	1.5840E-03
520207.14	4258933.08	83054.71724	1.71329	0.3286	1.58002	0.34105	1.58E-03	4.02E-06	6.74E-07	3.71E-06	6.71E-07	1.5878E-03
520437.38	4258845.28	83034.34485	0.34882	0.18151	0.3342	0.19196	1.58E-03	8.19E-07	3.72E-07	7.85E-07	3.78E-07	1.5807E-03
520393.3	4258313.3	83003.82002	0.24186	0.42934	0.24517	0.46378	1.58E-03	5.68E-07	8.81E-07	5.76E-07	9.13E-07	1.5807E-03
520306.15	4258932.92	82899.00474	0.76019	0.22377	0.72501	0.23967	1.58E-03	1.78E-06	4.59E-07	1.70E-06	4.72E-07	1.5802E-03
520458.9	4258350.62	82855.9088	0.2126	0.30362	0.21261	0.3221	1.57E-03	4.99E-07	6.23E-07	4.99E-07	6.34E-07	1.5772E-03
520375.41	4258902.8	82853.60398	0.49052	0.19513	0.46898	0.20646	1.57E-03	1.15E-06	4.00E-07	1.10E-06	4.06E-07	1.5780E-03
520042.8	4258745.07	82846.17439	4.07594	1.04073	5.84402	0.98707	1.57E-03	9.57E-06	2.13E-06	1.37E-05	1.94E-06	1.6021E-03
520411.74	4258875.91	82803.16042	0.40161	0.18608	0.38461	0.19664	1.57E-03	9.43E-07	3.82E-07	9.03E-07	3.87E-07	1.5766E-03
520177.42	4258923.13	82794.58077	2.41723	0.38651	2.18155	0.38786	1.57E-03	5.67E-06	7.93E-07	5.12E-06	7.63E-07	1.5861E-03
520495.45	4258443.49	82555.90289	0.20817	0.24115	0.20617	0.25574	1.57E-03	4.89E-07	4.95E-07	4.84E-07	5.03E-07	1.5712E-03
520305.2	4258313.02	82491.35942	0.29597	0.75659	0.30499	0.82843	1.57E-03	6.95E-07	1.55E-06	7.16E-07	1.63E-06	1.5726E-03
520140.36	4258901.94	82405.12918	4.27268	0.48066	3.71478	0.45779	1.57E-03	1.00E-05	9.86E-07	8.72E-06	9.01E-07	1.5870E-03
520497.18	4258725.62	82302.39617	0.24801	0.18655	0.23834	0.19532	1.56E-03	5.82E-07	3.83E-07	5.60E-07	3.84E-07	1.5663E-03
520158.15	4258382.56	82267.44232	0.46154	3.35636	0.49418	3.91005	1.56E-03	1.08E-06	6.88E-06	1.16E-06	7.70E-06	1.5806E-03
520478.26	4258778.32	82248.59079	0.27871	0.18147	0.26782	0.19038	1.56E-03	6.54E-07	3.72E-07	6.29E-07	3.75E-07	1.5654E-03
520049.77	4258589.19	82228.50204	2.0809	6.38381	3.25707	4.47122	1.56E-03	4.89E-06	1.31E-05	7.65E-06	8.80E-06	1.5974E-03
520266.01	4258322.9	82170.65121	0.32676	1.02313	0.33608	1.13193	1.56E-03	7.67E-07	2.10E-06	7.89E-07	2.23E-06	1.5678E-03
520428.6	4258858.92	82002.68045	0.36632	0.18205	0.35074	0.19252	1.56E-03	8.60E-07	3.73E-07	8.23E-07	3.79E-07	1.5612E-03
520395.19	4258892.77	81896.94468	0.44144	0.18926	0.42224	0.19994	1.56E-03	1.04E-06	3.88E-07	9.91E-07	3.94E-07	1.5595E-03
520485.94	4258392.24	81822.02517	0.20542	0.25989	0.20501	0.27623	1.56E-03	4.82E-07	5.33E-07	4.81E-07	5.44E-07	1.5573E-03
520115.55	4258881.71	81808.27427	7.33325	0.55303	6.2202	0.51215	1.56E-03	1.72E-05	1.13E-06	1.46E-05	1.01E-06	1.5890E-03
520403.09	4258313.33	81751.41791	0.23586	0.40733	0.2385	0.43901	1.55E-03	5.54E-07	8.35E-07	5.60E-07	8.64E-07	1.5568E-03
520197.24	4258933.1	81731.72212	1.90703	0.34348	1.74753	0.35272	1.55E-03	4.48E-06	7.04E-07	4.10E-06	6.94E-07	1.5636E-03
520034.59	4258701.16	81703.93805	2.93956	1.41209	4.02786	1.31096	1.55E-03	6.90E-06	2.90E-06	9.46E-06	2.58E-06	1.5749E-03
520316.05	4258932.9	81624.55234	0.71173	0.21685	0.67943	0.23195	1.55E-03	1.67E-06	4.45E-07	1.60E-06	4.57E-07	1.5557E-03
520217.01	4258342.75	81575.5016	0.37524	1.60193	0.39097	1.80665	1.55E-03	8.81E-07	3.29E-06	9.18E-07	3.56E-06	1.5592E-03
520087.78	4258850.27	81476.47694	15.04291	0.64178	17.44691	0.59066	1.55E-03	3.53E-05	1.32E-06	4.10E-05	1.16E-06	1.6275E-03
520295.41	4258312.99	81380.73934	0.30149	0.81458	0.31044	0.89367	1.55E-03	7.08E-07	1.67E-06	7.29E-07	1.76E-06	1.5518E-03
520256.66	4258943	81291.92058	1.09521	0.25991	1.03274	0.27756	1.55E-03	2.57E-06	5.33E-07	2.42E-06	5.46E-07	1.5513E-03
520246.76	4258943.02	81166.27409	1.18659	0.27017	1.1151	0.28748	1.54E-03	2.79E-06	5.54E-07	2.62E-06	5.66E-07	1.5493E-03
520365.52	4258912.82	81147.82944	0.52176	0.19653	0.49883	0.20833	1.54E-03	1.22E-06	4.03E-07	1.17E-06	4.10E-07	1.5457E-03
520266.56	4258942.98	81134.46542	1.01329	0.25024	0.95841	0.26792	1.54E-03	2.38E-06	5.13E-07	2.25E-06	5.27E-07	1.5479E-03
520039.13	4258736.23	81052.56127	3.55864	1.09235	5.01452	1.03304	1.54E-03	8.35E-06	2.24E-06	1.18E-05	2.03E-06	1.5651E-03
520097.49	4258864.26	80982.896	12.46281	0.60418	10.9551	0.55523	1.54E-03	2.93E-05	1.24E-06	2.57E-05	1.09E-06	1.5966E-03
520236.86	4258943.03	80944.23784	1.29354	0.2816	1.21075	0.29816	1.54E-03	3.04E-06	5.78E-07	2.84E-06	5.87E-07	1.5456E-03
520037.12	4258646.05	80887.11257	2.52398	2.49403	3.59196	2.17033	1.54E-03	5.93E-06	5.12E-06	8.43E-06	4.27E-06	1.5613E-03
520059.6	4258550.36	80817.46227	1.49072	13.34975	1.96939	7.34557	1.54E-03	3.50E-06	2.74E-05	4.62E-06	1.45E-05	1.5862E-03
520276.46	4258942.97	80809.58029	0.94111	0.24144	0.89244	0.25887	1.54E-03	2.21E-06	4.95E-07	2.10E-06	5.10E-07	1.5414E-03
520197.4	4258352.69	80753.1912	0.39744	1.98598	0.41894	2.25921	1.53E-03	9.33E-07	4.07E-06	9.84E-07	4.45E-06	1.5454E-03
520476.07	4258367.98	80692.46465	0.20644	0.2771	0.20675	0.29385	1.53E-03	4.85E-07	5.68E-07	4.85E-07	5.78E-07	1.5359E-03
520167.52	4258923.15	80671.83565	2.76565	0.40326	2.47405	0.39863	1.53E-03	6.49E-06	8.27E-07	5.81E-06	7.85E-07	1.5473E-03
520167.97	4258372.59	80530.32436	0.43913	2.90317	0.46937	3.35295	1.53E-03	1.03E-06	5.95E-06	1.10E-06	6.60E-06	1.5454E-03
520467.28	4258354.21	80431.83298	0.20857	0.29137	0.2087	0.30882	1.53E-03	4.90E-07	5.98E-07	4.90E-07	6.08E-07	1.5310E-03
520325.95	4258932.89	80352.51111	0.66911	0.21066	0.63912	0.22504	1.53E-03	1.57E-06	4.32E-07	1.50E-06	4.43E-07	1.5313E-03
520354.17	4258303.18	80305.34096	0.2612	0.54533	0.26808	0.59276	1.53E-03	6.13E-07	1.12E-06	6.29E-07	1.17E-06	1.5300E-03
520226.96	4258943.05	80291.39967	1.41118	0.29321	1.31526	0.30859	1.53E-03	3.31E-06	6.01E-07	3.09E-06	6.07E-07	1.5338E-03
520412.87	4258313.36	80255.96082	0.22999	0.38706	0.23199	0.41622	1.53E-03	5.40E-07	7.94E-07	5.45E-07	8.19E-07	1.5282E-03
520363.96	4258303.21	80240.57502	0.25548	0.51301	0.26165	0.55693	1.53E-03	6.00E-07	1.05E-06	6.14E-07	1.10E-06	1.5286E-03
520403.89	4258889.17	80213.6144	0.42073	0.18584	0.40271	0.19624	1.52E-03	9.88E-07	3.81E-07	9.45E-07	3.86E-07	1.5274E-03
520286.36	4258942.95	80212.24273	0.8755	0.23316	0.83203	0.25013	1.52E-03	2.06E-06	4.78E-07	1.95E-06	4.92E-07	1.5297E-03
520158.57	4258919.46	80184.84079	3.15667	0.42326	2.7994	0.41297	1.52E-03	7.41E-06	8.68E-07	6.57E-06	8.13E-07	1.5398E-03

520187.34	4258933.12	80126.97819	2.13587	0.35878	1.94382	0.36395	1.52E-03	5.01E-06	7.36E-07	4.56E-06	7.16E-07	1.5341E-03
520109.05	4258432.41	80126.01377	0.58058	9.67626	0.6247	11.73287	1.52E-03	1.36E-06	1.98E-05	1.47E-06	2.31E-05	1.5688E-03
520285.62	4258312.96	80121.11756	0.30683	0.87886	0.31559	0.9667	1.52E-03	7.20E-07	1.80E-06	7.41E-07	1.90E-06	1.5281E-03
520256.23	4258322.87	80043.96576	0.33155	1.11416	0.34147	1.23588	1.52E-03	7.78E-07	2.29E-06	8.02E-07	2.43E-06	1.5278E-03
520344.39	4258303.15	79979.58935	0.2667	0.58118	0.27436	0.63209	1.52E-03	6.26E-07	1.19E-06	6.44E-07	1.24E-06	1.5240E-03
520385.31	4258902.79	79844.22355	0.46486	0.18966	0.44413	0.20051	1.52E-03	1.09E-06	3.89E-07	1.04E-06	3.95E-07	1.5206E-03
520373.75	4258303.24	79827.35624	0.24965	0.48382	0.25515	0.52432	1.52E-03	5.86E-07	9.92E-07	5.99E-07	1.03E-06	1.5206E-03
520039.93	4258628.02	79775.93649	2.41343	3.19592	3.54716	2.66784	1.52E-03	5.67E-06	6.55E-06	8.33E-06	5.25E-06	1.5422E-03
520454.97	4258827.99	79634.16971	0.31831	0.17775	0.30546	0.18757	1.51E-03	7.47E-07	3.65E-07	7.17E-07	3.69E-07	1.5159E-03
520445.83	4258841.78	79624.06708	0.33447	0.17816	0.3206	0.18825	1.51E-03	7.85E-07	3.65E-07	7.53E-07	3.71E-07	1.5158E-03
520217.06	4258943.07	79598.74258	1.55311	0.30621	1.44023	0.31982	1.51E-03	3.65E-06	6.28E-07	3.38E-06	6.30E-07	1.5213E-03
520106.9	4258878.14	79592.53197	9.27436	0.56579	7.88558	0.52127	1.51E-03	2.18E-05	1.16E-06	1.85E-05	1.03E-06	1.5554E-03
520334.6	4258303.11	79571.2515	0.27221	0.62044	0.28043	0.67543	1.51E-03	6.39E-07	1.27E-06	6.58E-07	1.33E-06	1.5164E-03
520485.18	4258381.89	79435.61216	0.20392	0.26292	0.20387	0.27919	1.51E-03	4.79E-07	5.39E-07	4.79E-07	5.50E-07	1.5120E-03
520296.27	4258942.93	79403.39654	0.81626	0.22547	0.77708	0.24181	1.51E-03	1.92E-06	4.62E-07	1.82E-06	4.76E-07	1.5140E-03
520504.24	4258708.75	79354.08959	0.23819	0.1863	0.22894	0.19538	1.51E-03	5.59E-07	3.82E-07	5.37E-07	3.85E-07	1.5102E-03
520149.63	4258915.77	79352.06123	3.6386	0.44297	3.19633	0.4266	1.51E-03	8.54E-06	9.08E-07	7.50E-06	8.40E-07	1.5261E-03
520355.64	4258922.84	79292.56644	0.55628	0.19786	0.53174	0.21024	1.51E-03	1.31E-06	4.06E-07	1.25E-06	4.14E-07	1.5106E-03
520383.54	4258303.27	79269.90217	0.24389	0.45703	0.24865	0.49448	1.51E-03	5.73E-07	9.37E-07	5.84E-07	9.73E-07	1.5098E-03
520122.26	4258894.47	79223.38425	6.21394	0.51791	5.29762	0.48235	1.51E-03	1.46E-05	1.06E-06	1.24E-05	9.50E-07	1.5349E-03
520035.46	4258727.38	79056.73053	3.17942	1.14665	4.3631	1.08125	1.50E-03	7.46E-06	2.35E-06	1.02E-05	2.13E-06	1.5249E-03
520436.96	4258855.46	79034.08975	0.35115	0.1786	0.33628	0.18878	1.50E-03	8.24E-07	3.66E-07	7.89E-07	3.72E-07	1.5046E-03
520324.81	4258303.08	79029.16922	0.27767	0.66362	0.28623	0.72332	1.50E-03	6.52E-07	1.36E-06	6.72E-07	1.42E-06	1.5063E-03
520498.73	4258472.76	78962.63874	0.21011	0.23264	0.20742	0.24691	1.50E-03	4.93E-07	4.77E-07	4.87E-07	4.86E-07	1.5029E-03
520464.43	4258814.07	78957.92413	0.30273	0.17716	0.29053	0.18661	1.50E-03	7.11E-07	3.63E-07	6.82E-07	3.67E-07	1.5030E-03
520275.83	4258312.93	78693.36112	0.31196	0.95034	0.32056	1.04871	1.50E-03	7.32E-07	1.95E-06	7.53E-07	2.06E-06	1.5013E-03
520460.13	4258341.14	78645.5454	0.20967	0.3039	0.20955	0.3223	1.49E-03	4.92E-07	6.23E-07	4.92E-07	6.34E-07	1.4972E-03
520207.16	4258943.08	78627.4054	1.71736	0.31979	1.58363	0.33095	1.49E-03	4.03E-06	6.56E-07	3.72E-06	6.51E-07	1.5036E-03
520177.79	4258362.63	78607.96467	0.418	2.54047	0.44545	2.9151	1.49E-03	9.81E-07	5.21E-06	1.05E-06	5.74E-06	1.5072E-03
520422.66	4258313.39	78547.58632	0.22426	0.36824	0.22566	0.3951	1.49E-03	5.26E-07	7.55E-07	5.30E-07	7.78E-07	1.4956E-03
520050.47	4258787.67	78493.0757	5.58704	0.80977	8.52941	0.77145	1.49E-03	1.31E-05	1.66E-06	2.00E-05	1.52E-06	1.5283E-03
520393.33	4258303.3	78478.34033	0.23816	0.43252	0.24219	0.46715	1.49E-03	5.59E-07	8.87E-07	5.69E-07	9.20E-07	1.4947E-03
520306.17	4258942.92	78431.78803	0.76306	0.21838	0.72739	0.234	1.49E-03	1.79E-06	4.48E-07	1.71E-06	4.61E-07	1.4953E-03
520375.42	4258912.8	78394.92152	0.49293	0.19092	0.47098	0.20209	1.49E-03	1.16E-06	3.92E-07	1.11E-06	3.98E-07	1.4932E-03
520177.44	4258933.13	78330.79093	2.41362	0.37444	2.17996	0.37465	1.49E-03	5.67E-06	7.68E-07	5.12E-06	7.37E-07	1.5012E-03
520315.02	4258303.05	78316.24048	0.28301	0.71123	0.2917	0.77638	1.49E-03	6.64E-07	1.46E-06	6.85E-07	1.53E-06	1.4930E-03
520140.68	4258912.07	78280.52614	4.25323	0.4621	3.69915	0.43945	1.49E-03	9.99E-06	9.48E-07	8.68E-06	8.65E-07	1.5085E-03
520412.58	4258885.57	78250.13456	0.40134	0.18236	0.38438	0.19252	1.49E-03	9.42E-07	3.74E-07	9.02E-07	3.79E-07	1.4900E-03
520088.74	4258860.65	78206.10544	16.02295	0.60987	16.37517	0.56171	1.49E-03	3.76E-05	1.25E-06	3.84E-05	1.11E-06	1.5650E-03
520207.22	4258342.72	78147.29737	0.37809	1.78474	0.39683	2.02086	1.49E-03	8.88E-07	3.66E-06	9.32E-07	3.98E-06	1.4949E-03
520046.85	4258778.96	78054.39662	4.901	0.84193	7.12507	0.8038	1.48E-03	1.15E-05	1.73E-06	1.67E-05	1.58E-06	1.5152E-03
520246.44	4258322.84	77964.37974	0.33621	1.21648	0.34696	1.35504	1.48E-03	7.89E-07	2.49E-06	8.15E-07	2.67E-06	1.4887E-03
520037.12	4258636.77	77919.31872	2.36049	2.7619	3.37405	2.36154	1.48E-03	5.54E-06	5.66E-06	7.92E-06	4.65E-06	1.5049E-03
520428.3	4258869.05	77886.73301	0.36857	0.17885	0.3525	0.18903	1.48E-03	8.65E-07	3.67E-07	8.28E-07	3.72E-07	1.4829E-03
520475.66	4258357.8	77565.92053	0.20456	0.27989	0.20479	0.29645	1.47E-03	4.80E-07	5.74E-07	4.81E-07	5.84E-07	1.4765E-03
520395.21	4258902.77	77500.39846	0.44325	0.18545	0.42372	0.19583	1.47E-03	1.04E-06	3.80E-07	9.95E-07	3.85E-07	1.4759E-03
520197.26	4258943.1	77485.29514	1.91419	0.33419	1.7537	0.34208	1.47E-03	4.49E-06	6.85E-07	4.12E-06	6.73E-07	1.4828E-03
520305.23	4258303.02	77479.08522	0.28826	0.76367	0.29683	0.83537	1.47E-03	6.77E-07	1.57E-06	6.97E-07	1.64E-06	1.4773E-03
520507.78	4258700.32	77468.08167	0.23346	0.18628	0.22457	0.19541	1.47E-03	5.48E-07	3.82E-07	5.27E-07	3.85E-07	1.4744E-03
520098.24	4258874.57	77417.46248	12.15308	0.57499	10.5781	0.52892	1.47E-03	2.85E-05	1.18E-06	2.48E-05	1.04E-06	1.5272E-03
520403.12	4258303.33	77411.59075	0.23246	0.41009	0.23581	0.44206	1.47E-03	5.46E-07	8.41E-07	5.54E-07	8.70E-07	1.4743E-03
520030.86	4258692.16	77403.4986	2.57417	1.49019	3.46039	1.37293	1.47E-03	6.04E-06	3.06E-06	8.12E-06	2.70E-06	1.4912E-03
520495.89	4258406.5	77380.79645	0.20196	0.24645	0.20076	0.26172	1.47E-03	4.74E-07	5.05E-07	4.71E-07	5.15E-07	1.4728E-03
520043.24	4258770.25	77368.64241	4.32457	0.87654	6.06921	0.8378	1.47E-03	1.02E-05	1.80E-06	1.42E-05	1.65E-06	1.4985E-03
520113.21	4258890.74	77365.35578	7.808	0.53266	6.60339	0.49243	1.47E-03	1.83E-05	1.09E-06	1.55E-05	9.69E-07	1.5065E-03
520493.54	4258758.26	77224.65896	0.25772	0.17913	0.24735	0.18743	1.47E-03	6.05E-07	3.67E-07	5.81E-07	3.69E-07	1.4698E-03
520316.07	4258942.9	77222.23292	0.71416	0.21161	0.68139	0.22648	1.47E-03	1.68E-06	4.34E-07	1.60E-06	4.46E-07	1.4720E-03
520256.68	4258953	77145.54208	1.10197	0.25412	1.03864	0.27095	1.47E-03	2.59E-06	5.21E-07	2.44E-06	5.33E-07	1.4725E-03
520266.58	4258952.98	77040.60969	1.02017	0.24479	0.96443	0.26176	1.46E-03	2.40E-06	5.02E-07	2.26E-06	5.15E-07	1.4701E-03
520246.78	4258953.02	77033.96563	1.19408	0.26413	1.1216	0.2805	1.46E-03	2.80E-06	5.42E-07	2.63E-06	5.52E-07	1.4708E-03
520266.05	4258312.9	76944.84649	0.31663	1.03088	0.32552	1.1411	1.46E-03	7.43E-07	2.11E-06	7.64E-07	2.25E-06	1.4685E-03
520498.55	4258417.66	76927.8609	0.20218	0.24199	0.2006	0.25678	1.46E-03	4.75E-07	4.96E-07	4.71E-07	5.05E-07	1.4642E-03
520484.55	4258371.61	76913.90397	0.2023	0.26598	0.20249	0.28205	1.46E-03	4.75E-07	5.46E-07	4.75E-07	5.55E-07	1.4640E-03
520497.01	4258749.96	76854.22454	0.25258	0.17974	0.24242	0.18795	1.46E-03	5.93E-07	3.69E-07	5.69E-07	3.70E-07	1.4628E-03
520365.54	4258922.82	76842.902	0.52433	0.19216	0.50096	0.20386	1.46E-03	1.23E-06	3.94E-07	1.18E-06	4.01E-07	1.4638E-03
520236.88	4258953.03	76756.58558	1.2998	0.27496	1.21615	0.29049	1.46E-03	3.05E-06	5.64E-07	2.86E-06	5.72E-07	1.4660E-03
520055.61	4258807.01	76755.09214	6.85081	0.7368	11.62339	0.6997	1.46E-03	1.61E-05	1.51E-06	2.73E-05	1.38E-06	1.5052E-03
520276.48	4258952.97	76682.1285	0.94657	0.23605	0.89719	0.2529	1.46E-03	2.22E-06	4.84E-07	2.11E-06	4.98E-07	1.4629E-03
520049.73	4258579.49	76635.26388	1.80328	6.83525	2.68075	4.70097	1.46E-03	4.23E-06	1.40E-05	6.29E-06	9.25E-06	1.4905E-03
520476.32	4258799.14	76598.81114	0.28475	0.17575	0.27333	0.18465	1.46E-03	6.69E-07	3.60E-07	6.42E-07	3.63E-07	1.4580E-03
520187.61	4258352.66	76567.33172	0.39821	2.24465	0.42266	2.56378	1.46E-03	9.35E-07	4.60E-06	9.92E-07	5.05E-06	1.4670E-03
520432.45	4258313.42	76546.89046	0.21865	0.35085	0.21953	0.37555	1.46E-03	5.13E-07	7.20E-07	5.15E-07	7.39E-07	1.4575E-03
520031.79	4258718.53	76520.60235	2.82848	1.20472	3.79988	1.13079	1.45E-03	6.64E-06	2.47E-06	8.92E-06	2.23E-06	1.4748E-03
520167.54	4258933.15	76446.35243	2.76438	0.39035	2.47459	0.38475	1.45E-03	6.49E-06	8.01E-07	5.81E-06	7.57E-07	1.4670E-03
520039.63	4258761.54	76401.44978	3.83276	0.91431	5.24334	0.87365	1.45E-03	9.00E-06	1.88E-06	1.23E-05	1.72E-06	1.4772E-03
520469.11	4258344.98	76399.46786	0.20551	0.29094	0.20546	0.30814	1.45E-03	4.82E-07	5.97E-07	4.82E-07	6.07E-07	1.4544E-03
520295.44	4258302.99	76388.51946	0.29324	0.82185	0.30166	0.90105	1.45E-03	6.88E-07	1.69E-06	7.08E-07	1.77E-06	1.4569E-03
520494.72	4258395.99	76276.86134	0.2009	0.24965	0.20013	0.26514	1.45E-03	4.72E-07	5.12E-07	4.70E-07	5.22E-07	1.4519E-03
520226.98	4258953.05	76237.01047	1.42038	0.28643	1.3232	0.30069	1.45E-03	3.33E-06	5.87E-07	3.11E-06	5.92E-07	1.4567E-03
520454.28	4258838.28	76180.19624	0.32097	0.17484	0.30774	0.18455	1.45E-03	7.54E-07	3.59E-07	7.22E-07	3.63E-07	1.4502E-03
520412.91	4258303.36	76172.2929	0.22689	0.38932	0.22953	0.4189	1.45E-03	5.33E-07	7.98E-07	5.39E-07	8.25E-07	1.4506E-03
520286.38	4258952.95	76092.47681	0.88012	0.22789	0.83602	0.2444	1.45E-03	2.07E-06	4.67E-07	1.96E-06	4.81E-07	1.4514E-03
520138.54	4258392.5	76027.56458	0.47575	4.7484	0.50733	5.62239	1.45E-03	1.12E-06	9.74E-06	1.19E-06	1.11E-05	1.4683E-03
520325.97	4258942.89	76017.28085	0.67117	0.20558	0.64071	0.21975	1.44E-03	1.58E-06	4.22E-07	1.50E-06	4.33E-07	1.4489E-03
520158.68	4258929.5	76001.6616	3.14859	0.40883	2.79418	0.3979	1.44E-03	7.39E-06	8.38E-07	6.56E-06	7.83E-07	1.4602E-03
520403.81	4258899.21	75992.59783	0.42272	0.18223	0.40427	0.19233	1.44E-03	9.92E-07	3.74E-07	9.49E-07	3.79E-07	1.4472E-03
520187.36	4258943.12	75973.73844	2.14094	0.34858	1.94853	0.35246	1.44E-03	5.03E-06	7.15E-07	4.57E-06	6.94E-07	1.4551E-03
520445.32	4258852	75969.32815	0.33688	0.17524	0.32266	0.18512	1.44E-03	7.91E-07	3.59E-07	7.58E-07	3.64E-07	1.4463E-03
520501.93	4258460.52	75951.76887	0.20639	0.23203	0.20399	0.24597	1.44E-03	4.85E-07	4.76E-07	4.79E-07	4.84E-07	1.4456E-03
520421.28	4258881.97	75911.09358	0.3838	0.17823	0.36659	0.18829	1.44E-03	9.01E-07	3.66E-07	8.61E-07	3.71E-07	1.4454E-03
520463.52	4258824.45	75831.00993	0.3056	0.1744	0.29321	0.1838	1.44E-03	7.17E-07	3.58E-07	6.88E-07	3.62E-07	1.4435E-03
520363.99	4258293.21	75819.93839	0.2507	0.5175	0.25727	0.56129	1.44E-03	5.89E-07	1.06E-06	6.04E-07	1.10E-06	1.4446E-03
520039.89	4258618.32	75816.89227	2.18261	3.55246	3.20466	2.89523	1.44E-03	5.12E-06	7.29E-06	7.52E-06	5.70E-06	1.4668E-03
520354.21	4258293.18	75763.00651	0.25594	0.55038	0.26316	0.59747	1.44E-03	6.01E-07	1.13E-06	6.18E-07	1.18E-06	1.4436E-03
520128.72	4258402.47	75722.37547	0.49649	5.81651	0.52906	6.95403	1.44E-03	1.17E-06	1.19E-05	1.24E-06	1.37E-05	1.4674E-03
520385.32	4258912.79	75586.71947	0.46683	0.18565	0.44572	0.19628	1.44E-03	1.10E-06	3.81E-07	1.05E-06	3.86E-07	1.4397E-03
520217.07	4258953.07	75556.66473	1.56182	0.29877	1.44772	0.31117	1.44E-03	3.67E-06	6.13E-07	3.40E-06	6.13E-07	1.4445E-03
520502.07	4258481.52	75536.02711	0.20897	0.22825	0.20593	0.24224	1.44E-03	4.91E-07	4.68E-07	4.83E-07	4.77E-07	1.4377E-03
520373.78	4258293.24	75528.79499	0.24528	0.4878	0.25126	0.5283	1.44E-03	5.76E-07	1.00E-06	5.90E-07	1.04E-06	1.4389E-03
520503.97	4258733.34	75469.4977	0.2426	0.18056	0.2329	0.18881	1.43E-03	5.70E-07	3.70E-07	5.47E-07	3.72E-07	1.4364E-03
520344.42	4258293.15	75420.53629	0.26102	0.58667	0.26884	0.63718	1.43E-03	6.13E-07	1.20E-06	6.31E-07	1.25E-06	1.4373E-03
520236.65	4258322.81	75401.00747	0.33995	1.33482	0.35255	1.49105	1.43E-03	7.98E-07	2.74E-06	8.28E-07	2.94E-06	1.4405E-03
520149.83	4258925.84	75366.93052	3.63076	0.42717	3.19091	0.41056	1.43E-03	8.52E-06	8.76E-07	7.49E-06	8.08E-07	1.4503E-03
520511.31	4258691.88	75365.9069	0.22891	0.18619	0.22034	0.19527	1.43E-03	5.37E-07	3.82E-07	5.17E-07	3.84E-07	1.4344E-03
520296.28	4258952.93	75338.84159	0.82056	0.22038	0.78079	0.23637	1.43E-03	1.93E-06	4.52E-07	1.83E-06	4.65E-07	1.4367E-03
520104.16	4258887	75300.2271	10.10179	0.54366	8.57809	0.50072	1.43E-03	2.37E-05	1.12E-06	2.01E-05	9.86E-07	1.4773E-03
520058.16	4258818.05	75272.16268	7.62198	0.69903	14.115	0.66257	1.43E-03	1.79E-05	1.43E-06	3.31E-05	1.30E-06	1.4846E-03
520285.65	4258302.96	75156.19859	0.29805	0.88627	0.30631	0.9745	1.43E-03	7.00E-07	1.82E-06	7.19E-07	1.92E-06	1.4337E-03
520485.42	4258785.36	75101.85031	0.27145	0.17541	0.26062	0.1839	1.43E-03	6.37E-07	3.60E-07	6.12E-07	3.62E-07	1.4295E-03
520355.65	4258932.84	75066.0684	0.55847	0.19327	0.53347	0.20553	1.43E-03	1.31E-06	3.96E-07	1.25E-06	4.05E-07	1.4302E-03
520383.57	4258293.27	75060.64076	0.23987	0.46059	0.24518	0.49812	1.43E-03	5.63E-07	9.45E-07	5.76E-07	9.81E-07	1.4298E-03
520036.02	4258752.83	75050.24888	3.38228	0.95608	4.58254	0.91135	1.43E-03	7.94E-06	1.96E-06	1.08E-05	1.79E-06	1.4490E-03
520089.59	4258871	75039.22448	15.72186	0.58037	15.50529	0.535	1.43E-03	3.69E-05	1.19E-06	3.64E-05	1.05E-06	1.5019E-03
520502.59	4258436.39	75020.34348	0.20256	0.23519	0.20055	0.24923	1.43E-03	4.76E-07	4.82E-07	4.71E-07	4.91E-07	1.4279E-03
520334.63	4258293.11	75009.00662	0.2661	0.6263	0.27426	0.68091	1.43E-03	6.25E-07	1.28E-06	6.44E-07	1.34E-06	1.4297E-03
520256.26	4258312.87	74969.22689	0.32091	1.12196	0.33059	1.24591	1.43E-03	7.53E-07	2.30E-06	7.76E-07	2.45E-06	1.4313E-03
520473.09	4258810.48	74861.36577	0.29072	0.17375	0.27888	0.18276	1.42E-03	6.83E-07	3.56E-07	6.55E-07	3.60E-07	1.4250E-03
520158.18	4258372.56	74757.83843	0.43497	3.38278	0.46459	3.9306	1.42E-03	1.02E-06	6.94E-06	1.09E-06	7.74E-06	1.4378E-03
520493.79	4258385.58	74689.22515	0.19962	0.25255	0.19925	0.26809	1.42E-03	4.69E-07	5.18E-07	4.68E-07	5.28E-07	1.4217E-03
520207.17	4258953.08	74642.16494	1.72594	0.31171	1.591	0.32161	1.42E-03	4.05E-06	6.39E-07	3.74E-06	6.33E-07	1.4279E-03
520422.69	4258303.39	74633.91322	0.22138	0.37028	0.2234	0.39757	1.42E-03	5.20E-07	7.59E-07	5.24E-07	7.83E-07	1.4212E-03
520140.98	4258922.19	74510.57663	4.24523	0.44483	3.69181	0.42242	1.42E-03	9.97E-06	9.12E-07	8.67E-06	8.32E-07	1.4367E-03
520197.43	4258342.69	74468.70069	0.37953	2.0021	0.40128	2.27492	1.42E-03	8.91E-07	4.11E-06	9.42E-07	4.48E-06	1.4259E-03
520324.84	4258293.08	74429.72358	0.27106	0.66986	0.27939	0.72918	1.41E-03	6.36E-07	1.37E-06	6.56E-07	1.44E-06	1.4189E-03
520507.45	4258725.04	74424.95008	0.23785	0.18059	0.22832	0.18898	1.41E-03	5.58E-07	3.70E-07	5.36E-07	3.72E-07	1.4165E-03
520306.18	4258952.92	74410.60542	0.76677	0.21342	0.73054	0.22876	1.41E-03	1.80E-06	4.38E-07	1.72E-06	4.50E-07	1.4188E-03
520393.36	4258293.3	74400.34664	0.23448	0.43564	0.23909	0.47045	1.41E-03	5.50E-07	8.93E-07	5.61E-07	9.26E-07	1.4171E-03
520118.9	4258412.44	74368.84836	0.51686	7.34987	0.55101	8.90376	1.41E-03	1.21E-06	1.51E-05	1.29E-06	1.75E-05	1.4487E-03
520177.45	4258943.13	74363.35587	2.42152	0.36349	2.18704	0.36251	1.41E-03	5.68E-06	7.45E-07	5.13E-06	7.14E-07	1.4258E-03
520484.04	4258361.38	74329.02332	0.2006	0.2688	0.20083	0.28465	1.41E-03	4.71E-07	5.51E-07	4.71E-07	5.60E-07	1.4149E-03
520375.44	4258922.8	74286.04518	0.49518	0.18676	0.47282	0.19781	1.41E-03	1.16E-06	3.83E-07	1.11E-06	3.89E-07	1.4151E-03
520412.42	4258895.64	74253.06182	0.40336	0.17899	0.38603	0.18884	1.41E-03	9.47E-07	3.67E-07	9.06E-07	3.72E-07	1.4140E-03
520442.24	4258313.45	74208.60134	0.21313	0.33489	0.21363	0.35755	1.41E-03	5.00E-07	6.87E-07	5.02E-07	7.04E-07	1.4130E-03
520099.23	4258442.38	74145.44306	0.60121	13.83618	0.65228	15.87986	1.41E-03	1.41E-06	2.84E-05	1.53E-06	3.13E-05	1.4719E-03
520113.85	4258901	73741.63813	7.63126	0.50878	6.47059	0.47072	1.40E-03	1.79E-05	1.04E-06	1.52E-05	9.27E-07	1.4368E-03
520315.05	4258293.05	73707.98484	0.27592	0.71775	0.28422	0.78262	1.40E-03	6.48E-07	1.47E-06	6.67E-07	1.54E-06	1.4054E-03
520275.87	4258302.93	73683.33507	0.30253	0.9582	0.31091	1.05683	1.40E-03	7.10E-07	1.97E-06	7.30E-07	2.08E-06	1.4061E-03
520478.09	4258348.82	73637.53636	0.20134	0.27882	0.20144	0.29499	1.40E-03	4.73E-07	5.72E-07	4.73E-07	5.81E-07	1.4018E-03
520197.27	4258953.1	73566.49119	1.92181	0.32535	1.76036	0.33197	1.40E-03	4.51E-06	6.67E-07	4.13E-06	6.53E-07	1.4083E-03
520168	4258362.6	73564.39921	0.41557	2.92447	0.44361	3.3734	1.40E-03	9.76E-07	6.00E-06	1.04E-06	6.64E-06	1.4130E-03
520429.98	4258878.37	73497.89285	0.36703	0.17482	0.35059	0.18467	1.40E-03	8.62E-07	3.59E-07	8.23E-07	3.64E-07	1.3995E-03
520403.15	4258293.33	73454.41056	0.22907	0.41288	0.23304	0.44507	1.40E-03	5.38E-07	8.47E-07	5.47E-07	8.76E-07	1.3990E-03
520395.22	4258912.77	73444.12269	0.44498	0.18165	0.42512	0.19179	1.40E-03	1.04E-06	3.73E-07	9.98E-07	3.78E-07	1.3988E-03
520316.08	4258952.9	73443.53345	0.7191	0.20712	0.68573	0.22177	1.40E-03	1.69E-06	4.25E-07	1.61E-06	4.37E-07	1.4002E-03
520028.13	4258709.69	73429.87436	2.51027	1.2658	3.31777	1.18093	1.40E-03	5.89E-06	2.60E-06	7.79E-06	2.32E-06	1.4144E-03
520095.11	4258883.27	73247.94411	13.41912	0.55083	11.92286	0.50742	1.39E-03	3.15E-05	1.13E-06	2.80E-05	9.99E-07	1.4539E-03
520032.4	4258744.12	73238.47406	2.97135	1.00074	4.00913	0.94988	1.39E-03	6.98E-06	2.05E-06	9.41E-06	1.87E-06	1.4124E-03
520450.96	4258317.18	73194.4279	0.20922	0.32099	0.20931	0.3418	1.39E-03	4.91E-07	6.58E-07	4.91E-07	6.73E-07	1.3936E-03
520468.73	4258334.8	73056.66198	0.20342	0.29364	0.2033	0.31087	1.39E-03	4.78E-07	6.02E-07	4.77E-07	6.12E-07	1.3908E-03
520256.7	4258963	73017.30338	1.10257	0.24788	1.03889	0.26393	1.39E-03	2.59E-06	5.08E-07	2.44E-06	5.20E-07	1.3940E-03
520246.79	4258963.02	72902.84138	1.1942	0.25751	1.12147	0.27302	1.39E-03	2.80E-06	5.28E-07	2.63E-06	5.37E-07	1.3923E-03
520305.26	4258293.02	72874.23839	0.28069	0.77037	0.28878	0.842	1.39E-03	6.59E-07	1.58E-06	6.78E-07	1.66E-06	1.3898E-03
520453.68	4258848.54	72872.26498	0.32342	0.17201	0.30984	0.18156	1.39E-03	7.59E-07	3.53E-07	7.27E-07	3.57E-07	1.3874E-03
520266.6	4258962.98	72869.13162	1.02006	0.23871	0.964	0.25501	1.39E-03	2.39E-06	4.90E-07	2.26E-06	5.02E-07	1.3908E-03
520432.48	4258303.42	72852.2952	0.21597	0.35265	0.21742	0.37781	1.38E-03	5.07E-07	7.23E-07	5.10E-07	7.44E-07	1.3873E-03
520246.47	4258312.84	72828.53137	0.32476	1.22523	0.33575	1.36538	1.38E-03	7.62E-07	2.51E-06	7.88E-07	2.69E-06	1.3911E-03
520493.04	4258375.25	72827.57084	0.1982	0.25553	0.19816	0.27095	1.38E-03	4.65E-07	5.24E-07	4.65E-07	5.33E-07	1.3863E-03
520462.73	4258834.79	72756.78283	0.30828	0.17161	0.29558	0.18093	1.38E-03	7.24E-07	3.52E-07	6.94E-07	3.56E-07	1.3851E-03
520236.89	4258963.03	72703.30296	1.30106	0.26813	1.21711	0.28271	1.38E-03	3.05E-06	5.50E-07	2.86E-06	5.57E-07	1.3890E-03
520365.55	4258932.82	72687.32106	0.52565	0.1876	0.50187	0.19917	1.38E-03	1.23E-06	3.85E-07	1.18E-06	3.92E-07	1.3848E-03
520226.86	4258322.78	72668.13219	0.34301	1.47111	0.35798	1.64796	1.38E-03	8.05E-07	3.02E-06	8.40E-07	3.24E-06	1.3892E-03
520167.55	4258943.15	72640.93147	2.7728	0.37838	2.48222	0.37184	1.38E-03	6.51E-06	7.76E-07	5.83E-06	7.32E-07	1.3946E-03
520276.5	4258962.97	72521.61579	0.94642	0.23016	0.89668	0.24645	1.38E-03	2.22E-06	4.72E-07	2.11E-06	4.85E-07	1.3838E-03
520444.87	4258862.19	72508.12744	0.33913	0.17237	0.32455	0.18202	1.38E-03	7.96E-07	3.54E-07	7.62E-07	3.58E-07	1.3805E-03
520505.17	4258469.04	72409.0705	0.2053	0.22732	0.20262	0.24105	1.38E-03	4.82E-07	4.66E-07	4.76E-07	4.75E-07	1.3783E-03
520027.12	4258683.15	72383.67715	2.2452	1.5684	2.97529	1.43252	1.38E-03	5.27E-06	3.22E-06	6.99E-06	2.82E-06	1.3942E-03
520412.94	4258293.36	72320.23758	0.22373	0.39189	0.22704	0.42169	1.37E-03	5.25E-07	8.04E-07	5.33E-07	8.30E-07	1.3774E-03
520187.37	4258953.12	72279.60941	2.15505	0.33932	1.96034	0.34191	1.37E-03	5.06E-06	6.96E-07	4.60E-06	6.73E-07	1.3849E-03
520059.56	4258540.66	72255.47644	1.26617	13.34593	1.59225	7.51885	1.37E-03	2.97E-06	2.74E-05	3.74E-06	1.48E-05	1.4223E-03
520158.79	4258939.53	72254.00075	3.15168	0.39545	2.79757	0.38393	1.37E-03	7.40E-06	8.11E-07	6.57E-06	7.56E-07	1.3890E-03
520226.99	4258963.05	72239.41138	1.4218	0.2792	1.32438	0.29243	1.37E-03	3.34E-06	5.73E-07	3.11E-06	5.76E-07	1.3807E-03
520421.02	4258892.08	72160.74402	0.3859	0.17506	0.36829	0.18482	1.37E-03	9.06E-07	3.59E-07	8.65E-07	3.64E-07	1.3741E-03
520177.82	4258352.63	72140.68335	0.39708	2.55821	0.42306	2.93462	1.37E-03	9.32E-07	5.25E-06	9.93E-07	5.78E-06	1.3842E-03
520472.06	4258820.91	72136.80447	0.29362	0.17116	0.28165	0.18014	1.37E-03	6.89E-07	3.51E-07	6.61E-07	3.55E-07	1.3732E-03
520403.75	4258909.24	72090.41399	0.42454	0.17865	0.40573	0.18848	1.37E-03	9.97E-07	3.66E-07	9.53E-07	3.71E-07	1.3730E-03
520266.08	4258302.9	71976.06451	0.30664	1.03916	0.3156	1.14973	1.37E-03	7.20E-07	2.13E-06	7.41E-07	2.26E-06	1.3740E-03
520286.4	4258962.95	71953.63287	0.87978	0.22214	0.83532	0.23817	1.37E-03	2.07E-06	4.56E-07	1.96E-06	4.69E-07	1.3727E-03
520043.45	4258794.86	71882.07167	4.45511	0.75478	6.22755	0.72426	1.37E-03	1.05E-05	1.55E-06	1.46E-05	1.43E-06	1.3944E-03
520104.9	4258897.3	71868.46738	9.79092	0.51861	8.32661	0.4782	1.37E-03	2.30E-05	1.06E-06	1.95E-05	9.41E-07	1.4106E-03
520459.68	4258320.92	71815.63945	0.20531	0.30798	0.20518	0.32706	1.37E-03	4.82E-07	6.32E-07	4.82E-07	6.44E-07	1.3673E-03
520295.47	4258292.99	71756.52355	0.28513	0.82885	0.29314	0.90802	1.36E-03	6.69E-07	1.70E-06	6.88E-07	1.79E-06	1.3688E-03
520385.34	4258922.79	71727.86457	0.469	0.18178	0.44752	0.19226	1.36E-03	1.10E-06	3.73E-07	1.05E-06	3.78E-07	1.3663E-03
520364.03	4258283.21	71681.27339	0.24584	0.52217	0.25271	0.56557	1.36E-03	5.77E-07	1.07E-06	5.93E-07	1.11E-06	1.3659E-03
520514.4	4258708.42	71641.66466	0.22876	0.18043	0.21973	0.18907	1.36E-03	5.37E-07	3.70E-07	5.16E-07	3.72E-07	1.3636E-03
520150.02	4258935.91	71595.17556	3.6139	0.41204	3.18082	0.39534	1.36E-03	8.48E-06	8.45E-07	7.47E-06	7.78E-07	1.3785E-03
520039.85	4258608.63	71588.3185	1.94447	3.89281	2.82138	3.10539	1.36E-03	4.56E-06	7.98E-06	6.62E-06	6.11E-06	1.3860E-03
520354.24	4258283.18	71582.06369	0.25069	0.55545	0.25806	0.6021	1.36E-03	5.89E-07	1.14E-06	6.06E-07	1.19E-06	1.3642E-03
520217.09	4258963.07	71565.51181	1.56084	0.29088	1.44699	0.30222	1.36E-03	3.66E-06	5.97E-07	3.40E-06	5.95E-07	1.3686E-03
520373.81	4258283.24	71561.47992	0.24089	0.49184	0.24719	0.53223	1.36E-03	5.66E-07	1.01E-06	5.80E-07	1.05E-06	1.3635E-03
520027.12	4258673.87	71471.82176	2.15949	1.70166	2.87135	1.54021	1.36E-03	5.07E-06	3.49E-06	6.74E-06	3.03E-06	1.3769E-03

520028.79	4258735.41	71417.85438	2.69044	1.04649	3.55652	0.99022	1.36E-03	6.32E-06	2.15E-06	8.35E-06	1.95E-06	1.3763E-03
520039.88	4258786.27	71365.23448	3.97141	0.78326	5.39742	0.75236	1.36E-03	9.32E-06	1.61E-06	1.27E-05	1.48E-06	1.3816E-03
520296.3	4258962.93	71292.11391	0.82087	0.2149	0.78068	0.23051	1.36E-03	1.93E-06	4.41E-07	1.83E-06	4.54E-07	1.3598E-03
520344.45	4258283.15	71251.34477	0.25538	0.59202	0.26316	0.64215	1.35E-03	6.00E-07	1.21E-06	6.18E-07	1.26E-06	1.3581E-03
520383.6	4258283.27	71188.49988	0.23583	0.46421	0.24156	0.50172	1.35E-03	5.54E-07	9.52E-07	5.67E-07	9.88E-07	1.3562E-03
520109.08	4258422.41	71182.74741	0.53535	9.71718	0.57288	11.77283	1.35E-03	1.26E-06	1.99E-05	1.34E-06	2.32E-05	1.3988E-03
520355.67	4258942.84	71151.98925	0.56033	0.18881	0.53486	0.20094	1.35E-03	1.32E-06	3.87E-07	1.26E-06	3.96E-07	1.3558E-03
520504.86	4258410.35	71016.76731	0.19731	0.2372	0.19582	0.25149	1.35E-03	4.63E-07	4.86E-07	4.60E-07	4.95E-07	1.3518E-03
520422.73	4258293.39	70985.39176	0.21847	0.37247	0.22113	0.40007	1.35E-03	5.13E-07	7.64E-07	5.19E-07	7.88E-07	1.3519E-03
520438.67	4258874.77	70949.3572	0.35128	0.17157	0.33564	0.18117	1.35E-03	8.25E-07	3.52E-07	7.88E-07	3.57E-07	1.3509E-03
520497.07	4258773.76	70942.08348	0.25654	0.17282	0.24614	0.18083	1.35E-03	6.02E-07	3.54E-07	5.78E-07	3.56E-07	1.3504E-03
520481.76	4258806.89	70936.74089	0.27935	0.17047	0.26788	0.17905	1.35E-03	6.56E-07	3.50E-07	6.29E-07	3.52E-07	1.3504E-03
520141.25	4258932.29	70854.49252	4.21801	0.4283	3.67377	0.40625	1.35E-03	9.90E-06	8.78E-07	8.62E-06	8.00E-07	1.3670E-03
520049.05	4258814.29	70850.9085	5.44229	0.69011	8.0621	0.66066	1.35E-03	1.28E-05	1.42E-06	1.89E-05	1.30E-06	1.3812E-03
520086.06	4258879.53	70828.60964	14.04818	0.5539	18.67299	0.51233	1.35E-03	3.30E-05	1.14E-06	4.38E-05	1.01E-06	1.4253E-03
520334.66	4258283.11	70803.91405	0.26002	0.63198	0.26798	0.68622	1.35E-03	6.10E-07	1.30E-06	6.29E-07	1.35E-06	1.3497E-03
520492.42	4258364.97	70802.12089	0.19666	0.25839	0.19682	0.27361	1.35E-03	4.62E-07	5.30E-07	4.62E-07	5.39E-07	1.3478E-03
520177.47	4258953.13	70790.48061	2.43639	0.35333	2.19944	0.35121	1.35E-03	5.72E-06	7.25E-07	5.16E-06	6.91E-07	1.3579E-03
520049.69	4258569.8	70769.13705	1.56866	7.16762	2.19599	4.91445	1.35E-03	3.68E-06	1.47E-05	5.16E-06	9.67E-06	1.3784E-03
520442.27	4258303.45	70760.31357	0.21063	0.33652	0.21162	0.35964	1.35E-03	4.94E-07	6.90E-07	4.97E-07	7.08E-07	1.3474E-03
520477.57	4258338.58	70748.22631	0.19945	0.28169	0.19943	0.29778	1.34E-03	4.68E-07	5.78E-07	4.68E-07	5.86E-07	1.3469E-03
520207.19	4258963.08	70709.51854	1.72329	0.30319	1.58913	0.31201	1.34E-03	4.05E-06	6.22E-07	3.73E-06	6.14E-07	1.3531E-03
520503.5	4258399.75	70657.41896	0.19644	0.24022	0.19533	0.25481	1.34E-03	4.61E-07	4.93E-07	4.59E-07	5.02E-07	1.3450E-03
520036.32	4258777.68	70630.14412	3.55422	0.81389	4.72927	0.78179	1.34E-03	8.34E-06	1.67E-06	1.11E-05	1.54E-06	1.3652E-03
520393.39	4258283.3	70602.1046	0.23075	0.43893	0.23586	0.47375	1.34E-03	5.42E-07	9.00E-07	5.54E-07	9.33E-07	1.3449E-03
520187.64	4258342.66	70569.30035	0.3794	2.2621	0.40326	2.5799	1.34E-03	8.91E-07	4.64E-06	9.47E-07	5.08E-06	1.3530E-03
520285.69	4258292.96	70543.19626	0.28944	0.8934	0.29744	0.98178	1.34E-03	6.80E-07	1.83E-06	6.98E-07	1.93E-06	1.3460E-03
520412.27	4258905.71	70518.01334	0.40546	0.17557	0.38753	0.18515	1.34E-03	9.52E-07	3.60E-07	9.10E-07	3.64E-07	1.3430E-03
520503.94	4258757.36	70504.66167	0.24671	0.17388	0.23661	0.18171	1.34E-03	5.79E-07	3.57E-07	5.55E-07	3.58E-07	1.3420E-03
520487.07	4258352.66	70503.46663	0.19725	0.26705	0.1974	0.28242	1.34E-03	4.63E-07	5.48E-07	4.63E-07	5.56E-07	1.3422E-03
520306.2	4258962.92	70462.66968	0.76752	0.20818	0.73083	0.22323	1.34E-03	1.80E-06	4.27E-07	1.72E-06	4.39E-07	1.3438E-03
520236.68	4258312.81	70433.71435	0.32793	1.34388	0.34089	1.50222	1.34E-03	7.70E-07	2.76E-06	8.00E-07	2.96E-06	1.3461E-03
520114.42	4258911.23	70403.41389	7.50828	0.48691	6.36939	0.45075	1.34E-03	1.76E-05	9.99E-07	1.50E-05	8.87E-07	1.3727E-03
520375.46	4258932.8	70383.8913	0.49667	0.18251	0.47391	0.19344	1.34E-03	1.17E-06	3.74E-07	1.11E-06	3.81E-07	1.3409E-03
520324.87	4258283.08	70237.42513	0.26459	0.67574	0.27253	0.73485	1.34E-03	6.21E-07	1.39E-06	6.40E-07	1.45E-06	1.3392E-03
520256.29	4258302.87	70094.33392	0.31038	1.1305	0.32038	1.25498	1.33E-03	7.29E-07	2.32E-06	7.52E-07	2.47E-06	1.3386E-03
520095.96	4258893.61	70073.95213	13.03243	0.52549	11.43155	0.48454	1.33E-03	3.06E-05	1.08E-06	2.68E-05	9.54E-07	1.3914E-03
520507.37	4258749.16	70052.04587	0.24194	0.17438	0.23204	0.18216	1.33E-03	5.68E-07	3.58E-07	5.45E-07	3.59E-07	1.3334E-03
520027.12	4258664.6	70021.54012	2.06541	1.84842	2.75386	1.65694	1.33E-03	4.85E-06	3.79E-06	6.47E-06	3.26E-06	1.3493E-03
520450.89	4258307.14	69946.85261	0.20691	0.32256	0.20736	0.34387	1.33E-03	4.86E-07	6.62E-07	4.87E-07	6.77E-07	1.3319E-03
520217.07	4258322.75	69933.87479	0.34547	1.62853	0.36284	1.83168	1.33E-03	8.11E-07	3.34E-06	8.52E-07	3.61E-06	1.3379E-03
520429.63	4258888.52	69895.48641	0.36905	0.17171	0.35215	0.18127	1.33E-03	8.66E-07	3.52E-07	8.27E-07	3.57E-07	1.3310E-03
520502.41	4258389.27	69787.01199	0.19536	0.24312	0.19467	0.25786	1.33E-03	4.59E-07	4.99E-07	4.57E-07	5.08E-07	1.3284E-03
520024.46	4258700.84	69781.83533	2.22368	1.32825	2.89884	1.23058	1.33E-03	5.22E-06	2.72E-06	6.81E-06	2.42E-06	1.3436E-03
520462.04	4258845.08	69781.02814	0.31075	0.16886	0.29773	0.17807	1.33E-03	7.30E-07	3.46E-07	6.99E-07	3.51E-07	1.3285E-03
520197.29	4258963.1	69778.64747	1.92115	0.31642	1.76056	0.32196	1.33E-03	4.51E-06	6.49E-07	4.13E-06	6.34E-07	1.3363E-03
520403.18	4258283.33	69753.56669	0.22561	0.41587	0.23015	0.4481	1.33E-03	5.30E-07	8.53E-07	5.40E-07	8.82E-07	1.3287E-03
520395.24	4258922.77	69687.35492	0.44659	0.17786	0.42638	0.18781	1.32E-03	1.05E-06	3.65E-07	1.00E-06	3.70E-07	1.3274E-03
520032.76	4258769.08	69651.60082	3.18997	0.84693	4.17786	0.8126	1.32E-03	7.49E-06	1.74E-06	9.81E-06	1.60E-06	1.3446E-03
520315.08	4258283.05	69514.88171	0.26902	0.72379	0.27683	0.78864	1.32E-03	6.32E-07	1.48E-06	6.50E-07	1.55E-06	1.3257E-03
520345.79	4258952.85	69445.29775	0.59758	0.18999	0.57021	0.20261	1.32E-03	1.40E-06	3.90E-07	1.34E-06	3.99E-07	1.3236E-03
520471.18	4258831.29	69409.13885	0.2963	0.16847	0.28408	0.17741	1.32E-03	6.96E-07	3.46E-07	6.67E-07	3.49E-07	1.3214E-03
520432.51	4258293.42	69404.99645	0.21328	0.35458	0.21534	0.3801	1.32E-03	5.01E-07	7.27E-07	5.06E-07	7.48E-07	1.3217E-03
520256.71	4258973	69332.78075	1.10582	0.24226	1.04159	0.25753	1.32E-03	2.60E-06	4.97E-07	2.45E-06	5.07E-07	1.3239E-03
520050.82	4258825.02	69280.05516	5.78377	0.65605	8.89386	0.62733	1.32E-03	1.36E-05	1.35E-06	2.09E-05	1.23E-06	1.3539E-03
520246.81	4258973.02	69243.85845	1.19798	0.25165	1.12467	0.26628	1.32E-03	2.81E-06	5.16E-07	2.64E-06	5.24E-07	1.3227E-03
520266.61	4258972.98	69197.40448	1.02317	0.23336	0.96655	0.24896	1.32E-03	2.40E-06	4.79E-07	2.27E-06	4.90E-07	1.3210E-03
520167.57	4258953.15	69163.4176	2.78485	0.36708	2.49273	0.35971	1.31E-03	6.54E-06	7.53E-07	5.85E-06	7.08E-07	1.3285E-03
520025.18	4258726.7	69148.81582	2.42133	1.09467	3.14766	1.03122	1.31E-03	5.68E-06	2.25E-06	7.39E-06	2.03E-06	1.3317E-03
520275.9	4258292.93	69075.85183	0.29339	0.96577	0.30179	1.06454	1.31E-03	6.89E-07	1.98E-06	7.09E-07	2.10E-06	1.3185E-03
520365.57	4258942.82	69073.5244	0.52817	0.18354	0.50391	0.19503	1.31E-03	1.24E-06	3.76E-07	1.18E-06	3.84E-07	1.3161E-03
520236.91	4258973.03	68971.36231	1.30241	0.2616	1.21818	0.27526	1.31E-03	3.06E-06	5.37E-07	2.86E-06	5.42E-07	1.3180E-03
520508.82	4258473.37	68948.15442	0.20342	0.22335	0.20055	0.23681	1.31E-03	4.78E-07	4.58E-07	4.71E-07	4.66E-07	1.3125E-03
520276.51	4258972.97	68843.98807	0.94879	0.22495	0.89852	0.24064	1.31E-03	2.23E-06	4.61E-07	2.11E-06	4.74E-07	1.3139E-03
520492.57	4258792.41	68842.1122	0.26449	0.1695	0.25365	0.17763	1.31E-03	6.21E-07	3.48E-07	5.95E-07	3.50E-07	1.3105E-03
520412.97	4258283.36	68833.76723	0.2206	0.39434	0.22445	0.42436	1.31E-03	5.18E-07	8.09E-07	5.27E-07	8.35E-07	1.3111E-03
520459.51	4258310.83	68812.64333	0.20319	0.30954	0.20324	0.32916	1.31E-03	4.77E-07	6.35E-07	4.77E-07	6.48E-07	1.3102E-03
520158.47	4258949.39	68804.59835	3.18073	0.38363	2.82222	0.37136	1.31E-03	7.47E-06	7.87E-07	6.63E-06	7.31E-07	1.3235E-03
520138.58	4258382.5	68796.33599	0.44579	4.77466	0.47287	5.64604	1.31E-03	1.05E-06	9.79E-06	1.11E-06	1.11E-05	1.3308E-03
520420.79	4258902.18	68665.32267	0.3879	0.17212	0.3701	0.18157	1.31E-03	9.11E-07	3.53E-07	8.69E-07	3.57E-07	1.3077E-03
520105.57	4258907.57	68632.40515	9.51588	0.49522	8.10751	0.45717	1.30E-03	2.23E-05	1.02E-06	1.90E-05	9.00E-07	1.3479E-03
520227.01	4258973.05	68598.51732	1.42484	0.27246	1.32701	0.28469	1.30E-03	3.35E-06	5.59E-07	3.12E-06	5.60E-07	1.3115E-03
520514.24	4258732.76	68596.51	0.23274	0.17493	0.22322	0.18282	1.30E-03	5.46E-07	3.59E-07	5.24E-07	3.60E-07	1.3057E-03
520187.39	4258963.12	68592.34235	2.15336	0.32967	1.96013	0.33126	1.30E-03	5.06E-06	6.76E-07	4.60E-06	6.52E-07	1.3148E-03
520305.29	4258283.02	68588.16073	0.27323	0.77682	0.28094	0.84826	1.30E-03	6.41E-07	1.59E-06	6.60E-07	1.67E-06	1.3083E-03
520501.53	4258378.88	68547.89768	0.19412	0.2459	0.19382	0.26064	1.30E-03	4.56E-07	5.04E-07	4.55E-07	5.13E-07	1.3049E-03
520480.61	4258817.37	68547.60049	0.28232	0.16795	0.27066	0.17653	1.30E-03	6.63E-07	3.44E-07	6.35E-07	3.47E-07	1.3050E-03
520403.69	4258919.27	68477.00097	0.42627	0.1751	0.40714	0.1847	1.30E-03	1.00E-06	3.59E-07	9.56E-07	3.64E-07	1.3043E-03
520286.41	4258972.95	68359.63046	0.8827	0.21722	0.83765	0.23277	1.30E-03	2.07E-06	4.46E-07	1.97E-06	4.58E-07	1.3043E-03
520029.19	4258760.49	68348.30521	2.85681	0.88315	3.71783	0.84486	1.30E-03	6.71E-06	1.81E-06	8.73E-06	1.66E-06	1.3181E-03
520447.37	4258871.17	68310.96164	0.33647	0.16835	0.3216	0.17769	1.30E-03	7.90E-07	3.45E-07	7.55E-07	3.50E-07	1.3007E-03
520158.21	4258362.56	68301.13401	0.41072	3.40506	0.43711	3.95121	1.30E-03	9.64E-07	6.98E-06	1.03E-06	7.78E-06	1.3150E-03
520385.36	4258932.79	68233.39609	0.47144	0.17805	0.44959	0.18842	1.30E-03	1.11E-06	3.65E-07	1.06E-06	3.71E-07	1.2999E-03
520486.41	4258342.37	68186.18428	0.19557	0.27014	0.19562	0.28536	1.30E-03	4.59E-07	5.54E-07	4.59E-07	5.62E-07	1.2981E-03
520128.76	4258392.47	68174.93712	0.46336	5.83713	0.49082	6.99866	1.30E-03	1.09E-06	1.20E-05	1.15E-06	1.38E-05	1.3239E-03
520149.36	4258945.63	68149.17364	3.66653	0.39958	3.22456	0.38226	1.30E-03	8.61E-06	8.20E-07	7.57E-06	7.52E-07	1.3131E-03
520087.01	4258889.92	68087.5125	15.52568	0.52874	17.48178	0.48935	1.29E-03	3.64E-05	1.08E-06	4.10E-05	9.63E-07	1.3738E-03
520027.12	4258655.32	68057.89442	1.96193	2.00876	2.62136	1.78219	1.29E-03	4.61E-06	4.12E-06	6.15E-06	3.51E-06	1.3120E-03
520217.11	4258973.07	68041.16092	1.56651	0.2839	1.45198	0.29416	1.29E-03	3.68E-06	5.82E-07	3.41E-06	5.79E-07	1.3016E-03
520521.36	4258691.81	68034.16547	0.22023	0.18014	0.21176	0.18876	1.29E-03	5.17E-07	3.69E-07	4.97E-07	3.72E-07	1.2950E-03
520246.5	4258302.84	68032.23737	0.31363	1.23436	0.32519	1.37487	1.29E-03	7.36E-07	2.53E-06	7.63E-07	2.71E-06	1.2999E-03
520364.06	4258273.21	67916.75887	0.24102	0.5267	0.248	0.56976	1.29E-03	5.66E-07	1.08E-06	5.82E-07	1.12E-06	1.2943E-03
520226.89	4258312.78	67895.59349	0.33042	1.48053	0.34568	1.66022	1.29E-03	7.76E-07	3.04E-06	8.12E-07	3.27E-06	1.2985E-03
520373.85	4258273.24	67852.18843	0.23642	0.49599	0.24297	0.53609	1.29E-03	5.55E-07	1.02E-06	5.70E-07	1.06E-06	1.2929E-03
520354.27	4258273.18	67796.3755	0.24551	0.56027	0.25282	0.60661	1.29E-03	5.76E-07	1.15E-06	5.94E-07	1.19E-06	1.2922E-03
520296.32	4258972.93	67741.52632	0.82349	0.21012	0.78272	0.22534	1.29E-03	1.93E-06	4.31E-07	1.84E-06	4.44E-07	1.2923E-03
520438.23	4258884.96	67696.70348	0.35344	0.16853	0.3373	0.17788	1.29E-03	8.30E-07	3.46E-07	7.92E-07	3.50E-07	1.2891E-03
520355.69	4258952.84	67686.12223	0.56291	0.18471	0.53695	0.1967	1.29E-03	1.32E-06	3.79E-07	1.26E-06	3.87E-07	1.2899E-03
520422.76	4258283.39	67590.65824	0.21554	0.37479	0.2188	0.40259	1.28E-03	5.06E-07	7.69E-07	5.14E-07	7.92E-07	1.2874E-03
520052.37	4258835.65	67556.71051	6.08535	0.62441	9.76329	0.59647	1.28E-03	1.43E-05	1.28E-06	2.29E-05	1.17E-06	1.3238E-03
520442.3	4258293.45	67538.0819	0.20812	0.33822	0.20968	0.36172	1.28E-03	4.89E-07	6.94E-07	4.92E-07	7.12E-07	1.2862E-03
520383.63	4258273.27	67512.85794	0.23168	0.46812	0.23778	0.50533	1.28E-03	5.44E-07	9.60E-07	5.58E-07	9.95E-07	1.2864E-03
520168.03	4258352.6	67504.78011	0.39391	2.94239	0.41934	3.3937	1.28E-03	9.25E-07	6.03E-06	9.84E-07	6.68E-06	1.2978E-03
520295.51	4258282.99	67500.63187	0.27724	0.83535	0.28497	0.91454	1.28E-03	6.51E-07	1.71E-06	6.69E-07	1.80E-06	1.2879E-03
520344.48	4258273.15	67473.69235	0.24987	0.59706	0.25738	0.64699	1.28E-03	5.87E-07	1.22E-06	6.04E-07	1.27E-06	1.2862E-03
520140.25	4258941.88	67470.77132	4.31533	0.41514	3.75202	0.39269	1.28E-03	1.01E-05	8.51E-07	8.81E-06	7.73E-07	1.3031E-03
520266.11	4258292.9	67425.01761	0.297	1.04705	0.30624	1.15779	1.28E-03	6.97E-07	2.15E-06	7.19E-07	2.28E-06	1.2875E-03
520335.9	4258962.87	67419.34687	0.63678	0.19101	0.60725	0.2041	1.28E-03	1.49E-06	3.92E-07	1.43E-06	4.02E-07	1.2852E-03
520468.13	4258314.52	67358.55545	0.19948	0.29735	0.19928	0.31539	1.28E-03	4.68E-07	6.10E-07	4.68E-07	6.21E-07	1.2825E-03
520114.95	4258921.44	67273.58845	7.40312	0.46664	6.2837	0.4322	1.28E-03	1.74E-05	9.57E-07	1.48E-05	8.51E-07	1.3127E-03
520207.21	4258973.08	67266.71059	1.73008	0.29576	1.59516	0.30346	1.28E-03	4.06E-06	6.07E-07	3.74E-06	5.97E-07	1.2876E-03
520177.49	4258963.13	67225.33608	2.4331	0.34287	2.19856	0.33992	1.28E-03	5.71E-06	7.03E-07	5.16E-06	6.69E-07	1.2901E-03
520490.42	4258803.31	67186.07901	0.26861	0.16726	0.25749	0.17545	1.28E-03	6.31E-07	3.43E-07	6.05E-07	3.45E-07	1.2790E-03
520039.81	4258598.93	67166.03637	1.71612	4.18897	2.44419	3.28564	1.28E-03	4.03E-06	8.59E-06	5.74E-06	6.47E-06	1.3015E-03
520496.04	4258356.5	67078.66314	0.19318	0.256	0.19332	0.27071	1.28E-03	4.54E-07	5.25E-07	4.54E-07	5.33E-07	1.2770E-03
520500.8	4258368.55	67065.01065	0.19276	0.24873	0.19275	0.26332	1.27E-03	4.53E-07	5.10E-07	4.53E-07	5.18E-07	1.2767E-03
520412.14	4258915.77	67037.98023	0.40737	0.17215	0.38889	0.1815	1.27E-03	9.56E-07	3.53E-07	9.13E-07	3.57E-07	1.2769E-03
520334.69	4258273.11	67025.98398	0.25414	0.6372	0.26168	0.6914	1.27E-03	5.97E-07	1.31E-06	6.14E-07	1.36E-06	1.2779E-03
520393.42	4258273.3	67020.78113	0.22692	0.44246	0.23249	0.47707	1.27E-03	5.33E-07	9.07E-07	5.46E-07	9.39E-07	1.2769E-03
520096.72	4258903.92	67014.99478	12.62655	0.50175	11.00146	0.46318	1.27E-03	2.96E-05	1.03E-06	2.58E-05	9.12E-07	1.3312E-03
520461.44	4258855.34	66913.50231	0.31304	0.16616	0.29969	0.17523	1.27E-03	7.35E-07	3.41E-07	7.04E-07	3.45E-07	1.2740E-03
520375.47	4258942.8	66900.505	0.49876	0.17856	0.47557	0.18942	1.27E-03	1.17E-06	3.66E-07	1.12E-06	3.73E-07	1.2747E-03
520450.83	4258297.1	66846.34587	0.20458	0.32427	0.20553	0.34601	1.27E-03	4.80E-07	6.65E-07	4.83E-07	6.81E-07	1.2729E-03
520207.28	4258322.72	66804.2752	0.34649	1.81472	0.36645	2.04556	1.27E-03	8.13E-07	3.72E-06	8.60E-07	4.03E-06	1.2793E-03
520470.4	4258841.62	66742.30132	0.29879	0.16581	0.28629	0.17468	1.27E-03	7.01E-07	3.40E-07	6.72E-07	3.44E-07	1.2707E-03
520118.94	4258402.44	66727.24285	0.48045	7.38365	0.5096	8.91	1.27E-03	1.13E-06	1.51E-05	1.20E-06	1.75E-05	1.3034E-03
520025.63	4258751.9	66682.22047	2.54787	0.92172	3.31277	0.87782	1.27E-03	5.98E-06	1.89E-06	7.78E-06	1.73E-06	1.2849E-03
520512.12	4258461.42	66679.69661	0.19995	0.22268	0.19738	0.2358	1.27E-03	4.69E-07	4.57E-07	4.63E-07	4.64E-07	1.2693E-03
520429.31	4258898.66	66569.60073	0.37101	0.16872	0.35375	0.17799	1.27E-03	8.71E-07	3.46E-07	8.30E-07	3.50E-07	1.2678E-03
520177.85	4258342.63	66473.54191	0.37748	2.57704	0.40185	2.95076	1.26E-03	8.86E-07	5.29E-06	9.43E-07	5.81E-06	1.2765E-03
520021.57	4258717.99	66458.6131	2.17388	1.14433	2.78436	1.07234	1.26E-03	5.10E-06	2.35E-06	6.54E-06	2.11E-06	1.2794E-03
520324.9	4258273.08	66406.98762	0.25827	0.6812	0.26573	0.74031	1.26E-03	6.06E-07	1.40E-06	6.24E-07	1.46E-06	1.2664E-03
520521.1	4258716.36	66367.67141	0.22406	0.17495	0.215	0.1831	1.26E-03	5.26E-07	3.59E-07	5.05E-07	3.60E-07	1.2633E-03
520197.31	4258973.1	66357.38838	1.92534	0.30817	1.76463	0.31263	1.26E-03	4.52E-06	6.32E-07	4.14E-06	6.15E-07	1.2712E-03
520403.21	4258273.33	66357.09375	0.22214	0.41886	0.22713	0.45109	1.26E-03	5.22E-07	8.59E-07	5.33E-07	8.88E-07	1.2641E-03
520512.06	4258481.89	66312.22942	0.20233	0.21944	0.19912	0.23262	1.26E-03	4.75E-07	4.50E-07	4.67E-07	4.58E-07	1.2623E-03
520285.72	4258282.96	66293.51468	0.28109	0.90021	0.28904	0.98869	1.26E-03	6.60E-07	1.85E-06	6.79E-07	1.95E-06	1.2653E-03
520099.26	4258432.38	66246.05501	0.5517	13.86168	0.59523	15.91144	1.26E-03	1.30E-06	2.84E-05	1.40E-06	3.13E-05	1.3217E-03
520395.26	4258932.77	66213.65843	0.44808	0.17413	0.42758	0.18393	1.26E-03	1.05E-06	3.57E-07	1.00E-06	3.62E-07	1.2614E-03
520345.8	4258962.85	66176.33859	0.59981	0.18607	0.57234	0.19851	1.26E-03	1.41E-06	3.82E-07	1.34E-06	3.91E-07	1.2614E-03
520432.55	4258283.42	66176.27132	0.21055	0.35665	0.21323	0.38241	1.26E-03	4.94E-07	7.31E-07	5.01E-07	7.53E-07	1.2604E-03
520479.62	4258827.79	66156.733	0.28502	0.16541	0.27318	0.17397	1.26E-03	6.69E-07	3.39E-07	6.41E-07	3.42E-07	1.2595E-03
520365.59	4258952.82	66098.07055	0.53202	0.17999	0.50738	0.19137	1.26E-03	1.25E-06	3.69E-07	1.19E-06	3.77E-07	1.2596E-03
520036.17	4258801.44	66032.06856	3.62419	0.70783	4.79642	0.68289	1.26E-03	8.51E-06	1.45E-06	1.13E-05	1.34E-06	1.2777E-03
520459.36	4258300.75	65906.74014	0.20103	0.3112	0.20145	0.33128	1.25E-03	4.72E-07	6.38E-07	4.73E-07	6.52E-07	1.2550E-03
520106.18	4258917.82	65783.13274	9.40007	0.47465	7.97682	0.43842	1.25E-03	2.21E-05	9.73E-07	1.87E-05	8.63E-07	1.2931E-03
520236.71	4258302.81	65765.37016	0.31622	1.35357	0.32982	1.51215	1.25E-03	7.42E-07	2.78E-06	7.74E-07	2.98E-06	1.2574E-03
520053.74	4258846.21	65743.21763	6.40646	0.59484	10.72055	0.56781	1.25E-03	1.50E-05	1.22E-06	2.52E-05	1.12E-06	1.2922E-03
520167.59	4258963.15	65742.18441	2.78105	0.3558	2.49206	0.34783	1.25E-03	6.53E-06	7.30E-07	5.85E-06	6.85E-07	1.2634E-03
520027.12	4258646.05	65653.08603	1.84887	2.18087	2.47343	1.91373	1.25E-03	4.34E-06	4.47E-06	5.81E-06	3.77E-06	1.2663E-03
520456.07	4258867.56	65642.11288	0.32256	0.1652	0.30842	0.17427	1.25E-03	7.57E-07	3.39E-07	7.24E-07	3.43E-07	1.2499E-03
520256.32	4258292.87	65635.54699	0.30024	1.13871	0.31074	1.26344	1.25E-03	7.05E-07	2.34E-06	7.30E-07	2.49E-06	1.2539E-03
520020.79	4258692	65633.36835	1.96546	1.38942	2.53132	1.27805	1.25E-03	4.61E-06	2.85E-06	5.94E-06	2.52E-06	1.2635E-03
520315.11	4258273.05	65569.84347	0.26216	0.72966	0.2696	0.79429	1.25E-03	6.15E-07	1.50E-06	6.33E-07	1.56E-06	1.2507E-03
520476.75	4258318.21	65542.8319	0.19575	0.28592	0.1955	0.30248	1.25E-03	4.60E-07	5.86E-07	4.59E-07	5.95E-07	1.2480E-03
520413	4258273.36	65503.32213	0.21736	0.39715	0.22175	0.42716	1.25E-03	5.10E-07	8.15E-07	5.21E-07	8.41E-07	1.2478E-03
520158.57	4258959.43	65471.78454	3.17595	0.37128	2.82081	0.35868	1.24E-03	7.46E-06	7.61E-07	6.62E-06	7.06E-07	1.2600E-03
520087.87	4258900.27	65442.37231	15.23026	0.50535	16.54014	0.46802	1.24E-03	3.58E-05	1.04E-06	3.88E-05	9.21E-07	1.3205E-03
520032.4	4258792.34	65405.0401	3.24496	0.73558	4.22096	0.70951	1.24E-03	7.62E-06	1.51E-06	9.91E-06	1.40E-06	1.2637E-03
520420.59	4258912.28	65392.80037	0.38976	0.16894	0.3716	0.17813	1.24E-03	9.15E-07	3.46E-07	8.72E-07	3.51E-07	1.2455E-03
520326.02	4258972.89	65346.5309	0.67945	0.19218	0.64747	0.20573	1.24E-03	1.60E-06	3.94E-07	1.52E-06	4.05E-07	1.2460E-03
520446.84	4258881.39	65342.3547	0.33872	0.16541	0.32332	0.17454	1.24E-03	7.95E-07	3.39E-07	7.59E-07	3.44E-07	1.2443E-03
520041.85	4258821.31	65297.38129	4.32005	0.64827	5.95521	0.62472	1.24E-03	1.01E-05	1.33E-06	1.40E-05	1.23E-06	1.2679E-03
520495.25	4258346.15	65252.13538	0.19172	0.25898	0.19179	0.2735	1.24E-03	4.50E-07	5.31E-07	4.50E-07	5.38E-07	1.2423E-03
520187.41	4258973.12	65214.91631	2.15378	0.32055	1.96154	0.32119	1.24E-03	5.06E-06	6.57E-07	4.61E-06	6.32E-07	1.2506E-03
520217.1	4258312.75	65205.17484	0.33203	1.63937	0.34962	1.84404	1.24E-03	7.79E-07	3.36E-06	8.21E-07	3.63E-06	1.2480E-03
520507.49	4258772.83	65143.92133	0.24558	0.16788	0.23549	0.17543	1.24E-03	5.77E-07	3.44E-07	5.53E-07	3.45E-07	1.2401E-03
520489.16	4258813.84	65120.71342	0.27161	0.16477	0.26028	0.17297	1.24E-03	6.38E-07	3.38E-07	6.11E-07	3.40E-07	1.2398E-03
520403.64	4258929.3	65102.80736	0.42794	0.17151	0.40835	0.18095	1.24E-03	1.00E-06	3.52E-07	9.59E-07	3.56E-07	1.2402E-03
520385.37	4258942.79	65100.47988	0.47404	0.17446	0.45182	0.18474	1.24E-03	1.11E-06	3.58E-07	1.06E-06	3.64E-07	1.2403E-03
520149.56	4258955.71	64995.38742	3.66618	0.38622	3.22538	0.36889	1.24E-03	8.61E-06	7.92E-07	7.57E-06	7.26E-07	1.2531E-03
520524.54	4258708.16	64965.74142	0.21991	0.17483	0.21112	0.18306	1.23E-03	5.16E-07	3.59E-07	4.96E-07	3.60E-07	1.2366E-03
520275.93	4258282.93	64924.67495	0.28467	0.97257	0.29318	1.07187	1.23E-03	6.68E-07	1.99E-06	6.88E-07	2.11E-06	1.2396E-03
520510.88	4258764.72	64917.89809	0.24097	0.16845	0.23105	0.1759	1.23E-03	5.66E-07	3.45E-07	5.42E-07	3.46E-07	1.2358E-03
520022.07	4258743.3	64887.8951	2.30741	0.96113	2.96702	0.9117	1.23E-03	5.42E-06	1.97E-06	6.97E-06	1.79E-06	1.2496E-03
520049.65	4258560.1	64712.33512	1.35979	7.40139	1.80865	5.08338	1.23E-03	3.19E-06	1.52E-05	4.25E-06	1.00E-05	1.2627E-03
520467.89	4258304.4	64641.90467	0.19746	0.29908	0.19751	0.31754	1.23E-03	4.64E-07	6.13E-07	4.64E-07	6.25E-07	1.2309E-03
520355.7	4258962.84	64628.84307	0.56521	0.18117	0.5395	0.19298	1.23E-03	1.33E-06	3.72E-07	1.27E-06	3.80E-07	1.2318E-03
520305.32	4258273.02	64606.98068	0.26592	0.78293	0.27338	0.85413	1.23E-03	6.24E-07	1.61E-06	6.42E-07	1.68E-06	1.2326E-03
520437.84	4258895.13	64594.51902	0.35544	0.1657	0.33895	0.17478	1.23E-03	8.34E-07	3.40E-07	7.96E-07	3.44E-07	1.2301E-03
520028.63	4258783.24	64550.46512	2.91721	0.76526	3.73952	0.73727	1.23E-03	6.85E-06	1.57E-06	8.78E-06	1.45E-06	1.2456E-03
520442.33	4258283.45	64528.05353	0.20561	0.33999	0.20775	0.36379	1.23E-03	4.83E-07	6.97E-07	4.88E-07	7.16E-07	1.2289E-03
520140.55	4258951.99	64438.24372	4.30436	0.40056	3.74591	0.37852	1.22E-03	1.01E-05	8.22E-07	8.79E-06	7.45E-07	1.2453E-03
520422.79	4258273.39	64410.3397	0.21256	0.37726	0.21639	0.40512	1.22E-03	4.99E-07	7.74E-07	5.08E-07	7.97E-07	1.2269E-03
520364.09	4258263.21	64399.64015	0.23617	0.53124	0.24315	0.57385	1.22E-03	5.54E-07	1.09E-06	5.71E-07	1.13E-06	1.2275E-03
520373.88	4258263.24	64362.75175	0.2319	0.50028	0.23859	0.53992	1.22E-03	5.44E-07	1.03E-06	5.60E-07	1.06E-06	1.2266E-03
520335.92	4258972.87	64262.77211	0.63877	0.18705	0.60914	0.19993	1.22E-03	1.50E-06	3.84E-07	1.43E-06	3.94E-07	1.2252E-03
520354.3	4258263.18	64253.98329	0.24033	0.56504	0.24747	0.61097	1.22E-03	5.64E-07	1.16E-06	5.81E-07	1.20E-06	1.2249E-03
520097.41	4258914.2	64230.86681	12.32647	0.48005	10.6813	0.44357	1.22E-03	2.89E-05	9.85E-07	2.51E-05	8.73E-07	1.2768E-03
520383.67	4258263.27	64147.34873	0.22753	0.47191	0.23385	0.50882	1.22E-03	5.34E-07	9.68E-07	5.49E-07	1.00E-06	1.2224E-03

520109.12	4258412.41	64059.94829	0.49613	9.76209	0.52838	11.79485	1.22E-03	1.16E-06	2.00E-05	1.24E-06	2.32E-05	1.2633E-03
520517.67	4258748.5	64053.48207	0.23203	0.16926	0.22241	0.17664	1.22E-03	5.45E-07	3.47E-07	5.22E-07	3.48E-07	1.2193E-03
520177.5	4258973.13	64027.29189	2.43929	0.33327	2.20485	0.32946	1.22E-03	5.73E-06	6.84E-07	5.18E-06	6.49E-07	1.2293E-03
520375.49	4258952.8	63973.74825	0.5023	0.17512	0.47869	0.1859	1.22E-03	1.18E-06	3.59E-07	1.12E-06	3.66E-07	1.2191E-03
520112.94	4258930.6	63958.55402	7.79797	0.45014	6.6155	0.4167	1.22E-03	1.83E-05	9.23E-07	1.55E-05	8.20E-07	1.2513E-03
520043.52	4258832	63955.53049	4.55647	0.617	6.40691	0.59431	1.22E-03	1.07E-05	1.27E-06	1.50E-05	1.17E-06	1.2439E-03
520344.51	4258263.15	63925.68401	0.24436	0.60198	0.25154	0.65164	1.22E-03	5.74E-07	1.23E-06	5.91E-07	1.28E-06	1.2188E-03
520451.31	4258287.29	63917.58639	0.20205	0.3251	0.2035	0.34711	1.21E-03	4.74E-07	6.67E-07	4.78E-07	6.83E-07	1.2173E-03
520054.96	4258856.71	63870.77833	6.71133	0.56739	11.76173	0.54129	1.21E-03	1.58E-05	1.16E-06	2.76E-05	1.07E-06	1.2597E-03
520029.93	4258628.06	63823.44766	1.73978	2.66306	2.36914	2.26801	1.21E-03	4.08E-06	5.46E-06	5.56E-06	4.46E-06	1.2327E-03
520412.02	4258925.83	63819.55135	0.40907	0.16881	0.39028	0.17796	1.21E-03	9.60E-07	3.46E-07	9.16E-07	3.50E-07	1.2157E-03
520478.76	4258838.16	63785.0792	0.28749	0.16288	0.27547	0.17139	1.21E-03	6.75E-07	3.34E-07	6.47E-07	3.37E-07	1.2144E-03
520393.45	4258263.3	63724.40756	0.22308	0.44596	0.22897	0.48033	1.21E-03	5.24E-07	9.15E-07	5.38E-07	9.46E-07	1.2142E-03
520246.53	4258292.84	63691.28425	0.30299	1.24295	0.31515	1.38379	1.21E-03	7.11E-07	2.55E-06	7.40E-07	2.72E-06	1.2174E-03
520515.3	4258469.76	63651.13446	0.19883	0.21834	0.19596	0.23127	1.21E-03	4.67E-07	4.48E-07	4.60E-07	4.55E-07	1.2117E-03
520499.09	4258799.72	63607.67095	0.25842	0.1642	0.24769	0.172	1.21E-03	6.07E-07	3.37E-07	5.81E-07	3.39E-07	1.2109E-03
520059.52	4258530.96	63578.99187	1.09112	13.28282	1.32468	7.65591	1.21E-03	2.56E-06	2.72E-05	3.11E-06	1.51E-05	1.2565E-03
520429.03	4258908.78	63574.03288	0.37301	0.16582	0.35546	0.17482	1.21E-03	8.76E-07	3.40E-07	8.35E-07	3.44E-07	1.2108E-03
520295.54	4258272.99	63526.15713	0.26951	0.84164	0.27718	0.92064	1.21E-03	6.33E-07	1.73E-06	6.51E-07	1.81E-06	1.2123E-03
520197.49	4258322.69	63512.19159	0.34622	2.03507	0.36802	2.29825	1.21E-03	8.13E-07	4.17E-06	8.64E-07	4.52E-06	1.2176E-03
520334.72	4258263.11	63450.61533	0.24826	0.6423	0.25539	0.69631	1.21E-03	5.83E-07	1.32E-06	6.00E-07	1.37E-06	1.2100E-03
520505.02	4258360.35	63447.12707	0.18913	0.24596	0.18919	0.26001	1.21E-03	4.44E-07	5.04E-07	4.44E-07	5.12E-07	1.2079E-03
520024.85	4258774.14	63442.27128	2.62765	0.79695	3.32931	0.76613	1.21E-03	6.17E-06	1.63E-06	7.82E-06	1.51E-06	1.2231E-03
520266.14	4258282.9	63358.07748	0.28785	1.05401	0.29739	1.16551	1.20E-03	6.76E-07	2.16E-06	6.98E-07	2.29E-06	1.2102E-03
520226.92	4258302.78	63341.99738	0.31805	1.49118	0.33389	1.67045	1.20E-03	7.47E-07	3.06E-06	7.84E-07	3.29E-06	1.2119E-03
520017.96	4258709.28	63312.58018	1.94396	1.1946	2.46491	1.11272	1.20E-03	4.56E-06	2.45E-06	5.79E-06	2.19E-06	1.2184E-03
520432.58	4258273.42	63187.52179	0.20782	0.35875	0.21106	0.38468	1.20E-03	4.88E-07	7.36E-07	4.96E-07	7.57E-07	1.2036E-03
520403.24	4258263.33	63154.1056	0.2186	0.42203	0.22398	0.45408	1.20E-03	5.13E-07	8.66E-07	5.26E-07	8.94E-07	1.2032E-03
520494.57	4258335.85	63151.45531	0.19004	0.26218	0.19011	0.27642	1.20E-03	4.46E-07	5.38E-07	4.46E-07	5.44E-07	1.2024E-03
520476.42	4258308.05	63116.51471	0.19389	0.28764	0.19372	0.30462	1.20E-03	4.55E-07	5.90E-07	4.55E-07	6.00E-07	1.2018E-03
520316.13	4258982.9	63070.3292	0.72521	0.19342	0.69023	0.20733	1.20E-03	1.70E-06	3.97E-07	1.62E-06	4.08E-07	1.2030E-03
520460.29	4258291.14	63051.47066	0.19845	0.31125	0.19928	0.33156	1.20E-03	4.66E-07	6.38E-07	4.68E-07	6.53E-07	1.2007E-03
520488.07	4258824.29	63012.95449	0.27435	0.16232	0.26282	0.17052	1.20E-03	6.44E-07	3.33E-07	6.17E-07	3.36E-07	1.1997E-03
520395.27	4258942.77	63003.73247	0.44945	0.17048	0.42875	0.18017	1.20E-03	1.06E-06	3.50E-07	1.01E-06	3.55E-07	1.2004E-03
520464.77	4258863.96	62963.87777	0.30949	0.16211	0.29601	0.1709	1.20E-03	7.27E-07	3.32E-07	6.95E-07	3.36E-07	1.1989E-03
520345.82	4258972.85	62946.85057	0.60106	0.18204	0.57343	0.1943	1.20E-03	1.41E-06	3.73E-07	1.35E-06	3.82E-07	1.2000E-03
520256.75	4258993	62932.58317	1.11493	0.23211	1.04949	0.24583	1.20E-03	2.62E-06	4.76E-07	2.46E-06	4.84E-07	1.2023E-03
520455.44	4258877.83	62920.80106	0.32489	0.16242	0.31023	0.1713	1.20E-03	7.63E-07	3.33E-07	7.28E-07	3.37E-07	1.1982E-03
520365.6	4258962.82	62919.96573	0.53351	0.17627	0.50876	0.18751	1.20E-03	1.25E-06	3.62E-07	1.19E-06	3.69E-07	1.1992E-03
520027.12	4258636.77	62917.32357	1.72569	2.36234	2.3111	2.04783	1.20E-03	4.05E-06	4.84E-06	5.43E-06	4.03E-06	1.2143E-03
520517.32	4258423.32	62915.68398	0.19194	0.22428	0.19001	0.23713	1.20E-03	4.51E-07	4.60E-07	4.46E-07	4.67E-07	1.1977E-03
520148.43	4258362.53	62902.85888	0.40364	4.01685	0.42677	4.69858	1.20E-03	9.48E-07	8.24E-06	1.00E-06	9.25E-06	1.2151E-03
520088.64	4258910.58	62896.04374	14.95675	0.48363	15.80866	0.44822	1.20E-03	3.51E-05	9.92E-07	3.71E-05	8.82E-07	1.2696E-03
520246.84	4258993.02	62885.32253	1.20911	0.24104	1.13444	0.25399	1.20E-03	2.84E-06	4.94E-07	2.66E-06	5.00E-07	1.2018E-03
520058.92	4258868.33	62864.21256	7.93548	0.5435	16.4273	0.51675	1.19E-03	1.86E-05	1.11E-06	3.86E-05	1.02E-06	1.2543E-03
520266.65	4258992.98	62843.35441	1.03173	0.22373	0.97392	0.23794	1.19E-03	2.42E-06	4.59E-07	2.29E-06	4.68E-07	1.2002E-03
520018.5	4258734.71	62830.74122	2.09531	1.00158	2.65827	0.94602	1.19E-03	4.92E-06	2.05E-06	6.24E-06	1.86E-06	1.2094E-03
520324.93	4258263.08	62767.88528	0.25196	0.68658	0.25905	0.74544	1.19E-03	5.92E-07	1.41E-06	6.08E-07	1.47E-06	1.1972E-03
520236.94	4258993.03	62717.48341	1.31651	0.25056	1.23068	0.26238	1.19E-03	3.09E-06	5.14E-07	2.89E-06	5.16E-07	1.1992E-03
520158.25	4258352.56	62715.68744	0.38856	3.42407	0.41173	3.97105	1.19E-03	9.12E-07	7.02E-06	9.67E-07	7.82E-06	1.2088E-03
520138.61	4258372.5	62676.54897	0.41876	4.80034	0.44195	5.66578	1.19E-03	9.83E-07	9.85E-06	1.04E-06	1.12E-05	1.2144E-03
520167.6	4258973.15	62638.40908	2.78477	0.34527	2.49709	0.33673	1.19E-03	6.54E-06	7.08E-07	5.86E-06	6.63E-07	1.2044E-03
520039.77	4258589.23	62606.54953	1.52089	4.44824	2.12594	3.4428	1.19E-03	3.57E-06	9.12E-06	4.99E-06	6.78E-06	1.2145E-03
520276.55	4258992.97	62583.282	0.95738	0.21584	0.90589	0.2303	1.19E-03	2.25E-06	4.43E-07	2.13E-06	4.53E-07	1.1949E-03
520524.46	4258732.28	62581.08206	0.22351	0.16962	0.21423	0.17716	1.19E-03	5.25E-07	3.48E-07	5.03E-07	3.49E-07	1.1913E-03
520103.83	4258926.84	62540.81202	10.07805	0.45699	8.5717	0.42235	1.19E-03	2.37E-05	9.37E-07	2.01E-05	8.31E-07	1.2343E-03
520045	4258842.6	62494.3978	4.80901	0.58784	6.87773	0.56603	1.19E-03	1.13E-05	1.21E-06	1.61E-05	1.11E-06	1.2177E-03
520413.03	4258263.36	62429.75984	0.21411	0.39996	0.21893	0.42989	1.19E-03	5.03E-07	8.20E-07	5.14E-07	8.46E-07	1.1894E-03
520446.36	4258891.6	62416.16613	0.34069	0.16266	0.32492	0.17154	1.19E-03	8.00E-07	3.34E-07	7.63E-07	3.38E-07	1.1887E-03
520227.04	4258993.05	62408.99238	1.43969	0.26063	1.3404	0.27089	1.19E-03	3.38E-06	5.35E-07	3.15E-06	5.33E-07	1.1939E-03
520207.31	4258312.72	62380.48029	0.33261	1.82541	0.35207	2.05987	1.19E-03	7.81E-07	3.74E-06	8.27E-07	4.05E-06	1.1951E-03
520158.67	4258969.46	62344.29272	3.16653	0.3594	2.81678	0.34661	1.19E-03	7.43E-06	7.37E-07	6.61E-06	6.82E-07	1.2005E-03
520420.4	4258922.36	62342.41717	0.39149	0.1659	0.37312	0.17484	1.19E-03	9.19E-07	3.40E-07	8.76E-07	3.44E-07	1.1875E-03
520285.75	4258272.96	62338.53696	0.27294	0.90678	0.28106	0.99506	1.18E-03	6.41E-07	1.86E-06	6.60E-07	1.96E-06	1.1901E-03
520326.03	4258982.89	62281.97224	0.68119	0.18812	0.64894	0.20145	1.18E-03	1.60E-06	3.86E-07	1.52E-06	3.97E-07	1.1878E-03
520168.07	4258342.6	62219.68018	0.37377	2.96195	0.39673	3.40981	1.18E-03	8.77E-07	6.07E-06	9.31E-07	6.71E-06	1.1973E-03
520286.45	4258992.95	62162.86827	0.89062	0.20845	0.84432	0.22295	1.18E-03	2.09E-06	4.28E-07	1.98E-06	4.39E-07	1.1865E-03
520385.39	4258952.79	62133.95622	0.47581	0.17081	0.45333	0.18102	1.18E-03	1.12E-06	3.50E-07	1.06E-06	3.56E-07	1.1839E-03
520504.08	4258349.93	62078.29481	0.18785	0.24884	0.18795	0.26271	1.18E-03	4.41E-07	5.10E-07	4.41E-07	5.17E-07	1.1819E-03
520021.08	4258765.04	62059.98996	2.36812	0.83094	2.97885	0.79612	1.18E-03	5.56E-06	1.70E-06	6.99E-06	1.57E-06	1.1955E-03
520315.14	4258263.05	61985.07822	0.25556	0.73499	0.26263	0.79973	1.18E-03	6.00E-07	1.51E-06	6.17E-07	1.57E-06	1.1825E-03
520149.75	4258965.78	61950.42781	3.65174	0.37327	3.21761	0.35607	1.18E-03	8.57E-06	7.66E-07	7.55E-06	7.01E-07	1.1952E-03
520403.99	4258939.16	61939.50887	0.42848	0.16791	0.40873	0.17719	1.18E-03	1.01E-06	3.44E-07	9.60E-07	3.49E-07	1.1800E-03
520217.14	4258993.07	61915.78896	1.58163	0.27116	1.46578	0.27935	1.18E-03	3.71E-06	5.56E-07	3.44E-06	5.50E-07	1.1852E-03
520128.79	4258382.47	61893.12564	0.43384	5.86707	0.45725	7.02077	1.18E-03	1.02E-06	1.20E-05	1.07E-06	1.38E-05	1.2044E-03
520469.27	4258294.98	61872.67636	0.19482	0.29844	0.19516	0.31708	1.18E-03	4.57E-07	6.12E-07	4.58E-07	6.24E-07	1.1782E-03
520497.71	4258810.3	61848.10751	0.26144	0.16184	0.25051	0.16965	1.18E-03	6.14E-07	3.32E-07	5.88E-07	3.34E-07	1.1775E-03
520442.37	4258273.45	61791.98181	0.20314	0.34146	0.20578	0.36559	1.17E-03	4.77E-07	7.00E-07	4.83E-07	7.20E-07	1.1769E-03
520531.4	4258691.76	61710.06088	0.21201	0.17463	0.20376	0.18278	1.17E-03	4.98E-07	3.58E-07	4.78E-07	3.60E-07	1.1747E-03
520437.48	4258905.28	61687.96499	0.35732	0.16289	0.34052	0.17171	1.17E-03	8.39E-07	3.34E-07	7.99E-07	3.38E-07	1.1749E-03
520256.35	4258282.87	61637.69433	0.29062	1.1461	0.30158	1.27154	1.17E-03	6.82E-07	2.35E-06	7.08E-07	2.50E-06	1.1779E-03
520296.35	4258992.93	61590.31538	0.83039	0.20155	0.78837	0.21591	1.17E-03	1.95E-06	4.13E-07	1.85E-06	4.25E-07	1.1754E-03
520236.74	4258292.81	61514.31578	0.30499	1.36299	0.31921	1.52132	1.17E-03	7.16E-07	2.80E-06	7.49E-07	2.99E-06	1.1765E-03
520140.82	4258962.09	61507.27769	4.28663	0.38662	3.73443	0.36504	1.17E-03	1.01E-05	7.93E-07	8.77E-06	7.19E-07	1.1895E-03
520422.82	4258263.39	61498.14818	0.20958	0.37967	0.21386	0.40757	1.17E-03	4.92E-07	7.79E-07	5.02E-07	8.02E-07	1.1715E-03
520355.72	4258972.84	61491.88925	0.56649	0.17715	0.54028	0.18881	1.17E-03	1.33E-06	3.63E-07	1.27E-06	3.72E-07	1.1722E-03
520478	4258848.48	61457.09731	0.28978	0.16037	0.27754	0.1688	1.17E-03	6.80E-07	3.29E-07	6.52E-07	3.32E-07	1.1702E-03
520484.95	4258311.7	61453.09128	0.19043	0.2766	0.19008	0.29236	1.17E-03	4.47E-07	5.67E-07	4.46E-07	5.76E-07	1.1701E-03
520113.51	4258940.83	61305.11653	7.72282	0.43262	6.54205	0.40061	1.17E-03	1.81E-05	8.87E-07	1.54E-05	7.89E-07	1.2005E-03
520451.24	4258277.25	61288.09589	0.19978	0.32662	0.20175	0.34902	1.16E-03	4.69E-07	6.70E-07	4.74E-07	6.87E-07	1.1673E-03
520207.24	4258993.08	61252.26998	1.74697	0.28208	1.61067	0.28766	1.16E-03	4.10E-06	5.79E-07	3.78E-06	5.66E-07	1.1733E-03
520094.73	4258923.08	61228.16265	13.53111	0.46187	11.91497	0.42737	1.16E-03	3.18E-05	9.47E-07	2.80E-05	8.41E-07	1.2254E-03
520335.94	4258982.87	61161.39489	0.63996	0.18295	0.60996	0.19566	1.16E-03	1.50E-06	3.75E-07	1.43E-06	3.85E-07	1.1663E-03
520373.91	4258253.24	61117.06306	0.22737	0.50451	0.23409	0.54361	1.16E-03	5.34E-07	1.03E-06	5.50E-07	1.07E-06	1.1649E-03
520375.51	4258962.8	61109.80503	0.50419	0.1716	0.48043	0.18228	1.16E-03	1.18E-06	3.52E-07	1.13E-06	3.59E-07	1.1646E-03
520364.12	4258253.21	61103.08537	0.23132	0.53573	0.23818	0.5778	1.16E-03	5.43E-07	1.10E-06	5.59E-07	1.14E-06	1.1648E-03
520017.12	4258683.15	61048.83775	1.73178	1.44644	2.20619	1.32151	1.16E-03	4.07E-06	2.97E-06	5.18E-06	2.60E-06	1.1752E-03
520305.36	4258263.02	61028.76903	0.25894	0.78832	0.26619	0.85974	1.16E-03	6.08E-07	1.62E-06	6.25E-07	1.69E-06	1.1646E-03
520275.96	4258272.93	60999.14107	0.27609	0.97952	0.28501	1.07849	1.16E-03	6.48E-07	2.01E-06	6.69E-07	2.12E-06	1.1649E-03
520383.7	4258253.27	60995.20939	0.22335	0.47577	0.22978	0.51227	1.16E-03	5.24E-07	9.76E-07	5.39E-07	1.01E-06	1.1625E-03
520060.17	4258878.84	60954.5146	8.40351	0.51965	15.98008	0.4938	1.16E-03	1.97E-05	1.07E-06	3.75E-05	9.72E-07	1.2179E-03
520046.31	4258853.13	60931.93116	5.04025	0.56088	7.35846	0.53984	1.16E-03	1.18E-05	1.15E-06	1.73E-05	1.06E-06	1.1895E-03
520354.33	4258253.18	60930.94621	0.23516	0.56971	0.24206	0.61516	1.16E-03	5.52E-07	1.17E-06	5.68E-07	1.21E-06	1.1617E-03
520487.12	4258834.69	60908.88332	0.27681	0.15998	0.26518	0.16815	1.16E-03	6.50E-07	3.28E-07	6.23E-07	3.31E-07	1.1597E-03
520306.25	4258992.92	60881.19705	0.77588	0.19513	0.7374	0.20919	1.16E-03	1.82E-06	4.00E-07	1.73E-06	4.12E-07	1.1616E-03
520029.16	4258808.65	60878.26095	3.03102	0.66469	3.88562	0.64347	1.16E-03	7.12E-06	1.36E-06	9.12E-06	1.27E-06	1.1761E-03
520217.13	4258302.75	60843.9057	0.31912	1.65061	0.33688	1.85493	1.16E-03	7.49E-07	3.39E-06	7.91E-07	3.65E-06	1.1651E-03
520428.78	4258918.89	60748.95181	0.37484	0.16292	0.35704	0.17167	1.15E-03	8.80E-07	3.34E-07	8.38E-07	3.38E-07	1.1571E-03
520520.79	4258432.44	60712.0833	0.19113	0.21997	0.189	0.23243	1.15E-03	4.49E-07	4.51E-07	4.44E-07	4.58E-07	1.1558E-03
520412.71	4258935.55	60706.98703	0.4089	0.16527	0.38994	0.17421	1.15E-03	9.60E-07	3.39E-07	9.15E-07	3.43E-07	1.1565E-03
520393.48	4258253.3	60678.50541	0.21923	0.44944	0.22531	0.48351	1.15E-03	5.15E-07	9.22E-07	5.29E-07	9.52E-07	1.1563E-03
520344.54	4258253.15	60573.0528	0.23885	0.60682	0.24572	0.65605	1.15E-03	5.61E-07	1.24E-06	5.77E-07	1.29E-06	1.1551E-03
520460.11	4258281.05	60518.04289	0.19635	0.31289	0.19769	0.33361	1.15E-03	4.61E-07	6.42E-07	4.64E-07	6.57E-07	1.1526E-03
520503.29	4258339.58	60485.83599	0.18641	0.25185	0.18649	0.26546	1.15E-03	4.38E-07	5.17E-07	4.38E-07	5.23E-07	1.1516E-03
520464.05	4258874.27	60485.74454	0.31183	0.1595	0.29791	0.16813	1.15E-03	7.32E-07	3.27E-07	6.99E-07	3.31E-07	1.1518E-03
520531.26	4258716.06	60451.79148	0.21544	0.16958	0.20664	0.17736	1.15E-03	5.06E-07	3.48E-07	4.85E-07	3.49E-07	1.1508E-03
520014.94	4258726.12	60428.39726	1.89633	1.04302	2.37919	0.98022	1.15E-03	4.45E-06	2.14E-06	5.59E-06	1.93E-06	1.1627E-03
520478.24	4258298.82	60416.64116	0.19118	0.28648	0.19117	0.30354	1.15E-03	4.49E-07	5.88E-07	4.49E-07	5.98E-07	1.1505E-03
520197.34	4258993.1	60401.13693	1.94135	0.2932	1.77954	0.29563	1.15E-03	4.56E-06	6.01E-07	4.18E-06	5.82E-07	1.1580E-03
520118.97	4258392.44	60398.83816	0.44817	7.4066	0.47298	8.95933	1.15E-03	1.05E-06	1.52E-05	1.11E-06	1.76E-05	1.1831E-03
520432.61	4258263.42	60383.15569	0.20506	0.36096	0.2088	0.38694	1.15E-03	4.81E-07	7.40E-07	4.90E-07	7.62E-07	1.1502E-03
520034.67	4258828.34	60372.2201	3.55253	0.6103	4.66205	0.59124	1.15E-03	8.34E-06	1.25E-06	1.09E-05	1.16E-06	1.1693E-03
520187.71	4258322.66	60336.87622	0.34504	2.29579	0.36695	2.60542	1.15E-03	8.10E-07	4.71E-06	8.61E-07	5.13E-06	1.1584E-03
520473.46	4258860.36	60330.64339	0.29718	0.15915	0.28436	0.16763	1.15E-03	6.98E-07	3.26E-07	6.68E-07	3.30E-07	1.1488E-03
520029.89	4258618.37	60326.79516	1.58299	2.87004	2.1453	2.41176	1.15E-03	3.72E-06	5.89E-06	5.04E-06	4.75E-06	1.1661E-03
520454.88	4258888.07	60310.89067	0.32694	0.15978	0.31192	0.16844	1.15E-03	7.68E-07	3.28E-07	7.32E-07	3.32E-07	1.1486E-03
520316.15	4258992.9	60256.17561	0.72732	0.18944	0.69196	0.20306	1.15E-03	1.71E-06	3.89E-07	1.62E-06	4.00E-07	1.1495E-03
520025.45	4258799.68	60235.81354	2.74633	0.68951	3.47487	0.66685	1.14E-03	6.45E-06	1.41E-06	8.16E-06	1.31E-06	1.1623E-03
520511.37	4258787.48	60224.54275	0.24389	0.162	0.23379	0.16932	1.14E-03	5.73E-07	3.32E-07	5.49E-07	3.33E-07	1.1465E-03
520017.31	4258755.94	60223.79578	2.10953	0.86781	2.66719	0.82666	1.14E-03	4.95E-06	1.78E-06	6.26E-06	1.63E-06	1.1594E-03
520403.27	4258253.33	60215.93819	0.21506	0.42514	0.22069	0.457	1.14E-03	5.05E-07	8.72E-07	5.18E-07	9.00E-07	1.1474E-03
520515	4258778.83	60122.96496	0.23907	0.1627	0.22919	0.1699	1.14E-03	5.61E-07	3.34E-07	5.38E-07	3.34E-07	1.1446E-03
520334.75	4258253.12	60074.56342	0.24242	0.64727	0.24921	0.70094	1.14E-03	5.69E-07	1.33E-06	5.85E-07	1.38E-06	1.1458E-03
520519.65	4258396.65	60054.19496	0.18697	0.22595	0.18567	0.23905	1.14E-03	4.39E-07	4.63E-07	4.36E-07	4.71E-07	1.1433E-03
520049.87	4258864.6	60052.19627	5.67077	0.53752	8.83531	0.51591	1.14E-03	1.33E-05	1.10E-06	2.07E-05	1.02E-06	1.1777E-03
520256.76	4259003	60044.81827	1.11763	0.22724	1.05195	0.24022	1.14E-03	2.62E-06	4.66E-07	2.47E-06	4.73E-07	1.1474E-03
520104.49	4258937.11	60020.77732	9.91854	0.43878	8.4191	0.40577	1.14E-03	2.33E-05	9.00E-07	1.98E-05	7.99E-07	1.1856E-03
520496.52	4258820.8	60012.47659	0.26418	0.15951	0.25311	0.16733	1.14E-03	6.20E-07	3.27E-07	5.94E-07	3.29E-07	1.1426E-03
520395.29	4258952.77	60004.38903	0.45071	0.16684	0.42972	0.17646	1.14E-03	1.06E-06	3.42E-07	1.01E-06	3.47E-07	1.1433E-03
520266.66	4259002.98	59973.97724	1.0341	0.21914	0.9761	0.23266	1.14E-03	2.43E-06	4.49E-07	2.29E-06	4.58E-07	1.1456E-03
520246.86	4259003.02	59968.58496	1.2118	0.23585	1.13689	0.24801	1.14E-03	2.84E-06	4.84E-07	2.67E-06	4.88E-07	1.1464E-03
520295.57	4258262.99	59957.10428	0.26216	0.84725	0.26981	0.92655	1.14E-03	6.15E-07	1.74E-06	6.33E-07	1.82E-06	1.1445E-03
520345.84	4258982.85	59921.64882	0.60228	0.17796	0.57395	0.19007	1.14E-03	1.41E-06	3.65E-07	1.35E-06	3.74E-07	1.1425E-03
520365.62	4258972.82	59911.84877	0.53468	0.17245	0.5096	0.18356	1.14E-03	1.26E-06	3.54E-07	1.20E-06	3.61E-07	1.1420E-03
520518.62	4258770.18	59907.19542	0.23437	0.1633	0.22467	0.1704	1.14E-03	5.50E-07	3.35E-07	5.27E-07	3.35E-07	1.1405E-03
520099.3	4258422.38	59821.70777	0.50937	13.90391	0.54689	15.93435	1.14E-03	1.20E-06	2.85E-05	1.28E-06	3.14E-05	1.1995E-03
520518.51	4258386.15	59813.7668	0.18607	0.22853	0.18517	0.24182	1.14E-03	4.37E-07	4.69E-07	4.35E-07	4.76E-07	1.1388E-03
520017.12	4258673.87	59807.47258	1.66012	1.55246	2.11824	1.40835	1.14E-03	3.90E-06	3.18E-06	4.97E-06	2.77E-06	1.1517E-03
520445.93	4258901.78	59790.10747	0.34268	0.16005	0.32664	0.16868	1.14E-03	8.05E-07	3.28E-07	7.67E-07	3.32E-07	1.1387E-03
520085.62	4258919.33	59761.71853	15.99824	0.46354	18.61698	0.43094	1.14E-03	3.76E-05	9.51E-07	4.37E-05	8.48E-07	1.2190E-03
520236.96	4259003.03	59741.05518	1.31855	0.24493	1.23243	0.25593	1.14E-03	3.10E-06	5.02E-07	2.89E-06	5.04E-07	1.1426E-03
520014.34	4258700.57	59740.05953	1.73331	1.24463	2.18128	1.15125	1.14E-03	4.07E-06	2.55E-06	5.12E-06	2.27E-06	1.1496E-03
520246.56	4258282.84	59712.52472	0.29277	1.25134	0.30555	1.39202	1.14E-03	6.87E-07	2.57E-06	7.17E-07	2.74E-06	1.1417E-03
520276.56	4259002.97	59692.3919	0.95936	0.21137	0.90747	0.22522	1.13E-03	2.25E-06	4.34E-07	2.13E-06	4.43E-07	1.1399E-03
520514	4258364.19	59621.27917	0.18508	0.23643	0.185	0.24985	1.13E-03	4.35E-07	4.85E-07	4.34E-07	4.92E-07	1.1351E-03
520158.77	4258979.5	59611.36486	3.18006	0.34871	2.8285	0.33559	1.13E-03	7.47E-06	7.15E-07	6.64E-06	6.61E-07	1.1486E-03
520413.06	4258253.36	59578.52976	0.21083	0.40278	0.21599	0.43257	1.13E-03	4.95E-07	8.26E-07	5.07E-07	8.52E-07	1.1352E-03
520522.24	4258761.53	59563.60959	0.22979	0.16372	0.2202	0.17075	1.13E-03	5.39E-07	3.36E-07	5.17E-07	3.36E-07	1.1339E-03
520227.06	4259003.05	59503.60707	1.44228	0.25473	1.34288	0.2641	1.13E-03	3.39E-06	5.22E-07	3.15E-06	5.20E-07	1.1386E-03
520266.17	4258272.9	59495.57991	0.27885	1.06136	0.28898	1.1724	1.13E-03	6.55E-07	2.18E-06	6.78E-07	2.31E-06	1.1367E-03
520468.98	4258284.84	59491.49228	0.19287	0.30012	0.19367	0.31919	1.13E-03	4.53E-07	6.16E-07	4.55E-07	6.28E-07	1.1330E-03
520493.47	4258315.35	59482.06403	0.18695	0.26627	0.18659	0.28088	1.13E-03	4.39E-07	5.46E-07	4.38E-07	5.53E-07	1.1326E-03
520187.44	4258993.12	59429.73347	2.17346	0.30441	1.97962	0.30319	1.13E-03	5.10E-06	6.24E-07	4.65E-06	5.97E-07	1.1406E-03
520324.96	4258253.08	59400.83531	0.2458	0.69158	0.25258	0.7503	1.13E-03	5.77E-07	1.42E-06	5.93E-07	1.48E-06	1.1332E-03
520021.73	4258790.72	59387.2426	2.49441	0.71578	3.11991	0.69106	1.13E-03	5.86E-06	1.47E-06	7.32E-06	1.36E-06	1.1449E-03
520421.42	4258931.94	59370.54775	0.3904	0.1627	0.37256	0.17133	1.13E-03	9.17E-07	3.34E-07	8.75E-07	3.37E-07	1.1310E-03
520197.53	4258312.69	59369.72395	0.33188	2.04568	0.35235	2.31477	1.13E-03	7.79E-07	4.20E-06	8.27E-07	4.56E-06	1.1389E-03
520286.46	4259002.95	59340.97477	0.89257	0.2042	0.84589	0.21816	1.13E-03	2.10E-06	4.19E-07	1.99E-06	4.29E-07	1.1329E-03
520326.05	4258992.89	59325.90602	0.68224	0.18412	0.64968	0.19722	1.13E-03	1.60E-06	3.78E-07	1.53E-06	3.88E-07	1.1316E-03
520517.56	4258375.73	59260.27556	0.18503	0.23105	0.18453	0.24439	1.13E-03	4.34E-07	4.74E-07	4.33E-07	4.81E-07	1.1283E-03
520226.95	4258292.78	59236.13929	0.3063	1.50129	0.32251	1.68002	1.13E-03	7.19E-07	3.08E-06	7.57E-07	3.31E-06	1.1338E-03
520036.25	4258838.99	59235.15309	3.7425	0.58141	4.94835	0.56343	1.13E-03	8.79E-06	1.19E-06	1.16E-05	1.11E-06	1.1487E-03
520385.41	4258962.79	59192.92594	0.47704	0.16733	0.45446	0.17744	1.13E-03	1.12E-06	3.43E-07	1.07E-06	3.49E-07	1.1280E-03
520149.92	4258975.84	59192.81748	3.65224	0.36132	3.21992	0.34417	1.13E-03	8.57E-06	7.41E-07	7.56E-06	6.77E-07	1.1427E-03
520442.4	4258263.45	59089.03885	0.20054	0.34368	0.20376	0.36785	1.12E-03	4.71E-07	7.05E-07	4.78E-07	7.24E-07	1.1256E-03
520525.86	4258752.88	59080.91057	0.22528	0.16399	0.2158	0.17102	1.12E-03	5.29E-07	3.36E-07	5.07E-07	3.37E-07	1.1247E-03
520522.26	4258462.18	59080.2337	0.19378	0.21404	0.19104	0.2264	1.12E-03	4.55E-07	4.39E-07	4.49E-07	4.46E-07	1.1248E-03
520061.31	4258889.3	59046.48343	8.7725	0.49757	17.52718	0.47255	1.12E-03	2.06E-05	1.02E-06	4.11E-05	9.30E-07	1.1861E-03
520403.93	4258949.19	59040.95467	0.4299	0.16445	0.40989	0.17363	1.12E-03	1.01E-06	3.37E-07	9.62E-07	3.42E-07	1.1249E-03
520437.16	4258915.42	58964.89374	0.3591	0.16011	0.34202	0.16867	1.12E-03	8.43E-07	3.28E-07	8.03E-07	3.32E-07	1.1231E-03
520217.16	4259003.07	58920.49491	1.58271	0.26462	1.46658	0.27194	1.12E-03	3.72E-06	5.43E-07	3.44E-06	5.35E-07	1.1282E-03
520114.03	4258951.04	58881.21726	7.71107	0.41652	6.49863	0.38574	1.12E-03	1.81E-05	8.54E-07	1.53E-05	7.59E-07	1.1542E-03
520487.22	4258302.66	58881.09549	0.18768	0.27476	0.18733	0.29057	1.12E-03	4.41E-07	5.64E-07	4.40E-07	5.72E-07	1.1212E-03
520296.37	4259002.93	58835.9912	0.8323	0.19748	0.78989	0.21137	1.12E-03	1.95E-06	4.05E-07	1.85E-06	4.16E-07	1.1230E-03
520285.78	4258262.96	58784.04053	0.2652	0.91264	0.27352	1.00119	1.12E-03	6.23E-07	1.87E-06	6.42E-07	1.97E-06	1.1225E-03
520095.48	4258933.39	58783.21893	13.20616	0.44299	11.55912	0.41022	1.12E-03	3.10E-05	9.09E-07	2.71E-05	8.08E-07	1.1772E-03
520451.17	4258267.21	58769.34393	0.19747	0.32835	0.19996	0.351	1.12E-03	4.64E-07	6.73E-07	4.69E-07	6.91E-07	1.1194E-03
520422.85	4258253.39	58768.47442	0.20657	0.38216	0.21122	0.41001	1.12E-03	4.85E-07	7.84E-07	4.96E-07	8.07E-07	1.1197E-03
520141.06	4258972.19	58761.70625	4.27111	0.37347	3.72554	0.35236	1.12E-03	1.00E-05	7.66E-07	8.75E-06	6.94E-07	1.1372E-03
520506.26	4258806.76	58722.47205	0.25178	0.15907	0.24131	0.16651	1.12E-03	5.91E-07	3.26E-07	5.67E-07	3.28E-07	1.1180E-03

520315.18	4258253.05	58622.96968	0.24907	0.74003	0.25595	0.80474	1.11E-03	5.85E-07	1.52E-06	6.01E-07	1.58E-06	1.1186E-03
520355.74	4258982.84	58565.30284	0.56766	0.1732	0.54075	0.18473	1.11E-03	1.33E-06	3.55E-07	1.27E-06	3.64E-07	1.1165E-03
520049.6	4258550.4	58504.54961	1.18236	7.54373	1.50489	5.2306	1.11E-03	2.78E-06	1.55E-05	3.53E-06	1.03E-05	1.1441E-03
520529.48	4258744.23	58454.55511	0.22091	0.16427	0.21159	0.17135	1.11E-03	5.19E-07	3.37E-07	4.97E-07	3.37E-07	1.1128E-03
520051.23	4258875.15	58422.17105	5.97633	0.51423	9.63062	0.49323	1.11E-03	1.40E-05	1.05E-06	2.26E-05	9.71E-07	1.1492E-03
520524.27	4258441.57	58353.97248	0.19025	0.21565	0.18792	0.22779	1.11E-03	4.47E-07	4.42E-07	4.41E-07	4.48E-07	1.1110E-03
520013.53	4258746.84	58340.73755	1.91565	0.90432	2.39682	0.85773	1.11E-03	4.50E-06	1.85E-06	5.63E-06	1.69E-06	1.1226E-03
520018.01	4258781.76	58318.50919	2.26729	0.74366	2.81123	0.71613	1.11E-03	5.32E-06	1.53E-06	6.60E-06	1.41E-06	1.1234E-03
520335.95	4258992.87	58285.84273	0.64102	0.17901	0.61061	0.19153	1.11E-03	1.50E-06	3.67E-07	1.43E-06	3.77E-07	1.1116E-03
520477.85	4258288.64	58255.52816	0.1894	0.28812	0.18973	0.30565	1.11E-03	4.45E-07	5.91E-07	4.45E-07	6.02E-07	1.1094E-03
520207.26	4259003.08	58234.73666	1.74543	0.2749	1.60936	0.27965	1.11E-03	4.10E-06	5.64E-07	3.78E-06	5.50E-07	1.1159E-03
520375.52	4258972.8	58227.78853	0.50531	0.16798	0.48132	0.17855	1.11E-03	1.19E-06	3.45E-07	1.13E-06	3.51E-07	1.1098E-03
520207.35	4258302.72	58223.24539	0.31916	1.837	0.33817	2.07121	1.11E-03	7.49E-07	3.77E-06	7.94E-07	4.08E-06	1.1161E-03
520017.12	4258664.6	58187.86172	1.58231	1.66595	2.02276	1.49974	1.11E-03	3.71E-06	3.42E-06	4.75E-06	2.95E-06	1.1209E-03
520306.27	4259002.92	58186.01607	0.77778	0.19119	0.73885	0.20487	1.11E-03	1.83E-06	3.92E-07	1.73E-06	4.03E-07	1.1104E-03
520524.45	4258416.19	58167.17724	0.18701	0.21901	0.18509	0.2314	1.11E-03	4.39E-07	4.49E-07	4.35E-07	4.56E-07	1.1074E-03
520373.94	4258243.24	58146.60235	0.22291	0.5085	0.22949	0.54719	1.11E-03	5.23E-07	1.04E-06	5.39E-07	1.08E-06	1.1084E-03
520459.95	4258270.97	58127.85537	0.19423	0.31454	0.1961	0.33559	1.10E-03	4.56E-07	6.45E-07	4.60E-07	6.61E-07	1.1071E-03
520463.4	4258884.54	58118.53856	0.31393	0.15692	0.29963	0.16536	1.10E-03	7.37E-07	3.22E-07	7.03E-07	3.26E-07	1.1068E-03
520472.65	4258870.71	58077.79841	0.29954	0.15664	0.2863	0.16501	1.10E-03	7.03E-07	3.21E-07	6.72E-07	3.25E-07	1.1060E-03
520383.73	4258243.27	58053.81823	0.21916	0.47958	0.22559	0.51561	1.10E-03	5.15E-07	9.84E-07	5.30E-07	1.01E-06	1.1065E-03
520364.15	4258243.21	58044.0473	0.22651	0.54002	0.23316	0.58158	1.10E-03	5.32E-07	1.11E-06	5.47E-07	1.14E-06	1.1066E-03
520109.15	4258402.41	58017.62765	0.46145	9.8017	0.48933	11.79989	1.10E-03	1.08E-06	2.01E-05	1.15E-06	2.32E-05	1.1484E-03
520037.65	4258849.56	57968.82987	3.92074	0.55472	5.23294	0.5376	1.10E-03	9.20E-06	1.14E-06	1.23E-05	1.06E-06	1.1256E-03
520412.57	4258945.61	57952.45915	0.41032	0.16208	0.39138	0.17087	1.10E-03	9.63E-07	3.32E-07	9.19E-07	3.36E-07	1.1041E-03
520039.73	4258579.53	57942.50988	1.35497	4.68102	1.84768	3.58376	1.10E-03	3.18E-06	9.60E-06	4.34E-06	7.05E-06	1.1256E-03
520158.28	4258342.56	57844.71869	0.36811	3.44421	0.3884	3.98681	1.10E-03	8.64E-07	7.06E-06	9.12E-07	7.85E-06	1.1162E-03
520354.36	4258243.18	57834.69559	0.23004	0.57416	0.23665	0.61915	1.10E-03	5.40E-07	1.18E-06	5.56E-07	1.22E-06	1.1028E-03
520256.38	4258272.87	57834.48873	0.28115	1.15405	0.29281	1.2786	1.10E-03	6.60E-07	2.37E-06	6.87E-07	2.52E-06	1.1056E-03
520148.46	4258352.53	57830.77037	0.3813	4.03717	0.40117	4.71787	1.10E-03	8.95E-07	8.28E-06	9.42E-07	9.29E-06	1.1187E-03
520393.52	4258243.3	57821.53805	0.21535	0.4529	0.22152	0.48659	1.10E-03	5.06E-07	9.29E-07	5.20E-07	9.58E-07	1.1020E-03
520454.38	4258898.28	57782.7481	0.32883	0.15722	0.31353	0.16566	1.10E-03	7.72E-07	3.22E-07	7.36E-07	3.26E-07	1.1005E-03
520432.64	4258253.42	57775.27534	0.20227	0.36318	0.20643	0.38916	1.10E-03	4.75E-07	7.45E-07	4.85E-07	7.66E-07	1.1007E-03
520430.14	4258928.33	57761.76049	0.37346	0.15951	0.35557	0.16799	1.10E-03	8.77E-07	3.27E-07	8.35E-07	3.31E-07	1.1003E-03
520482.16	4258856.76	57752.49356	0.28556	0.15627	0.27335	0.16444	1.10E-03	6.70E-07	3.20E-07	6.42E-07	3.24E-07	1.0997E-03
520538.05	4258699.84	57737.18318	0.20786	0.1694	0.19959	0.17721	1.10E-03	4.88E-07	3.47E-07	4.69E-07	3.49E-07	1.0991E-03
520105.1	4258947.35	57715.93437	9.84747	0.42215	8.31439	0.3905	1.10E-03	2.31E-05	8.66E-07	1.95E-05	7.69E-07	1.1413E-03
520011.37	4258717.52	57705.59409	1.71294	1.08346	2.1246	1.01345	1.10E-03	4.02E-06	2.22E-06	4.99E-06	1.99E-06	1.1101E-03
520305.39	4258253.02	57683.13089	0.25213	0.7935	0.25934	0.86502	1.10E-03	5.92E-07	1.63E-06	6.09E-07	1.70E-06	1.1010E-03
520533.11	4258735.58	57668.50777	0.21663	0.16451	0.20754	0.17168	1.10E-03	5.09E-07	3.37E-07	4.87E-07	3.38E-07	1.0978E-03
520236.77	4258282.81	57637.57982	0.29425	1.37211	0.30898	1.52974	1.10E-03	6.91E-07	2.81E-06	7.25E-07	3.01E-06	1.1028E-03
520086.47	4258929.67	57523.21176	15.66034	0.4448	17.7428	0.41371	1.09E-03	3.68E-05	9.12E-07	4.17E-05	8.14E-07	1.1736E-03
520275.99	4258262.93	57490.54318	0.26797	0.98565	0.27727	1.0849	1.09E-03	6.29E-07	2.02E-06	6.51E-07	2.14E-06	1.0982E-03
520344.57	4258243.15	57482.89694	0.23347	0.6113	0.23998	0.66027	1.09E-03	5.48E-07	1.25E-06	5.63E-07	1.30E-06	1.0963E-03
520197.36	4259003.1	57467.10817	1.93841	0.28549	1.77764	0.28716	1.09E-03	4.55E-06	5.86E-07	4.17E-06	5.65E-07	1.1022E-03
520138.64	4258362.5	57445.63148	0.39439	4.82252	0.41414	5.68892	1.09E-03	9.26E-07	9.89E-06	9.72E-07	1.12E-05	1.1149E-03
520316.17	4259002.9	57443.95927	0.72834	0.1854	0.69238	0.19874	1.09E-03	1.71E-06	3.80E-07	1.63E-06	3.91E-07	1.0960E-03
520403.3	4258243.33	57437.01179	0.21146	0.42834	0.21728	0.45989	1.09E-03	4.96E-07	8.78E-07	5.10E-07	9.05E-07	1.0946E-03
520502	4258319	57288.18359	0.18347	0.25643	0.18321	0.27004	1.09E-03	4.31E-07	5.26E-07	4.30E-07	5.32E-07	1.0909E-03
520256.78	4259013	57287.34267	1.11932	0.22251	1.05347	0.23479	1.09E-03	2.63E-06	4.56E-07	2.47E-06	4.62E-07	1.0949E-03
520246.88	4259013.02	57251.41552	1.2139	0.23087	1.1389	0.24227	1.09E-03	2.85E-06	4.73E-07	2.67E-06	4.77E-07	1.0947E-03
520468.73	4258274.72	57240.25749	0.19091	0.30174	0.19222	0.3212	1.09E-03	4.48E-07	6.19E-07	4.51E-07	6.32E-07	1.0902E-03
520395.31	4258962.77	57218.03947	0.45184	0.16331	0.43062	0.17286	1.09E-03	1.06E-06	3.35E-07	1.01E-06	3.40E-07	1.0904E-03
520040.82	4258860.86	57215.39045	4.30631	0.53134	5.92596	0.51411	1.09E-03	1.01E-05	1.09E-06	1.39E-05	1.01E-06	1.1137E-03
520266.68	4259012.98	57189.51256	1.03549	0.21458	0.97714	0.22746	1.09E-03	2.43E-06	4.40E-07	2.29E-06	4.48E-07	1.0927E-03
520062.34	4258899.72	57151.61917	9.15261	0.47684	16.05601	0.45271	1.09E-03	2.15E-05	9.78E-07	3.77E-05	8.91E-07	1.1474E-03
520345.85	4258992.85	57144.16506	0.60323	0.1742	0.57471	0.18614	1.09E-03	1.42E-06	3.57E-07	1.35E-06	3.66E-07	1.0897E-03
520504.97	4258817.3	57138.00906	0.25453	0.15681	0.24391	0.16427	1.09E-03	5.98E-07	3.22E-07	5.73E-07	3.23E-07	1.0879E-03
520445.55	4258911.95	57125.97621	0.34427	0.15732	0.32794	0.16571	1.09E-03	8.08E-07	3.23E-07	7.70E-07	3.26E-07	1.0881E-03
520365.64	4258982.82	57116.00614	0.53571	0.16875	0.51027	0.17972	1.09E-03	1.26E-06	3.46E-07	1.20E-06	3.54E-07	1.0888E-03
520014.29	4258772.79	57027.0168	2.06299	0.77295	2.5388	0.74194	1.08E-03	4.84E-06	1.59E-06	5.96E-06	1.46E-06	1.0978E-03
520236.98	4259013.03	57024.14394	1.32098	0.23962	1.23473	0.24981	1.08E-03	3.10E-06	4.91E-07	2.90E-06	4.92E-07	1.0909E-03
520334.78	4258243.12	56978.27025	0.23675	0.65181	0.24321	0.70536	1.08E-03	5.56E-07	1.34E-06	5.71E-07	1.39E-06	1.0869E-03
520496.2	4258306.51	56969.14968	0.18411	0.26413	0.18367	0.27868	1.08E-03	4.32E-07	5.42E-07	4.31E-07	5.49E-07	1.0848E-03
520276.58	4259012.97	56958.11556	0.96075	0.20708	0.90851	0.22033	1.08E-03	2.26E-06	4.25E-07	2.13E-06	4.34E-07	1.0879E-03
520486.72	4258292.44	56928.73071	0.18603	0.27648	0.18589	0.29273	1.08E-03	4.37E-07	5.67E-07	4.36E-07	5.76E-07	1.0841E-03
520217.17	4258292.75	56900.82495	0.30684	1.66126	0.32453	1.86482	1.08E-03	7.20E-07	3.41E-06	7.62E-07	3.67E-06	1.0901E-03
520413.09	4258243.36	56880.08465	0.20749	0.40571	0.21292	0.43524	1.08E-03	4.87E-07	8.32E-07	5.00E-07	8.57E-07	1.0839E-03
520052.46	4258885.65	56759.42128	6.26509	0.4925	10.47565	0.4721	1.08E-03	1.47E-05	1.01E-06	2.46E-05	9.29E-07	1.1201E-03
520227.08	4259013.05	56752.64962	1.44424	0.24898	1.34468	0.25752	1.08E-03	3.39E-06	5.11E-07	3.16E-06	5.07E-07	1.0863E-03
520177.92	4258322.63	56740.21173	0.34179	2.61419	0.36282	2.97154	1.08E-03	8.02E-07	5.36E-06	8.52E-07	5.85E-06	1.0914E-03
520536.73	4258726.93	56722.75178	0.21249	0.1645	0.20361	0.17181	1.08E-03	4.99E-07	3.37E-07	4.78E-07	3.38E-07	1.0798E-03
520421.21	4258942.04	56721.43005	0.39198	0.15964	0.374	0.16811	1.08E-03	9.20E-07	3.27E-07	8.78E-07	3.31E-07	1.0806E-03
520029.85	4258608.67	56667.42939	1.43258	3.05372	1.9179	2.54288	1.08E-03	3.36E-06	6.26E-06	4.50E-06	5.01E-06	1.0963E-03
520295.6	4258252.99	56659.44609	0.25506	0.85251	0.26283	0.9321	1.08E-03	5.99E-07	1.75E-06	6.17E-07	1.83E-06	1.0818E-03
520442.43	4258253.45	56635.37232	0.19799	0.34559	0.20163	0.36984	1.08E-03	4.65E-07	7.09E-07	4.73E-07	7.28E-07	1.0789E-03
520286.48	4259012.95	56603.10453	0.89375	0.20006	0.84663	0.21348	1.08E-03	2.10E-06	4.10E-07	1.99E-06	4.20E-07	1.0808E-03
520525.39	4258470.4	56579.49844	0.19269	0.21012	0.18965	0.2223	1.08E-03	4.52E-07	4.31E-07	4.45E-07	4.38E-07	1.0772E-03
520187.46	4259003.12	56578.65129	2.1685	0.2961	1.9769	0.29424	1.08E-03	5.09E-06	6.07E-07	4.64E-06	5.79E-07	1.0864E-03
520326.07	4259002.89	56574.51594	0.68321	0.18014	0.64997	0.19301	1.08E-03	1.60E-06	3.69E-07	1.53E-06	3.80E-07	1.0793E-03
520128.82	4258372.47	56555.99102	0.40709	5.90104	0.42745	7.00157	1.08E-03	9.56E-07	1.21E-05	1.00E-06	1.38E-05	1.1029E-03
520096.17	4258943.67	56508.48178	12.94703	0.42555	11.28113	0.39433	1.07E-03	3.04E-05	8.73E-07	2.65E-05	7.76E-07	1.1327E-03
520385.42	4258972.79	56463.61346	0.47809	0.16383	0.45538	0.17385	1.07E-03	1.12E-06	3.36E-07	1.07E-06	3.42E-07	1.0761E-03
520451.12	4258257.17	56355.49635	0.19509	0.33033	0.19811	0.3531	1.07E-03	4.58E-07	6.77E-07	4.65E-07	6.95E-07	1.0735E-03
520403.88	4258959.22	56334.2741	0.43119	0.16104	0.41093	0.17015	1.07E-03	1.01E-06	3.30E-07	9.65E-07	3.35E-07	1.0735E-03
520325	4258243.08	56327.48117	0.23987	0.69606	0.24638	0.7549	1.07E-03	5.63E-07	1.43E-06	5.78E-07	1.49E-06	1.0747E-03
520022.15	4258815.84	56318.6066	2.58888	0.62587	3.23065	0.60742	1.07E-03	6.08E-06	1.28E-06	7.58E-06	1.20E-06	1.0867E-03
520494.57	4258841.62	56295.14169	0.26894	0.15493	0.25767	0.16271	1.07E-03	6.31E-07	3.18E-07	6.05E-07	3.20E-07	1.0719E-03
520114.51	4258961.23	56289.13152	7.53376	0.40029	6.39801	0.37107	1.07E-03	1.77E-05	8.21E-07	1.50E-05	7.30E-07	1.1042E-03
520527.85	4258425.11	56268.26537	0.18626	0.21487	0.18411	0.22688	1.07E-03	4.37E-07	4.41E-07	4.32E-07	4.47E-07	1.0713E-03
520217.18	4259013.07	56244.0665	1.58544	0.25856	1.46932	0.26502	1.07E-03	3.72E-06	5.30E-07	3.45E-06	5.22E-07	1.0773E-03
520017.12	4258655.32	56220.07633	1.49953	1.78457	1.91759	1.59487	1.07E-03	3.52E-06	3.66E-06	4.50E-06	3.14E-06	1.0835E-03
520187.74	4258312.66	56218.8975	0.32981	2.30899	0.35	2.61994	1.07E-03	7.74E-07	4.74E-06	8.22E-07	5.16E-06	1.0801E-03
520541.44	4258691.73	56204.97161	0.20425	0.16927	0.1962	0.17699	1.07E-03	4.80E-07	3.47E-07	4.61E-07	3.48E-07	1.0700E-03
520009.76	4258737.74	56175.10011	1.73775	0.94156	2.1517	0.88881	1.07E-03	4.08E-06	1.93E-06	5.05E-06	1.75E-06	1.0806E-03
520422.88	4258243.39	56172.08589	0.20348	0.38482	0.20847	0.41246	1.07E-03	4.78E-07	7.89E-07	4.89E-07	8.12E-07	1.0703E-03
520477.51	4258278.48	56169.30548	0.18759	0.2897	0.18836	0.30766	1.07E-03	4.40E-07	5.94E-07	4.42E-07	6.06E-07	1.0698E-03
520140.2	4258981.82	56165.98561	4.34414	0.36245	3.79007	0.34134	1.07E-03	1.02E-05	7.43E-07	8.90E-06	6.72E-07	1.0881E-03
520296.38	4259012.93	56125.70219	0.83337	0.19342	0.79036	0.20686	1.07E-03	1.96E-06	3.97E-07	1.86E-06	4.07E-07	1.0715E-03
520246.59	4258272.84	56061.10856	0.28294	1.25953	0.29629	1.39954	1.07E-03	6.64E-07	2.58E-06	6.96E-07	2.75E-06	1.0723E-03
520266.2	4258262.9	56042.30271	0.27034	1.06788	0.28096	1.17907	1.07E-03	6.35E-07	2.19E-06	6.60E-07	2.32E-06	1.0711E-03
520438.86	4258924.73	56006.34258	0.35714	0.1567	0.34002	0.16499	1.06E-03	8.38E-07	3.21E-07	7.98E-07	3.25E-07	1.0669E-03
520027.5	4258835.38	55982.13246	2.99278	0.57601	3.78373	0.56023	1.06E-03	7.03E-06	1.18E-06	8.88E-06	1.10E-06	1.0823E-03
520471.93	4258881.01	55924.82844	0.30168	0.15418	0.28811	0.16239	1.06E-03	7.08E-07	3.16E-07	6.76E-07	3.20E-07	1.0651E-03
520010.73	4258691.86	55892.38768	1.54426	1.2899	1.92483	1.18653	1.06E-03	3.63E-06	2.65E-06	4.52E-06	2.34E-06	1.0755E-03
520522.98	4258368.03	55888.84787	0.18117	0.22714	0.18075	0.24003	1.06E-03	4.25E-07	4.66E-07	4.24E-07	4.72E-07	1.0641E-03
520355.75	4258992.84	55884.57771	0.56853	0.1696	0.54154	0.18097	1.06E-03	1.33E-06	3.48E-07	1.27E-06	3.56E-07	1.0656E-03
520459.82	4258260.89	55857.72888	0.19207	0.31623	0.19446	0.33753	1.06E-03	4.51E-07	6.49E-07	4.57E-07	6.64E-07	1.0640E-03
520042.28	4258871.46	55845.68983	4.50945	0.50857	6.33086	0.49178	1.06E-03	1.06E-05	1.04E-06	1.49E-05	9.68E-07	1.0890E-03
520462.83	4258894.79	55775.2243	0.31583	0.15447	0.30126	0.16271	1.06E-03	7.41E-07	3.17E-07	7.07E-07	3.20E-07	1.0623E-03
520518.38	4258794.68	55761.86858	0.23802	0.15701	0.22817	0.16401	1.06E-03	5.59E-07	3.22E-07	5.36E-07	3.23E-07	1.0617E-03
520481.26	4258867.14	55716.15816	0.28792	0.15387	0.27535	0.16195	1.06E-03	6.76E-07	3.16E-07	6.46E-07	3.19E-07	1.0610E-03
520521.96	4258786.15	55683.61827	0.23349	0.15761	0.22381	0.16451	1.06E-03	5.48E-07	3.23E-07	5.25E-07	3.24E-07	1.0602E-03
520207.27	4259013.08	55651.95105	1.75042	0.26854	1.61422	0.27242	1.06E-03	4.11E-06	5.51E-07	3.79E-06	5.36E-07	1.0668E-03
520018.48	4258807	55645.58616	2.35913	0.64839	2.92373	0.62813	1.06E-03	5.54E-06	1.33E-06	6.86E-06	1.24E-06	1.0727E-03
520526.99	4258389.78	55638.43616	0.18219	0.22021	0.18091	0.23285	1.06E-03	4.28E-07	4.52E-07	4.25E-07	4.58E-07	1.0593E-03
520540.35	4258718.28	55618.53092	0.20849	0.16438	0.19984	0.17181	1.06E-03	4.89E-07	3.37E-07	4.69E-07	3.38E-07	1.0588E-03
520335.97	4259002.87	55598.81809	0.64192	0.17515	0.61089	0.1875	1.06E-03	1.51E-06	3.59E-07	1.43E-06	3.69E-07	1.0605E-03
520177.55	4259003.13	55588.47438	2.44821	0.30651	2.21714	0.30078	1.06E-03	5.75E-06	6.29E-07	5.21E-06	5.92E-07	1.0688E-03
520375.54	4258982.8	55565.28695	0.50624	0.16449	0.48213	0.17492	1.06E-03	1.19E-06	3.37E-07	1.13E-06	3.44E-07	1.0592E-03
520315.21	4258243.05	55525.25621	0.2428	0.74472	0.24959	0.80954	1.06E-03	5.70E-07	1.53E-06	5.86E-07	1.59E-06	1.0597E-03
520226.98	4258282.78	55518.47751	0.29511	1.51092	0.31148	1.68898	1.06E-03	6.93E-07	3.10E-06	7.31E-07	3.32E-06	1.0632E-03
520525.53	4258777.61	55515.6609	0.22904	0.15822	0.21954	0.16501	1.06E-03	5.38E-07	3.24E-07	5.15E-07	3.25E-07	1.0570E-03
520503.84	4258827.77	55510.17626	0.25702	0.15461	0.24633	0.16206	1.06E-03	6.03E-07	3.17E-07	5.78E-07	3.19E-07	1.0570E-03
520285.81	4258252.96	55497.129	0.25772	0.91819	0.26636	1.0069	1.05E-03	6.05E-07	1.88E-06	6.25E-07	1.98E-06	1.0600E-03
520306.28	4259012.92	55495.69075	0.77868	0.18721	0.73908	0.20051	1.05E-03	1.83E-06	3.84E-07	1.74E-06	3.95E-07	1.0592E-03
520010.58	4258763.83	55469.08837	1.87321	0.80399	2.29964	0.76835	1.05E-03	4.40E-06	1.65E-06	5.40E-06	1.51E-06	1.0673E-03
520525.94	4258379.31	55462.46055	0.1813	0.22262	0.18041	0.23539	1.05E-03	4.26E-07	4.57E-07	4.24E-07	4.63E-07	1.0560E-03
520197.56	4258302.69	55432.80448	0.31796	2.05783	0.33726	2.32715	1.05E-03	7.46E-07	4.22E-06	7.92E-07	4.58E-06	1.0640E-03
520087.24	4258939.98	55367.98779	15.32321	0.42726	17.03636	0.39759	1.05E-03	3.60E-05	8.76E-07	4.00E-05	7.83E-07	1.1301E-03
520412.45	4258955.67	55344.17464	0.41174	0.15883	0.39257	0.16753	1.05E-03	9.67E-07	3.26E-07	9.22E-07	3.30E-07	1.0545E-03
520521.76	4258357.5	55324.42432	0.18021	0.23006	0.18009	0.24282	1.05E-03	4.23E-07	4.72E-07	4.23E-07	4.78E-07	1.0534E-03
520105.65	4258957.57	55319.85693	9.63781	0.40572	8.17073	0.37565	1.05E-03	2.26E-05	8.32E-07	1.92E-05	7.39E-07	1.0949E-03
520373.97	4258233.24	55318.88772	0.21842	0.51246	0.22482	0.5506	1.05E-03	5.13E-07	1.05E-06	5.28E-07	1.08E-06	1.0547E-03
520495.6	4258296.23	55272.70413	0.1826	0.26582	0.18222	0.28077	1.05E-03	4.29E-07	5.45E-07	4.28E-07	5.53E-07	1.0526E-03
520432.67	4258243.42	55269.35837	0.19939	0.36562	0.20396	0.39142	1.05E-03	4.68E-07	7.50E-07	4.79E-07	7.71E-07	1.0530E-03
520383.76	4258233.27	55265.3729	0.21493	0.48337	0.2213	0.51882	1.05E-03	5.05E-07	9.91E-07	5.20E-07	1.02E-06	1.0535E-03
520490.86	4258853.16	55255.76993	0.27458	0.15351	0.26297	0.16135	1.05E-03	6.45E-07	3.15E-07	6.17E-07	3.18E-07	1.0522E-03
520429.85	4258938.46	55255.44435	0.37515	0.15663	0.35708	0.16493	1.05E-03	8.81E-07	3.21E-07	8.38E-07	3.25E-07	1.0527E-03
520453.93	4258908.48	55247.95448	0.33032	0.15458	0.31475	0.16278	1.05E-03	7.75E-07	3.17E-07	7.39E-07	3.20E-07	1.0523E-03
520529.1	4258769.08	55240.90524	0.22471	0.15862	0.21529	0.16535	1.05E-03	5.28E-07	3.25E-07	5.05E-07	3.25E-07	1.0517E-03
520364.18	4258233.21	55211.0645	0.22178	0.54404	0.22814	0.5852	1.05E-03	5.21E-07	1.12E-06	5.36E-07	1.15E-06	1.0528E-03
520059.48	4258521.27	55174.71735	0.9535	13.20721	1.12797	7.76162	1.05E-03	2.24E-06	2.71E-05	2.65E-06	1.53E-05	1.0960E-03
520119	4258382.44	55120.09386	0.41956	7.43683	0.44093	8.97942	1.05E-03	9.85E-07	1.53E-05	1.04E-06	1.77E-05	1.0827E-03
520393.55	4258233.3	55114.21399	0.21142	0.45643	0.21761	0.4896	1.05E-03	4.96E-07	9.36E-07	5.11E-07	9.64E-07	1.0505E-03
520468.51	4258264.61	55109.86718	0.18895	0.30334	0.19076	0.32313	1.05E-03	4.44E-07	6.22E-07	4.48E-07	6.36E-07	1.0497E-03
520053.57	4258896.1	55084.76948	6.56251	0.47211	11.38423	0.45235	1.05E-03	1.54E-05	9.68E-07	2.67E-05	8.90E-07	1.0911E-03
520486.29	4258282.24	55030.58841	0.18437	0.27804	0.18457	0.29473	1.05E-03	4.33E-07	5.70E-07	4.33E-07	5.80E-07	1.0480E-03
520029	4258845.99	55001.34692	3.1306	0.54959	3.98	0.5349	1.05E-03	7.35E-06	1.13E-06	9.34E-06	1.05E-06	1.0643E-03
520197.37	4259013.1	54961.07069	1.94523	0.27872	1.78424	0.27955	1.04E-03	4.57E-06	5.72E-07	4.19E-06	5.50E-07	1.0546E-03
520354.39	4258233.18	54959.24128	0.22502	0.57832	0.23131	0.62295	1.04E-03	5.28E-07	1.19E-06	5.43E-07	1.23E-06	1.0482E-03
520505.18	4258310.35	54854.16267	0.18056	0.25398	0.18014	0.26745	1.04E-03	4.24E-07	5.21E-07	4.23E-07	5.26E-07	1.0446E-03
520532.68	4258760.54	54852.46608	0.22041	0.15897	0.21111	0.16565	1.04E-03	5.17E-07	3.26E-07	4.96E-07	3.26E-07	1.0443E-03
520014.81	4258798.15	54823.22833	2.16152	0.67172	2.65239	0.64943	1.04E-03	5.07E-06	1.38E-06	6.23E-06	1.28E-06	1.0560E-03
520403.34	4258233.33	54819.42834	0.20782	0.43155	0.21374	0.46267	1.04E-03	4.88E-07	8.85E-07	5.02E-07	9.11E-07	1.0448E-03
520316.18	4259012.9	54784.52835	0.72909	0.18148	0.6924	0.19451	1.04E-03	1.71E-06	3.72E-07	1.63E-06	3.83E-07	1.0454E-03
520121.9	4258974.27	54710.93677	6.33363	0.38084	5.4023	0.354	1.04E-03	1.49E-05	7.81E-07	1.27E-05	6.97E-07	1.0690E-03
520256.8	4259023	54662.35306	1.12047	0.21777	1.054	0.22938	1.04E-03	2.63E-06	4.47E-07	2.47E-06	4.52E-07	1.0450E-03
520007.81	4258708.93	54647.78964	1.54217	1.12376	1.89899	1.04523	1.04E-03	3.62E-06	2.30E-06	4.46E-06	2.06E-06	1.0512E-03
520246.89	4259023.02	54639.62011	1.21534	0.22593	1.1399	0.23661	1.04E-03	2.85E-06	4.63E-07	2.68E-06	4.66E-07	1.0451E-03
520395.32	4258972.77	54604.90258	0.45292	0.15982	0.43132	0.16931	1.04E-03	1.06E-06	3.28E-07	1.01E-06	3.33E-07	1.0407E-03
520305.42	4258243.02	54604.86763	0.24556	0.79829	0.25285	0.87001	1.04E-03	5.76E-07	1.64E-06	5.94E-07	1.71E-06	1.0425E-03
520266.7	4259022.98	54590.20778	1.03661	0.21013	0.97768	0.22238	1.04E-03	2.43E-06	4.31E-07	2.30E-06	4.38E-07	1.0433E-03
520344.6	4258233.15	54578.89585	0.22816	0.61555	0.23438	0.66424	1.04E-03	5.36E-07	1.26E-06	5.50E-07	1.31E-06	1.0411E-03
520099.33	4258412.38	54552.31934	0.47264	13.96792	0.50533	15.87652	1.04E-03	1.11E-06	2.86E-05	1.19E-06	3.13E-05	1.0991E-03
520345.87	4259002.85	54523.14052	0.60411	0.17042	0.57488	0.18222	1.04E-03	1.42E-06	3.50E-07	1.35E-06	3.59E-07	1.0399E-03
520520.73	4258347.04	54520.01029	0.17911	0.23288	0.17916	0.24542	1.04E-03	4.20E-07	4.78E-07	4.21E-07	4.83E-07	1.0381E-03
520365.65	4258992.82	54507.92984	0.53664	0.16516	0.51078	0.176	1.04E-03	1.26E-06	3.39E-07	1.20E-06	3.46E-07	1.0392E-03
520167.65	4259003.15	54485.89842	2.79117	0.31631	2.5094	0.30656	1.04E-03	6.55E-06	6.49E-07	5.89E-06	6.03E-07	1.0494E-03
520256.41	4258262.87	54482.89744	0.27229	1.16089	0.28441	1.2857	1.04E-03	6.39E-07	2.38E-06	6.68E-07	2.53E-06	1.0418E-03
520207.38	4258292.72	54451.92118	0.3064	1.84843	0.32475	2.08181	1.04E-03	7.19E-07	3.79E-06	7.62E-07	4.10E-06	1.0444E-03
520236.99	4259023.03	54447.17011	1.32274	0.23444	1.23629	0.24387	1.03E-03	3.11E-06	4.81E-07	2.90E-06	4.80E-07	1.0419E-03
520043.6	4258882	54423.00133	4.72261	0.48716	6.74383	0.47085	1.03E-03	1.11E-05	9.99E-07	1.58E-05	9.27E-07	1.0633E-03
520513.42	4258813.8	54385.6573	0.24537	0.15417	0.23519	0.16129	1.03E-03	5.76E-07	3.16E-07	5.52E-07	3.17E-07	1.0355E-03
520276.6	4259022.97	54374.10246	0.96175	0.20285	0.90894	0.21552	1.03E-03	2.26E-06	4.16E-07	2.13E-06	4.24E-07	1.0388E-03
520543.97	4258709.63	54368.80228	0.2046	0.16427	0.19622	0.17176	1.03E-03	4.80E-07	3.37E-07	4.61E-07	3.38E-07	1.0351E-03
520031.77	4258857.13	54357.61776	3.38104	0.52581	4.35564	0.51165	1.03E-03	7.94E-06	1.08E-06	1.02E-05	1.01E-06	1.0535E-03
520536.25	4258752.01	54349.70991	0.21625	0.15928	0.20709	0.16598	1.03E-03	5.08E-07	3.27E-07	4.86E-07	3.27E-07	1.0347E-03
520413.12	4258233.36	54347.69065	0.20411	0.40866	0.20973	0.43783	1.03E-03	4.79E-07	8.38E-07	4.92E-07	8.62E-07	1.0357E-03
520158.59	4258999.41	54327.38081	3.18476	0.32825	2.83982	0.31484	1.03E-03	7.48E-06	6.73E-07	6.67E-06	6.20E-07	1.0481E-03
520096.8	4258953.92	54322.69424	12.70579	0.40919	11.03961	0.37943	1.03E-03	2.98E-05	8.39E-07	2.59E-05	7.47E-07	1.0899E-03
520276.02	4258252.93	54249.92706	0.26014	0.99152	0.26989	1.09085	1.03E-03	6.11E-07	2.03E-06	6.34E-07	2.15E-06	1.0366E-03
520531.25	4258434.03	54248.55186	0.18542	0.21086	0.18309	0.22255	1.03E-03	4.35E-07	4.32E-07	4.30E-07	4.38E-07	1.0329E-03
520442.46	4258243.45	54243.46305	0.19532	0.3478	0.19942	0.3719	1.03E-03	4.59E-07	7.13E-07	4.68E-07	7.32E-07	1.0334E-03
520058.31	4258908.05	54223.42773	7.86047	0.45494	16.71729	0.43408	1.03E-03	1.85E-05	9.33E-07	3.92E-05	8.54E-07	1.0902E-03
520421.02	4258952.12	54217.64144	0.39358	0.15653	0.37527	0.16489	1.03E-03	9.24E-07	3.21E-07	8.81E-07	3.25E-07	1.0330E-03
520227.09	4259023.05	54209.21421	1.4462	0.24354	1.34675	0.25127	1.03E-03	3.40E-06	4.99E-07	3.16E-06	4.95E-07	1.0380E-03
520447.57	4258921.12	54177.8653	0.34171	0.15389	0.32539	0.16199	1.03E-03	8.02E-07	3.16E-07	7.64E-07	3.19E-07	1.0320E-03
520477.2	4258268.34	54173.86173	0.18577	0.29126	0.18704	0.30959	1.03E-03	4.36E-07	5.97E-07	4.39E-07	6.09E-07	1.0318E-03
520236.8	4258272.81	54163.88751	0.28409	1.38047	0.29908	1.53797	1.03E-03	6.67E-07	2.83E-06	7.02E-07	3.03E-06	1.0368E-03

520187.47	4259013.12	54119.0162	2.17614	0.28876	1.98433	0.28616	1.03E-03	5.11E-06	5.92E-07	4.66E-06	5.63E-07	1.0396E-03
520334.82	4258233.12	54078.7613	0.23118	0.65604	0.23742	0.70947	1.03E-03	5.43E-07	1.35E-06	5.57E-07	1.40E-06	1.0318E-03
520451.08	4258247.14	54075.35954	0.19268	0.33234	0.19616	0.35514	1.03E-03	4.52E-07	6.82E-07	4.61E-07	6.99E-07	1.0302E-03
520149.52	4258995.67	54073.61223	3.68338	0.33976	3.25293	0.32266	1.03E-03	8.65E-06	6.97E-07	7.64E-06	6.35E-07	1.0455E-03
520286.5	4259022.95	54042.35966	0.89464	0.196	0.84688	0.2089	1.03E-03	2.10E-06	4.02E-07	1.99E-06	4.11E-07	1.0321E-03
520326.08	4259012.89	54010.12892	0.68405	0.17624	0.64992	0.18888	1.03E-03	1.61E-06	3.61E-07	1.53E-06	3.72E-07	1.0305E-03
520531.6	4258409.1	53984.24051	0.18228	0.21374	0.18035	0.22572	1.03E-03	4.28E-07	4.38E-07	4.23E-07	4.44E-07	1.0279E-03
520017.12	4258646.05	53967.56951	1.41155	1.90682	1.80477	1.69131	1.03E-03	3.31E-06	3.91E-06	4.24E-06	3.33E-06	1.0406E-03
520385.44	4258982.79	53916.18569	0.479	0.16041	0.45612	0.17033	1.02E-03	1.12E-06	3.29E-07	1.07E-06	3.35E-07	1.0277E-03
520471.28	4258891.29	53848.75812	0.30366	0.15188	0.28986	0.15991	1.02E-03	7.13E-07	3.11E-07	6.80E-07	3.15E-07	1.0256E-03
520011.14	4258789.3	53805.49525	1.98003	0.69627	2.41165	0.67137	1.02E-03	4.65E-06	1.43E-06	5.66E-06	1.32E-06	1.0358E-03
520403.83	4258969.25	53790.40734	0.43242	0.15764	0.41177	0.16672	1.02E-03	1.02E-06	3.23E-07	9.67E-07	3.28E-07	1.0251E-03
520217.19	4259023.07	53787.7566	1.58822	0.25283	1.47242	0.25845	1.02E-03	3.73E-06	5.19E-07	3.46E-06	5.09E-07	1.0306E-03
520480.45	4258877.48	53759.34302	0.29009	0.1515	0.27721	0.15947	1.02E-03	6.81E-07	3.11E-07	6.51E-07	3.14E-07	1.0238E-03
520112.75	4258970.5	53737.75876	7.87503	0.38687	6.6966	0.35868	1.02E-03	1.85E-05	7.93E-07	1.57E-05	7.06E-07	1.0572E-03
520422.91	4258233.39	53728.94688	0.20035	0.38751	0.20559	0.41486	1.02E-03	4.70E-07	7.95E-07	4.83E-07	8.17E-07	1.0239E-03
520539.82	4258743.47	53721.31583	0.21222	0.15953	0.20323	0.1663	1.02E-03	4.98E-07	3.27E-07	4.77E-07	3.27E-07	1.0228E-03
520005.99	4258728.64	53703.78316	1.57224	0.97872	1.92789	0.91919	1.02E-03	3.69E-06	2.01E-06	4.53E-06	1.81E-06	1.0328E-03
520459.7	4258250.83	53677.71601	0.18987	0.31812	0.19276	0.33954	1.02E-03	4.46E-07	6.52E-07	4.53E-07	6.68E-07	1.0225E-03
520295.63	4258242.99	53604.11725	0.24818	0.85747	0.2562	0.93728	1.02E-03	5.83E-07	1.76E-06	6.01E-07	1.85E-06	1.0237E-03
520438.49	4258934.88	53602.84072	0.35876	0.15396	0.34145	0.16204	1.02E-03	8.42E-07	3.16E-07	8.02E-07	3.19E-07	1.0212E-03
520296.4	4259022.93	53596.15361	0.83417	0.18953	0.79051	0.2025	1.02E-03	1.96E-06	3.89E-07	1.86E-06	3.99E-07	1.0234E-03
520495.06	4258285.99	53585.14354	0.18108	0.26734	0.1809	0.28274	1.02E-03	4.25E-07	5.48E-07	4.25E-07	5.57E-07	1.0205E-03
520519.84	4258336.65	53573.26708	0.17792	0.23549	0.17797	0.2478	1.02E-03	4.18E-07	4.83E-07	4.18E-07	4.88E-07	1.0201E-03
520006.86	4258754.86	53564.82096	1.68996	0.83626	2.07927	0.79457	1.02E-03	3.97E-06	1.72E-06	4.88E-06	1.56E-06	1.0303E-03
520462.31	4258905.01	53542.38223	0.31757	0.15204	0.30277	0.16007	1.02E-03	7.46E-07	3.12E-07	7.11E-07	3.15E-07	1.0198E-03
520531.22	4258459.82	53523.11921	0.18823	0.2074	0.18542	0.2191	1.02E-03	4.42E-07	4.25E-07	4.35E-07	4.31E-07	1.0191E-03
520489.86	4258863.58	53430.41337	0.27695	0.15123	0.26504	0.15902	1.02E-03	6.50E-07	3.10E-07	6.22E-07	3.13E-07	1.0175E-03
520325.03	4258233.08	53424.24383	0.23403	0.7004	0.24045	0.75921	1.02E-03	5.49E-07	1.44E-06	5.64E-07	1.49E-06	1.0195E-03
520148.49	4258342.53	53417.9575	0.36086	4.0575	0.37792	4.73336	1.02E-03	8.47E-07	8.32E-06	8.87E-07	9.32E-06	1.0348E-03
520504.47	4258300.03	53400.32952	0.17918	0.25584	0.1787	0.26961	1.02E-03	4.21E-07	5.25E-07	4.20E-07	5.31E-07	1.0169E-03
520355.77	4259002.84	53346.95439	0.56936	0.16596	0.54173	0.1772	1.01E-03	1.34E-06	3.40E-07	1.27E-06	3.49E-07	1.0173E-03
520087.95	4258950.27	53298.27414	16.50572	0.41077	16.44111	0.38246	1.01E-03	3.88E-05	8.42E-07	3.86E-05	7.53E-07	1.0920E-03
520217.2	4258282.75	53276.37	0.29508	1.6721	0.31255	1.87362	1.01E-03	6.93E-07	3.43E-06	7.34E-07	3.69E-06	1.0212E-03
520207.29	4259023.08	53274.97654	1.75388	0.26248	1.61844	0.26552	1.01E-03	4.12E-06	5.38E-07	3.80E-06	5.23E-07	1.0216E-03
520033.34	4258867.77	53249.14449	3.53878	0.50332	4.61327	0.4897	1.01E-03	8.31E-06	1.03E-06	1.08E-05	9.64E-07	1.0333E-03
520039.69	4258569.84	53207.87675	1.2109	4.86356	1.59274	3.7197	1.01E-03	2.84E-06	9.97E-06	3.74E-06	7.32E-06	1.0353E-03
520177.57	4259013.13	53197.21512	2.45643	0.29855	2.22534	0.29226	1.01E-03	5.77E-06	6.12E-07	5.22E-06	5.75E-07	1.0234E-03
520485.9	4258272.06	53194.3661	0.18273	0.27909	0.18331	0.29628	1.01E-03	4.29E-07	5.72E-07	4.30E-07	5.83E-07	1.0131E-03
520168.13	4258322.6	53169.01698	0.33731	3.00231	0.35601	3.42576	1.01E-03	7.92E-07	6.16E-06	8.36E-07	6.74E-06	1.0252E-03
520335.99	4259012.87	53096.19728	0.64271	0.17135	0.6108	0.18352	1.01E-03	1.51E-06	3.51E-07	1.43E-06	3.61E-07	1.0129E-03
520375.56	4258992.8	53059.77155	0.5071	0.16101	0.48262	0.17133	1.01E-03	1.19E-06	3.30E-07	1.13E-06	3.37E-07	1.0116E-03
520468.31	4258254.52	53043.61475	0.18692	0.30508	0.18926	0.32506	1.01E-03	4.39E-07	6.26E-07	4.44E-07	6.40E-07	1.0104E-03
520306.3	4259022.92	53027.64203	0.77944	0.18346	0.7392	0.19636	1.01E-03	1.83E-06	3.76E-07	1.74E-06	3.87E-07	1.0123E-03
520547.59	4258700.97	52990.64375	0.20083	0.16422	0.19273	0.17166	1.01E-03	4.71E-07	3.37E-07	4.52E-07	3.38E-07	1.0089E-03
520177.95	4258312.63	52979.38933	0.3264	2.6264	0.34499	2.99029	1.01E-03	7.66E-07	5.39E-06	8.10E-07	5.89E-06	1.0199E-03
520044.8	4258892.48	52967.57124	4.93667	0.46711	7.16145	0.45128	1.01E-03	1.16E-05	9.58E-07	1.68E-05	8.88E-07	1.0371E-03
520512.2	4258824.31	52963.85553	0.24788	0.15201	0.23761	0.15914	1.01E-03	5.82E-07	3.12E-07	5.58E-07	3.13E-07	1.0085E-03
520432.7	4258233.42	52952.63398	0.19652	0.36798	0.20137	0.39359	1.01E-03	4.61E-07	7.55E-07	4.73E-07	7.75E-07	1.0090E-03
520543.4	4258734.94	52949.99644	0.20826	0.15957	0.19945	0.16646	1.01E-03	4.89E-07	3.27E-07	4.68E-07	3.28E-07	1.0081E-03
520138.67	4258352.5	52933.44512	0.37227	4.84359	0.38911	5.70705	1.01E-03	8.74E-07	9.93E-06	9.14E-07	1.12E-05	1.0291E-03
520109.18	4258392.41	52924.318	0.43063	9.82729	0.4548	11.84313	1.01E-03	1.01E-06	2.02E-05	1.07E-06	2.33E-05	1.0515E-03
520029.81	4258598.97	52884.42774	1.29539	3.21443	1.71407	2.65889	1.01E-03	3.04E-06	6.59E-06	4.02E-06	5.23E-06	1.0241E-03
520266.23	4258252.9	52872.67757	0.26217	1.07409	0.27326	1.18533	1.01E-03	6.15E-07	2.20E-06	6.42E-07	2.33E-06	1.0108E-03
520429.59	4258948.58	52871.41079	0.3767	0.15374	0.35845	0.16188	1.00E-03	8.84E-07	3.15E-07	8.42E-07	3.19E-07	1.0073E-03
520412.34	4258965.73	52866.42353	0.41317	0.1555	0.39347	0.16418	1.00E-03	9.70E-07	3.19E-07	9.24E-07	3.23E-07	1.0074E-03
520499.55	4258849.56	52840.19078	0.26423	0.15082	0.25314	0.15834	1.00E-03	6.20E-07	3.09E-07	5.94E-07	3.12E-07	1.0062E-03
520246.62	4258262.84	52797.09305	0.27367	1.2669	0.28736	1.40697	1.00E-03	6.42E-07	2.60E-06	6.75E-07	2.77E-06	1.0103E-03
520103.61	4258966.72	52765.92673	10.1761	0.39125	8.69025	0.36269	1.00E-03	2.39E-05	8.02E-07	2.04E-05	7.14E-07	1.0488E-03
520383.79	4258223.27	52693.7461	0.21077	0.48693	0.21695	0.52189	1.00E-03	4.95E-07	9.99E-07	5.09E-07	1.03E-06	1.0046E-03
520374	4258223.24	52665.99325	0.21395	0.51624	0.22012	0.55382	1.00E-03	5.02E-07	1.06E-06	5.17E-07	1.09E-06	1.0043E-03
520315.24	4258233.05	52633.38288	0.23669	0.74913	0.24353	0.81401	1.00E-03	5.56E-07	1.54E-06	5.72E-07	1.60E-06	1.0047E-03
520197.39	4259023.1	52630.88976	1.94881	0.27216	1.78884	0.27222	1.00E-03	4.58E-06	5.58E-07	4.20E-06	5.36E-07	1.0103E-03
520514.15	4258314.19	52627.47405	0.17709	0.24417	0.17673	0.25678	1.00E-03	4.16E-07	5.01E-07	4.15E-07	5.05E-07	1.0022E-03
520007.47	4258780.46	52597.54505	1.81517	0.7217	2.19534	0.69373	1.00E-03	4.26E-06	1.48E-06	5.15E-06	1.37E-06	1.0120E-03
520393.58	4258223.3	52568.44161	0.20748	0.45987	0.21361	0.49248	9.99E-04	4.87E-07	9.43E-07	5.01E-07	9.69E-07	1.0021E-03
520364.21	4258223.21	52566.05598	0.21711	0.54783	0.22317	0.58863	9.99E-04	5.10E-07	1.12E-06	5.24E-07	1.16E-06	1.0025E-03
520059.43	4258918.51	52537.50618	8.30808	0.4369	18.78784	0.41671	9.99E-04	1.95E-05	8.96E-07	4.41E-05	8.20E-07	1.0640E-03
520285.84	4258242.96	52495.07635	0.25056	0.92333	0.25955	1.01236	9.98E-04	5.88E-07	1.89E-06	6.09E-07	1.99E-06	1.0029E-03
520187.77	4258302.66	52447.34572	0.31536	2.32254	0.3339	2.63168	9.97E-04	7.40E-07	4.76E-06	7.84E-07	5.18E-06	1.0084E-03
520403.37	4258223.33	52371.39693	0.20418	0.43471	0.2101	0.46538	9.95E-04	4.79E-07	8.92E-07	4.93E-07	9.16E-07	9.9827E-04
520456.29	4258917.51	52369.84253	0.32732	0.15115	0.3118	0.15907	9.95E-04	7.68E-07	3.10E-07	7.32E-07	3.13E-07	9.9758E-04
520049.56	4258540.7	52344.02875	1.03533	7.62916	1.2709	5.3466	9.95E-04	2.43E-06	1.56E-05	2.98E-06	1.05E-05	1.0266E-03
520534.94	4258417.86	52330.15172	0.18154	0.20985	0.17939	0.22144	9.95E-04	4.26E-07	4.30E-07	4.21E-07	4.36E-07	9.9642E-04
520354.42	4258223.18	52305.21392	0.22013	0.58213	0.22611	0.62656	9.94E-04	5.17E-07	1.19E-06	5.31E-07	1.23E-06	9.9770E-04
520316.2	4259022.9	52304.18117	0.72959	0.17776	0.6922	0.19046	9.94E-04	1.71E-06	3.65E-07	1.63E-06	3.75E-07	9.9829E-04
520476.93	4258258.21	52259.10792	0.18393	0.29283	0.1857	0.31146	9.93E-04	4.32E-07	6.01E-07	4.36E-07	6.13E-07	9.9543E-04
520015.13	4258823.02	52252.81191	2.24438	0.59076	2.73789	0.57439	9.93E-04	5.27E-06	1.21E-06	6.43E-06	1.13E-06	1.0073E-03
520049.2	4258904.29	52229.04617	5.72055	0.45004	8.91349	0.43333	9.93E-04	1.34E-05	9.23E-07	2.09E-05	8.53E-07	1.0289E-03
520256.81	4259033	52187.50346	1.12134	0.21323	1.05434	0.2242	9.92E-04	2.63E-06	4.37E-07	2.48E-06	4.41E-07	9.9798E-04
520534.65	4258442.96	52161.93531	0.18452	0.20707	0.18201	0.21849	9.92E-04	4.33E-07	4.25E-07	4.27E-07	4.30E-07	9.9322E-04
520266.71	4259032.98	52161.39039	1.03758	0.20588	0.97815	0.21753	9.91E-04	2.44E-06	4.22E-07	2.30E-06	4.28E-07	9.9708E-04
520531.95	4258371.87	52160.98345	0.17731	0.21829	0.17651	0.23064	9.91E-04	4.16E-07	4.48E-07	4.14E-07	4.54E-07	9.9322E-04
520227.02	4258272.78	52160.46211	0.2845	1.51982	0.30077	1.69736	9.91E-04	6.68E-07	3.12E-06	7.06E-07	3.34E-06	9.9931E-04
520246.91	4259033.02	52158.56943	1.2162	0.22111	1.14031	0.23112	9.91E-04	2.86E-06	4.53E-07	2.68E-06	4.55E-07	9.9788E-04
520395.34	4258982.77	52155.39248	0.45387	0.15639	0.43183	0.16583	9.91E-04	1.07E-06	3.21E-07	1.01E-06	3.26E-07	9.9411E-04
520167.67	4259013.15	52150.79861	2.79852	0.30764	2.51735	0.29757	9.91E-04	6.57E-06	6.31E-07	5.91E-06	5.86E-07	1.0050E-03
520442.49	4258233.45	52104.8772	0.19273	0.34973	0.1971	0.37383	9.90E-04	4.52E-07	7.17E-07	4.63E-07	7.36E-07	9.9279E-04
520345.89	4259012.85	52085.90549	0.60481	0.1668	0.57493	0.17845	9.90E-04	1.42E-06	3.42E-07	1.35E-06	3.51E-07	9.9352E-04
520365.67	4259002.82	52077.93488	0.53737	0.16171	0.51118	0.17242	9.90E-04	1.26E-06	3.32E-07	1.20E-06	3.39E-07	9.9304E-04
520034.75	4258878.34	52059.04821	3.69518	0.48221	4.86576	0.46908	9.90E-04	8.68E-06	9.89E-07	1.14E-05	9.23E-07	1.0116E-03
520546.97	4258726.4	52046.27685	0.20442	0.15946	0.1958	0.16649	9.89E-04	4.80E-07	3.27E-07	4.60E-07	3.28E-07	9.9090E-04
520020.34	4258842.42	52037.74906	2.5567	0.54539	3.15349	0.53178	9.89E-04	6.00E-06	1.12E-06	7.40E-06	1.05E-06	1.0047E-03
520237.01	4259033.03	52027.95404	1.32402	0.22943	1.23738	0.23813	9.89E-04	3.11E-06	4.71E-07	2.90E-06	4.69E-07	9.9591E-04
520128.85	4258362.47	52024.00474	0.38325	5.92358	0.40067	7.02607	9.89E-04	9.00E-07	1.21E-05	9.41E-07	1.38E-05	1.0167E-03
520530.6	4258361.28	51965.60785	0.17651	0.22109	0.17608	0.23341	9.88E-04	4.14E-07	4.53E-07	4.13E-07	4.59E-07	9.8951E-04
520451.47	4258237.29	51960.31983	0.19014	0.33347	0.19395	0.35623	9.88E-04	4.46E-07	6.84E-07	4.55E-07	7.01E-07	9.8996E-04
520276.61	4259032.97	51959.98386	0.96259	0.19884	0.90928	0.21094	9.88E-04	2.26E-06	4.08E-07	2.13E-06	4.15E-07	9.9288E-04
520158.68	4259009.44	51954.89706	3.17876	0.31851	2.83875	0.30509	9.88E-04	7.46E-06	6.53E-07	6.66E-06	6.01E-07	1.0029E-03
520413.16	4258223.36	51938.97954	0.20068	0.41164	0.20641	0.44032	9.87E-04	4.71E-07	8.44E-07	4.85E-07	8.67E-07	9.8993E-04
520503.84	4258289.75	51937.56694	0.17777	0.25747	0.17738	0.27163	9.87E-04	4.17E-07	5.28E-07	4.16E-07	5.35E-07	9.8914E-04
520447.13	4258931.31	51935.67111	0.34331	0.15129	0.32681	0.15918	9.87E-04	8.06E-07	3.10E-07	7.67E-07	3.13E-07	9.8940E-04
520494.59	4258275.78	51930.65186	0.17954	0.26867	0.17968	0.28452	9.87E-04	4.22E-07	5.51E-07	4.22E-07	5.60E-07	9.8906E-04
520094.46	4258962.95	51925.37528	13.68566	0.39444	12.14811	0.36641	9.87E-04	3.21E-05	8.09E-07	2.85E-05	7.21E-07	1.0492E-03
520479.72	4258887.79	51889.70253	0.29201	0.14953	0.27916	0.15731	9.86E-04	6.86E-07	3.07E-07	6.55E-07	3.10E-07	9.8829E-04
520019.93	4258628.11	51863.93831	1.32087	2.24134	1.70421	1.94819	9.86E-04	3.10E-06	4.60E-06	4.00E-06	3.83E-06	1.0014E-03
520344.64	4258223.15	51860.30452	0.22294	0.61948	0.22897	0.66789	9.86E-04	5.23E-07	1.27E-06	5.38E-07	1.31E-06	9.8942E-04
520187.49	4259023.12	51854.65768	2.18105	0.2817	1.99037	0.27846	9.86E-04	5.12E-06	5.78E-07	4.67E-06	5.48E-07	9.9658E-04
520420.85	4258962.2	51829.59005	0.39513	0.15333	0.37623	0.16164	9.85E-04	9.28E-07	3.14E-07	8.83E-07	3.18E-07	9.8763E-04
520113.27	4258980.7	51821.79389	7.89723	0.37383	6.66998	0.34655	9.85E-04	1.85E-05	7.67E-07	1.57E-05	6.82E-07	1.0207E-03
520197.59	4258292.69	51804.50569	0.30468	2.07052	0.32281	2.33741	9.85E-04	7.15E-07	4.25E-06	7.58E-07	4.60E-06	9.9503E-04
520007.12	4258683.15	51795.19095	1.37204	1.32904	1.6948	1.21691	9.85E-04	3.22E-06	2.73E-06	3.98E-06	2.40E-06	9.9685E-04
520525.4	4258801.87	51774.07296	0.23236	0.15207	0.22269	0.15879	9.84E-04	5.46E-07	3.12E-07	5.23E-07	3.13E-07	9.8582E-04
520227.11	4259033.05	51773.26276	1.44734	0.23812	1.3476	0.24511	9.84E-04	3.40E-06	4.88E-07	3.16E-06	4.82E-07	9.9165E-04
520470.69	4258901.54	51771.97826	0.3054	0.14951	0.29135	0.15734	9.84E-04	7.17E-07	3.07E-07	6.84E-07	3.10E-07	9.8611E-04
520305.45	4258233.02	51756.46872	0.23922	0.80275	0.24669	0.8747	9.84E-04	5.62E-07	1.65E-06	5.79E-07	1.72E-06	9.8831E-04
520534.32	4258382.9	51728.63554	0.17759	0.2147	0.17634	0.22687	9.83E-04	4.17E-07	4.40E-07	4.14E-07	4.47E-07	9.8499E-04
520528.93	4258793.43	51719.30066	0.22807	0.15266	0.21857	0.15929	9.83E-04	5.35E-07	3.13E-07	5.13E-07	3.14E-07	9.8477E-04
520149.69	4259005.73	51684.17746	3.65988	0.32897	3.24065	0.31221	9.82E-04	8.59E-06	6.75E-07	7.61E-06	6.15E-07	9.9991E-04
520286.51	4259032.95	51649.89643	0.89537	0.19214	0.84701	0.20452	9.82E-04	2.10E-06	3.94E-07	1.99E-06	4.03E-07	9.8666E-04
520003.14	4258745.9	51643.42803	1.54648	0.86765	1.88355	0.82097	9.82E-04	3.63E-06	1.78E-06	4.42E-06	1.62E-06	9.9310E-04
520488.97	4258873.96	51642.74893	0.27914	0.14893	0.26693	0.15663	9.82E-04	6.55E-07	3.05E-07	6.27E-07	3.08E-07	9.8353E-04
520460.45	4258241.14	51603.4084	0.18738	0.31853	0.19063	0.33991	9.81E-04	4.40E-07	6.53E-07	4.48E-07	6.69E-07	9.8310E-04
520011.5	4258814.28	51587.76101	2.06004	0.61102	2.50103	0.59283	9.81E-04	4.84E-06	1.25E-06	5.87E-06	1.17E-06	9.9372E-04
520532.46	4258785	51585.3233	0.22385	0.1533	0.21455	0.15983	9.81E-04	5.26E-07	3.14E-07	5.04E-07	3.15E-07	9.8220E-04
520326.1	4259022.89	51546.71655	0.68439	0.17253	0.6495	0.18491	9.80E-04	1.61E-06	3.54E-07	1.52E-06	3.64E-07	9.8366E-04
520529.45	4258350.78	51534.27337	0.17559	0.22377	0.1754	0.23595	9.80E-04	4.12E-07	4.59E-07	4.12E-07	4.64E-07	9.8132E-04
520385.46	4258992.79	51522.71008	0.47982	0.15705	0.45662	0.16687	9.79E-04	1.13E-06	3.22E-07	1.07E-06	3.28E-07	9.8220E-04
520551.22	4258692.32	51497.93615	0.19717	0.16419	0.18933	0.17151	9.79E-04	4.63E-07	3.37E-07	4.44E-07	3.38E-07	9.8046E-04
520017.12	4258636.77	51496.34068	1.31954	2.02975	1.68549	1.78629	9.79E-04	3.10E-06	4.16E-06	3.96E-06	3.52E-06	9.9359E-04
520022.72	4258853.39	51493.17727	2.71947	0.5215	3.3783	0.50893	9.79E-04	6.38E-06	1.07E-06	7.93E-06	1.00E-06	9.9518E-04
520511.13	4258834.76	51485.41954	0.2502	0.14979	0.23979	0.15692	9.79E-04	5.87E-07	3.07E-07	5.63E-07	3.09E-07	9.8041E-04
520485.55	4258261.89	51427.13856	0.181	0.28097	0.1821	0.29846	9.78E-04	4.25E-07	5.76E-07	4.28E-07	5.88E-07	9.7955E-04
520217.21	4259033.07	51411.27756	1.58964	0.24714	1.47397	0.252	9.77E-04	3.73E-06	5.07E-07	3.46E-06	4.96E-07	9.8543E-04
520403.79	4258979.27	51410.35652	0.43352	0.15425	0.41242	0.16329	9.77E-04	1.02E-06	3.16E-07	9.68E-07	3.21E-07	9.7984E-04
520256.44	4258252.87	51393.36114	0.26375	1.16754	0.27629	1.29228	9.77E-04	6.19E-07	2.39E-06	6.49E-07	2.54E-06	9.8310E-04
520513.34	4258303.83	51390.38429	0.1758	0.24625	0.17533	0.25902	9.77E-04	4.13E-07	5.05E-07	4.12E-07	5.10E-07	9.7868E-04
520422.94	4258223.39	51389.70531	0.19714	0.39028	0.20259	0.41718	9.77E-04	4.63E-07	8.00E-07	4.76E-07	8.21E-07	9.7939E-04
520140.71	4259002.02	51382.53332	4.29441	0.33894	3.76041	0.31895	9.77E-04	1.01E-05	6.95E-07	8.83E-06	6.28E-07	9.9692E-04
520535.99	4258776.56	51368.47685	0.21971	0.1539	0.21058	0.16032	9.76E-04	5.16E-07	3.16E-07	4.94E-07	3.16E-07	9.7806E-04
520438.16	4258945.03	51356.61052	0.36031	0.15123	0.34285	0.15913	9.76E-04	8.46E-07	3.10E-07	8.05E-07	3.13E-07	9.7847E-04
520334.85	4258223.12	51355.84737	0.22573	0.66005	0.23186	0.71333	9.76E-04	5.30E-07	1.35E-06	5.44E-07	1.40E-06	9.8001E-04
520004.25	4258700.34	51337.42457	1.38572	1.16109	1.69441	1.07433	9.76E-04	3.25E-06	2.38E-06	3.98E-06	2.11E-06	9.8756E-04
520276.05	4258242.93	51285.56373	0.25264	0.99701	0.26282	1.09652	9.75E-04	5.93E-07	2.04E-06	6.17E-07	2.16E-06	9.8026E-04
520296.42	4259032.93	51231.94341	0.83473	0.18577	0.79036	0.19827	9.74E-04	1.96E-06	3.81E-07	1.86E-06	3.90E-07	9.7841E-04
520498.46	4258860.02	51218.71692	0.26657	0.14867	0.25531	0.15615	9.74E-04	6.26E-07	3.05E-07	5.99E-07	3.07E-07	9.7541E-04
520003.81	4258771.61	51181.73719	1.66241	0.7483	2.002	0.71654	9.73E-04	3.90E-06	1.53E-06	4.70E-06	1.41E-06	9.8442E-04
520534.69	4258468.95	51082.91247	0.18702	0.20315	0.18388	0.21469	9.71E-04	4.39E-07	4.17E-07	4.32E-07	4.23E-07	9.7270E-04
520539.52	4258768.13	51058.555	0.21567	0.15432	0.20665	0.16068	9.71E-04	5.06E-07	3.16E-07	4.85E-07	3.16E-07	9.7216E-04
520469.42	4258244.98	51005.71469	0.18445	0.30487	0.18718	0.32481	9.70E-04	4.33E-07	6.25E-07	4.39E-07	6.39E-07	9.7166E-04
520131.72	4258998.31	51000.95362	5.12534	0.34782	4.43578	0.32503	9.69E-04	1.20E-05	7.13E-07	1.04E-05	6.40E-07	9.9324E-04
520236.84	4258262.81	50997.38356	0.2744	1.38833	0.28947	1.54556	9.69E-04	6.44E-07	2.85E-06	6.80E-07	3.04E-06	9.7658E-04
520355.79	4259012.84	50985.97097	0.57001	0.16247	0.54187	0.17358	9.69E-04	1.34E-06	3.33E-07	1.27E-06	3.42E-07	9.7244E-04
520177.59	4259023.13	50985.23408	2.46169	0.29091	2.23212	0.28413	9.69E-04	5.78E-06	5.97E-07	5.24E-06	5.59E-07	9.8131E-04
520550.54	4258717.87	50982.09096	0.20068	0.15932	0.19229	0.16645	9.69E-04	4.71E-07	3.27E-07	4.51E-07	3.28E-07	9.7065E-04
520002.21	4258719.55	50951.11547	1.41943	1.01423	1.72308	0.948	9.68E-04	3.33E-06	2.08E-06	4.05E-06	1.87E-06	9.7981E-04
520207.41	4258282.72	50946.26659	0.29413	1.86056	0.3118	2.09034	9.68E-04	6.91E-07	3.82E-06	7.32E-07	4.11E-06	9.7775E-04
520207.31	4259033.08	50931.01458	1.75525	0.25635	1.62009	0.25868	9.68E-04	4.12E-06	5.26E-07	3.80E-06	5.09E-07	9.7707E-04
520104.2	4258976.96	50879.93197	10.15584	0.37771	8.60388	0.35017	9.67E-04	2.38E-05	7.75E-07	2.02E-05	6.89E-07	1.0126E-03
520060.45	4258928.92	50876.54644	8.68165	0.42011	18.28267	0.40053	9.67E-04	2.04E-05	8.62E-07	4.29E-05	7.88E-07	1.0320E-03
520528.46	4258340.34	50868.85699	0.17451	0.22658	0.17447	0.23851	9.67E-04	4.10E-07	4.65E-07	4.10E-07	4.70E-07	9.6868E-04
520036.03	4258888.86	50812.04349	3.84751	0.46245	5.11585	0.44975	9.66E-04	9.03E-06	9.48E-07	1.20E-05	8.85E-07	9.8872E-04
520295.66	4258232.99	50801.78433	0.24159	0.86207	0.24989	0.94223	9.66E-04	5.67E-07	1.77E-06	5.87E-07	1.85E-06	9.7043E-04
520432.73	4258223.42	50785.78509	0.19363	0.37033	0.19868	0.39572	9.65E-04	4.55E-07	7.60E-07	4.66E-07	7.79E-07	9.6781E-04
520007.88	4258805.54	50772.22612	1.895	0.6321	2.28886	0.61175	9.65E-04	4.45E-06	1.30E-06	5.37E-06	1.20E-06	9.7741E-04
520336	4259022.87	50755.06502	0.64323	0.16772	0.61057	0.1797	9.65E-04	1.51E-06	3.44E-07	1.43E-06	3.54E-07	9.6840E-04
520465.01	4258913.9	50754.70828	0.31438	0.14867	0.29967	0.15641	9.65E-04	7.38E-07	3.05E-07	7.04E-07	3.08E-07	9.6681E-04
520050.41	4258914.79	50732.39467	5.98973	0.43244	9.58671	0.41613	9.64E-04	1.41E-05	8.87E-07	2.25E-05	8.19E-07	1.0026E-03
520375.57	4259002.8	50725.74798	0.50783	0.15768	0.48306	0.16788	9.64E-04	1.19E-06	3.23E-07	1.13E-06	3.30E-07	9.6718E-04
520306.32	4259032.92	50710.03475	0.77997	0.17985	0.73906	0.19234	9.64E-04	1.83E-06	3.69E-07	1.74E-06	3.79E-07	9.6822E-04
520325.06	4258223.08	50708.18529	0.22833	0.70447	0.23479	0.76321	9.64E-04	5.36E-07	1.44E-06	5.51E-07	1.50E-06	9.6791E-04
520429.35	4258958.68	50692.09557	0.37819	0.15091	0.35986	0.15893	9.64E-04	8.88E-07	3.10E-07	8.45E-07	3.13E-07	9.6592E-04
520119.03	4258372.44	50645.79008	0.39385	7.47085	0.41255	8.95863	9.63E-04	9.25E-07	1.53E-05	9.69E-07	1.76E-05	9.9754E-04
520024.39	4258864.07	50634.30232	2.84704	0.49902	3.55801	0.48729	9.62E-04	6.68E-06	1.02E-06	8.35E-06	9.59E-07	9.7949E-04
520538.28	4258426.62	50580.58641	0.18076	0.20621	0.17843	0.21746	9.61E-04	4.24E-07	4.23E-07	4.19E-07	4.28E-07	9.6314E-04
520412.24	4258975.77	50565.47634	0.41437	0.15229	0.39435	0.16092	9.61E-04	9.73E-07	3.12E-07	9.26E-07	3.17E-07	9.6369E-04
520520.56	4258820.85	50519.3658	0.2392	0.14946	0.22932	0.15628	9.60E-04	5.62E-07	3.07E-07	5.38E-07	3.08E-07	9.6200E-04
520508.25	4258845.96	50495.80425	0.25443	0.14816	0.24379	0.15536	9.60E-04	5.97E-07	3.04E-07	5.72E-07	3.06E-07	9.6161E-04
520503.29	4258279.5	50486.8132	0.17635	0.25889	0.17616	0.27348	9.60E-04	4.14E-07	5.31E-07	4.14E-07	5.38E-07	9.6156E-04
520007.12	4258673.87	50432.43184	1.31288	1.4118	1.62182	1.28637	9.59E-04	3.08E-06	2.90E-06	3.81E-06	2.53E-06	9.7095E-04
520122.73	4258994.6	50405.58852	6.23603	0.355	5.33205	0.33013	9.58E-04	1.46E-05	7.28E-07	1.25E-05	6.50E-07	9.8666E-04
520494.17	4258265.58	50317.30013	0.17798	0.2701	0.17854	0.28635	9.56E-04	4.18E-07	5.54E-07	4.19E-07	5.64E-07	9.5840E-04
520383.82	4258213.27	50315.93701	0.2067	0.49024	0.2126	0.52484	9.56E-04	4.85E-07	1.01E-06	4.99E-07	1.03E-06	9.5944E-04
520455.77	4258927.73	50295.1927	0.32896	0.1487	0.31327	0.15641	9.56E-04	7.72E-07	3.05E-07	7.35E-07	3.08E-07	9.5814E-04
520538.77	4258402.04	50278.75524	0.17771	0.2088	0.17581	0.22035	9.56E-04	4.17E-07	4.28E-07	4.13E-07	4.34E-07	9.5740E-04
520478.4	4258248.82	50276.40009	0.18148	0.29202	0.18362	0.31063	9.56E-04	4.26E-07	5.99E-07	4.31E-07	6.11E-07	9.5773E-04
520523.13	4258318.03	50241.17613	0.17363	0.23488	0.17338	0.24676	9.55E-04	4.08E-07	4.82E-07	4.07E-07	4.86E-07	9.5678E-04
520197.41	4259033.1	50232.71609	1.94833	0.26537	1.7888	0.26483	9.55E-04	4.57E-06	5.44E-07	4.20E-06	5.21E-07	9.6467E-04
520393.61	4258213.3	50224.46815	0.20362	0.46308	0.20956	0.49526	9.55E-04	4.78E-07	9.50E-07	4.92E-07	9.75E-07	9.5757E-04
520374.03	4258213.24	50219.84578	0.2096	0.5197	0.21548	0.5569	9.55E-04	4.92E-07	1.07E-06	5.06E-07	1.10E-06	9.5775E-04

520040.1	4258900.54	50186.90411	4.32893	0.44531	5.9603	0.43208	9.54E-04	1.02E-05	9.13E-07	1.40E-05	8.51E-07	9.7988E-04
520546.59	4258751.26	50135.92322	0.20782	0.15494	0.19907	0.16132	9.53E-04	4.88E-07	3.18E-07	4.67E-07	3.18E-07	9.5458E-04
520364.24	4258213.21	50124.80387	0.21259	0.55128	0.21832	0.59191	9.53E-04	4.99E-07	1.13E-06	5.13E-07	1.17E-06	9.5609E-04
520512.62	4258293.51	50087.11755	0.17445	0.24812	0.174	0.26111	9.52E-04	4.10E-07	5.09E-07	4.08E-07	5.14E-07	9.5391E-04
520316.22	4259032.9	50052.05277	0.73016	0.17428	0.69214	0.18663	9.51E-04	1.71E-06	3.57E-07	1.62E-06	3.67E-07	9.5546E-04
520217.23	4258272.75	50047.74357	0.28405	1.68176	0.30095	1.8825	9.51E-04	6.67E-07	3.45E-06	7.07E-07	3.71E-06	9.5985E-04
520442.52	4258223.45	50027.51265	0.19005	0.35187	0.19467	0.37578	9.51E-04	4.46E-07	7.22E-07	4.57E-07	7.40E-07	9.5330E-04
520479.07	4258898.07	50024.81409	0.29389	0.14726	0.28074	0.15488	9.51E-04	6.90E-07	3.02E-07	6.59E-07	3.05E-07	9.5284E-04
520403.4	4258213.33	50020.49217	0.20047	0.43788	0.20636	0.46796	9.51E-04	4.71E-07	8.98E-07	4.84E-07	9.21E-07	9.5357E-04
520167.69	4259023.15	50019.17754	2.80632	0.29947	2.52645	0.2891	9.51E-04	6.59E-06	6.14E-07	5.93E-06	5.69E-07	9.6448E-04
520451.41	4258227.26	49978.86458	0.18772	0.33537	0.19182	0.3581	9.50E-04	4.41E-07	6.88E-07	4.50E-07	7.05E-07	9.5229E-04
520266.26	4258242.9	49978.74312	0.25435	1.07993	0.26585	1.19131	9.50E-04	5.97E-07	2.21E-06	6.24E-07	2.35E-06	9.5579E-04
520315.27	4258223.05	49969.18471	0.23081	0.75318	0.23779	0.81824	9.50E-04	5.42E-07	1.54E-06	5.58E-07	1.61E-06	9.5408E-04
520099.36	4258402.38	49956.11732	0.44004	14.01788	0.46876	15.73276	9.50E-04	1.03E-06	2.87E-05	1.10E-06	3.10E-05	1.0114E-03
520095.14	4258973.22	49932.56186	13.38111	0.37983	11.83297	0.35309	9.49E-04	3.14E-05	7.79E-07	2.78E-05	6.95E-07	1.0098E-03
520488.17	4258884.29	49923.47747	0.28108	0.14693	0.26883	0.15449	9.49E-04	6.60E-07	3.01E-07	6.31E-07	3.04E-07	9.5085E-04
520266.73	4259042.98	49887.79774	1.03819	0.20173	0.97811	0.21279	9.48E-04	2.44E-06	4.14E-07	2.30E-06	4.19E-07	9.5384E-04
520395.36	4258992.77	49884.01248	0.45465	0.15313	0.43236	0.1625	9.48E-04	1.07E-06	3.14E-07	1.02E-06	3.20E-07	9.5092E-04
520554.12	4258709.33	49855.29915	0.19708	0.15927	0.18896	0.16642	9.48E-04	4.63E-07	3.27E-07	4.44E-07	3.28E-07	9.4922E-04
520158.77	4259019.47	49841.20528	3.18862	0.30963	2.84869	0.29611	9.47E-04	7.49E-06	6.35E-07	6.69E-06	5.83E-07	9.6278E-04
520354.46	4258213.18	49835.52557	0.21536	0.5856	0.22107	0.62994	9.47E-04	5.06E-07	1.20E-06	5.19E-07	1.24E-06	9.5075E-04
520246.93	4259043.02	49834.12762	1.21655	0.21646	1.14023	0.22582	9.47E-04	2.86E-06	4.44E-07	2.68E-06	4.45E-07	9.5368E-04
520256.83	4259043	49822.00083	1.12107	0.20875	1.05353	0.21911	9.47E-04	2.63E-06	4.28E-07	2.47E-06	4.31E-07	9.5299E-04
520345.9	4259022.85	49814.4603	0.6054	0.16324	0.57474	0.17474	9.47E-04	1.42E-06	3.35E-07	1.35E-06	3.44E-07	9.5033E-04
520004.25	4258796.8	49803.90937	1.74678	0.65376	2.09638	0.63103	9.47E-04	4.10E-06	1.34E-06	4.92E-06	1.24E-06	9.5829E-04
520365.69	4259012.82	49802.85003	0.53797	0.15836	0.5114	0.16895	9.47E-04	1.26E-06	3.25E-07	1.20E-06	3.33E-07	9.4978E-04
520246.66	4258252.84	49796.45581	0.26476	1.27394	0.27867	1.41373	9.47E-04	6.22E-07	2.61E-06	6.54E-07	2.78E-06	9.5321E-04
520237.03	4259043.03	49778.72409	1.32514	0.22463	1.23836	0.23262	9.46E-04	3.11E-06	4.61E-07	2.91E-06	4.58E-07	9.5314E-04
520446.73	4258941.48	49777.30603	0.34463	0.14864	0.32798	0.15634	9.46E-04	8.09E-07	3.05E-07	7.70E-07	3.08E-07	9.4837E-04
520285.87	4258232.96	49715.23902	0.24365	0.92823	0.25303	1.01746	9.45E-04	5.72E-07	1.90E-06	5.94E-07	2.00E-06	9.5007E-04
520276.63	4259042.97	49700.08087	0.96315	0.1949	0.90916	0.20646	9.45E-04	2.26E-06	4.00E-07	2.13E-06	4.06E-07	9.4991E-04
520460.31	4258231.06	49688.35545	0.18516	0.32037	0.18877	0.3418	9.44E-04	4.35E-07	6.57E-07	4.43E-07	6.73E-07	9.4669E-04
520413.19	4258213.36	49681.83144	0.19724	0.41455	0.203	0.44274	9.44E-04	4.63E-07	8.50E-07	4.77E-07	8.72E-07	9.4702E-04
520025.9	4258874.69	49671.07449	2.97054	0.478	3.73421	0.46695	9.44E-04	6.97E-06	9.80E-07	8.77E-06	9.19E-07	9.6180E-04
520168.16	4258312.6	49669.10503	0.32169	3.01447	0.33777	3.44665	9.44E-04	7.55E-07	6.18E-06	7.93E-07	6.78E-06	9.5864E-04
520420.69	4258972.28	49635.33393	0.39637	0.15032	0.37739	0.15858	9.43E-04	9.31E-07	3.08E-07	8.86E-07	3.12E-07	9.4591E-04
520497.49	4258870.43	49589.53069	0.26876	0.14647	0.25723	0.1539	9.43E-04	6.31E-07	3.00E-07	6.04E-07	3.03E-07	9.4445E-04
520149.85	4259015.79	49578.11913	3.66539	0.31928	3.24685	0.30267	9.42E-04	8.61E-06	6.55E-07	7.62E-06	5.96E-07	9.5987E-04
520158.34	4258322.56	49575.84239	0.33155	3.48488	0.34726	3.99903	9.42E-04	7.78E-07	7.15E-06	8.15E-07	7.87E-06	9.5896E-04
520227.13	4259043.05	49557.11074	1.44862	0.23309	1.34917	0.23934	9.42E-04	3.40E-06	4.78E-07	3.17E-06	4.71E-07	9.4951E-04
520000.14	4258762.77	49512.7052	1.51737	0.77591	1.82693	0.73932	9.41E-04	3.56E-06	1.59E-06	4.29E-06	1.46E-06	9.5205E-04
520550.12	4258742.83	49510.13172	0.20404	0.15508	0.19546	0.16156	9.41E-04	4.79E-07	3.18E-07	4.59E-07	3.18E-07	9.4267E-04
520487.38	4258252.66	49492.95819	0.17858	0.27941	0.18	0.29694	9.41E-04	4.19E-07	5.73E-07	4.23E-07	5.85E-07	9.4277E-04
520187.51	4259033.12	49480.79549	2.17737	0.27429	1.98822	0.2706	9.41E-04	5.11E-06	5.63E-07	4.67E-06	5.33E-07	9.5142E-04
520177.98	4258302.63	49446.00498	0.31167	2.64031	0.32825	3.00201	9.40E-04	7.32E-07	5.42E-06	7.71E-07	5.91E-06	9.5271E-04
519999.42	4258736.93	49444.58686	1.40886	0.89888	1.70178	0.8466	9.40E-04	3.31E-06	1.84E-06	4.00E-06	1.67E-06	9.5067E-04
520344.67	4258213.15	49384.24692	0.21796	0.62301	0.2238	0.67146	9.39E-04	5.12E-07	1.28E-06	5.25E-07	1.32E-06	9.4234E-04
520326.12	4259032.89	49377.9411	0.68499	0.16918	0.64958	0.18128	9.39E-04	1.61E-06	3.47E-07	1.53E-06	3.57E-07	9.4242E-04
520286.53	4259042.95	49323.81678	0.89539	0.18821	0.84601	0.20009	9.38E-04	2.10E-06	3.86E-07	1.99E-06	3.94E-07	9.4242E-04
520437.86	4258955.16	49313.96182	0.36195	0.14858	0.34439	0.15633	9.37E-04	8.50E-07	3.05E-07	8.09E-07	3.08E-07	9.3964E-04
520522.21	4258307.63	49293.71335	0.17249	0.23699	0.17205	0.24895	9.37E-04	4.05E-07	4.86E-07	4.04E-07	4.90E-07	9.3877E-04
520385.47	4259002.79	49285.24123	0.48054	0.1538	0.45705	0.16353	9.37E-04	1.13E-06	3.15E-07	1.07E-06	3.22E-07	9.3966E-04
520140.93	4259012.11	49256.28601	4.2789	0.32828	3.75292	0.30877	9.36E-04	1.00E-05	6.73E-07	8.81E-06	6.08E-07	9.5641E-04
520061.39	4258939.3	49247.53632	9.06667	0.40428	19.47478	0.38534	9.36E-04	2.13E-05	8.29E-07	4.57E-05	7.59E-07	1.0047E-03
520051.52	4258925.24	49241.67015	6.24871	0.41594	10.25635	0.40004	9.36E-04	1.47E-05	8.53E-07	2.41E-05	7.87E-07	9.7638E-04
520422.98	4258213.39	49210.04238	0.19393	0.39295	0.19948	0.41939	9.35E-04	4.55E-07	8.06E-07	4.68E-07	8.26E-07	9.3795E-04
520217.23	4259043.07	49203.63464	1.59085	0.24173	1.47568	0.24586	9.35E-04	3.73E-06	4.96E-07	3.46E-06	4.84E-07	9.4345E-04
520469.2	4258234.87	49177.75301	0.18242	0.30666	0.18557	0.3267	9.35E-04	4.28E-07	6.29E-07	4.36E-07	6.43E-07	9.3692E-04
520473.72	4258910.29	49173.11027	0.30212	0.14624	0.28823	0.1538	9.35E-04	7.09E-07	3.00E-07	6.77E-07	3.03E-07	9.3668E-04
520404.09	4258989.16	49167.46623	0.43367	0.15092	0.41233	0.1599	9.35E-04	1.02E-06	3.10E-07	9.68E-07	3.15E-07	9.3720E-04
520305.48	4258223.02	49150.71808	0.23316	0.80684	0.24084	0.87923	9.34E-04	5.47E-07	1.65E-06	5.65E-07	1.73E-06	9.3876E-04
520227.05	4258262.78	49084.97638	0.27436	1.52854	0.29036	1.70522	9.33E-04	6.44E-07	3.13E-06	6.82E-07	3.36E-06	9.4083E-04
520538.16	4258478.07	49075.74495	0.18586	0.19953	0.18235	0.21084	9.33E-04	4.36E-07	4.09E-07	4.28E-07	4.15E-07	9.3453E-04
520507.07	4258856.46	49051.0903	0.25678	0.14608	0.246	0.15327	9.32E-04	6.03E-07	3.00E-07	5.78E-07	3.02E-07	9.3415E-04
520086.07	4258969.48	49050.76739	14.12102	0.38064	18.36207	0.35556	9.32E-04	3.32E-05	7.81E-07	4.31E-05	7.00E-07	1.0101E-03
520502.79	4258269.27	49046.58877	0.17491	0.26023	0.17504	0.27525	9.32E-04	4.11E-07	5.34E-07	4.11E-07	5.42E-07	9.3418E-04
520029.77	4258589.27	49037.22162	1.17454	3.3659	1.54052	2.76174	9.32E-04	2.76E-06	6.90E-06	3.62E-06	5.44E-06	9.5082E-04
520187.8	4258292.66	49022.26699	0.30174	2.3358	0.31865	2.64153	9.32E-04	7.08E-07	4.79E-06	7.48E-07	5.20E-06	9.4327E-04
520138.7	4258342.5	49006.32667	0.35212	4.86375	0.36653	5.72042	9.32E-04	8.27E-07	9.98E-06	8.60E-07	1.13E-05	9.5444E-04
520132.02	4259008.43	48892.27455	5.09011	0.33638	4.41394	0.31434	9.29E-04	1.19E-05	6.90E-07	1.04E-05	6.19E-07	9.5297E-04
520296.43	4259042.93	48887.23938	0.83443	0.18199	0.78915	0.19404	9.29E-04	1.96E-06	3.73E-07	1.85E-06	3.82E-07	9.3382E-04
520041.4	4258911.07	48878.88804	4.51393	0.42801	6.30897	0.41506	9.29E-04	1.06E-05	8.78E-07	1.48E-05	8.17E-07	9.5620E-04
520334.88	4258213.12	48842.46983	0.22046	0.6637	0.22658	0.71696	9.28E-04	5.18E-07	1.36E-06	5.32E-07	1.41E-06	9.3223E-04
520511.98	4258283.22	48832.89653	0.17314	0.24963	0.17277	0.26301	9.28E-04	4.06E-07	5.12E-07	4.06E-07	5.18E-07	9.3007E-04
520542.05	4258410.67	48829.29932	0.17703	0.20518	0.17489	0.21635	9.28E-04	4.16E-07	4.21E-07	4.11E-07	4.26E-07	9.2983E-04
520019.89	4258618.41	48821.82738	1.21338	2.36728	1.55596	2.04395	9.28E-04	2.85E-06	4.86E-06	3.65E-06	4.02E-06	9.4339E-04
520464.41	4258924.15	48795.56843	0.31602	0.14634	0.30115	0.15388	9.28E-04	7.42E-07	3.00E-07	7.07E-07	3.03E-07	9.2957E-04
520007.12	4258664.6	48794.9619	1.24983	1.49798	1.54488	1.35767	9.28E-04	2.93E-06	3.07E-06	3.63E-06	2.67E-06	9.3981E-04
520355.8	4259022.84	48779.54041	0.5706	0.15898	0.54167	0.16998	9.27E-04	1.34E-06	3.26E-07	1.27E-06	3.35E-07	9.3048E-04
520541.61	4258435.38	48768.84093	0.17992	0.2026	0.17741	0.21358	9.27E-04	4.22E-07	4.16E-07	4.17E-07	4.20E-07	9.2868E-04
520553.65	4258734.39	48768.36828	0.20039	0.15503	0.19195	0.16164	9.27E-04	4.70E-07	3.18E-07	4.51E-07	3.18E-07	9.2856E-04
520207.32	4259043.08	48744.07634	1.75653	0.25049	1.6219	0.25214	9.27E-04	4.12E-06	5.14E-07	3.81E-06	4.96E-07	9.3548E-04
520177.6	4259033.13	48709.51663	2.45858	0.28306	2.23125	0.27598	9.26E-04	5.77E-06	5.81E-07	5.24E-06	5.43E-07	9.3801E-04
520432.76	4258213.42	48673.55608	0.19063	0.37283	0.19587	0.39779	9.25E-04	4.48E-07	7.65E-07	4.60E-07	7.83E-07	9.2765E-04
520000.62	4258788.06	48667.10484	1.61024	0.67614	1.92163	0.65062	9.25E-04	3.78E-06	1.39E-06	4.51E-06	1.28E-06	9.3603E-04
520109.21	4258382.41	48663.60889	0.40343	9.86327	0.42459	11.85859	9.25E-04	9.47E-07	2.02E-05	9.97E-07	2.33E-05	9.7052E-04
520013.67	4258849.66	48637.59529	2.23652	0.51788	2.71056	0.50576	9.25E-04	5.25E-06	1.06E-06	6.36E-06	9.96E-07	9.3818E-04
520027.27	4258885.25	48631.13569	3.08733	0.45838	3.90798	0.44787	9.24E-04	7.25E-06	9.40E-07	9.17E-06	8.82E-07	9.4263E-04
520539.44	4258365.07	48627.52332	0.17282	0.21289	0.17207	0.2247	9.24E-04	4.06E-07	4.37E-07	4.04E-07	4.42E-07	9.2601E-04
520008.1	4258830.19	48601.46538	1.96654	0.55895	2.35671	0.54413	9.24E-04	4.62E-06	1.15E-06	5.53E-06	1.07E-06	9.3619E-04
520557.69	4258700.8	48598.35108	0.1936	0.15932	0.18577	0.16639	9.24E-04	4.55E-07	3.27E-07	4.36E-07	3.28E-07	9.2531E-04
520429.13	4258968.78	48595.17174	0.37956	0.14814	0.36122	0.15607	9.24E-04	8.91E-07	3.04E-07	8.48E-07	3.07E-07	9.2606E-04
520276.08	4258232.93	48581.26838	0.24548	1.00212	0.25603	1.10198	9.23E-04	5.76E-07	2.06E-06	6.01E-07	2.17E-06	9.2884E-04
520336.02	4259032.87	48576.61227	0.64365	0.16444	0.61053	0.17619	9.23E-04	1.51E-06	3.37E-07	1.43E-06	3.47E-07	9.2698E-04
520256.48	4258242.87	48565.65748	0.25559	1.17375	0.26841	1.29839	9.23E-04	6.00E-07	2.41E-06	6.30E-07	2.56E-06	9.2934E-04
520478.09	4258238.67	48558.12968	0.17963	0.2937	0.18223	0.3125	9.23E-04	4.22E-07	6.02E-07	4.28E-07	6.15E-07	9.2507E-04
520375.59	4259012.8	48544.57112	0.50838	0.15446	0.48339	0.16455	9.23E-04	1.19E-06	3.17E-07	1.13E-06	3.24E-07	9.2571E-04
520540.93	4258375.72	48539.10895	0.17346	0.21015	0.1723	0.22189	9.23E-04	4.07E-07	4.31E-07	4.05E-07	4.37E-07	9.2432E-04
520197.62	4258282.69	48516.19038	0.29214	2.08264	0.30899	2.3465	9.22E-04	6.86E-07	4.27E-06	7.25E-07	4.62E-06	9.3251E-04
520538.17	4258354.51	48474.97245	0.17204	0.2154	0.17161	0.22716	9.21E-04	4.04E-07	4.42E-07	4.03E-07	4.47E-07	9.2312E-04
520306.33	4259042.92	48470.92257	0.78014	0.17631	0.73842	0.1884	9.21E-04	1.83E-06	3.62E-07	1.73E-06	3.71E-07	9.2564E-04
520039.65	4258560.14	48467.78435	1.07981	5.00718	1.37521	3.83459	9.21E-04	2.54E-06	1.03E-05	3.23E-06	7.55E-06	9.4487E-04
520496.36	4258256.51	48432.04771	0.17551	0.26842	0.17638	0.28466	9.21E-04	4.12E-07	5.51E-07	4.14E-07	5.60E-07	9.2254E-04
520412.82	4258985.54	48355.64303	0.41396	0.14896	0.39376	0.15754	9.19E-04	9.72E-07	3.06E-07	9.24E-07	3.10E-07	9.2167E-04
520455.3	4258937.93	48323.80362	0.33048	0.14626	0.31466	0.15377	9.19E-04	7.76E-07	3.00E-07	7.39E-07	3.03E-07	9.2067E-04
520123.1	4259004.75	48286.17482	6.14886	0.34272	5.27964	0.31889	9.18E-04	1.44E-05	7.03E-07	1.24E-05	6.28E-07	9.4599E-04
520487.45	4258894.6	48274.65997	0.28282	0.14496	0.27064	0.15233	9.18E-04	6.64E-07	2.97E-07	6.35E-07	3.00E-07	9.1951E-04
520516.95	4258842.36	48255.50498	0.24515	0.14552	0.23493	0.15242	9.17E-04	5.76E-07	2.98E-07	5.52E-07	3.00E-07	9.1898E-04
520325.09	4258213.08	48217.00653	0.22287	0.70815	0.22942	0.76702	9.17E-04	5.23E-07	1.45E-06	5.39E-07	1.51E-06	9.2054E-04
520295.69	4258222.99	48209.34018	0.23524	0.86639	0.24387	0.9469	9.16E-04	5.52E-07	1.78E-06	5.73E-07	1.86E-06	9.2114E-04
520095.76	4258983.47	48207.4656	13.14477	0.36665	11.61083	0.34096	9.16E-04	3.09E-05	7.52E-07	2.73E-05	6.71E-07	9.7588E-04
520532.42	4258809.04	48203.07305	0.2268	0.1474	0.2174	0.15385	9.16E-04	5.32E-07	3.02E-07	5.10E-07	3.03E-07	9.1790E-04
520521.4	4258297.26	48189.59233	0.17123	0.23901	0.17074	0.25108	9.16E-04	4.02E-07	4.90E-07	4.01E-07	4.94E-07	9.1778E-04
520537.07	4258344.03	48129.181	0.17114	0.218	0.17092	0.22959	9.15E-04	4.02E-07	4.47E-07	4.01E-07	4.52E-07	9.1655E-04
520383.85	4258203.27	48123.85701	0.20274	0.49326	0.2083	0.52768	9.15E-04	4.76E-07	1.01E-06	4.89E-07	1.04E-06	9.1776E-04
520197.42	4259043.1	48110.94338	1.95026	0.25912	1.79156	0.25798	9.15E-04	4.58E-06	5.31E-07	4.21E-06	5.08E-07	9.2433E-04
520030.99	4258896.78	48106.04437	3.39741	0.44111	4.38643	0.43048	9.14E-04	7.98E-06	9.05E-07	1.03E-05	8.47E-07	9.3443E-04
520236.87	4258252.81	48093.07945	0.26512	1.39599	0.2801	1.55277	9.14E-04	6.22E-07	2.86E-06	6.58E-07	3.06E-06	9.2136E-04
520128.88	4258352.47	48084.69957	0.36166	5.9459	0.37667	7.0405	9.14E-04	8.49E-07	1.22E-05	8.84E-07	1.39E-05	9.4179E-04
520393.64	4258203.3	48065.48918	0.19986	0.46604	0.20551	0.49793	9.14E-04	4.69E-07	9.56E-07	4.82E-07	9.80E-07	9.1653E-04
520451.37	4258217.22	48061.98886	0.18522	0.33746	0.18958	0.36004	9.14E-04	4.35E-07	6.92E-07	4.45E-07	7.09E-07	9.1585E-04
520539.41	4258792.35	48054.70003	0.21877	0.14863	0.20972	0.1549	9.13E-04	5.14E-07	3.05E-07	4.92E-07	3.05E-07	9.1505E-04
520442.55	4258213.45	48033.77982	0.1873	0.35409	0.19215	0.37771	9.13E-04	4.40E-07	7.26E-07	4.51E-07	7.44E-07	9.1540E-04
520015.45	4258860.38	48019.32612	2.34085	0.49556	2.84744	0.48459	9.13E-04	5.50E-06	1.02E-06	6.68E-06	9.54E-07	9.2691E-04
520496.62	4258880.8	48007.09571	0.27075	0.14436	0.25904	0.15169	9.13E-04	6.36E-07	2.96E-07	6.08E-07	2.99E-07	9.1437E-04
520541.44	4258460.8	47989.63247	0.18249	0.19959	0.17951	0.21061	9.12E-04	4.28E-07	4.09E-07	4.21E-07	4.15E-07	9.1387E-04
520374.06	4258203.24	47985.81695	0.20541	0.52281	0.21096	0.55988	9.12E-04	4.82E-07	1.07E-06	4.95E-07	1.10E-06	9.1528E-04
520004.51	4258821.54	47958.07566	1.81746	0.57709	2.16814	0.56058	9.12E-04	4.27E-06	1.18E-06	5.09E-06	1.10E-06	9.2324E-04
520316.23	4259042.9	47953.00638	0.73062	0.17102	0.69206	0.18301	9.11E-04	1.72E-06	3.51E-07	1.62E-06	3.60E-07	9.1555E-04
519998.44	4258710.45	47935.97572	1.27751	1.04715	1.53823	0.97458	9.11E-04	3.00E-06	2.15E-06	3.61E-06	1.92E-06	9.2185E-04
520486.98	4258242.48	47890.98654	0.17691	0.28068	0.17879	0.29851	9.10E-04	4.15E-07	5.76E-07	4.20E-07	5.88E-07	9.1232E-04
520542.9	4258784	47882.31686	0.21483	0.14931	0.20599	0.15547	9.10E-04	5.04E-07	3.06E-07	4.84E-07	3.06E-07	9.1176E-04
520557.18	4258725.96	47879.43494	0.19681	0.15476	0.18851	0.16151	9.10E-04	4.62E-07	3.17E-07	4.43E-07	3.18E-07	9.1164E-04
520460.18	4258221	47868.81736	0.1829	0.32224	0.1868	0.34364	9.10E-04	4.29E-07	6.61E-07	4.39E-07	6.76E-07	9.1210E-04
520403.43	4258203.33	47864.39259	0.19686	0.44082	0.20257	0.47045	9.10E-04	4.62E-07	9.04E-07	4.76E-07	9.26E-07	9.1258E-04
520364.28	4258203.21	47863.65092	0.20819	0.55436	0.21362	0.59498	9.10E-04	4.89E-07	1.14E-06	5.02E-07	1.17E-06	9.1310E-04
520446.37	4258951.64	47842.2585	0.34629	0.14614	0.32956	0.15367	9.09E-04	8.13E-07	3.00E-07	7.74E-07	3.02E-07	9.1158E-04
520207.44	4258272.72	47829.42337	0.28265	1.8711	0.29931	2.09894	9.09E-04	6.64E-07	3.84E-06	7.03E-07	4.13E-06	9.1849E-04
520000.68	4258691.74	47826.4751	1.24269	1.19268	1.50741	1.09953	9.09E-04	2.92E-06	2.45E-06	3.54E-06	2.16E-06	9.2016E-04
520167.7	4259033.15	47822.2248	2.80102	0.29107	2.52489	0.28061	9.09E-04	6.58E-06	5.97E-07	5.93E-06	5.52E-07	9.2267E-04
520052.54	4258935.65	47765.75931	6.4978	0.40043	10.91474	0.38494	9.08E-04	1.53E-05	8.21E-07	2.56E-05	7.58E-07	9.5040E-04
520395.37	4259002.77	47762.24981	0.45531	0.15005	0.43291	0.15932	9.08E-04	1.07E-06	3.08E-07	1.02E-06	3.14E-07	9.1058E-04
520158.85	4259029.5	47727.57021	3.1827	0.30072	2.84762	0.28726	9.07E-04	7.47E-06	6.17E-07	6.69E-06	5.65E-07	9.2255E-04
520246.94	4259053.02	47696.97813	1.2172	0.21206	1.14053	0.22077	9.07E-04	2.86E-06	4.35E-07	2.68E-06	4.35E-07	9.1304E-04
520345.92	4259032.85	47689.04333	0.60573	0.15996	0.5746	0.17129	9.06E-04	1.42E-06	3.28E-07	1.35E-06	3.37E-07	9.0992E-04
520266.75	4259052.98	47687.18866	1.03825	0.19766	0.97741	0.20817	9.06E-04	2.44E-06	4.05E-07	2.29E-06	4.10E-07	9.1199E-04
520114.18	4259001.06	47673.7991	7.64154	0.34781	6.5048	0.3229	9.06E-04	1.79E-05	7.13E-07	1.53E-05	6.36E-07	9.4075E-04
520256.85	4259053	47665.86643	1.12114	0.20452	1.05313	0.21428	9.06E-04	2.63E-06	4.19E-07	2.47E-06	4.22E-07	9.1199E-04
520365.7	4259022.82	47665.68431	0.53853	0.155	0.5113	0.16548	9.06E-04	1.26E-06	3.18E-07	1.20E-06	3.26E-07	9.0915E-04
520237.04	4259053.03	47660.96786	1.326	0.22	1.23907	0.22731	9.06E-04	3.11E-06	4.51E-07	2.91E-06	4.47E-07	9.1287E-04
519996.47	4258753.92	47645.45905	1.38461	0.80341	1.66394	0.76163	9.06E-04	3.25E-06	1.65E-06	3.91E-06	1.50E-06	9.1596E-04
520413.22	4258203.36	47615.5076	0.19389	0.41727	0.19952	0.44508	9.05E-04	4.55E-07	8.56E-07	4.68E-07	8.76E-07	9.0774E-04
520506.02	4258866.9	47603.57741	0.25893	0.14404	0.24801	0.15119	9.05E-04	6.08E-07	2.95E-07	5.82E-07	2.98E-07	9.0664E-04
520276.65	4259052.97	47582.03571	0.96343	0.19108	0.90865	0.2021	9.04E-04	2.26E-06	3.92E-07	2.13E-06	3.98E-07	9.0963E-04
520511.41	4258272.96	47580.52658	0.17181	0.25097	0.17165	0.26477	9.04E-04	4.03E-07	5.15E-07	4.03E-07	5.21E-07	9.0626E-04
520150	4259025.84	47557.24639	3.65947	0.30987	3.24619	0.2935	9.04E-04	8.59E-06	6.36E-07	7.62E-06	5.78E-07	9.2140E-04
520042.59	4258921.55	47540.13183	4.69109	0.41167	6.65115	0.39901	9.04E-04	1.10E-05	8.44E-07	1.56E-05	7.85E-07	9.3191E-04
520354.49	4258203.18	47530.3932	0.21072	0.58881	0.21623	0.63316	9.03E-04	4.95E-07	1.21E-06	5.08E-07	1.25E-06	9.0692E-04
520315.3	4258213.05	47513.57669	0.22517	0.75691	0.23233	0.82227	9.03E-04	5.29E-07	1.55E-06	5.45E-07	1.62E-06	9.0739E-04
520482.44	4258906.68	47483.40161	0.29026	0.14405	0.27745	0.15138	9.03E-04	6.81E-07	2.95E-07	6.51E-07	2.98E-07	9.0450E-04
520437.58	4258965.28	47477.54981	0.3636	0.146	0.34605	0.15364	9.02E-04	8.54E-07	2.99E-07	8.12E-07	3.02E-07	9.0473E-04
520469	4258224.77	47457.1328	0.18037	0.30839	0.18385	0.32852	9.02E-04	4.23E-07	6.32E-07	4.32E-07	6.47E-07	9.0421E-04
520059.44	4258511.57	47456.8268	0.84276	13.16372	0.97736	7.88119	9.02E-04	1.98E-06	2.70E-05	2.29E-06	1.55E-05	9.4885E-04
520421.55	4258981.93	47456.455	0.39544	0.14711	0.37644	0.15528	9.02E-04	9.28E-07	3.02E-07	8.84E-07	3.06E-07	9.0448E-04
520227.14	4259053.05	47442.03964	1.44947	0.22809	1.34986	0.23367	9.02E-04	3.40E-06	4.68E-07	3.17E-06	4.60E-07	9.0929E-04
519997	4258779.31	47369.16839	1.48461	0.69908	1.76203	0.6704	9.00E-04	3.49E-06	1.43E-06	4.14E-06	1.32E-06	9.1078E-04
520473.05	4258920.57	47353.35896	0.30386	0.14403	0.2898	0.15141	9.00E-04	7.13E-07	2.95E-07	6.80E-07	2.98E-07	9.0209E-04
520266.3	4258232.9	47337.34069	0.24689	1.08527	0.25868	1.19695	9.00E-04	5.80E-07	2.23E-06	6.07E-07	2.36E-06	9.0557E-04
520187.52	4259043.12	47334.91683	2.17347	0.2673	1.98655	0.26319	9.00E-04	5.10E-06	5.48E-07	4.66E-06	5.18E-07	9.1058E-04
520549.89	4258767.31	47302.94385	0.20719	0.15022	0.19862	0.15625	8.99E-04	4.86E-07	3.08E-07	4.66E-07	3.08E-07	9.0071E-04
520545.34	4258419.3	47296.70806	0.17629	0.20181	0.17397	0.21263	8.99E-04	4.14E-07	4.14E-07	4.08E-07	4.19E-07	9.0068E-04
520326.13	4259042.89	47283.17902	0.68528	0.16592	0.64926	0.17773	8.99E-04	1.61E-06	3.40E-07	1.52E-06	3.50E-07	9.0259E-04
520086.77	4258979.76	47282.44965	15.64038	0.36697	17.6955	0.34296	8.99E-04	3.67E-05	7.53E-07	4.15E-05	6.75E-07	9.7844E-04
520141.15	4259022.19	47276.79051	4.26484	0.31821	3.74668	0.29917	8.99E-04	1.00E-05	6.53E-07	8.80E-06	5.89E-07	9.1870E-04
520017.05	4258871.04	47274.11061	2.44107	0.47464	2.97943	0.4646	8.99E-04	5.73E-06	9.73E-07	6.99E-06	9.15E-07	9.1321E-04
520561.26	4258692.26	47247.31771	0.1902	0.15933	0.18261	0.16626	8.98E-04	4.47E-07	3.27E-07	4.29E-07	3.27E-07	8.9962E-04
520286.55	4259052.95	47230.21974	0.89566	0.18461	0.84558	0.196	8.98E-04	2.10E-06	3.79E-07	1.99E-06	3.86E-07	9.0261E-04
520423.01	4258203.39	47207.58221	0.19078	0.39549	0.19631	0.42157	8.97E-04	4.48E-07	8.11E-07	4.61E-07	8.30E-07	8.9988E-04
520505.33	4258260.35	47206.11038	0.17242	0.25814	0.1728	0.27315	8.97E-04	4.05E-07	5.29E-07	4.06E-07	5.38E-07	8.9918E-04
520385.49	4259012.79	47193.54807	0.48109	0.15068	0.45739	0.1603	8.97E-04	1.13E-06	3.09E-07	1.07E-06	3.16E-07	8.9989E-04
520285.9	4258222.96	47179.29656	0.23706	0.93275	0.24678	1.02241	8.97E-04	5.57E-07	1.91E-06	5.79E-07	2.01E-06	9.0185E-04
520000.93	4258812.89	47175.57473	1.68102	0.59594	1.99777	0.57743	8.97E-04	3.95E-06	1.22E-06	4.69E-06	1.14E-06	9.0772E-04
520520.67	4258286.94	47136.20059	0.17001	0.24061	0.16951	0.25298	8.96E-04	3.99E-07	4.93E-07	3.98E-07	4.98E-07	8.9776E-04
520531.08	4258311.42	47116.42507	0.16921	0.22808	0.16884	0.2394	8.96E-04	3.97E-07	4.68E-07	3.96E-07	4.71E-07	8.9733E-04
520217.26	4258262.75	47109.55263	0.27357	1.69083	0.28971	1.89082	8.95E-04	6.42E-07	3.47E-06	6.80E-07	3.72E-06	9.0398E-04
520217.24	4259053.07	47104.65721	1.59171	0.23638	1.47656	0.23986	8.95E-04	3.74E-06	4.85E-07	3.47E-06	4.72E-07	9.0353E-04
520404.04	4258999.18	47100.01645	0.43449	0.14791	0.41307	0.15683	8.95E-04	1.02E-06	3.03E-07	9.70E-07	3.09E-07	8.9789E-04
520105.26	4258997.38	47056.59023	9.84359	0.35157	8.35219	0.32636	8.94E-04	2.31E-05	7.21E-07	1.96E-05	6.42E-07	9.3854E-04
520344.7	4258203.15	47054.8082	0.21308	0.62631	0.21886	0.67477	8.94E-04	5.00E-07	1.28E-06	5.14E-07	1.33E-06	8.9805E-04
520527.7	4258827.9	47052.61473	0.23323	0.14495	0.22367	0.15149	8.94E-04	5.48E-07	2.97E-07	5.25E-07	2.98E-07	8.9605E-04

520246.69	4258242.84	47033.02363	0.25622	1.28084	0.27021	1.42013	8.94E-04	6.02E-07	2.63E-06	6.34E-07	2.80E-06	9.0067E-04
519995.71	4258727.97	47019.30662	1.28073	0.92882	1.53493	0.87093	8.94E-04	3.01E-06	1.90E-06	3.60E-06	1.71E-06	9.0398E-04
520057.87	4258947.84	46991.21862	7.93632	0.38763	16.08399	0.37096	8.93E-04	1.86E-05	7.95E-07	3.78E-05	7.30E-07	9.5114E-04
520463.87	4258934.38	46985.18364	0.3177	0.14407	0.3027	0.15141	8.93E-04	7.46E-07	2.95E-07	7.11E-07	2.98E-07	8.9515E-04
520032.39	4258907.35	46985.10108	3.5356	0.424	4.60874	0.41365	8.93E-04	8.30E-06	8.70E-07	1.08E-05	8.14E-07	9.1391E-04
520545.94	4258395	46980.01792	0.17331	0.20406	0.17146	0.2152	8.93E-04	4.07E-07	4.19E-07	4.03E-07	4.24E-07	8.9466E-04
520515.67	4258852.89	46978.33134	0.2475	0.14356	0.23719	0.15045	8.93E-04	5.81E-07	2.94E-07	5.57E-07	2.96E-07	8.9470E-04
520495.87	4258246.29	46967.39185	0.17398	0.26982	0.17533	0.2864	8.93E-04	4.08E-07	5.53E-07	4.12E-07	5.64E-07	8.9470E-04
520007.12	4258655.32	46921.22565	1.18387	1.58573	1.46321	1.42981	8.92E-04	2.78E-06	3.25E-06	3.44E-06	2.81E-06	9.0417E-04
520477.81	4258228.54	46913.04199	0.17774	0.2954	0.18075	0.31431	8.92E-04	4.17E-07	6.06E-07	4.24E-07	6.19E-07	8.9380E-04
520132.29	4259018.53	46905.24451	5.05659	0.32557	4.39435	0.30425	8.92E-04	1.19E-05	6.68E-07	1.03E-05	5.99E-07	9.1504E-04
520560.71	4258717.52	46900.47111	0.19334	0.15466	0.18528	0.16148	8.91E-04	4.54E-07	3.17E-07	4.35E-07	3.18E-07	8.9302E-04
520553.39	4258758.96	46882.29875	0.2035	0.1505	0.19503	0.15654	8.91E-04	4.78E-07	3.09E-07	4.58E-07	3.08E-07	8.9270E-04
520296.45	4259052.93	46829.93844	0.83473	0.17856	0.78872	0.19016	8.90E-04	1.96E-06	3.66E-07	1.85E-06	3.74E-07	8.9470E-04
520119.06	4258362.44	46794.34148	0.37086	7.49483	0.38709	8.9918	8.89E-04	8.71E-07	1.54E-05	9.09E-07	1.77E-05	9.2433E-04
520432.8	4258203.42	46730.99499	0.18767	0.37518	0.19297	0.39978	8.88E-04	4.41E-07	7.69E-07	4.53E-07	7.87E-07	8.9072E-04
520355.82	4259032.84	46718.38461	0.57091	0.15577	0.54159	0.16664	8.88E-04	1.34E-06	3.19E-07	1.27E-06	3.28E-07	8.9129E-04
520305.51	4258213.02	46704.60593	0.22725	0.81075	0.23524	0.88338	8.88E-04	5.34E-07	1.66E-06	5.52E-07	1.74E-06	8.9226E-04
520207.34	4259053.08	46691.53866	1.75726	0.24489	1.62363	0.2459	8.88E-04	4.13E-06	5.02E-07	3.81E-06	4.84E-07	8.9645E-04
520177.62	4259043.13	46616.80627	2.45314	0.27555	2.22903	0.26823	8.86E-04	5.76E-06	5.65E-07	5.23E-06	5.28E-07	8.9819E-04
520336.04	4259042.87	46529.95037	0.64379	0.16116	0.61003	0.17268	8.84E-04	1.51E-06	3.31E-07	1.43E-06	3.40E-07	8.8806E-04
520454.87	4258948.11	46513.36926	0.33217	0.14391	0.31627	0.15124	8.84E-04	7.80E-07	2.95E-07	7.43E-07	2.98E-07	8.8625E-04
520334.91	4258203.12	46497.69188	0.21535	0.66708	0.22154	0.72034	8.84E-04	5.06E-07	1.37E-06	5.20E-07	1.42E-06	8.8765E-04
520306.35	4259052.92	46489.15909	0.78047	0.17307	0.73813	0.18473	8.84E-04	1.83E-06	3.55E-07	1.73E-06	3.64E-07	8.8796E-04
520375.61	4259022.8	46484.56089	0.50886	0.15129	0.48344	0.16127	8.84E-04	1.19E-06	3.10E-07	1.13E-06	3.17E-07	8.8654E-04
520495.83	4258891.13	46471.2192	0.27256	0.14241	0.2608	0.14961	8.83E-04	6.40E-07	2.92E-07	6.12E-07	2.95E-07	8.8517E-04
520430.28	4258978.31	46458.89721	0.37811	0.1451	0.36	0.15291	8.83E-04	8.88E-07	2.98E-07	8.45E-07	3.01E-07	8.8543E-04
520049.52	4258531.01	46437.26878	0.91467	7.68277	1.09101	5.4396	8.83E-04	2.15E-06	1.58E-05	2.56E-06	1.07E-05	9.1386E-04
520018.5	4258881.63	46432.9775	2.53585	0.45507	3.10831	0.44579	8.83E-04	5.95E-06	9.33E-07	7.30E-06	8.78E-07	8.9767E-04
520096.34	4258993.7	46419.55057	12.92071	0.35371	11.36419	0.32915	8.82E-04	3.03E-05	7.25E-07	2.67E-05	6.48E-07	9.4074E-04
520123.44	4259014.88	46416.66381	6.11391	0.3316	5.25431	0.3086	8.82E-04	1.44E-05	6.80E-07	1.23E-05	6.07E-07	9.1027E-04
520168.19	4258302.6	46400.22745	0.30687	3.02833	0.32086	3.45857	8.82E-04	7.20E-07	6.21E-06	7.53E-07	6.81E-06	8.9648E-04
520412.7	4258995.59	46353.44842	0.41495	0.14598	0.39464	0.15451	8.81E-04	9.74E-07	2.99E-07	9.26E-07	3.04E-07	8.8360E-04
520486.62	4258232.31	46330.01876	0.17514	0.28292	0.17753	0.30083	8.81E-04	4.11E-07	5.80E-07	4.17E-07	5.92E-07	8.8265E-04
520158.37	4258312.56	46301.40595	0.31576	3.49818	0.32913	4.01805	8.80E-04	7.41E-07	7.17E-06	7.73E-07	7.91E-06	8.9670E-04
520227.08	4258252.78	46296.22679	0.26475	1.53659	0.28024	1.71283	8.80E-04	6.22E-07	3.15E-06	6.58E-07	3.37E-06	8.8781E-04
520530.18	4258301.02	46259.81665	0.16808	0.23018	0.16759	0.24153	8.79E-04	3.95E-07	4.72E-07	3.93E-07	4.75E-07	8.8105E-04
520178.01	4258292.63	46258.54603	0.29789	2.6535	0.31258	3.01216	8.79E-04	6.99E-07	5.44E-06	7.34E-07	5.93E-06	8.9210E-04
519997.34	4258804.24	46248.95423	1.55594	0.61529	1.84158	0.59452	8.79E-04	3.65E-06	1.26E-06	4.32E-06	1.17E-06	8.8952E-04
520451.33	4258207.19	46246.10443	0.18268	0.33956	0.18724	0.36193	8.79E-04	4.29E-07	6.96E-07	4.40E-07	7.12E-07	8.8133E-04
520043.69	4258932	46232.53328	4.86554	0.39648	6.98828	0.38408	8.79E-04	1.14E-05	8.13E-07	1.64E-05	7.56E-07	9.0820E-04
520197.44	4259053.1	46172.3601	1.95188	0.25321	1.7946	0.25149	8.78E-04	4.58E-06	5.19E-07	4.21E-06	4.95E-07	8.8746E-04
520505.07	4258877.3	46171.85931	0.26091	0.14205	0.24988	0.14912	8.78E-04	6.13E-07	2.91E-07	5.87E-07	2.94E-07	8.7943E-04
520442.58	4258203.45	46139.91286	0.18451	0.35632	0.18952	0.37956	8.77E-04	4.33E-07	7.31E-07	4.45E-07	7.47E-07	8.7939E-04
520460.07	4258210.94	46113.36375	0.18056	0.32425	0.18473	0.34552	8.77E-04	4.24E-07	6.65E-07	4.34E-07	6.80E-07	8.7873E-04
520525.64	4258838.76	46109.2233	0.23632	0.14307	0.22658	0.14966	8.76E-04	5.55E-07	2.93E-07	5.32E-07	2.95E-07	8.7813E-04
520446.03	4258961.78	46091.00252	0.34817	0.14374	0.3314	0.15113	8.76E-04	8.17E-07	2.95E-07	7.78E-07	2.97E-07	8.7829E-04
520276.12	4258222.93	46071.15663	0.23857	1.00696	0.24946	1.10697	8.76E-04	5.60E-07	2.07E-06	5.86E-07	2.18E-06	8.8112E-04
520099.39	4258392.38	46043.67426	0.41128	14.04458	0.43642	15.98746	8.75E-04	9.66E-07	2.88E-05	1.02E-06	3.15E-05	9.3747E-04
520520.02	4258276.65	46033.74578	0.16876	0.24204	0.16837	0.25476	8.75E-04	3.96E-07	4.96E-07	3.95E-07	5.01E-07	8.7681E-04
520544.84	4258469.73	46028.37022	0.18136	0.19584	0.17804	0.20671	8.75E-04	4.26E-07	4.02E-07	4.18E-07	4.07E-07	8.7657E-04
520383.88	4258193.27	46014.89522	0.19876	0.49617	0.20405	0.53031	8.75E-04	4.67E-07	1.02E-06	4.79E-07	1.04E-06	8.7767E-04
520021.89	4258893.02	46001.96692	2.74625	0.43757	3.40713	0.42861	8.74E-04	6.45E-06	8.97E-07	8.00E-06	8.44E-07	8.9060E-04
520187.83	4258282.66	45999.84514	0.28912	2.3468	0.30424	2.65257	8.74E-04	6.79E-07	4.81E-06	7.14E-07	5.22E-06	8.8580E-04
520256.51	4258232.87	45998.63801	0.24783	1.17948	0.26076	1.30449	8.74E-04	5.82E-07	2.42E-06	6.12E-07	2.57E-06	8.8053E-04
520393.67	4258193.3	45980.03973	0.19606	0.46893	0.20145	0.50042	8.74E-04	4.60E-07	9.62E-07	4.73E-07	9.85E-07	8.7688E-04
520148.55	4258322.53	45949.02218	0.32455	4.10004	0.33752	4.73413	8.73E-04	7.62E-07	8.41E-06	7.92E-07	9.32E-06	8.9269E-04
520316.25	4259052.9	45946.99358	0.7307	0.16783	0.69155	0.17946	8.73E-04	1.72E-06	3.44E-07	1.62E-06	3.53E-07	8.7741E-04
520325.12	4258203.08	45942.89557	0.21767	0.71144	0.22434	0.77072	8.73E-04	5.11E-07	1.46E-06	5.27E-07	1.52E-06	8.7731E-04
520504.77	4258250.09	45891.84475	0.17103	0.25937	0.17184	0.27479	8.72E-04	4.02E-07	5.32E-07	4.03E-07	5.41E-07	8.7420E-04
520564.24	4258709.09	45875.82464	0.19003	0.15471	0.18225	0.16152	8.72E-04	4.46E-07	3.17E-07	4.28E-07	3.18E-07	8.7353E-04
520374.09	4258193.24	45866.47611	0.20127	0.52572	0.20654	0.56264	8.72E-04	4.73E-07	1.08E-06	4.85E-07	1.11E-06	8.7498E-04
519993.37	4258770.57	45865.02237	1.36513	0.7228	1.61716	0.69015	8.72E-04	3.20E-06	1.48E-06	3.80E-06	1.36E-06	8.8165E-04
520114.59	4259011.23	45852.35496	7.57345	0.33622	6.4512	0.31228	8.72E-04	1.78E-05	6.90E-07	1.51E-05	6.15E-07	9.0580E-04
520481.69	4258917	45848.83848	0.29214	0.14193	0.27908	0.1491	8.72E-04	6.86E-07	2.91E-07	6.55E-07	2.94E-07	8.7343E-04
520403.46	4258193.33	45838.79544	0.19328	0.44359	0.19877	0.4728	8.71E-04	4.54E-07	9.10E-07	4.67E-07	9.31E-07	8.7407E-04
520468.81	4258214.68	45829.01081	0.17829	0.31005	0.18203	0.33023	8.71E-04	4.19E-07	6.36E-07	4.27E-07	6.50E-07	8.7326E-04
520514.31	4258264.19	45815.97619	0.16931	0.24849	0.1693	0.26231	8.71E-04	3.97E-07	5.10E-07	3.97E-07	5.16E-07	8.7270E-04
520295.72	4258212.99	45797.56087	0.2291	0.87051	0.23807	0.95125	8.71E-04	5.38E-07	1.79E-06	5.59E-07	1.87E-06	8.7528E-04
520033.66	4258917.87	45793.77192	3.66725	0.40789	4.82587	0.39779	8.70E-04	8.61E-06	8.37E-07	1.13E-05	7.83E-07	8.9202E-04
520395.39	4259012.77	45779.07468	0.45581	0.14707	0.43339	0.15625	8.70E-04	1.07E-06	3.02E-07	1.02E-06	3.08E-07	8.7287E-04
520167.72	4259043.15	45766.30067	2.78795	0.28291	2.51791	0.27243	8.70E-04	6.55E-06	5.80E-07	5.91E-06	5.36E-07	8.8351E-04
520560.37	4258742.27	45757.36632	0.1964	0.1507	0.18818	0.15691	8.70E-04	4.61E-07	3.09E-07	4.42E-07	3.09E-07	8.7129E-04
520491.16	4258903.07	45744.36247	0.27911	0.14155	0.26696	0.14869	8.70E-04	6.55E-07	2.90E-07	6.27E-07	2.93E-07	8.7138E-04
520548.62	4258427.92	45710.73578	0.17547	0.19859	0.17301	0.2091	8.69E-04	4.12E-07	4.07E-07	4.06E-07	4.12E-07	8.7052E-04
520364.31	4258193.21	45708.89872	0.20384	0.55731	0.20908	0.59786	8.69E-04	4.79E-07	1.14E-06	4.91E-07	1.18E-06	8.7213E-04
519992.8	4258745.07	45699.97222	1.27081	0.82979	1.51444	0.78351	8.69E-04	2.98E-06	1.70E-06	3.56E-06	1.54E-06	8.7846E-04
520345.94	4259042.85	45697.00917	0.60588	0.15677	0.57421	0.16792	8.69E-04	1.42E-06	3.22E-07	1.35E-06	3.31E-07	8.7204E-04
520549.18	4258403.52	45696.69264	0.17265	0.20086	0.17057	0.21161	8.69E-04	4.05E-07	4.12E-07	4.00E-07	4.17E-07	8.7025E-04
520158.62	4259039.39	45695.80986	3.18126	0.2923	2.85178	0.27891	8.69E-04	7.47E-06	5.99E-07	6.70E-06	5.49E-07	8.8391E-04
520514.54	4258863.37	45678.13895	0.24964	0.1416	0.23924	0.14848	8.68E-04	5.86E-07	2.90E-07	5.62E-07	2.92E-07	8.6999E-04
520365.72	4259032.82	45674.07409	0.53879	0.15194	0.5114	0.16232	8.68E-04	1.26E-06	3.12E-07	1.20E-06	3.20E-07	8.7128E-04
520019.85	4258608.71	45670.31437	1.11387	2.47692	1.41583	2.13126	8.68E-04	2.62E-06	5.08E-06	3.32E-06	4.20E-06	8.8332E-04
520472.44	4258930.83	45664.24811	0.30555	0.14188	0.29138	0.14907	8.68E-04	7.17E-07	2.91E-07	6.84E-07	2.93E-07	8.6998E-04
520413.25	4258193.36	45629.97083	0.19049	0.41995	0.19598	0.44729	8.67E-04	4.47E-07	8.61E-07	4.60E-07	8.80E-07	8.6999E-04
520149.51	4259035.63	45561.67673	3.68193	0.30123	3.27054	0.285	8.66E-04	8.64E-06	6.18E-07	7.68E-06	5.61E-07	8.8355E-04
520048.72	4258944.07	45560.65093	5.72072	0.38382	8.82508	0.37039	8.66E-04	1.34E-05	7.87E-07	2.07E-05	7.29E-07	9.0169E-04
520495.44	4258236.09	45540.7672	0.1724	0.27141	0.17422	0.28824	8.66E-04	4.05E-07	5.57E-07	4.09E-07	5.67E-07	8.6759E-04
520197.65	4258272.69	45539.25315	0.28033	2.09386	0.29581	2.35472	8.66E-04	6.58E-07	4.29E-06	6.94E-07	4.64E-06	8.7590E-04
520058.88	4258958.25	45528.20491	8.27544	0.37379	17.55504	0.35757	8.65E-04	1.94E-05	7.67E-07	4.12E-05	7.04E-07	9.2752E-04
520421.37	4258992.01	45522.12071	0.39654	0.1442	0.37745	0.15234	8.65E-04	9.31E-07	2.96E-07	8.86E-07	3.00E-07	8.6771E-04
520546.89	4258358.24	45478.4513	0.16852	0.20764	0.1678	0.21894	8.64E-04	3.96E-07	4.26E-07	3.94E-07	4.31E-07	8.6611E-04
520187.54	4259053.12	45448.93292	2.18082	0.26107	1.99417	0.25646	8.64E-04	5.12E-06	5.35E-07	4.68E-06	5.05E-07	8.7474E-04
520236.9	4258242.81	45440.3477	0.25628	1.40316	0.27098	1.55962	8.64E-04	6.02E-07	2.88E-06	6.36E-07	3.07E-06	8.7092E-04
520006.5	4258856.69	45411.40276	1.95821	0.49253	2.33648	0.48151	8.63E-04	4.60E-06	1.01E-06	5.49E-06	9.48E-07	8.7523E-04
520548.28	4258368.85	45400.27747	0.16917	0.20517	0.16807	0.21644	8.63E-04	3.97E-07	4.21E-07	3.95E-07	4.26E-07	8.6462E-04
520439.01	4258974.7	45392.93424	0.36184	0.14299	0.34451	0.15049	8.63E-04	8.49E-07	2.93E-07	8.09E-07	2.96E-07	8.6509E-04
520140.41	4259031.87	45381.68064	4.32278	0.30943	3.80084	0.2906	8.63E-04	1.01E-05	6.35E-07	8.92E-06	5.72E-07	8.8290E-04
520354.52	4258193.18	45368.34963	0.20619	0.59177	0.2116	0.63616	8.62E-04	4.84E-07	1.21E-06	4.97E-07	1.25E-06	8.6582E-04
520545.69	4258347.72	45361.24917	0.16776	0.21004	0.16732	0.22125	8.62E-04	3.94E-07	4.31E-07	3.93E-07	4.36E-07	8.6389E-04
520477.56	4258218.42	45354.10667	0.17583	0.29705	0.17916	0.31604	8.62E-04	4.13E-07	6.09E-07	4.21E-07	6.22E-07	8.6416E-04
520529.37	4258290.66	45335.04669	0.16691	0.232	0.16636	0.24348	8.62E-04	3.92E-07	4.76E-07	3.91E-07	4.79E-07	8.6347E-04
520423.04	4258193.39	45311.48642	0.18763	0.39797	0.19305	0.42365	8.61E-04	4.40E-07	8.16E-07	4.53E-07	8.34E-07	8.6383E-04
520326.15	4259052.89	45291.08203	0.68524	0.16272	0.64852	0.17422	8.61E-04	1.61E-06	3.34E-07	1.52E-06	3.43E-07	8.6471E-04
520000.87	4258836.88	45281.99286	1.73243	0.53087	2.04649	0.51718	8.61E-04	4.07E-06	1.09E-06	4.80E-06	1.02E-06	8.7171E-04
520463.38	4258944.59	45269.0306	0.31931	0.14182	0.30423	0.14897	8.60E-04	7.50E-07	2.91E-07	7.14E-07	2.93E-07	8.6253E-04
520315.33	4258203.05	45245.27783	0.21974	0.76033	0.22713	0.8261	8.60E-04	5.16E-07	1.56E-06	5.33E-07	1.63E-06	8.6427E-04
520385.51	4259022.79	45226.50174	0.48152	0.14764	0.45758	0.15716	8.60E-04	1.13E-06	3.03E-07	1.07E-06	3.09E-07	8.6249E-04
520105.74	4259007.57	45214.51213	9.63853	0.33933	8.21902	0.31528	8.59E-04	2.26E-05	6.96E-07	1.93E-05	6.21E-07	9.0269E-04
520029.73	4258579.58	45184.57512	1.06684	3.50678	1.37951	2.85376	8.59E-04	2.50E-06	7.19E-06	3.24E-06	5.62E-06	8.7743E-04
519993.75	4258795.6	45176.53091	1.44047	0.63512	1.69834	0.61177	8.59E-04	3.38E-06	1.30E-06	3.99E-06	1.20E-06	8.6860E-04
520404	4259009.21	45160.43639	0.43514	0.14507	0.4138	0.15391	8.58E-04	1.02E-06	2.98E-07	9.71E-07	3.03E-07	8.6101E-04
520023.37	4258903.63	45059.07353	2.85401	0.4206	3.56423	0.41203	8.56E-04	6.70E-06	8.63E-07	8.37E-06	8.11E-07	8.7323E-04
520563.87	4258733.92	45041.99074	0.19299	0.15063	0.18493	0.15697	8.56E-04	4.53E-07	3.09E-07	4.34E-07	3.09E-07	8.5767E-04
520207.47	4258262.72	45033.68652	0.27188	1.88042	0.28734	2.10766	8.56E-04	6.38E-07	3.86E-06	6.75E-07	4.15E-06	8.6533E-04
520544.65	4258337.25	45020.58419	0.16681	0.21269	0.16662	0.22365	8.56E-04	3.92E-07	4.36E-07	3.91E-07	4.40E-07	8.5742E-04
520109.24	4258372.41	45004.95271	0.37893	9.90479	0.3978	11.75688	8.55E-04	8.90E-07	2.03E-05	9.34E-07	2.31E-05	9.0074E-04
520131.3	4259028.12	44985.50449	5.15428	0.31622	4.48208	0.29531	8.55E-04	1.21E-05	6.49E-07	1.05E-05	5.81E-07	8.7895E-04
520524.28	4258849.33	44981.84535	0.23865	0.14123	0.22887	0.14782	8.55E-04	5.60E-07	2.90E-07	5.37E-07	2.91E-07	8.5670E-04
520542.9	4258807.93	44962.77372	0.21759	0.14362	0.20868	0.14973	8.55E-04	5.11E-07	2.95E-07	4.90E-07	2.95E-07	8.5625E-04
520432.83	4258193.42	44904.78968	0.18473	0.37747	0.19	0.40172	8.54E-04	4.34E-07	7.74E-07	4.46E-07	7.91E-07	8.5600E-04
520539.96	4258315.22	44883.51872	0.16597	0.2195	0.16564	0.23033	8.53E-04	3.90E-07	4.50E-07	3.89E-07	4.53E-07	8.5484E-04
520008.2	4258867.38	44879.44107	2.04235	0.47184	2.44132	0.46199	8.53E-04	4.79E-06	9.68E-07	5.73E-06	9.09E-07	8.6548E-04
520266.33	4258222.9	44875.75463	0.23967	1.09058	0.2517	1.20223	8.53E-04	5.63E-07	2.24E-06	5.91E-07	2.37E-06	8.5876E-04
520344.73	4258193.15	44861.69872	0.20831	0.62937	0.21413	0.67781	8.53E-04	4.89E-07	1.29E-06	5.03E-07	1.33E-06	8.5636E-04
520007.12	4258646.05	44860.43692	1.11586	1.67301	1.37777	1.50099	8.53E-04	2.62E-06	3.43E-06	3.23E-06	2.95E-06	8.6496E-04
520454.48	4258958.28	44854.61793	0.33401	0.14163	0.31808	0.14881	8.53E-04	7.84E-07	2.90E-07	7.47E-07	2.93E-07	8.5472E-04
520486.3	4258222.16	44823.73124	0.17335	0.2846	0.17616	0.3026	8.52E-04	4.07E-07	5.84E-07	4.14E-07	5.96E-07	8.5402E-04
520285.94	4258212.96	44789.15551	0.23062	0.93715	0.24072	1.02678	8.51E-04	5.41E-07	1.92E-06	5.65E-07	2.02E-06	8.5641E-04
520355.84	4259042.84	44786.3403	0.57106	0.15272	0.54142	0.16344	8.51E-04	1.34E-06	3.13E-07	1.27E-06	3.22E-07	8.5455E-04
520504.21	4258887.66	44753.37941	0.26275	0.14006	0.25159	0.14704	8.51E-04	6.17E-07	2.87E-07	5.91E-07	2.89E-07	8.5247E-04
520549.83	4258791.4	44733.7599	0.21007	0.1449	0.20152	0.15081	8.50E-04	4.93E-07	2.97E-07	4.73E-07	2.97E-07	8.5187E-04
520177.64	4259053.13	44725.51135	2.45632	0.26864	2.23365	0.26103	8.50E-04	5.77E-06	5.51E-07	5.24E-06	5.14E-07	8.6223E-04
520567.77	4258700.65	44719.77513	0.18676	0.15475	0.17924	0.16145	8.50E-04	4.38E-07	3.17E-07	4.21E-07	3.18E-07	8.5154E-04
519994.67	4258701.35	44712.17524	1.14729	1.0749	1.36884	0.99778	8.50E-04	2.69E-06	2.20E-06	3.21E-06	1.96E-06	8.5997E-04
520513.66	4258253.9	44677.15029	0.16806	0.24971	0.1684	0.26397	8.49E-04	3.95E-07	5.12E-07	3.95E-07	5.20E-07	8.5105E-04
520128.91	4258342.47	44675.79317	0.34212	5.96518	0.35503	7.06255	8.49E-04	8.03E-07	1.22E-05	8.33E-07	1.39E-05	8.7698E-04
520034.84	4258928.34	44637.37277	3.79666	0.39291	5.03889	0.38301	8.48E-04	8.91E-06	8.06E-07	1.18E-05	7.54E-07	8.7078E-04
519997.12	4258827.83	44617.50799	1.60372	0.54803	1.88516	0.53273	8.48E-04	3.77E-06	1.12E-06	4.43E-06	1.05E-06	8.5846E-04
520430.03	4258988.42	44615.53326	0.3793	0.14235	0.36121	0.15012	8.48E-04	8.90E-07	2.92E-07	8.48E-07	2.96E-07	8.5039E-04
520504.25	4258239.86	44596.12301	0.1696	0.26082	0.17088	0.27655	8.48E-04	3.98E-07	5.35E-07	4.01E-07	5.44E-07	8.4957E-04
520096.89	4259003.92	44591.30776	12.66601	0.34126	11.11196	0.31783	8.48E-04	2.97E-05	7.00E-07	2.61E-05	6.26E-07	9.0475E-04
520375.62	4259032.8	44573.51379	0.50916	0.1483	0.48363	0.15818	8.47E-04	1.20E-06	3.04E-07	1.14E-06	3.11E-07	8.5021E-04
520122.19	4259024.36	44549.55333	6.29143	0.32188	5.40753	0.29948	8.47E-04	1.48E-05	6.60E-07	1.27E-05	5.90E-07	8.7552E-04
520246.72	4258232.84	44540.07371	0.24813	1.28698	0.26197	1.42652	8.47E-04	5.83E-07	2.64E-06	6.15E-07	2.81E-06	8.5327E-04
520336.05	4259052.87	44539.78821	0.64364	0.15801	0.60925	0.16928	8.47E-04	1.51E-06	3.24E-07	1.43E-06	3.33E-07	8.5022E-04
520451.29	4258197.17	44523.57769	0.18012	0.34165	0.18481	0.36376	8.46E-04	4.23E-07	7.01E-07	4.34E-07	7.16E-07	8.4859E-04
520459.97	4258200.88	44475.11007	0.17823	0.32601	0.18256	0.34716	8.45E-04	4.18E-07	6.69E-07	4.29E-07	6.83E-07	8.4759E-04
520412.6	4259005.64	44468.16657	0.41578	0.1431	0.39542	0.15158	8.45E-04	9.76E-07	2.93E-07	9.28E-07	2.98E-07	8.4776E-04
520528.64	4258280.34	44449.28874	0.16579	0.23342	0.16522	0.24524	8.45E-04	3.89E-07	4.79E-07	3.88E-07	4.83E-07	8.4664E-04
520217.29	4258252.75	44430.81326	0.26363	1.69927	0.27885	1.89865	8.45E-04	6.19E-07	3.49E-06	6.55E-07	3.74E-06	8.5305E-04
520305.54	4258203.02	44430.42562	0.22155	0.81444	0.22986	0.88727	8.45E-04	5.20E-07	1.67E-06	5.40E-07	1.75E-06	8.4902E-04
520442.62	4258193.45	44402.89895	0.18178	0.35837	0.18681	0.38133	8.44E-04	4.27E-07	7.35E-07	4.39E-07	7.51E-07	8.4637E-04
520513.52	4258873.8	44384.03462	0.2516	0.13972	0.24115	0.14654	8.44E-04	5.91E-07	2.87E-07	5.66E-07	2.88E-07	8.4539E-04
519991.99	4258719.01	44377.50479	1.16121	0.95628	1.38185	0.89323	8.44E-04	2.73E-06	1.96E-06	3.24E-06	1.76E-06	8.5323E-04
520334.94	4258193.12	44340.06513	0.21045	0.67013	0.21676	0.72358	8.43E-04	4.94E-07	1.37E-06	5.09E-07	1.42E-06	8.4663E-04
520552.42	4258412.04	44339.58619	0.17193	0.19766	0.16967	0.20805	8.43E-04	4.04E-07	4.05E-07	3.98E-07	4.10E-07	8.4443E-04
520523.29	4258268.03	44304.41758	0.16621	0.23936	0.1659	0.25205	8.42E-04	3.90E-07	4.91E-07	3.89E-07	4.96E-07	8.4391E-04
520548.24	4258478.65	44282.4595	0.1802	0.19263	0.17654	0.20328	8.42E-04	4.23E-07	3.95E-07	4.14E-07	4.00E-07	8.4336E-04
520481.02	4258927.28	44280.72049	0.29383	0.13986	0.28065	0.14686	8.42E-04	6.90E-07	2.87E-07	6.59E-07	2.89E-07	8.4362E-04
520490.33	4258913.42	44267.62411	0.28094	0.13961	0.2687	0.14659	8.41E-04	6.60E-07	2.86E-07	6.31E-07	2.89E-07	8.4331E-04
520538.95	4258304.78	44264.93556	0.16498	0.22165	0.1645	0.23243	8.41E-04	3.87E-07	4.55E-07	3.86E-07	4.58E-07	8.4308E-04
520556.75	4258774.86	44259.04044	0.20282	0.14576	0.19448	0.15153	8.41E-04	4.76E-07	2.99E-07	4.57E-07	2.98E-07	8.4281E-04
520468.65	4258204.59	44242.24202	0.17612	0.3118	0.1801	0.3319	8.41E-04	4.13E-07	6.39E-07	4.23E-07	6.53E-07	8.4309E-04
520447.74	4258971.08	44236.95256	0.34645	0.1409	0.32994	0.14812	8.41E-04	8.13E-07	2.89E-07	7.75E-07	2.92E-07	8.4303E-04
520567.36	4258725.58	44231.02007	0.1897	0.15046	0.1818	0.15691	8.41E-04	4.45E-07	3.09E-07	4.27E-07	3.09E-07	8.4224E-04
520049.81	4258954.51	44230.13967	5.94919	0.37029	9.33885	0.35713	8.41E-04	1.40E-05	7.59E-07	2.19E-05	7.03E-07	8.7809E-04
520009.73	4258878.01	44229.47521	2.12217	0.45234	2.54198	0.44349	8.41E-04	4.98E-06	9.28E-07	5.97E-06	8.73E-07	8.5347E-04
519997.12	4258683.15	44188.18245	1.11183	1.21803	1.34011	1.11973	8.40E-04	2.61E-06	2.50E-06	3.15E-06	2.20E-06	8.5040E-04
519989.75	4258761.83	44169.64682	1.25248	0.74663	1.48273	0.70943	8.40E-04	2.94E-06	1.53E-06	3.48E-06	1.40E-06	8.4893E-04
520495.04	4258225.9	44140.88147	0.17077	0.27303	0.17304	0.29001	8.39E-04	4.01E-07	5.60E-07	4.06E-07	5.71E-07	8.4098E-04
520059.81	4258968.63	44096.89016	8.61049	0.36067	19.14181	0.34492	8.38E-04	2.02E-05	7.40E-07	4.49E-05	6.79E-07	9.0477E-04
520551.91	4258436.55	44073.65597	0.17459	0.19529	0.17198	0.20556	8.38E-04	4.10E-07	4.01E-07	4.04E-07	4.05E-07	8.3938E-04
520024.74	4258914.18	44061.30659	2.95841	0.40469	3.71912	0.39641	8.38E-04	6.95E-06	8.30E-07	8.73E-06	7.80E-07	8.5481E-04
520113.09	4259020.6	44056.06877	7.89529	0.32617	6.72091	0.30301	8.37E-04	1.85E-05	6.69E-07	1.58E-05	5.96E-07	8.7301E-04
520534.34	4258835.16	44048.22714	0.2279	0.14084	0.2187	0.14712	8.37E-04	5.35E-07	2.89E-07	5.13E-07	2.90E-07	8.3890E-04
520039.57	4258940.29	44046.32601	4.3305	0.38008	5.95892	0.36943	8.37E-04	1.02E-05	7.80E-07	1.40E-05	7.27E-07	8.6290E-04
520499.87	4258899.46	44045.80116	0.26859	0.1391	0.25706	0.14604	8.37E-04	6.31E-07	2.85E-07	6.03E-07	2.87E-07	8.3904E-04
520471.89	4258941.07	44031.61613	0.3071	0.13972	0.29285	0.14672	8.37E-04	7.21E-07	2.87E-07	6.88E-07	2.89E-07	8.3895E-04
520393.7	4258183.3	44010.88565	0.19231	0.47162	0.19745	0.50273	8.37E-04	4.51E-07	9.67E-07	4.64E-07	9.90E-07	8.3944E-04
520383.91	4258183.27	43997.50577	0.19481	0.49894	0.19988	0.53273	8.36E-04	4.57E-07	1.02E-06	4.69E-07	1.05E-06	8.3931E-04
519990.16	4258786.95	43966.35222	1.33404	0.65526	1.56582	0.62906	8.36E-04	3.13E-06	1.34E-06	3.68E-06	1.24E-06	8.4511E-04
520088.03	4259000.27	43960.55497	15.19593	0.34186	16.58513	0.31983	8.36E-04	3.57E-05	7.01E-07	3.89E-05	6.30E-07	9.1155E-04
520167.74	4259053.15	43954.44918	2.7955	0.27566	2.52631	0.26502	8.35E-04	6.56E-06	5.65E-07	5.93E-06	5.22E-07	8.4908E-04
520403.49	4258183.33	43933.45482	0.18975	0.44618	0.19498	0.47503	8.35E-04	4.45E-07	9.15E-07	4.58E-07	9.35E-07	8.3785E-04
520395.41	4259022.77	43908.08442	0.45621	0.14416	0.4337	0.15324	8.35E-04	1.07E-06	2.96E-07	1.02E-06	3.02E-07	8.3730E-04
520012.78	4258889.26	43879.60178	2.26967	0.43465	2.73907	0.4265	8.34E-04	5.33E-06	8.91E-07	6.43E-06	8.40E-07	8.4756E-04
520477.33	4258208.31	43861.15241	0.17387	0.29867	0.17747	0.3177	8.34E-04	4.08E-07	6.13E-07	4.17E-07	6.25E-07	8.3578E-04
520158.7	4259049.42	43856.29214	3.17784	0.28423	2.85235	0.27093	8.34E-04	7.46E-06	5.83E-07	6.70E-06	5.33E-07	8.4890E-04
520374.13	4258183.24	43834.65043	0.19715	0.52844	0.20225	0.56512	8.33E-04	4.63E-07	1.08E-06	4.75E-07	1.11E-06	8.3635E-04

520345.95	4259052.85	43829.11067	0.60591	0.15375	0.57379	0.16471	8.33E-04	1.42E-06	3.15E-07	1.35E-06	3.24E-07	8.3652E-04
520523.06	4258859.84	43824.55305	0.2408	0.13931	0.23094	0.1459	8.33E-04	5.65E-07	2.86E-07	5.42E-07	2.87E-07	8.3471E-04
520365.74	4259042.82	43811.23539	0.53892	0.149	0.51142	0.15925	8.33E-04	1.27E-06	3.06E-07	1.20E-06	3.13E-07	8.3586E-04
520039.6	4258550.44	43811.13413	0.96424	5.12003	1.19247	3.93196	8.33E-04	2.26E-06	1.05E-05	2.80E-06	7.74E-06	8.5607E-04
519993.37	4258818.79	43805.35337	1.48408	0.56592	1.73957	0.54863	8.33E-04	3.48E-06	1.16E-06	4.08E-06	1.08E-06	8.4247E-04
520325.15	4258193.08	43769.52347	0.21253	0.71466	0.21945	0.77402	8.32E-04	4.99E-07	1.47E-06	5.15E-07	1.52E-06	8.3598E-04
520413.28	4258183.36	43764.81041	0.18714	0.42247	0.19241	0.44939	8.32E-04	4.39E-07	8.66E-07	4.52E-07	8.85E-07	8.3453E-04
520149.67	4259045.69	43760.08544	3.67367	0.2926	3.2681	0.27664	8.32E-04	8.62E-06	6.00E-07	7.67E-06	5.45E-07	8.4924E-04
520227.11	4258242.78	43729.61364	0.25556	1.54428	0.2704	1.7198	8.31E-04	6.00E-07	3.17E-06	6.35E-07	3.39E-06	8.3901E-04
520553.38	4258388.69	43717.67121	0.16885	0.19823	0.16697	0.20901	8.31E-04	3.96E-07	4.07E-07	3.92E-07	4.11E-07	8.3260E-04
520276.15	4258212.93	43713.40859	0.23183	1.01184	0.24305	1.11154	8.31E-04	5.44E-07	2.08E-06	5.71E-07	2.19E-06	8.3629E-04
520421.21	4259002.08	43701.05373	0.3975	0.14136	0.37836	0.14948	8.31E-04	9.33E-07	2.90E-07	8.88E-07	2.94E-07	8.3308E-04
520462.93	4258954.79	43648.58865	0.32087	0.13958	0.30576	0.14657	8.30E-04	7.53E-07	2.86E-07	7.18E-07	2.89E-07	8.3173E-04
520140.63	4259041.96	43639.77713	4.30205	0.30032	3.79211	0.28193	8.30E-04	1.01E-05	6.16E-07	8.90E-06	5.55E-07	8.4969E-04
520438.7	4258984.83	43633.34527	0.36311	0.1404	0.34583	0.14784	8.29E-04	8.52E-07	2.88E-07	8.12E-07	2.91E-07	8.3163E-04
520364.34	4258183.21	43617.12571	0.19948	0.56021	0.20468	0.60043	8.29E-04	4.68E-07	1.15E-06	4.81E-07	1.18E-06	8.3236E-04
520256.54	4258222.87	43583.90698	0.24027	1.18531	0.25327	1.30989	8.28E-04	5.64E-07	2.43E-06	5.95E-07	2.58E-06	8.3462E-04
520295.75	4258202.99	43559.71203	0.22317	0.8744	0.23249	0.95532	8.28E-04	5.24E-07	1.79E-06	5.46E-07	1.88E-06	8.3273E-04
519989.13	4258736.23	43544.73491	1.16242	0.85495	1.37544	0.80413	8.28E-04	2.73E-06	1.75E-06	3.23E-06	1.58E-06	8.3700E-04
520513.07	4258243.63	43517.16072	0.16675	0.25098	0.16752	0.26562	8.27E-04	3.91E-07	5.15E-07	3.93E-07	5.23E-07	8.2900E-04
520423.07	4258183.39	43504.38046	0.18447	0.40037	0.18974	0.42563	8.27E-04	4.33E-07	8.21E-07	4.45E-07	8.38E-07	8.2948E-04
520563.68	4258758.32	43490.76792	0.19584	0.14633	0.18772	0.15212	8.27E-04	4.60E-07	3.00E-07	4.41E-07	2.99E-07	8.2818E-04
520571.31	4258692.22	43481.18206	0.1836	0.15467	0.17627	0.16124	8.26E-04	4.31E-07	3.17E-07	4.14E-07	3.17E-07	8.2798E-04
520538.06	4258294.38	43469.89892	0.16384	0.22374	0.16333	0.23448	8.26E-04	3.85E-07	4.59E-07	3.83E-07	4.62E-07	8.2797E-04
520119.09	4258352.44	43452.12641	0.35001	7.52194	0.36431	8.97237	8.26E-04	8.22E-07	1.54E-05	8.55E-07	1.77E-05	8.6071E-04
520103.98	4259016.84	43449.68644	10.19813	0.32883	8.70507	0.30578	8.26E-04	2.39E-05	6.74E-07	2.04E-05	6.02E-07	8.7155E-04
520168.22	4258292.6	43443.60929	0.29304	3.04177	0.30519	3.46802	8.26E-04	6.88E-07	6.24E-06	7.16E-07	6.83E-06	8.4025E-04
520178.04	4258282.63	43409.91815	0.28509	2.66505	0.29794	3.02255	8.25E-04	6.69E-07	5.47E-06	6.99E-07	5.95E-06	8.3793E-04
520385.52	4259032.79	43389.79048	0.48183	0.14473	0.4578	0.15416	8.25E-04	1.13E-06	2.97E-07	1.07E-06	3.03E-07	8.2757E-04
520486.01	4258212.02	43365.98544	0.17151	0.2863	0.17468	0.30431	8.24E-04	4.03E-07	5.87E-07	4.10E-07	5.99E-07	8.2631E-04
520403.96	4259019.23	43344.44813	0.43569	0.14225	0.41439	0.151	8.24E-04	1.02E-06	2.92E-07	9.73E-07	2.97E-07	8.2648E-04
520522.55	4258257.7	43325.5833	0.16507	0.2406	0.16503	0.25375	8.24E-04	3.88E-07	4.93E-07	3.87E-07	5.00E-07	8.2531E-04
520158.4	4258302.56	43304.74833	0.30099	3.51223	0.31246	4.0294	8.23E-04	7.07E-07	7.20E-06	7.34E-07	7.93E-06	8.3972E-04
520503.79	4258229.65	43304.1313	0.16811	0.26235	0.16986	0.27829	8.23E-04	3.95E-07	5.38E-07	3.99E-07	5.48E-07	8.2501E-04
520551.62	4258461.66	43289.0779	0.17697	0.19239	0.17382	0.20277	8.23E-04	4.15E-07	3.95E-07	4.08E-07	3.99E-07	8.2446E-04
520354.55	4258183.18	43276.10992	0.20167	0.59467	0.20714	0.63881	8.23E-04	4.73E-07	1.22E-06	4.86E-07	1.26E-06	8.2604E-04
520131.6	4259038.23	43256.93824	5.11861	0.3065	4.46134	0.28625	8.22E-04	1.20E-05	6.29E-07	1.05E-05	5.63E-07	8.4592E-04
520187.86	4258272.66	43191.60023	0.2771	2.35838	0.29065	2.66042	8.21E-04	6.51E-07	4.84E-06	6.82E-07	5.24E-06	8.3240E-04
520432.86	4258183.42	43144.68326	0.18174	0.37977	0.18694	0.40356	8.20E-04	4.27E-07	7.79E-07	4.39E-07	7.94E-07	8.2254E-04
520014.36	4258899.91	43114.96265	2.35795	0.41779	2.8591	0.4102	8.20E-04	5.54E-06	8.57E-07	6.71E-06	8.07E-07	8.3345E-04
520512.6	4258884.19	43102.44892	0.25341	0.13784	0.24291	0.14459	8.19E-04	5.95E-07	2.83E-07	5.70E-07	2.85E-07	8.2103E-04
520315.36	4258193.05	43070.07669	0.21436	0.76376	0.2221	0.82946	8.19E-04	5.03E-07	1.57E-06	5.21E-07	1.63E-06	8.2291E-04
520532.88	4258845.77	43068.62452	0.23023	0.13902	0.22099	0.14531	8.19E-04	5.41E-07	2.85E-07	5.19E-07	2.86E-07	8.2029E-04
520025.98	4258924.69	43026.58045	3.05766	0.38975	3.86782	0.38172	8.18E-04	7.18E-06	7.99E-07	9.08E-06	7.51E-07	8.3567E-04
520236.93	4258232.81	43020.85899	0.24786	1.40969	0.26208	1.56622	8.18E-04	5.82E-07	2.89E-06	6.15E-07	3.08E-06	8.2492E-04
520456.47	4258967.47	42981.15873	0.3319	0.1388	0.31622	0.14579	8.17E-04	7.79E-07	2.85E-07	7.42E-07	2.87E-07	8.1909E-04
520355.85	4259052.84	42973.71176	0.57108	0.14983	0.54124	0.1604	8.17E-04	1.34E-06	3.07E-07	1.27E-06	3.16E-07	8.2009E-04
520148.58	4258312.53	42939.95114	0.30883	4.11485	0.31988	4.74919	8.16E-04	7.25E-07	8.44E-06	7.51E-07	9.35E-06	8.3547E-04
520555.67	4258420.56	42930.4835	0.17117	0.19441	0.16873	0.20451	8.16E-04	4.02E-07	3.99E-07	3.96E-07	4.03E-07	8.1763E-04
520050.82	4258964.92	42918.25962	6.17462	0.35739	9.85291	0.34453	8.16E-04	1.45E-05	7.33E-07	2.31E-05	6.78E-07	8.5484E-04
520451.62	4258187.29	42887.1976	0.17746	0.34303	0.18221	0.3648	8.15E-04	4.17E-07	7.04E-07	4.28E-07	7.18E-07	8.1747E-04
520040.75	4258950.77	42884.96843	4.4938	0.36681	6.24023	0.35632	8.15E-04	1.05E-05	7.52E-07	1.47E-05	7.01E-07	8.4182E-04
520460.6	4258191.14	42880.82189	0.17568	0.32669	0.18011	0.34756	8.15E-04	4.12E-07	6.70E-07	4.23E-07	6.84E-07	8.1728E-04
520197.68	4258262.69	42878.35119	0.26929	2.10351	0.28329	2.3634	8.15E-04	6.32E-07	4.31E-06	6.65E-07	4.65E-06	8.2530E-04
520429.81	4258998.52	42864.16567	0.38036	0.1396	0.36225	0.14735	8.15E-04	8.93E-07	2.86E-07	8.50E-07	2.90E-07	8.1709E-04
519989.62	4258809.75	42855.98699	1.37431	0.58419	1.6053	0.56469	8.15E-04	3.23E-06	1.20E-06	3.77E-06	1.11E-06	8.2392E-04
519997.12	4258673.87	42822.60632	1.06341	1.28263	1.28075	1.17508	8.14E-04	2.50E-06	2.63E-06	3.01E-06	2.31E-06	8.2443E-04
520489.59	4258923.74	42820.33751	0.28263	0.13765	0.2703	0.14447	8.14E-04	6.64E-07	2.82E-07	6.35E-07	2.84E-07	8.1580E-04
520094.88	4259013.08	42814.87941	13.46122	0.33011	12.04709	0.30797	8.14E-04	3.16E-05	6.77E-07	2.83E-05	6.06E-07	8.7500E-04
520344.76	4258183.15	42806.24584	0.20368	0.6322	0.20962	0.6806	8.14E-04	4.78E-07	1.30E-06	4.92E-07	1.34E-06	8.1728E-04
520122.56	4259034.5	42785.73089	6.20198	0.31142	5.35437	0.28993	8.13E-04	1.46E-05	6.39E-07	1.26E-05	5.71E-07	8.4162E-04
520494.68	4258215.74	42778.1914	0.1691	0.27465	0.17178	0.29171	8.13E-04	3.97E-07	5.63E-07	4.03E-07	5.74E-07	8.1507E-04
520375.64	4259042.8	42771.97732	0.50931	0.14539	0.48363	0.15517	8.13E-04	1.20E-06	2.98E-07	1.14E-06	3.05E-07	8.1595E-04
520480.39	4258937.55	42769.17986	0.29543	0.13779	0.28215	0.14462	8.13E-04	6.94E-07	2.83E-07	6.62E-07	2.85E-07	8.1489E-04
520537.26	4258284.03	42731.80778	0.16279	0.22529	0.16218	0.23625	8.12E-04	3.82E-07	4.62E-07	3.81E-07	4.65E-07	8.1394E-04
520532.26	4258271.87	42703.26947	0.16313	0.23068	0.16263	0.24235	8.12E-04	3.83E-07	4.73E-07	3.82E-07	4.77E-07	8.1343E-04
520060.67	4258978.98	42702.92462	8.9141	0.34835	17.06479	0.33305	8.12E-04	2.09E-05	7.14E-07	4.01E-05	6.56E-07	8.7407E-04
520099.42	4258382.38	42695.03816	0.38577	14.08928	0.40806	16.00012	8.12E-04	9.06E-07	2.89E-05	9.58E-07	3.15E-05	8.7381E-04
520009.93	4258628.15	42693.51905	1.04484	1.90931	1.29384	1.69202	8.12E-04	2.45E-06	3.92E-06	3.04E-06	3.33E-06	8.2426E-04
520412.51	4259015.69	42692.72657	0.41648	0.14028	0.39607	0.14871	8.12E-04	9.78E-07	2.88E-07	9.30E-07	2.93E-07	8.1400E-04
520498.98	4258909.84	42685.49962	0.2704	0.13723	0.25879	0.14404	8.11E-04	6.35E-07	2.81E-07	6.08E-07	2.84E-07	8.1318E-04
520469.58	4258194.98	42684.93567	0.17366	0.31191	0.17779	0.33175	8.11E-04	4.08E-07	6.40E-07	4.17E-07	6.53E-07	8.1348E-04
520442.65	4258183.45	42682.331	0.17893	0.36057	0.184	0.38304	8.11E-04	4.20E-07	7.40E-07	4.32E-07	7.54E-07	8.1366E-04
520556.86	4258397.81	42672.93957	0.16836	0.19564	0.16624	0.20599	8.11E-04	3.95E-07	4.01E-07	3.90E-07	4.05E-07	8.1273E-04
520554.31	4258351.4	42656.17471	0.16439	0.2027	0.16371	0.2135	8.11E-04	3.86E-07	4.16E-07	3.84E-07	4.20E-07	8.1242E-04
520007.12	4258636.77	42654.40538	1.04702	1.75721	1.28953	1.56951	8.11E-04	2.46E-06	3.60E-06	3.03E-06	3.09E-06	8.2296E-04
520521.97	4258870.3	42651.57735	0.24278	0.13739	0.23282	0.14396	8.11E-04	5.70E-07	2.82E-07	5.47E-07	2.83E-07	8.1241E-04
519986.58	4258778.3	42608.06108	1.23437	0.67572	1.44379	0.64625	8.10E-04	2.90E-06	1.39E-06	3.39E-06	1.27E-06	8.1885E-04
520447.36	4258981.24	42600.01479	0.34785	0.13846	0.33141	0.14561	8.10E-04	8.17E-07	2.84E-07	7.78E-07	2.87E-07	8.1191E-04
520285.97	4258202.96	42597.55318	0.22447	0.94128	0.23486	1.03107	8.10E-04	5.27E-07	1.93E-06	5.51E-07	2.03E-06	8.1474E-04
520548.83	4258319.02	42587.4077	0.16273	0.21149	0.16246	0.22188	8.10E-04	3.82E-07	4.34E-07	3.81E-07	4.37E-07	8.1114E-04
520555.61	4258361.97	42585.58433	0.16504	0.20039	0.16401	0.2112	8.09E-04	3.87E-07	4.11E-07	3.85E-07	4.16E-07	8.1107E-04
520030.43	4258936.52	42563.13077	3.41153	0.37685	4.41023	0.36838	8.09E-04	8.01E-06	7.73E-07	1.04E-05	7.25E-07	8.2891E-04
520266.36	4258212.9	42559.53769	0.23263	1.09594	0.24486	1.20692	8.09E-04	5.46E-07	2.25E-06	5.75E-07	2.38E-06	8.1472E-04
520471.38	4258951.29	42555.8058	0.30868	0.13763	0.29443	0.14446	8.09E-04	7.25E-07	2.82E-07	6.91E-07	2.84E-07	8.1089E-04
520553.17	4258340.9	42523.12538	0.16359	0.20512	0.16321	0.21576	8.08E-04	3.84E-07	4.21E-07	3.83E-07	4.25E-07	8.0990E-04
519999.34	4258863.73	42491.90552	1.73319	0.46913	2.03908	0.459	8.08E-04	4.07E-06	9.62E-07	4.79E-06	9.04E-07	8.1842E-04
520207.5	4258252.72	42483.30854	0.26168	1.88899	0.27586	2.11581	8.08E-04	6.14E-07	3.87E-06	6.48E-07	4.16E-06	8.1683E-04
520019.81	4258599.01	42460.31741	1.02424	2.57719	1.2939	2.2103	8.07E-04	2.40E-06	5.29E-06	3.04E-06	4.35E-06	8.2217E-04
520138.76	4258322.5	42417.4221	0.31668	4.90542	0.32754	5.71974	8.06E-04	7.43E-07	1.01E-05	7.69E-07	1.13E-05	8.2911E-04
520508.59	4258895.85	42409.62596	0.25861	0.13677	0.24776	0.14351	8.06E-04	6.07E-07	2.81E-07	5.82E-07	2.82E-07	8.0788E-04
520570.6	4258741.78	42391.0287	0.18923	0.14637	0.18133	0.15236	8.06E-04	4.44E-07	3.00E-07	4.26E-07	3.00E-07	8.0725E-04
519986.12	4258753.09	42361.63704	1.1516	0.76942	1.35706	0.72804	8.05E-04	2.70E-06	1.58E-06	3.19E-06	1.43E-06	8.1412E-04
520478.56	4258198.82	42353.21008	0.17149	0.29818	0.17526	0.31701	8.05E-04	4.03E-07	6.12E-07	4.11E-07	6.24E-07	8.0711E-04
520113.52	4259030.77	42344.27309	7.76523	0.31542	6.63683	0.29323	8.05E-04	1.82E-05	6.47E-07	1.56E-05	5.77E-07	8.3992E-04
520574.35	4258708.88	42337.91911	0.18333	0.1504	0.17593	0.15686	8.05E-04	4.30E-07	3.08E-07	4.13E-07	3.09E-07	8.0623E-04
520512.53	4258233.39	42336.45448	0.16538	0.25243	0.16663	0.26733	8.05E-04	3.88E-07	5.18E-07	3.91E-07	5.26E-07	8.0656E-04
520521.88	4258247.4	42314.15139	0.16389	0.2418	0.16421	0.25537	8.04E-04	3.85E-07	4.96E-07	3.86E-07	5.03E-07	8.0608E-04
519993.85	4258844.06	42314.04217	1.54587	0.50425	1.80564	0.49156	8.04E-04	3.63E-06	1.03E-06	4.24E-06	9.68E-07	8.1418E-04
520334.97	4258183.12	42312.66726	0.20569	0.67299	0.21219	0.72656	8.04E-04	4.83E-07	1.38E-06	4.98E-07	1.43E-06	8.0808E-04
520305.57	4258193.02	42297.16935	0.21599	0.818	0.22466	0.89083	8.04E-04	5.07E-07	1.68E-06	5.27E-07	1.75E-06	8.0846E-04
520015.81	4258910.5	42288.20087	2.44266	0.40196	2.9759	0.3948	8.04E-04	5.73E-06	8.24E-07	6.99E-06	7.77E-07	8.1814E-04
520246.75	4258222.84	42204.82442	0.2403	1.29311	0.2539	1.43219	8.02E-04	5.64E-07	2.65E-06	5.96E-07	2.82E-06	8.0887E-04
520547.73	4258308.53	42196.52638	0.16188	0.21354	0.16145	0.22385	8.02E-04	3.80E-07	4.38E-07	3.79E-07	4.41E-07	8.0372E-04
520393.73	4258173.3	42195.00555	0.18869	0.47401	0.19356	0.50494	8.02E-04	4.43E-07	9.72E-07	4.54E-07	9.94E-07	8.0491E-04
520085.77	4259009.33	42173.64889	15.97974	0.33019	18.86667	0.30964	8.02E-04	3.75E-05	6.77E-07	4.43E-05	6.10E-07	8.8474E-04
520403.52	4258173.33	42151.86957	0.18629	0.44855	0.19124	0.47713	8.01E-04	4.37E-07	9.20E-07	4.49E-07	9.39E-07	8.0398E-04
520395.42	4259032.77	42151.31641	0.45651	0.14134	0.43396	0.15033	8.01E-04	1.07E-06	2.90E-07	1.02E-06	2.96E-07	8.0390E-04
520383.95	4258173.27	42129.03275	0.19098	0.50137	0.19585	0.53497	8.01E-04	4.48E-07	1.03E-06	4.60E-07	1.05E-06	8.0379E-04
520546.67	4258822.87	42094.27877	0.21601	0.13909	0.20739	0.14501	8.00E-04	5.07E-07	2.85E-07	4.87E-07	2.85E-07	8.0170E-04
520550.31	4258814.19	42064.0913	0.21215	0.13965	0.20366	0.1455	8.00E-04	4.98E-07	2.86E-07	4.78E-07	2.86E-07	8.0111E-04
520503.36	4258219.45	42063.51431	0.1666	0.26375	0.16877	0.27987	8.00E-04	3.91E-07	5.41E-07	3.96E-07	5.51E-07	8.0143E-04
520365.75	4259052.82	42061.92073	0.53894	0.14615	0.51132	0.15628	8.00E-04	1.27E-06	3.00E-07	1.20E-06	3.08E-07	8.0259E-04
520413.31	4258173.36	42061.45411	0.18391	0.42472	0.18889	0.45142	8.00E-04	4.32E-07	8.71E-07	4.43E-07	8.89E-07	8.0215E-04
520531.58	4258856.31	42043.34571	0.23238	0.13716	0.22308	0.14347	7.99E-04	5.46E-07	2.81E-07	5.24E-07	2.82E-07	8.0080E-04
520000.96	4258874.39	42029.99576	1.80198	0.44992	2.12131	0.44095	7.99E-04	4.23E-06	9.23E-07	4.98E-06	8.68E-07	8.0992E-04
520421.05	4259012.15	41986.19263	0.39834	0.13862	0.3792	0.1467	7.98E-04	9.35E-07	2.84E-07	8.90E-07	2.89E-07	8.0048E-04
520553.94	4258805.51	41984.57825	0.20835	0.14018	0.19998	0.14594	7.98E-04	4.89E-07	2.87E-07	4.69E-07	2.87E-07	7.9958E-04
520217.32	4258242.75	41967.98386	0.25416	1.70725	0.26837	1.90579	7.98E-04	5.97E-07	3.50E-06	6.30E-07	3.75E-06	8.0622E-04
520438.41	4258994.96	41964.44888	0.36424	0.13782	0.34705	0.14522	7.98E-04	8.55E-07	2.83E-07	8.15E-07	2.86E-07	7.9991E-04
520374.16	4258173.24	41940.20992	0.19315	0.53091	0.19815	0.56747	7.97E-04	4.53E-07	1.09E-06	4.65E-07	1.12E-06	8.0033E-04
520487.53	4258202.66	41909.89434	0.16921	0.2853	0.17256	0.30316	7.97E-04	3.97E-07	5.85E-07	4.05E-07	5.97E-07	7.9862E-04
520531.44	4258261.51	41899.47847	0.16212	0.23191	0.16175	0.24404	7.96E-04	3.81E-07	4.76E-07	3.80E-07	4.80E-07	7.9815E-04
520423.1	4258173.39	41885.53884	0.18147	0.40244	0.18644	0.42754	7.96E-04	4.26E-07	8.25E-07	4.38E-07	8.42E-07	7.9870E-04
520104.49	4259027.04	41865.32827	10.02281	0.3181	8.56897	0.29597	7.96E-04	2.35E-05	6.52E-07	2.01E-05	5.83E-07	8.4067E-04
520557.58	4258796.83	41847.9946	0.20461	0.14069	0.19636	0.14637	7.95E-04	4.80E-07	2.89E-07	4.61E-07	2.88E-07	7.9697E-04
520109.27	4258362.41	41827.92221	0.35706	9.93389	0.37374	11.78621	7.95E-04	8.38E-07	2.04E-05	8.77E-07	2.32E-05	8.4036E-04
520465.2	4258963.85	41801.94968	0.31839	0.13677	0.30357	0.14356	7.95E-04	7.47E-07	2.81E-07	7.13E-07	2.83E-07	7.9660E-04
519985.87	4258800.71	41765.02319	1.2726	0.60285	1.48146	0.58082	7.94E-04	2.99E-06	1.24E-06	3.48E-06	1.14E-06	8.0272E-04
520003.68	4258885.5	41754.95011	1.90885	0.4322	2.25712	0.4242	7.94E-04	4.48E-06	8.86E-07	5.30E-06	8.35E-07	8.0519E-04
520325.18	4258183.08	41741.42386	0.20756	0.71765	0.21477	0.77708	7.93E-04	4.87E-07	1.47E-06	5.04E-07	1.53E-06	7.9742E-04
520059.4	4258501.87	41712.54558	0.75297	13.19356	0.85982	7.96512	7.93E-04	1.77E-06	2.71E-05	2.02E-06	1.57E-05	8.3940E-04
520574.06	4258733.51	41710.59665	0.18604	0.14633	0.17833	0.15243	7.93E-04	4.37E-07	3.00E-07	4.19E-07	3.00E-07	7.9430E-04
520364.37	4258173.21	41704.0436	0.19531	0.56271	0.20051	0.60286	7.93E-04	4.59E-07	1.15E-06	4.71E-07	1.19E-06	7.9599E-04
520041.83	4258961.21	41693.11792	4.65112	0.35423	6.51307	0.3439	7.93E-04	1.09E-05	7.26E-07	1.53E-05	6.77E-07	8.2012E-04
519990.14	4258835.12	41675.40822	1.43809	0.51958	1.67193	0.50544	7.92E-04	3.38E-06	1.07E-06	3.93E-06	9.95E-07	8.0154E-04
520385.54	4259042.79	41661.38367	0.48198	0.14192	0.4579	0.15125	7.92E-04	1.13E-06	2.91E-07	1.08E-06	2.98E-07	7.9470E-04
520546.76	4258298.1	41630.84835	0.16089	0.21565	0.16036	0.22589	7.91E-04	3.78E-07	4.42E-07	3.76E-07	4.45E-07	7.9297E-04
520051.75	4258975.3	41630.7529	6.39395	0.34525	10.37462	0.33269	7.91E-04	1.50E-05	7.08E-07	2.44E-05	6.55E-07	8.3206E-04
520403.92	4259029.25	41627.70588	0.43614	0.13949	0.41484	0.14816	7.91E-04	1.02E-06	2.86E-07	9.74E-07	2.92E-07	7.9384E-04
520561.21	4258788.15	41625.82791	0.20089	0.14107	0.19273	0.14668	7.91E-04	4.72E-07	2.89E-07	4.52E-07	2.89E-07	7.9273E-04
520554.95	4258470.43	41620.72111	0.17588	0.18906	0.1724	0.19929	7.91E-04	4.13E-07	3.88E-07	4.05E-07	3.92E-07	7.9273E-04
519988.27	4258710.04	41583.77319	1.05141	0.97989	1.24161	0.91295	7.90E-04	2.47E-06	2.01E-06	2.91E-06	1.80E-06	7.9962E-04
520276.18	4258202.93	41559.35072	0.22541	1.01631	0.23682	1.11599	7.90E-04	5.29E-07	2.08E-06	5.56E-07	2.20E-06	7.9533E-04
520432.89	4258173.42	41556.72296	0.17887	0.38178	0.18386	0.40534	7.90E-04	4.20E-07	7.83E-07	4.32E-07	7.98E-07	7.9235E-04
520456.03	4258977.66	41518.47371	0.33344	0.13653	0.31784	0.14341	7.89E-04	7.83E-07	2.80E-07	7.46E-07	2.82E-07	7.9128E-04
520520.98	4258880.72	41495.82151	0.24456	0.13566	0.23464	0.14217	7.89E-04	5.74E-07	2.78E-07	5.51E-07	2.80E-07	7.9044E-04
520558.91	4258429.07	41491.55093	0.17037	0.19119	0.16776	0.20106	7.89E-04	4.00E-07	3.92E-07	3.94E-07	3.96E-07	7.9026E-04
520031.68	4258947.03	41469.97853	3.53135	0.36359	4.59422	0.35526	7.88E-04	8.29E-06	7.46E-07	1.08E-05	6.99E-07	8.0879E-04
520295.79	4258192.99	41454.71819	0.21739	0.87816	0.22705	0.95894	7.88E-04	5.10E-07	1.80E-06	5.33E-07	1.89E-06	7.9271E-04
520488.9	4258934.03	41425.24325	0.2842	0.13571	0.27183	0.14237	7.87E-04	6.67E-07	2.78E-07	6.38E-07	2.80E-07	7.8928E-04
520227.14	4258232.78	41373.46908	0.2468	1.55145	0.26086	1.72631	7.86E-04	5.79E-07	3.18E-06	6.12E-07	3.40E-06	7.9421E-04
520029.69	4258569.88	41369.99292	0.97141	3.62166	1.22564	2.94412	7.86E-04	2.28E-06	7.43E-06	2.88E-06	5.80E-06	8.0475E-04
520560.33	4258406.94	41357.44159	0.16761	0.19241	0.16528	0.20238	7.86E-04	3.93E-07	3.95E-07	3.88E-07	3.98E-07	7.8770E-04
520460.49	4258181.07	41357.4098	0.17325	0.32875	0.17778	0.34934	7.86E-04	4.07E-07	6.74E-07	4.17E-07	6.88E-07	7.8832E-04
520017.13	4258921.04	41355.50558	2.52212	0.38702	3.0873	0.38021	7.86E-04	5.92E-06	7.94E-07	7.25E-06	7.48E-07	8.0080E-04
520061.48	4258989.3	41350.52192	9.22683	0.33664	17.88657	0.3218	7.86E-04	2.17E-05	6.90E-07	4.20E-05	6.33E-07	8.5098E-04
519990.89	4258692.25	41349.9396	1.02802	1.09862	1.2199	1.01684	7.86E-04	2.41E-06	2.25E-06	2.86E-06	2.00E-06	7.9552E-04
520498.16	4258920.19	41348.28204	0.27211	0.13533	0.26038	0.142	7.86E-04	6.39E-07	2.78E-07	6.11E-07	2.80E-07	7.8776E-04
520354.58	4258173.18	41347.51692	0.19732	0.59722	0.2029	0.6413	7.86E-04	4.63E-07	1.22E-06	4.76E-07	1.26E-06	7.8937E-04
520496.51	4258206.51	41344.70121	0.16683	0.27326	0.16971	0.29018	7.86E-04	3.92E-07	5.60E-07	3.98E-07	5.71E-07	7.8781E-04
520564.85	4258779.46	41334.85846	0.19725	0.14147	0.18918	0.14701	7.86E-04	4.63E-07	2.90E-07	4.44E-07	2.89E-07	7.8719E-04
520095.45	4259023.31	41333.80452	13.2003	0.31939	11.77953	0.29811	7.86E-04	3.10E-05	6.55E-07	2.77E-05	5.87E-07	8.4557E-04
520256.57	4258212.87	41317.9534	0.23293	1.19117	0.24591	1.31466	7.85E-04	5.47E-07	2.44E-06	5.77E-07	2.59E-06	7.9153E-04
520479.82	4258947.79	41315.06533	0.29689	0.13576	0.28359	0.14242	7.85E-04	6.97E-07	2.78E-07	6.66E-07	2.80E-07	7.8725E-04
520521.27	4258237.13	41279.46132	0.16265	0.24305	0.1634	0.25695	7.85E-04	3.82E-07	4.98E-07	3.84E-07	5.06E-07	7.8642E-04
520577.85	4258700.54	41269.70862	0.18029	0.15033	0.17309	0.15669	7.84E-04	4.23E-07	3.08E-07	4.06E-07	3.08E-07	7.8591E-04
520451.58	4258177.26	41268.66687	0.17477	0.34527	0.1796	0.36656	7.84E-04	4.10E-07	7.08E-07	4.22E-07	7.22E-07	7.8670E-04
519997.12	4258664.6	41261.72075	1.01285	1.34793	1.21923	1.23075	7.84E-04	2.38E-06	2.76E-06	2.86E-06	2.42E-06	7.9474E-04
519985.46	4258727.38	41224.95594	1.06131	0.87791	1.24693	0.82313	7.84E-04	2.49E-06	1.80E-06	2.93E-06	1.62E-06	7.9245E-04
520469.39	4258184.89	41223.57698	0.17143	0.31386	0.17571	0.33351	7.84E-04	4.02E-07	6.44E-07	4.13E-07	6.57E-07	7.8570E-04
520541.49	4258842.21	41214.40314	0.22225	0.13675	0.21345	0.14278	7.83E-04	5.22E-07	2.80E-07	5.01E-07	2.81E-07	7.8500E-04
520429.6	4259008.61	41213.02244	0.3813	0.13691	0.3632	0.14464	7.83E-04	8.95E-07	2.81E-07	8.53E-07	2.85E-07	7.8570E-04
520512.04	4258223.17	41209.881	0.16401	0.25369	0.16569	0.26883	7.83E-04	3.85E-07	5.20E-07	3.89E-07	5.29E-07	7.8515E-04
520560.54	4258381.62	41195.92749	0.16492	0.19405	0.16309	0.20449	7.83E-04	3.87E-07	3.98E-07	3.83E-07	4.03E-07	7.8463E-04
520507.62	4258906.26	41159.93115	0.26043	0.13496	0.24948	0.14158	7.82E-04	6.11E-07	2.77E-07	5.86E-07	2.79E-07	7.8413E-04
520005.35	4258896.19	41159.23512	1.9829	0.41542	2.35263	0.40817	7.82E-04	4.66E-06	8.52E-07	5.52E-06	8.03E-07	7.9420E-04
520442.68	4258173.45	41118.2656	0.17619	0.36253	0.18115	0.38468	7.82E-04	4.14E-07	7.44E-07	4.25E-07	7.57E-07	7.8392E-04
520375.66	4259052.8	41076.99781	0.50934	0.14257	0.48352	0.15226	7.81E-04	1.20E-06	2.92E-07	1.14E-06	3.00E-07	7.8372E-04
519982.99	4258769.65	41073.91283	1.13897	0.69631	1.33055	0.66302	7.81E-04	2.67E-06	1.43E-06	3.12E-06	1.31E-06	7.8927E-04
520568.48	4258770.78	41072.51253	0.19379	0.14191	0.18584	0.14741	7.81E-04	4.55E-07	2.91E-07	4.36E-07	2.90E-07	7.8219E-04
520541.24	4258275.72	41066.97321	0.16013	0.22234	0.15949	0.23314	7.81E-04	3.76E-07	4.56E-07	3.74E-07	4.59E-07	7.8227E-04
520315.39	4258183.05	41058.17415	0.20919	0.76692	0.21726	0.83263	7.80E-04	4.91E-07	1.57E-06	5.10E-07	1.64E-06	7.8465E-04
520530.69	4258251.18	41047.57733	0.16105	0.233	0.16095	0.24558	7.80E-04	3.78E-07	4.78E-07	3.78E-07	4.83E-07	7.8196E-04
520412.42	4259025.73	41022.34123	0.41706	0.13754	0.39662	0.1459	7.80E-04	9.79E-07	2.82E-07	9.31E-07	2.87E-07	7.8224E-04
520447.02	4258991.39	41012.09173	0.34904	0.13603	0.33272	0.14312	7.80E-04	8.19E-07	2.79E-07	7.81E-07	2.82E-07	7.8173E-04
520530.41	4258866.8	40986.25642	0.23438	0.13523	0.22495	0.14154	7.79E-04	5.50E-07	2.77E-07	5.28E-07	2.79E-07	7.8071E-04
520545.88	4258287.72	40985.07222	0.15985	0.21745	0.15925	0.2277	7.79E-04	3.75E-07	4.46E-07	3.74E-07	4.48E-07	7.8070E-04
520478.3	4258188.7	40981.84086	0.16947	0.29984	0.17342	0.3186	7.79E-04	3.98E-07	6.15E-07	4.07E-07	6.27E-07	7.8104E-04
520021.28	4258932.74	40968.10955	2.76688	0.37392	3.43647	0.36701	7.79E-04	6.50E-06	7.67E-07	8.07E-06	7.22E-07	7.9478E-04

520049.48	4258521.31	40959.43353	0.81503	7.72475	0.95063	5.52178	7.79E-04	1.91E-06	1.58E-05	2.23E-06	1.09E-05	8.0942E-04
519986.43	4258826.18	40911.2484	1.33766	0.53542	1.54972	0.51958	7.78E-04	3.14E-06	1.10E-06	3.64E-06	1.02E-06	7.8655E-04
520344.79	4258173.15	40898.93969	0.19921	0.63476	0.20533	0.68323	7.77E-04	4.68E-07	1.30E-06	4.82E-07	1.34E-06	7.8101E-04
520517.31	4258892.25	40821.45872	0.24915	0.13452	0.23895	0.14103	7.76E-04	5.85E-07	2.76E-07	5.61E-07	2.78E-07	7.7764E-04
520178.07	4258272.63	40807.29882	0.27305	2.67629	0.28428	3.03088	7.76E-04	6.41E-07	5.49E-06	6.67E-07	5.97E-06	7.8844E-04
520168.25	4258282.6	40803.04554	0.28023	3.05343	0.29067	3.47826	7.76E-04	6.58E-07	6.26E-06	6.82E-07	6.85E-06	7.9004E-04
520236.96	4258222.81	40745.51455	0.23971	1.41635	0.2534	1.5719	7.74E-04	5.63E-07	2.90E-06	5.95E-07	3.09E-06	7.8166E-04
520086.42	4259019.59	40713.91338	15.69544	0.31936	18.13915	0.29961	7.74E-04	3.68E-05	6.55E-07	4.26E-05	5.90E-07	8.5458E-04
520187.89	4258262.66	40680.51168	0.26592	2.36821	0.27788	2.66899	7.73E-04	6.24E-07	4.86E-06	6.52E-07	5.25E-06	7.8465E-04
520572.12	4258762.1	40668.39376	0.19034	0.14216	0.18249	0.14769	7.73E-04	4.47E-07	2.92E-07	4.28E-07	2.91E-07	7.7449E-04
520158.43	4258292.56	40618.27312	0.28732	3.52511	0.29711	4.04013	7.72E-04	6.75E-07	7.23E-06	6.98E-07	7.95E-06	7.8863E-04
520505.49	4258210.35	40612.49689	0.1643	0.26225	0.16675	0.27815	7.72E-04	3.86E-07	5.38E-07	3.91E-07	5.48E-07	7.7383E-04
520487.21	4258192.51	40605.42822	0.16736	0.2869	0.17095	0.30475	7.72E-04	3.93E-07	5.88E-07	4.01E-07	6.00E-07	7.7382E-04
519982.12	4258791.66	40535.44661	1.17812	0.62175	1.36659	0.59687	7.71E-04	2.77E-06	1.28E-06	3.21E-06	1.17E-06	7.7893E-04
520286	4258192.96	40528.44019	0.21845	0.94539	0.22912	1.03491	7.70E-04	5.13E-07	1.94E-06	5.38E-07	2.04E-06	7.7540E-04
520042.84	4258971.62	40515.78958	4.8046	0.34232	6.78364	0.33217	7.70E-04	1.13E-05	7.02E-07	1.59E-05	6.54E-07	7.9869E-04
520119.12	4258342.44	40515.68692	0.33119	7.54537	0.34375	8.98191	7.70E-04	7.78E-07	1.55E-05	8.07E-07	1.77E-05	8.0487E-04
520395.44	4259042.77	40497.34957	0.45666	0.13861	0.43412	0.14751	7.70E-04	1.07E-06	2.84E-07	1.02E-06	2.90E-07	7.7245E-04
520006.88	4258906.81	40488.3594	2.05375	0.39969	2.44511	0.39302	7.70E-04	4.82E-06	8.20E-07	5.74E-06	7.74E-07	7.8177E-04
520393.77	4258163.3	40471.11143	0.18512	0.47618	0.18978	0.50694	7.69E-04	4.35E-07	9.77E-07	4.46E-07	9.98E-07	7.7214E-04
520197.71	4258252.69	40470.22217	0.25894	2.11199	0.27143	2.37202	7.69E-04	6.08E-07	4.33E-06	6.37E-07	4.67E-06	7.7951E-04
520403.55	4258163.33	40469.4465	0.1829	0.45072	0.18758	0.47908	7.69E-04	4.29E-07	9.24E-07	4.40E-07	9.43E-07	7.7199E-04
519982.5	4258744.34	40457.30199	1.06046	0.79075	1.24024	0.74582	7.69E-04	2.49E-06	1.62E-06	2.91E-06	1.47E-06	7.7751E-04
520335	4258173.12	40453.8013	0.20114	0.67553	0.20784	0.72945	7.69E-04	4.72E-07	1.39E-06	4.88E-07	1.44E-06	7.7274E-04
520413.34	4258163.36	40423.03986	0.18068	0.42683	0.18538	0.45328	7.68E-04	4.24E-07	8.75E-07	4.35E-07	8.92E-07	7.7100E-04
520266.39	4258202.9	40416.59914	0.22586	1.10102	0.23816	1.21128	7.68E-04	5.30E-07	2.26E-06	5.59E-07	2.38E-06	7.7398E-04
520464.69	4258974.07	40409.25496	0.31994	0.13464	0.30519	0.1413	7.68E-04	7.51E-07	2.76E-07	7.16E-07	2.78E-07	7.7013E-04
520032.84	4258957.5	40396.98045	3.64843	0.35112	4.77189	0.34291	7.68E-04	8.57E-06	7.20E-07	1.12E-05	6.75E-07	7.8904E-04
520540.33	4258265.31	40391.1348	0.15918	0.22367	0.1586	0.23486	7.68E-04	3.74E-07	4.59E-07	3.72E-07	4.62E-07	7.6943E-04
520438.15	4259005.07	40382.73363	0.36524	0.13524	0.34813	0.14263	7.68E-04	8.57E-07	2.77E-07	8.17E-07	2.81E-07	7.6984E-04
520383.98	4258163.27	40380.2316	0.18726	0.50357	0.19199	0.53707	7.68E-04	4.40E-07	1.03E-06	4.51E-07	1.06E-06	7.7054E-04
520052.62	4258985.65	40373.96967	6.60144	0.33383	10.91077	0.32156	7.67E-04	1.55E-05	6.85E-07	2.56E-05	6.33E-07	8.0987E-04
520420.91	4259022.22	40366.31466	0.39905	0.13594	0.37991	0.14397	7.67E-04	9.37E-07	2.79E-07	8.92E-07	2.83E-07	7.6968E-04
520540.11	4258852.78	40320.53528	0.22438	0.13501	0.21557	0.14105	7.66E-04	5.27E-07	2.77E-07	5.06E-07	2.78E-07	7.6801E-04
520423.13	4258163.39	40302.79239	0.17842	0.40444	0.18312	0.42931	7.66E-04	4.19E-07	8.29E-07	4.30E-07	8.45E-07	7.6861E-04
520305.61	4258183.02	40300.06263	0.2106	0.82135	0.21962	0.89401	7.66E-04	4.94E-07	1.68E-06	5.16E-07	1.76E-06	7.7049E-04
520148.61	4258302.53	40233.25463	0.29429	4.12913	0.30374	4.76045	7.65E-04	6.91E-07	8.47E-06	7.13E-07	9.37E-06	7.8400E-04
520520.72	4258226.88	40228.473	0.16136	0.24435	0.16258	0.25847	7.65E-04	3.79E-07	5.01E-07	3.82E-07	5.09E-07	7.6644E-04
520575.75	4258753.42	40182.79666	0.18696	0.1422	0.1792	0.14782	7.64E-04	4.39E-07	2.92E-07	4.21E-07	2.91E-07	7.6524E-04
520374.19	4258163.24	40172.16088	0.18928	0.53312	0.19422	0.56965	7.64E-04	4.44E-07	1.09E-06	4.56E-07	1.12E-06	7.6672E-04
520530.02	4258240.87	40138.93303	0.15992	0.23418	0.1602	0.24713	7.63E-04	3.75E-07	4.80E-07	3.76E-07	4.86E-07	7.6469E-04
520581.34	4258692.19	40137.92405	0.17736	0.15018	0.17028	0.15641	7.63E-04	4.16E-07	3.08E-07	4.00E-07	3.08E-07	7.6438E-04
520207.53	4258242.72	40137.49448	0.252	1.89707	0.2649	2.12313	7.63E-04	5.92E-07	3.89E-06	6.22E-07	4.18E-06	7.7222E-04
520496.11	4258196.32	40128.75426	0.16516	0.27467	0.16832	0.29165	7.63E-04	3.88E-07	5.63E-07	3.95E-07	5.74E-07	7.6470E-04
520558.29	4258479.19	40114.26465	0.17474	0.18577	0.17088	0.19583	7.62E-04	4.10E-07	3.81E-07	4.01E-07	3.85E-07	7.6408E-04
520556.51	4258312.29	40107.92628	0.1588	0.20577	0.1584	0.21571	7.62E-04	3.73E-07	4.22E-07	3.72E-07	4.25E-07	7.6397E-04
520580.99	4258716.98	40096.97801	0.17992	0.14623	0.17265	0.15242	7.62E-04	4.22E-07	3.00E-07	4.05E-07	3.00E-07	7.6360E-04
520561.7	4258344.55	40095.31178	0.16042	0.19789	0.15977	0.20821	7.62E-04	3.77E-07	4.06E-07	3.75E-07	4.10E-07	7.6371E-04
520488.27	4258944.29	40070.2866	0.28567	0.13377	0.27326	0.14026	7.62E-04	6.71E-07	2.74E-07	6.42E-07	2.76E-07	7.6353E-04
520009.89	4258618.45	40065.43	0.96947	1.99029	1.19408	1.75881	7.62E-04	2.28E-06	4.08E-06	2.80E-06	3.46E-06	7.7419E-04
520497.41	4258930.5	40048.47901	0.27368	0.13345	0.26187	0.13997	7.61E-04	6.43E-07	2.74E-07	6.15E-07	2.76E-07	7.6306E-04
520562.93	4258355.09	40045.88354	0.16108	0.19566	0.16009	0.20604	7.61E-04	3.78E-07	4.01E-07	3.76E-07	4.06E-07	7.6276E-04
520385.56	4259052.79	40034.11417	0.482	0.13919	0.4579	0.14843	7.61E-04	1.13E-06	2.85E-07	1.08E-06	2.92E-07	7.6376E-04
520432.92	4258163.42	40030.06677	0.176	0.38369	0.18074	0.40699	7.61E-04	4.13E-07	7.87E-07	4.24E-07	8.01E-07	7.6332E-04
520562.15	4258437.59	40027.61481	0.16951	0.18802	0.16671	0.19771	7.61E-04	3.98E-07	3.86E-07	3.91E-07	3.89E-07	7.6242E-04
519982.73	4258817.24	40019.02391	1.24365	0.55181	1.43772	0.5339	7.61E-04	2.92E-06	1.13E-06	3.38E-06	1.05E-06	7.6917E-04
520455.62	4258987.83	40017.41284	0.33474	0.13423	0.31925	0.14104	7.61E-04	7.86E-07	2.75E-07	7.49E-07	2.78E-07	7.6275E-04
520022.62	4258943.29	40010.20203	2.86096	0.36076	3.57112	0.35402	7.61E-04	6.72E-06	7.40E-07	8.38E-06	6.97E-07	7.7706E-04
520094.69	4259031.31	40005.31464	13.47248	0.31077	12.13057	0.29039	7.60E-04	3.16E-05	6.37E-07	2.85E-05	5.72E-07	8.2175E-04
520246.78	4258212.84	40005.07615	0.23268	1.29938	0.24599	1.43706	7.60E-04	5.46E-07	2.66E-06	5.78E-07	2.83E-06	7.6704E-04
520563.96	4258390.6	39995.01208	0.16419	0.19055	0.16206	0.20063	7.60E-04	3.85E-07	3.91E-07	3.80E-07	3.95E-07	7.6178E-04
520404.18	4259039.15	39992.08767	0.43578	0.13676	0.41455	0.14533	7.60E-04	1.02E-06	2.80E-07	9.73E-07	2.86E-07	7.6274E-04
520563.81	4258416.06	39989.08215	0.16681	0.18914	0.16429	0.1988	7.60E-04	3.92E-07	3.88E-07	3.86E-07	3.91E-07	7.6168E-04
520506.73	4258916.64	39926.20279	0.26213	0.13313	0.25107	0.13963	7.59E-04	6.15E-07	2.73E-07	5.89E-07	2.75E-07	7.6068E-04
520364.4	4258163.21	39918.15973	0.19128	0.56495	0.19653	0.60511	7.59E-04	4.49E-07	1.16E-06	4.61E-07	1.19E-06	7.6203E-04
520325.21	4258173.08	39892.23918	0.20284	0.72029	0.21029	0.78008	7.58E-04	4.76E-07	1.48E-06	4.94E-07	1.54E-06	7.6226E-04
519992.19	4258870.77	39842.27542	1.54782	0.44745	1.7981	0.43809	7.57E-04	3.63E-06	9.18E-07	4.22E-06	8.62E-07	7.6696E-04
520099.45	4258372.38	39788.57443	0.36281	14.14659	0.3829	15.72817	7.56E-04	8.52E-07	2.90E-05	8.99E-07	3.10E-05	8.1803E-04
520460.39	4258171.02	39781.43764	0.17063	0.33126	0.17534	0.35121	7.56E-04	4.01E-07	6.79E-07	4.12E-07	6.91E-07	7.5836E-04
520469.23	4258174.8	39771.6649	0.1691	0.31603	0.17353	0.33532	7.56E-04	3.97E-07	6.48E-07	4.07E-07	6.60E-07	7.5810E-04
520514.47	4258214.19	39769.54111	0.1617	0.2519	0.16369	0.26681	7.56E-04	3.80E-07	5.17E-07	3.84E-07	5.25E-07	7.5775E-04
520555.45	4258301.82	39757.91779	0.15795	0.2078	0.15743	0.21764	7.56E-04	3.71E-07	4.26E-07	3.70E-07	4.28E-07	7.5732E-04
520008.28	4258917.38	39746.54742	2.12129	0.38488	2.53432	0.3787	7.56E-04	4.98E-06	7.89E-07	5.95E-06	7.45E-07	7.6797E-04
520451.55	4258167.23	39727.10776	0.17207	0.34737	0.1769	0.36814	7.55E-04	4.04E-07	7.12E-07	4.15E-07	7.25E-07	7.5740E-04
520217.35	4258232.75	39701.44388	0.24514	1.71473	0.25829	1.91231	7.55E-04	5.76E-07	3.52E-06	6.06E-07	3.76E-06	7.6312E-04
520539.51	4258254.95	39686.08037	0.15821	0.22475	0.15779	0.23638	7.54E-04	3.71E-07	4.61E-07	3.70E-07	4.65E-07	7.5603E-04
520516.26	4258902.69	39673.68854	0.25098	0.13273	0.24065	0.13916	7.54E-04	5.89E-07	2.72E-07	5.65E-07	2.74E-07	7.5583E-04
520138.79	4258312.5	39672.38932	0.30117	4.92349	0.31061	5.72023	7.54E-04	7.07E-07	1.01E-05	7.29E-07	1.13E-05	7.7689E-04
520058.46	4258998.05	39661.11851	8.23962	0.32434	16.70518	0.31104	7.54E-04	1.93E-05	6.65E-07	3.92E-05	6.12E-07	8.1373E-04
520429.41	4259018.7	39650.47072	0.3821	0.13428	0.36403	0.14199	7.54E-04	8.97E-07	2.75E-07	8.55E-07	2.80E-07	7.5599E-04
520442.71	4258163.45	39637.77768	0.17346	0.36438	0.17824	0.38623	7.53E-04	4.07E-07	7.47E-07	4.18E-07	7.60E-07	7.5578E-04
519994.57	4258881.74	39632.31051	1.62697	0.42991	1.89366	0.42166	7.53E-04	3.82E-06	8.82E-07	4.45E-06	8.30E-07	7.6332E-04
519986.82	4258851.23	39619.41226	1.38887	0.47977	1.60753	0.46792	7.53E-04	3.26E-06	9.84E-07	3.77E-06	9.21E-07	7.6203E-04
520478.07	4258178.58	39619.0082	0.16736	0.30181	0.17149	0.32036	7.53E-04	3.93E-07	6.19E-07	4.03E-07	6.31E-07	7.5513E-04
520579.39	4258744.73	39558.10242	0.18365	0.14214	0.17601	0.14789	7.52E-04	4.31E-07	2.92E-07	4.13E-07	2.91E-07	7.5336E-04
520354.61	4258163.18	39546.88841	0.19312	0.59954	0.19885	0.6436	7.52E-04	4.53E-07	1.23E-06	4.67E-07	1.27E-06	7.5513E-04
519997.12	4258655.32	39527.39305	0.96057	1.41316	1.15572	1.28576	7.51E-04	2.26E-06	2.90E-06	2.71E-06	2.53E-06	7.6174E-04
520276.21	4258192.93	39522.89179	0.21913	1.0208	0.2307	1.11991	7.51E-04	5.14E-07	2.09E-06	5.42E-07	2.20E-06	7.5661E-04
520446.7	4259001.53	39503.00478	0.35011	0.13359	0.33392	0.14064	7.51E-04	8.22E-07	2.74E-07	7.84E-07	2.77E-07	7.5304E-04
520295.82	4258182.99	39484.00621	0.21177	0.88184	0.22176	0.9623	7.51E-04	4.97E-07	1.81E-06	5.21E-07	1.89E-06	7.5524E-04
520505.02	4258200.13	39474.69351	0.16277	0.26372	0.16556	0.27971	7.50E-04	3.82E-07	5.41E-07	3.89E-07	5.51E-07	7.5220E-04
520553.69	4258830.05	39463.8569	0.21096	0.13509	0.20269	0.14078	7.50E-04	4.95E-07	2.77E-07	4.76E-07	2.77E-07	7.5166E-04
520557.29	4258821.46	39442.21759	0.20729	0.13566	0.19917	0.14128	7.50E-04	4.87E-07	2.78E-07	4.68E-07	2.78E-07	7.5124E-04
519979.4	4258761	39407.78779	1.05021	0.71611	1.22391	0.67903	7.49E-04	2.47E-06	1.47E-06	2.87E-06	1.34E-06	7.5722E-04
520412.92	4259035.53	39406.5527	0.41625	0.13481	0.39595	0.14308	7.49E-04	9.77E-07	2.76E-07	9.30E-07	2.82E-07	7.5151E-04
520012.13	4258928.96	39404.40082	2.29563	0.37155	2.77029	0.36559	7.49E-04	5.39E-06	7.62E-07	6.50E-06	7.20E-07	7.6238E-04
520039.56	4258540.74	39386.33469	0.86413	5.20603	1.04037	4.01639	7.49E-04	2.03E-06	1.07E-05	2.44E-06	7.91E-06	7.7172E-04
520560.88	4258812.87	39379.08865	0.2037	0.13618	0.19569	0.14172	7.49E-04	4.78E-07	2.79E-07	4.59E-07	2.79E-07	7.5002E-04
520538.86	4258863.31	39373.81139	0.22637	0.13317	0.21747	0.13923	7.48E-04	5.31E-07	2.73E-07	5.11E-07	2.74E-07	7.5001E-04
520550.22	4258279.56	39368.76248	0.15714	0.21437	0.15647	0.22442	7.48E-04	3.69E-07	4.40E-07	3.67E-07	4.42E-07	7.4995E-04
520033.92	4258967.94	39357.84353	3.76285	0.33945	4.94539	0.33135	7.48E-04	8.83E-06	6.96E-07	1.16E-05	6.52E-07	7.6991E-04
520043.77	4258982	39355.30591	4.95041	0.33103	7.04842	0.32106	7.48E-04	1.16E-05	6.79E-07	1.65E-05	6.32E-07	7.7755E-04
520486.91	4258182.37	39327.97055	0.16545	0.28864	0.16924	0.30638	7.48E-04	3.88E-07	5.92E-07	3.97E-07	6.03E-07	7.4953E-04
520526.02	4258888.64	39287.5519	0.24019	0.13233	0.2306	0.13862	7.47E-04	5.64E-07	2.71E-07	5.41E-07	2.73E-07	7.4843E-04
520473.36	4258970.48	39279.21853	0.30718	0.1328	0.29333	0.13927	7.47E-04	7.21E-07	2.72E-07	6.89E-07	2.74E-07	7.4858E-04
520564.48	4258804.28	39267.95341	0.20015	0.13666	0.19224	0.14212	7.46E-04	4.70E-07	2.80E-07	4.51E-07	2.80E-07	7.4789E-04
520554.5	4258291.4	39258.62397	0.15699	0.20981	0.15639	0.21956	7.46E-04	3.69E-07	4.30E-07	3.67E-07	4.32E-07	7.4783E-04
520561.76	4258462.44	39257.58313	0.17169	0.18544	0.16835	0.19527	7.46E-04	4.03E-07	3.80E-07	3.95E-07	3.84E-07	7.4778E-04
520019.77	4258589.32	39250.58963	0.94386	2.67571	1.1862	2.28182	7.46E-04	2.22E-06	5.49E-06	2.78E-06	4.49E-06	7.6106E-04
520256.6	4258202.87	39223.083	0.22587	1.19669	0.23871	1.31906	7.46E-04	5.30E-07	2.45E-06	5.60E-07	2.60E-06	7.5170E-04
520315.43	4258173.05	39216.48298	0.20427	0.76972	0.21261	0.83566	7.45E-04	4.80E-07	1.58E-06	4.99E-07	1.64E-06	7.4964E-04
520529.4	4258230.59	39215.30576	0.15875	0.23538	0.15946	0.24862	7.45E-04	3.73E-07	4.83E-07	3.74E-07	4.89E-07	7.4713E-04
520227.17	4258222.78	39210.01456	0.23846	1.55801	0.25163	1.73243	7.45E-04	5.60E-07	3.20E-06	5.91E-07	3.41E-06	7.5307E-04
519996.34	4258892.47	39200.63374	1.69092	0.41327	1.97271	0.40592	7.45E-04	3.97E-06	8.48E-07	4.63E-06	7.99E-07	7.5538E-04
519978.37	4258782.62	39168.54224	1.08995	0.64058	1.25975	0.61261	7.45E-04	2.56E-06	1.31E-06	2.96E-06	1.21E-06	7.5256E-04
520344.82	4258163.15	39121.76994	0.1949	0.6371	0.20123	0.68569	7.44E-04	4.58E-07	1.31E-06	4.72E-07	1.35E-06	7.4722E-04
520568.08	4258795.69	39108.07238	0.19664	0.13709	0.18882	0.14248	7.43E-04	4.62E-07	2.81E-07	4.43E-07	2.80E-07	7.4484E-04
520023.85	4258953.79	39054.76647	2.95164	0.34837	3.70021	0.34178	7.42E-04	6.93E-06	7.14E-07	8.69E-06	6.73E-07	7.5936E-04
520109.3	4258352.41	39047.02963	0.33731	9.96295	0.35215	11.79272	7.42E-04	7.92E-07	2.04E-05	8.27E-07	2.32E-05	7.8748E-04
519983.15	4258842.38	39006.83023	1.29729	0.49359	1.49569	0.48042	7.41E-04	3.05E-06	1.01E-06	3.51E-06	9.46E-07	7.4996E-04
519979.02	4258808.3	39001.70129	1.15614	0.56839	1.33299	0.54817	7.41E-04	2.71E-06	1.17E-06	3.13E-06	1.08E-06	7.4944E-04
520464.23	4258984.27	38989.70893	0.32122	0.13241	0.30654	0.13898	7.41E-04	7.54E-07	2.72E-07	7.20E-07	2.74E-07	7.4314E-04
520567.38	4258399.59	38984.95814	0.16363	0.18816	0.1613	0.19783	7.41E-04	3.84E-07	3.86E-07	3.79E-07	3.89E-07	7.4257E-04
520583.02	4258736.05	38955.92287	0.18052	0.14219	0.17308	0.14804	7.40E-04	4.24E-07	2.92E-07	4.06E-07	2.91E-07	7.4189E-04
520395.46	4259052.77	38937.56038	0.4567	0.13596	0.43418	0.14478	7.40E-04	1.07E-06	2.79E-07	1.02E-06	2.85E-07	7.4279E-04
520495.74	4258186.15	38921.34536	0.1634	0.27639	0.16683	0.29331	7.40E-04	3.84E-07	5.67E-07	3.92E-07	5.77E-07	7.4174E-04
520538.76	4258244.61	38914.50589	0.15718	0.22586	0.15705	0.23788	7.40E-04	3.69E-07	4.63E-07	3.69E-07	4.68E-07	7.4136E-04
520393.8	4258153.3	38895.63801	0.18172	0.47801	0.18617	0.50886	7.39E-04	4.27E-07	9.80E-07	4.37E-07	1.00E-06	7.4218E-04
520437.91	4259015.18	38881.90904	0.36611	0.1327	0.34908	0.14007	7.39E-04	8.60E-07	2.72E-07	8.20E-07	2.76E-07	7.4130E-04
520403.59	4258153.33	38877.29144	0.17956	0.45265	0.18402	0.48084	7.39E-04	4.22E-07	9.28E-07	4.32E-07	9.47E-07	7.4172E-04
520567.71	4258374.57	38870.99606	0.16103	0.1903	0.15933	0.20032	7.39E-04	3.78E-07	3.90E-07	3.74E-07	3.94E-07	7.4040E-04
520523.44	4258218.03	38853.0012	0.15908	0.24217	0.16058	0.25614	7.39E-04	3.73E-07	4.97E-07	3.77E-07	5.04E-07	7.4028E-04
520413.37	4258153.36	38851.35997	0.17747	0.42881	0.18193	0.45498	7.38E-04	4.17E-07	8.79E-07	4.27E-07	8.96E-07	7.4111E-04
520549.22	4258269.12	38842.36126	0.15628	0.21578	0.15557	0.22615	7.38E-04	3.67E-07	4.43E-07	3.65E-07	4.45E-07	7.3994E-04
520128.97	4258322.47	38834.1716	0.30762	6.01225	0.31778	7.01049	7.38E-04	7.22E-07	1.23E-05	7.46E-07	1.38E-05	7.6577E-04
520084.79	4259031.32	38824.14846	14.49393	0.30653	19.95932	0.28818	7.38E-04	3.40E-05	6.29E-07	4.69E-05	5.67E-07	8.2006E-04
520571.67	4258787.1	38809.70012	0.19312	0.13741	0.18537	0.14273	7.38E-04	4.53E-07	2.82E-07	4.35E-07	2.81E-07	7.3915E-04
520496.72	4258940.8	38787.28299	0.27515	0.13158	0.26328	0.13794	7.37E-04	6.46E-07	2.70E-07	6.18E-07	2.72E-07	7.3908E-04
520384.01	4258153.27	38775.36665	0.18372	0.50542	0.18832	0.53908	7.37E-04	4.31E-07	1.04E-06	4.42E-07	1.06E-06	7.4002E-04
520421.66	4259031.91	38771.46908	0.39782	0.13317	0.37884	0.14112	7.37E-04	9.34E-07	2.73E-07	8.89E-07	2.78E-07	7.3935E-04
519981.79	4258718.53	38762.96747	0.96707	0.89782	1.12901	0.83992	7.37E-04	2.27E-06	1.84E-06	2.65E-06	1.65E-06	7.4523E-04
520423.16	4258153.39	38752.83883	0.17533	0.40644	0.1798	0.43092	7.37E-04	4.12E-07	8.34E-07	4.22E-07	8.48E-07	7.3914E-04
520505.92	4258926.98	38725.1791	0.26369	0.1313	0.25254	0.13767	7.36E-04	6.19E-07	2.69E-07	5.93E-07	2.71E-07	7.3785E-04
520049.35	4258994.29	38720.80873	5.92973	0.32156	9.0923	0.31069	7.36E-04	1.39E-05	6.59E-07	2.13E-05	6.12E-07	7.7255E-04
520513.92	4258203.94	38708.3466	0.16029	0.25334	0.16268	0.26835	7.36E-04	3.76E-07	5.20E-07	3.82E-07	5.28E-07	7.3758E-04
520335.03	4258163.12	38691.55196	0.1967	0.67793	0.20364	0.73204	7.35E-04	4.62E-07	1.39E-06	4.78E-07	1.44E-06	7.3923E-04
519997.95	4258903.12	38679.6867	1.75158	0.39768	2.04868	0.39106	7.35E-04	4.11E-06	8.16E-07	4.81E-06	7.70E-07	7.4574E-04
519984.55	4258701.08	38664.77567	0.94998	0.99898	1.11479	0.92922	7.35E-04	2.23E-06	2.05E-06	2.62E-06	1.83E-06	7.4367E-04
520548.63	4258849.26	38657.48888	0.21677	0.13289	0.2084	0.13867	7.35E-04	5.09E-07	2.73E-07	4.89E-07	2.73E-07	7.3635E-04
520236.99	4258212.81	38622.10907	0.23185	1.42292	0.24494	1.57686	7.34E-04	5.44E-07	2.92E-06	5.75E-07	3.10E-06	7.4128E-04
520286.03	4258182.96	38597.92616	0.21263	0.94933	0.22351	1.03844	7.34E-04	4.99E-07	1.95E-06	5.25E-07	2.04E-06	7.3869E-04
520567.28	4258425.19	38587.70937	0.16596	0.18587	0.16327	0.1953	7.33E-04	3.90E-07	3.81E-07	3.83E-07	3.84E-07	7.3502E-04
520455.25	4258997.99	38583.23564	0.33584	0.13192	0.32051	0.13867	7.33E-04	7.88E-07	2.71E-07	7.52E-07	2.73E-07	7.3548E-04
520575.27	4258778.51	38551.0871	0.18977	0.13779	0.1821	0.14306	7.33E-04	4.46E-07	2.83E-07	4.28E-07	2.82E-07	7.3422E-04
520013.55	4258939.54	38544.58323	2.36994	0.3584	2.87202	0.35269	7.33E-04	5.56E-06	7.35E-07	6.74E-06	6.94E-07	7.4640E-04
520515.3	4258913.09	38543.62035	0.25268	0.13095	0.24223	0.13727	7.33E-04	5.93E-07	2.69E-07	5.69E-07	2.70E-07	7.3435E-04
520432.95	4258153.42	38527.62402	0.17306	0.38562	0.1776	0.40853	7.32E-04	4.06E-07	7.91E-07	4.17E-07	8.04E-07	7.3476E-04
520374.22	4258153.24	38515.61572	0.18553	0.53509	0.19048	0.57166	7.32E-04	4.36E-07	1.10E-06	4.47E-07	1.13E-06	7.3522E-04
520178.1	4258262.63	38461.91739	0.26183	2.68611	0.27154	3.03946	7.31E-04	6.15E-07	5.51E-06	6.37E-07	5.98E-06	7.4384E-04
520404.14	4259049.17	38458.0622	0.43602	0.13412	0.41471	0.14262	7.31E-04	1.02E-06	2.75E-07	9.74E-07	2.81E-07	7.3357E-04
520305.64	4258173.02	38455.52033	0.20542	0.82451	0.21474	0.89711	7.31E-04	4.82E-07	1.69E-06	5.04E-07	1.77E-06	7.3541E-04
520266.42	4258192.9	38428.27237	0.21933	1.10585	0.2316	1.21529	7.30E-04	5.15E-07	2.27E-06	5.44E-07	2.39E-06	7.3617E-04
520187.92	4258252.66	38422.52915	0.25549	2.37638	0.2659	2.67823	7.30E-04	6.00E-07	4.87E-06	6.24E-07	5.27E-06	7.4171E-04
520537.74	4258873.78	38417.24379	0.22818	0.1314	0.21923	0.13745	7.30E-04	5.36E-07	2.69E-07	5.15E-07	2.71E-07	7.3183E-04
520059.31	4259008.4	38414.70477	8.54876	0.31385	18.05581	0.30092	7.30E-04	2.01E-05	6.44E-07	4.24E-05	5.92E-07	7.9389E-04
520168.28	4258272.6	38404.64816	0.26826	3.06444	0.27722	3.48699	7.30E-04	6.30E-07	6.28E-06	6.51E-07	6.86E-06	7.4443E-04
519978.87	4258735.6	38396.94986	0.97385	0.8101	1.13132	0.76206	7.30E-04	2.29E-06	1.66E-06	2.66E-06	1.50E-06	7.3796E-04
520504.58	4258189.93	38381.97786	0.16122	0.26512	0.16427	0.28118	7.30E-04	3.78E-07	5.44E-07	3.86E-07	5.53E-07	7.3143E-04
520460.3	4258160.97	38365.82975	0.16812	0.33322	0.17282	0.35275	7.29E-04	3.95E-07	6.83E-07	4.06E-07	6.94E-07	7.3144E-04
520469.07	4258164.72	38364.35308	0.1667	0.3181	0.17125	0.33693	7.29E-04	3.91E-07	6.52E-07	4.02E-07	6.63E-07	7.3135E-04
520059.36	4258492.17	38352.48537	0.68007	13.29831	0.76721	7.9772	7.29E-04	1.60E-06	2.73E-05	1.80E-06	1.57E-05	7.7539E-04
520451.52	4258157.21	38317.81348	0.16946	0.34924	0.17417	0.36965	7.28E-04	3.98E-07	7.16E-07	4.09E-07	7.28E-07	7.3060E-04
520034.92	4258978.34	38298.14453	3.87087	0.32835	5.11374	0.32035	7.28E-04	9.09E-06	6.73E-07	1.20E-05	6.31E-07	7.5038E-04
520578.87	4258769.92	38294.82086	0.18655	0.13818	0.179	0.14344	7.28E-04	4.38E-07	2.83E-07	4.20E-07	2.82E-07	7.2934E-04
519979.49	4258833.54	38287.31753	1.2118	0.50778	1.39257	0.49306	7.28E-04	2.84E-06	1.04E-06	3.27E-06	9.71E-07	7.3590E-04
520477.85	4258168.48	38286.36297	0.16517	0.30382	0.16946	0.32204	7.28E-04	3.88E-07	6.23E-07	3.98E-07	6.34E-07	7.2980E-04
520197.74	4258242.69	38260.61335	0.24915	2.11977	0.26021	2.37981	7.27E-04	5.85E-07	4.35E-06	6.11E-07	4.68E-06	7.3749E-04
520548.32	4258258.72	38259.37628	0.15539	0.21696	0.15474	0.22771	7.27E-04	3.65E-07	4.45E-07	3.63E-07	4.48E-07	7.2886E-04
520364.43	4258153.21	38246.86859	0.18738	0.56697	0.19273	0.60719	7.27E-04	4.40E-07	1.16E-06	4.52E-07	1.20E-06	7.3025E-04
520524.9	4258899.11	38238.74772	0.24202	0.13059	0.2323	0.13682	7.27E-04	5.68E-07	2.68E-07	5.45E-07	2.69E-07	7.2850E-04
520491.39	4258953.01	38224.45048	0.28232	0.13088	0.27011	0.13716	7.27E-04	6.63E-07	2.68E-07	6.34E-07	2.70E-07	7.2841E-04
520586.66	4258727.37	38215.58559	0.17742	0.14223	0.17023	0.14814	7.26E-04	4.17E-07	2.92E-07	4.00E-07	2.92E-07	7.2781E-04
520158.46	4258282.56	38209.31285	0.27467	3.53645	0.28297	4.05165	7.26E-04	6.45E-07	7.25E-06	6.64E-07	7.98E-06	7.4283E-04
520587.91	4258700.44	38193.33045	0.17418	0.14605	0.16727	0.15209	7.26E-04	4.09E-07	3.00E-07	3.93E-07	2.99E-07	7.2739E-04
520442.74	4258153.45	38180.00012	0.17067	0.36625	0.17529	0.38767	7.26E-04	4.01E-07	7.51E-07	4.12E-07	7.63E-07	7.2806E-04
520482.02	4258966.89	38164.61451	0.29509	0.13101	0.28223	0.13728	7.25E-04	6.93E-07	2.69E-07	6.63E-07	2.70E-07	7.2733E-04
520025	4258964.26	38136.96407	3.04125	0.33675	3.82451	0.33026	7.25E-04	7.14E-06	6.91E-07	8.98E-06	6.50E-07	7.4237E-04
520325.25	4258163.08	38135.06581	0.19821	0.7228	0.20595	0.78269	7.25E-04	4.65E-07	1.48E-06	4.84E-07	1.54E-06	7.2885E-04
520538.08	4258234.31	38113.90831	0.15611	0.22696	0.15636	0.23932	7.24E-04	3.66E-07	4.65E-07	3.67E-07	4.71E-07	7.2615E-04
520093.33	4259043.57	38113.57179	13.97094	0.2983	12.81594	0.27922	7.24E-04	3.28E-05	6.12E-07	3.01E-05	5.50E-07	7.8852E-04

520486.63	4258172.24	38092.19219	0.16348	0.2904	0.16744	0.30798	7.24E-04	3.84E-07	5.96E-07	3.93E-07	6.06E-07	7.2604E-04
519999.43	4258913.73	38084.07074	1.80954	0.38295	2.12193	0.37694	7.24E-04	4.25E-06	7.85E-07	4.98E-06	7.42E-07	7.3467E-04
520430.4	4259028.3	38076.54978	0.38052	0.13152	0.36266	0.13915	7.24E-04	8.93E-07	2.70E-07	8.51E-07	2.74E-07	7.2605E-04
520446.41	4259011.66	38067.20209	0.35106	0.1311	0.33493	0.13814	7.24E-04	8.24E-07	2.69E-07	7.86E-07	2.72E-07	7.2574E-04
520568.02	4258337.24	38037.34622	0.15697	0.19406	0.15638	0.20395	7.23E-04	3.69E-07	3.98E-07	3.67E-07	4.01E-07	7.2456E-04
520565.29	4258316.05	38001.62798	0.15572	0.19855	0.15534	0.20814	7.22E-04	3.66E-07	4.07E-07	3.65E-07	4.10E-07	7.2389E-04
520207.56	4258232.72	37984.84869	0.24283	1.90446	0.25445	2.12989	7.22E-04	5.70E-07	3.91E-06	5.97E-07	4.19E-06	7.3129E-04
520246.81	4258202.84	37970.36235	0.22538	1.30526	0.23826	1.4415	7.22E-04	5.29E-07	2.68E-06	5.59E-07	2.84E-06	7.2835E-04
520472.83	4258980.71	37944.49661	0.30849	0.13064	0.29465	0.137	7.21E-04	7.24E-07	2.68E-07	6.92E-07	2.70E-07	7.2321E-04
520412.82	4259045.58	37923.47428	0.41662	0.13229	0.39641	0.14048	7.21E-04	9.78E-07	2.71E-07	9.31E-07	2.77E-07	7.2331E-04
519987.12	4258683.15	37918.47876	0.91914	1.11524	1.08577	1.03049	7.21E-04	2.16E-06	2.29E-06	2.55E-06	2.03E-06	7.2978E-04
520522.83	4258207.76	37891.40378	0.15781	0.2435	0.15973	0.25763	7.20E-04	3.70E-07	4.99E-07	3.75E-07	5.07E-07	7.2200E-04
520532.42	4258221.88	37881.07897	0.15648	0.23297	0.15744	0.24608	7.20E-04	3.67E-07	4.78E-07	3.70E-07	4.84E-07	7.2175E-04
520582.47	4258761.33	37880.50228	0.18331	0.13828	0.17583	0.1436	7.20E-04	4.30E-07	2.84E-07	4.13E-07	2.83E-07	7.2145E-04
519975.31	4258799.36	37875.21781	1.07534	0.58491	1.23465	0.56226	7.20E-04	2.52E-06	1.20E-06	2.90E-06	1.11E-06	7.2767E-04
520354.64	4258153.18	37859.45642	0.18905	0.60164	0.19498	0.6457	7.20E-04	4.44E-07	1.23E-06	4.58E-07	1.27E-06	7.2305E-04
520148.64	4258292.53	37832.61276	0.28094	4.14101	0.28892	4.77688	7.19E-04	6.60E-07	8.49E-06	6.78E-07	9.40E-06	7.3836E-04
520547.31	4258859.81	37825.09363	0.21874	0.13116	0.21033	0.13696	7.19E-04	5.14E-07	2.69E-07	4.94E-07	2.70E-07	7.2053E-04
520564.14	4258305.55	37819.12907	0.15499	0.20053	0.15452	0.20999	7.19E-04	3.64E-07	4.11E-07	3.63E-07	4.13E-07	7.2042E-04
520565.05	4258471.07	37812.9771	0.17061	0.18233	0.16694	0.19202	7.19E-04	4.01E-07	3.74E-07	3.92E-07	3.78E-07	7.2030E-04
520534.74	4258885.03	37800.94639	0.23168	0.13022	0.22266	0.13627	7.19E-04	5.44E-07	2.67E-07	5.23E-07	2.68E-07	7.2013E-04
520002.98	4258925.19	37789.73882	1.93743	0.36951	2.28789	0.36397	7.18E-04	4.55E-06	7.58E-07	5.37E-06	7.16E-07	7.2971E-04
520570.81	4258408.58	37767.65948	0.16286	0.18512	0.16035	0.19447	7.18E-04	3.82E-07	3.80E-07	3.76E-07	3.83E-07	7.1942E-04
520495.41	4258175.99	37747.65884	0.16159	0.27806	0.16524	0.29487	7.18E-04	3.79E-07	5.70E-07	3.88E-07	5.80E-07	7.1943E-04
520040.25	4258990.54	37737.96897	4.489	0.31886	6.1445	0.31012	7.17E-04	1.05E-05	6.54E-07	1.44E-05	6.10E-07	7.4356E-04
520014.87	4258950.08	37716.69445	2.44483	0.34608	2.97336	0.34058	7.17E-04	5.74E-06	7.10E-07	6.98E-06	6.70E-07	7.3103E-04
520513.42	4258193.72	37691.30541	0.15887	0.25472	0.16159	0.26982	7.16E-04	3.73E-07	5.22E-07	3.79E-07	5.31E-07	7.1825E-04
519975.82	4258752.35	37674.07665	0.97052	0.73448	1.12468	0.6943	7.16E-04	2.28E-06	1.51E-06	2.64E-06	1.37E-06	7.2391E-04
519997.12	4258646.05	37670.77618	0.90804	1.47593	1.0903	1.33901	7.16E-04	2.13E-06	3.03E-06	2.56E-06	2.64E-06	7.2641E-04
520029.65	4258560.18	37664.87291	0.88365	3.71682	1.08974	3.02367	7.16E-04	2.07E-06	7.62E-06	2.56E-06	5.95E-06	7.3415E-04
520295.85	4258172.99	37653.6389	0.20636	0.8853	0.21659	0.96544	7.16E-04	4.84E-07	1.82E-06	5.08E-07	1.90E-06	7.2044E-04
519974.62	4258773.58	37646.11176	1.00602	0.65922	1.16047	0.62782	7.16E-04	2.36E-06	1.35E-06	2.72E-06	1.24E-06	7.2326E-04
520559.2	4258283.4	37639.78333	0.15419	0.20672	0.15354	0.21615	7.15E-04	3.62E-07	4.24E-07	3.60E-07	4.25E-07	7.1704E-04
520463.8	4258994.45	37633.35988	0.32238	0.13023	0.30785	0.13671	7.15E-04	7.57E-07	2.67E-07	7.23E-07	2.69E-07	7.1736E-04
520217.38	4258222.75	37629.37098	0.23661	1.72136	0.24862	1.91857	7.15E-04	5.55E-07	3.53E-06	5.84E-07	3.78E-06	7.2371E-04
520276.24	4258182.93	37624.43587	0.21305	1.0251	0.22469	1.12349	7.15E-04	5.00E-07	2.10E-06	5.27E-07	2.21E-06	7.2051E-04
520547.5	4258248.36	37619.84578	0.15445	0.21804	0.154	0.22916	7.15E-04	3.63E-07	4.47E-07	3.62E-07	4.51E-07	7.1671E-04
520505.17	4258937.3	37554.66005	0.26515	0.12949	0.25393	0.13572	7.14E-04	6.22E-07	2.66E-07	5.96E-07	2.67E-07	7.1560E-04
520050.28	4259004.67	37552.07346	6.13684	0.31126	9.53998	0.30062	7.14E-04	1.44E-05	6.38E-07	2.24E-05	5.92E-07	7.5183E-04
520062.25	4258475.37	37545.72844	0.59768	16.78882	0.66597	8.8469	7.14E-04	1.40E-06	3.44E-05	1.56E-06	1.74E-05	7.6849E-04
519985.47	4258877.99	37525.38714	1.40187	0.42743	1.61166	0.41878	7.13E-04	3.29E-06	8.77E-07	3.78E-06	8.24E-07	7.2207E-04
520563.12	4258295.09	37497.81958	0.15415	0.20247	0.15358	0.21181	7.13E-04	3.62E-07	4.15E-07	3.61E-07	4.17E-07	7.1432E-04
520315.46	4258163.05	37492.93392	0.1995	0.77236	0.2081	0.83851	7.13E-04	4.68E-07	1.58E-06	4.89E-07	1.65E-06	7.1686E-04
519975.82	4258824.69	37453.49251	1.13136	0.52231	1.29654	0.50577	7.12E-04	2.66E-06	1.07E-06	3.04E-06	9.96E-07	7.1969E-04
520344.85	4258153.15	37440.5907	0.19069	0.63929	0.19727	0.68788	7.12E-04	4.48E-07	1.31E-06	4.63E-07	1.35E-06	7.1525E-04
520514.42	4258923.46	37436.22402	0.25424	0.12918	0.2437	0.13539	7.12E-04	5.97E-07	2.65E-07	5.72E-07	2.67E-07	7.1330E-04
520590.3	4258718.69	37394.10021	0.17441	0.14214	0.16744	0.14807	7.11E-04	4.09E-07	2.92E-07	3.93E-07	2.91E-07	7.1218E-04
520009.85	4258608.75	37378.97896	0.90013	2.06276	1.10405	1.81954	7.11E-04	2.11E-06	4.23E-06	2.59E-06	3.58E-06	7.2302E-04
520413.41	4258143.36	37346.16876	0.17429	0.4306	0.17855	0.45649	7.10E-04	4.09E-07	8.83E-07	4.19E-07	8.99E-07	7.1249E-04
520393.83	4258143.3	37343.84389	0.17829	0.47981	0.18267	0.51053	7.10E-04	4.19E-07	9.84E-07	4.29E-07	1.00E-06	7.1268E-04
520403.62	4258143.33	37335.16456	0.17623	0.45448	0.18056	0.48241	7.10E-04	4.14E-07	9.32E-07	4.24E-07	9.50E-07	7.1239E-04
520421.51	4259041.98	37332.24407	0.39834	0.13062	0.37933	0.13851	7.10E-04	9.35E-07	2.68E-07	8.91E-07	2.73E-07	7.1198E-04
520439.14	4259024.68	37331.61377	0.36423	0.12993	0.34743	0.13723	7.10E-04	8.55E-07	2.66E-07	8.16E-07	2.70E-07	7.1181E-04
520586.06	4258752.74	37318.74602	0.1801	0.13824	0.17271	0.14367	7.09E-04	4.23E-07	2.84E-07	4.05E-07	2.83E-07	7.1076E-04
520504.19	4258179.75	37296.05973	0.15958	0.26658	0.16288	0.28262	7.09E-04	3.75E-07	5.47E-07	3.82E-07	5.56E-07	7.1079E-04
520256.63	4258192.87	37280.95946	0.21909	1.20189	0.23164	1.32307	7.09E-04	5.14E-07	2.46E-06	5.44E-07	2.60E-06	7.1477E-04
520138.82	4258302.5	37258.42225	0.287	4.9384	0.29512	5.73274	7.08E-04	6.74E-07	1.01E-05	6.93E-07	1.13E-05	7.3099E-04
520558.12	4258272.93	37248.62788	0.15341	0.20823	0.15264	0.21788	7.08E-04	3.60E-07	4.27E-07	3.58E-07	4.29E-07	7.0960E-04
519987.32	4258888.75	37245.49185	1.45789	0.41106	1.67806	0.40342	7.08E-04	3.42E-06	8.43E-07	3.94E-06	7.94E-07	7.1697E-04
520423.19	4258143.39	37244.51713	0.17222	0.40836	0.17652	0.43237	7.08E-04	4.04E-07	8.38E-07	4.14E-07	8.51E-07	7.1046E-04
520384.04	4258143.27	37236.77884	0.18022	0.50711	0.18479	0.54085	7.08E-04	4.23E-07	1.04E-06	4.34E-07	1.06E-06	7.1077E-04
520099.48	4258362.38	37230.91037	0.34229	14.18533	0.36026	15.79597	7.08E-04	8.04E-07	2.91E-05	8.46E-07	3.11E-05	7.6953E-04
520454.9	4259008.14	37216.5438	0.33685	0.12954	0.3216	0.13627	7.07E-04	7.91E-07	2.66E-07	7.55E-07	2.68E-07	7.0950E-04
520026.07	4258974.69	37204.43612	3.12707	0.32583	3.94511	0.31942	7.07E-04	7.34E-06	6.68E-07	9.26E-06	6.29E-07	7.2509E-04
520523.87	4258909.54	37202.07261	0.24371	0.12883	0.23386	0.13497	7.07E-04	5.72E-07	2.64E-07	5.49E-07	2.66E-07	7.0880E-04
519979.79	4258858.39	37177.70756	1.25695	0.45699	1.44149	0.44599	7.07E-04	2.95E-06	9.37E-07	3.38E-06	8.78E-07	7.1483E-04
520570.76	4258434.32	37160.63871	0.16504	0.18264	0.16217	0.19188	7.06E-04	3.87E-07	3.75E-07	3.81E-07	3.78E-07	7.0788E-04
520227.2	4258212.78	37152.37825	0.23035	1.56504	0.24268	1.73711	7.06E-04	5.41E-07	3.21E-06	5.70E-07	3.42E-06	7.1394E-04
520591.37	4258692.17	37151.56989	0.17143	0.14589	0.16463	0.1518	7.06E-04	4.02E-07	2.99E-07	3.86E-07	2.99E-07	7.0757E-04
520568.64	4258454.63	37129.91221	0.16763	0.18181	0.16438	0.19125	7.06E-04	3.94E-07	3.73E-07	3.86E-07	3.76E-07	7.0730E-04
520004.49	4258935.8	37107.55027	2.00189	0.35649	2.37177	0.35133	7.05E-04	4.70E-06	7.31E-07	5.57E-06	6.92E-07	7.1704E-04
520560.71	4258837.22	37072.11137	0.20604	0.13118	0.1981	0.13667	7.05E-04	4.84E-07	2.69E-07	4.65E-07	2.69E-07	7.0616E-04
520374.25	4258143.24	37072.04989	0.18211	0.53643	0.18697	0.57369	7.05E-04	4.28E-07	1.10E-06	4.39E-07	1.13E-06	7.0777E-04
520432.98	4258143.42	37066.70948	0.1701	0.38749	0.17446	0.40992	7.05E-04	3.99E-07	7.95E-07	4.10E-07	8.07E-07	7.0698E-04
520468.93	4258154.65	37066.04003	0.16436	0.31993	0.1689	0.3384	7.05E-04	3.86E-07	6.56E-07	3.97E-07	6.66E-07	7.0666E-04
520460.21	4258150.92	37058.83867	0.16567	0.33501	0.17026	0.35422	7.04E-04	3.89E-07	6.87E-07	4.00E-07	6.97E-07	7.0659E-04
520564.28	4258828.71	37056.2589	0.20257	0.13181	0.19479	0.13721	7.04E-04	4.76E-07	2.70E-07	4.57E-07	2.70E-07	7.0585E-04
520083.42	4259043.59	37018.32714	14.37839	0.2941	21.73969	0.27703	7.04E-04	3.38E-05	6.03E-07	5.10E-05	5.45E-07	7.8959E-04
520490.69	4258963.31	37013.9385	0.28375	0.129	0.27154	0.13514	7.04E-04	6.66E-07	2.65E-07	6.37E-07	2.66E-07	7.0540E-04
520335.07	4258153.12	37011.50578	0.19232	0.68021	0.19957	0.73427	7.04E-04	4.52E-07	1.40E-06	4.69E-07	1.45E-06	7.0728E-04
520500.12	4258949.4	37009.24783	0.27162	0.12874	0.26004	0.13489	7.03E-04	6.38E-07	2.64E-07	6.10E-07	2.66E-07	7.0526E-04
520567.84	4258820.2	37004.67434	0.19915	0.13231	0.19148	0.13764	7.03E-04	4.68E-07	2.71E-07	4.50E-07	2.71E-07	7.0485E-04
520477.66	4258158.38	37003.09354	0.16294	0.3057	0.16732	0.32354	7.03E-04	3.83E-07	6.27E-07	3.93E-07	6.37E-07	7.0540E-04
520531.73	4258211.57	36966.38478	0.15526	0.23434	0.15672	0.24756	7.03E-04	3.65E-07	4.81E-07	3.68E-07	4.87E-07	7.0436E-04
520522.26	4258197.5	36960.95306	0.15652	0.24479	0.1588	0.25905	7.03E-04	3.67E-07	5.02E-07	3.73E-07	5.10E-07	7.0431E-04
520546.12	4258870.31	36960.54334	0.22056	0.12935	0.21206	0.13516	7.03E-04	5.18E-07	2.65E-07	4.98E-07	2.66E-07	7.0410E-04
520053.78	4259013.71	36960.15181	6.95352	0.3046	11.70104	0.29347	7.03E-04	1.63E-05	6.25E-07	2.75E-05	5.78E-07	7.4754E-04
520451.49	4258147.18	36946.50794	0.16681	0.35106	0.17138	0.37105	7.02E-04	3.92E-07	7.20E-07	4.02E-07	7.30E-07	7.0453E-04
520546.75	4258238.02	36931.83013	0.15347	0.21912	0.15333	0.23059	7.02E-04	3.60E-07	4.49E-07	3.60E-07	4.54E-07	7.0363E-04
520571.4	4258811.69	36914.58753	0.19578	0.13276	0.1882	0.13803	7.02E-04	4.60E-07	2.72E-07	4.42E-07	2.72E-07	7.0313E-04
520481.44	4258977.14	36905.35144	0.29641	0.12898	0.28355	0.13514	7.02E-04	6.96E-07	2.65E-07	6.66E-07	2.66E-07	7.0340E-04
520486.38	4258162.11	36901.42144	0.16147	0.29209	0.16554	0.30946	7.01E-04	3.79E-07	5.99E-07	3.89E-07	6.09E-07	7.0341E-04
520016.08	4258960.58	36896.12842	2.5177	0.33449	3.07033	0.32915	7.01E-04	5.91E-06	6.86E-07	7.21E-06	6.48E-07	7.1578E-04
519989.02	4258899.44	36869.66475	1.51106	0.39573	1.74263	0.38891	7.01E-04	3.55E-06	8.12E-07	4.09E-06	7.66E-07	7.1004E-04
520533.54	4258895.53	36853.69395	0.2335	0.12854	0.22438	0.13455	7.01E-04	5.48E-07	2.64E-07	5.27E-07	2.65E-07	7.0213E-04
520541.4	4258225.72	36830.06956	0.15387	0.22428	0.1543	0.23656	7.00E-04	3.61E-07	4.60E-07	3.62E-07	4.66E-07	7.0172E-04
520286.06	4258172.96	36798.92487	0.20699	0.95308	0.21801	1.04168	6.99E-04	4.86E-07	1.95E-06	5.12E-07	2.05E-06	7.0448E-04
520093.34	4259053.57	36798.13068	13.89992	0.28916	12.78968	0.27086	6.99E-04	3.26E-05	5.93E-07	3.00E-05	5.33E-07	7.6325E-04
520557.14	4258262.49	36794.70173	0.1526	0.20949	0.1518	0.21945	6.99E-04	3.58E-07	4.30E-07	3.56E-07	4.32E-07	7.0098E-04
520574.96	4258803.19	36783.59665	0.19245	0.13322	0.18496	0.1384	6.99E-04	4.52E-07	2.73E-07	4.34E-07	2.72E-07	7.0062E-04
520442.77	4258143.45	36768.9607	0.16786	0.36803	0.17231	0.38897	6.99E-04	3.94E-07	7.55E-07	4.05E-07	7.66E-07	7.0123E-04
520589.66	4258744.15	36763.15981	0.17705	0.1382	0.1698	0.14375	6.99E-04	4.16E-07	2.83E-07	3.99E-07	2.83E-07	7.0018E-04
520305.67	4258163.02	36733.65246	0.20041	0.82749	0.20998	0.89998	6.98E-04	4.70E-07	1.70E-06	4.93E-07	1.77E-06	7.0267E-04
520512.96	4258183.51	36719.95302	0.15743	0.25601	0.16039	0.2712	6.98E-04	3.70E-07	5.25E-07	3.77E-07	5.34E-07	6.9978E-04
520031.14	4258986.78	36715.96918	3.53573	0.31636	4.55676	0.30938	6.98E-04	8.30E-06	6.49E-07	1.07E-05	6.09E-07	7.1816E-04
520430.19	4259038.39	36687.67501	0.38115	0.12906	0.36335	0.13665	6.97E-04	8.95E-07	2.65E-07	8.53E-07	2.69E-07	6.9965E-04
520364.46	4258143.21	36666.25703	0.18357	0.56881	0.18909	0.60904	6.97E-04	4.31E-07	1.17E-06	4.44E-07	1.20E-06	7.0020E-04
520472.35	4258990.91	36663.35954	0.30966	0.12853	0.29592	0.13479	6.97E-04	7.27E-07	2.64E-07	6.95E-07	2.65E-07	6.9885E-04
520041.24	4259000.94	36662.78451	4.63228	0.30871	6.37893	0.30011	6.97E-04	1.09E-05	6.33E-07	1.50E-05	5.91E-07	7.2397E-04
520237.02	4258202.81	36654.70058	0.22432	1.4291	0.23672	1.58129	6.97E-04	5.27E-07	2.93E-06	5.56E-07	3.11E-06	7.0387E-04
520495.1	4258165.85	36627.48183	0.15976	0.2796	0.16355	0.29628	6.96E-04	3.75E-07	5.73E-07	3.84E-07	5.83E-07	6.9814E-04
519987.12	4258673.87	36621.50038	0.88026	1.16534	1.03724	1.07484	6.96E-04	2.07E-06	2.39E-06	2.44E-06	2.12E-06	7.0512E-04
519971.61	4258790.42	36619.50343	0.99867	0.60154	1.14354	0.57611	6.96E-04	2.34E-06	1.23E-06	2.68E-06	1.13E-06	7.0347E-04
520578.53	4258794.68	36607.76583	0.18918	0.13367	0.18179	0.13878	6.96E-04	4.44E-07	2.74E-07	4.27E-07	2.73E-07	6.9727E-04
520109.33	4258342.41	36590.57424	0.31945	9.98845	0.33266	11.84693	6.96E-04	7.50E-07	2.05E-05	7.81E-07	2.33E-05	7.4086E-04
519976.16	4258849.63	36589.43558	1.17784	0.46952	1.34702	0.45727	6.95E-04	2.77E-06	9.63E-07	3.16E-06	9.00E-07	7.0329E-04
520266.45	4258182.9	36580.33458	0.21304	1.11042	0.22515	1.21897	6.95E-04	5.00E-07	2.28E-06	5.29E-07	2.40E-06	7.0103E-04
520447.88	4259021.06	36542.18831	0.3489	0.12835	0.33302	0.13532	6.95E-04	8.19E-07	2.63E-07	7.82E-07	2.66E-07	6.9673E-04
520129.01	4258312.47	36520.58074	0.29287	6.02615	0.3016	7.05287	6.94E-04	6.88E-07	1.24E-05	7.08E-07	1.39E-05	7.2183E-04
520568.33	4258479.69	36517.38266	0.16948	0.17925	0.16543	0.18876	6.94E-04	3.98E-07	3.68E-07	3.88E-07	3.72E-07	6.9565E-04
519972.15	4258815.84	36512.44585	1.05607	0.53702	1.20671	0.51844	6.94E-04	2.48E-06	1.10E-06	2.83E-06	1.02E-06	7.0147E-04
520593.93	4258710	36501.77592	0.17151	0.142	0.16471	0.14788	6.94E-04	4.03E-07	2.91E-07	3.87E-07	2.91E-07	6.9520E-04
520325.28	4258153.08	36469.21349	0.19368	0.72527	0.20172	0.78507	6.93E-04	4.55E-07	1.49E-06	4.74E-07	1.55E-06	6.9717E-04
519990.57	4258910.07	36410.27648	1.56148	0.38113	1.80398	0.37502	6.92E-04	3.67E-06	7.82E-07	4.24E-06	7.38E-07	7.0151E-04
520582.09	4258786.17	36386.11647	0.18597	0.13409	0.17868	0.13913	6.92E-04	4.37E-07	2.75E-07	4.19E-07	2.74E-07	6.9304E-04
520005.88	4258946.37	36385.09125	2.06374	0.3442	2.45218	0.33934	6.92E-04	4.84E-06	7.06E-07	5.76E-06	6.68E-07	7.0359E-04
520049.44	4258511.61	36364.17505	0.73225	7.76912	0.83922	5.59261	6.91E-04	1.72E-06	1.59E-05	1.97E-06	1.10E-05	7.2185E-04
520543.46	4258881.42	36360.81749	0.2236	0.12816	0.2151	0.13398	6.91E-04	5.25E-07	2.63E-07	5.05E-07	2.64E-07	6.9271E-04
520513.62	4258933.8	36349.13744	0.25566	0.12742	0.24504	0.1335	6.91E-04	6.00E-07	2.61E-07	5.75E-07	2.63E-07	6.9263E-04
520178.14	4258252.63	36339.57069	0.25137	2.69428	0.25967	3.04777	6.91E-04	5.90E-07	5.53E-06	6.10E-07	6.00E-06	7.0347E-04
520187.96	4258242.66	36335.29894	0.24562	2.38407	0.25465	2.68541	6.91E-04	5.77E-07	4.89E-06	5.98E-07	5.29E-06	7.0202E-04
520463.4	4259004.63	36334.20089	0.32342	0.128	0.30902	0.13444	6.91E-04	7.59E-07	2.63E-07	7.25E-07	2.65E-07	6.9266E-04
520555.76	4258856.31	36317.91984	0.21148	0.12912	0.20348	0.13468	6.90E-04	4.96E-07	2.65E-07	4.78E-07	2.65E-07	6.9184E-04
520556.25	4258252.1	36273.72237	0.15173	0.21061	0.15104	0.2209	6.89E-04	3.56E-07	4.32E-07	3.55E-07	4.35E-07	6.9108E-04
520354.67	4258143.18	36263.23952	0.18507	0.60358	0.19125	0.64755	6.89E-04	4.34E-07	1.24E-06	4.49E-07	1.27E-06	6.9269E-04
520503.82	4258169.58	36239.96143	0.1579	0.26805	0.16139	0.28401	6.89E-04	3.71E-07	5.50E-07	3.79E-07	5.59E-07	6.9071E-04
520168.32	4258262.6	36237.90039	0.25713	3.07377	0.26475	3.49526	6.89E-04	6.04E-07	6.30E-06	6.22E-07	6.88E-06	7.0323E-04
520593.26	4258735.56	36235.28018	0.17418	0.13829	0.16713	0.14392	6.89E-04	4.09E-07	2.84E-07	3.92E-07	2.83E-07	6.9014E-04
519975.25	4258726.86	36224.10129	0.89293	0.82688	1.03096	0.77652	6.89E-04	2.10E-06	1.70E-06	2.42E-06	1.53E-06	6.9630E-04
520197.78	4258232.69	36217.72564	0.23987	2.12702	0.24961	2.38616	6.88E-04	5.63E-07	4.36E-06	5.86E-07	4.70E-06	6.9864E-04
519978.13	4258709.69	36209.52903	0.88018	0.91397	1.02157	0.85402	6.88E-04	2.07E-06	1.87E-06	2.40E-06	1.68E-06	6.9630E-04
520522.93	4258919.94	36180.3681	0.24525	0.12712	0.23532	0.13316	6.88E-04	5.76E-07	2.61E-07	5.52E-07	2.62E-07	6.8937E-04
519993.84	4258921.41	36178.52297	1.65809	0.36773	1.92496	0.36223	6.88E-04	3.89E-06	7.54E-07	4.52E-06	7.13E-07	6.9757E-04
520531.1	4258201.28	36158.26239	0.15414	0.23546	0.15594	0.24894	6.87E-04	3.62E-07	4.83E-07	3.66E-07	4.90E-07	6.8900E-04
520585.65	4258777.66	36110.91993	0.18283	0.13444	0.17562	0.13945	6.86E-04	4.29E-07	2.76E-07	4.12E-07	2.75E-07	6.8780E-04
520019.73	4258579.62	36088.65605	0.87023	2.76919	1.08263	2.34707	6.86E-04	2.04E-06	5.68E-06	2.54E-06	4.62E-06	7.0086E-04
520246.84	4258192.84	36080.60981	0.21835	1.3108	0.23071	1.44547	6.86E-04	5.13E-07	2.69E-06	5.42E-07	2.85E-06	6.9242E-04
520017.21	4258971.04	36078.09097	2.58713	0.32358	3.16187	0.31836	6.86E-04	6.07E-06	6.64E-07	7.42E-06	6.27E-07	7.0057E-04
520521.74	4258187.26	36037.80293	0.15518	0.24608	0.15778	0.26042	6.85E-04	3.64E-07	5.05E-07	3.70E-07	5.13E-07	6.8677E-04
520540.64	4258215.38	36028.84644	0.15277	0.22562	0.15369	0.23807	6.85E-04	3.59E-07	4.63E-07	3.61E-07	4.69E-07	6.8649E-04
520158.5	4258272.56	36021.86501	0.26289	3.5467	0.26993	4.06069	6.85E-04	6.17E-07	7.27E-06	6.34E-07	7.99E-06	7.0123E-04
520207.59	4258222.72	36016.76785	0.23417	1.91088	0.24452	2.13639	6.85E-04	5.50E-07	3.92E-06	5.74E-07	4.21E-06	6.9386E-04
519970.87	4258764.54	35996.95028	0.92738	0.67682	1.06702	0.64213	6.84E-04	2.18E-06	1.39E-06	2.51E-06	1.26E-06	6.9157E-04
520438.87	4259034.79	35996.71584	0.36497	0.12754	0.34826	0.13481	6.84E-04	8.57E-07	2.62E-07	8.18E-07	2.65E-07	6.8643E-04
520574.07	4258319.81	35947.66848	0.1527	0.19153	0.15223	0.20084	6.83E-04	3.58E-07	3.93E-07	3.57E-07	3.95E-07	6.8480E-04
520295.88	4258162.99	35940.34052	0.2011	0.88861	0.21152	0.96829	6.83E-04	4.72E-07	1.82E-06	4.97E-07	1.91E-06	6.8786E-04
520568.17	4258287.24	35932.09354	0.15132	0.19932	0.15069	0.20829	6.83E-04	3.55E-07	4.09E-07	3.54E-07	4.10E-07	6.8453E-04
520413.44	4258133.36	35905.90353	0.17114	0.43224	0.17527	0.45783	6.83E-04	4.02E-07	8.86E-07	4.11E-07	9.01E-07	6.8511E-04
520532.44	4258905.99	35900.91635	0.23519	0.12684	0.22594	0.13279	6.82E-04	5.52E-07	2.60E-07	5.30E-07	2.61E-07	6.8402E-04
519972.52	4258840.87	35900.84839	1.10336	0.48234	1.25879	0.46862	6.82E-04	2.59E-06	9.89E-07	2.96E-06	9.22E-07	6.8987E-04
520499.35	4258959.72	35883.43833	0.27305	0.12697	0.26146	0.13297	6.82E-04	6.41E-07	2.60E-07	6.14E-07	2.62E-07	6.8386E-04
520572.84	4258309.27	35870.64313	0.15202	0.19362	0.15159	0.20273	6.82E-04	3.57E-07	3.97E-07	3.56E-07	3.99E-07	6.8335E-04
520403.65	4258133.33	35869.20453	0.17295	0.4561	0.17722	0.48378	6.82E-04	4.06E-07	9.35E-07	4.16E-07	9.52E-07	6.8452E-04
520344.89	4258143.15	35856.22009	0.18659	0.64128	0.19344	0.68979	6.82E-04	4.38E-07	1.32E-06	4.54E-07	1.36E-06	6.8513E-04
520276.27	4258172.93	35854.43384	0.20718	1.02919	0.21879	1.12673	6.82E-04	4.86E-07	2.11E-06	5.14E-07	2.22E-06	6.8686E-04
520469.73	4258144.98	35851.26256	0.16191	0.32005	0.16635	0.33817	6.81E-04	3.80E-07	6.56E-07	3.91E-07	6.66E-07	6.8356E-04
520490.04	4258973.58	35845.70358	0.28507	0.12712	0.2729	0.13313	6.81E-04	6.69E-07	2.61E-07	6.41E-07	2.62E-07	6.8319E-04
520315.49	4258153.05	35843.23007	0.19479	0.77503	0.20368	0.84097	6.81E-04	4.57E-07	1.59E-06	4.78E-07	1.66E-06	6.8550E-04
520423.23	4258133.39	35843.05081	0.16921	0.40996	0.17333	0.43366	6.81E-04	3.97E-07	8.41E-07	4.07E-07	8.54E-07	6.8381E-04
519972.23	4258743.7	35840.91702	0.89634	0.75093	1.03173	0.70835	6.81E-04	2.10E-06	1.54E-06	2.42E-06	1.39E-06	6.8873E-04
520508.85	4258945.78	35825.41495	0.26147	0.12664	0.25053	0.13266	6.81E-04	6.14E-07	2.60E-07	5.88E-07	2.61E-07	6.8270E-04
520393.86	4258133.3	35816.48946	0.17482	0.48156	0.17926	0.5119	6.81E-04	4.10E-07	9.88E-07	4.21E-07	1.01E-06	6.8363E-04
520460.76	4258141.14	35806.60332	0.16312	0.33559	0.16756	0.35441	6.81E-04	3.83E-07	6.88E-07	3.93E-07	6.98E-07	6.8278E-04
520478.71	4258148.82	35783.79551	0.16053	0.30549	0.1649	0.32291	6.80E-04	3.77E-07	6.27E-07	3.87E-07	6.36E-07	6.8221E-04
520589.21	4258769.15	35776.66224	0.17975	0.13468	0.17262	0.13971	6.80E-04	4.22E-07	2.76E-07	4.05E-07	2.75E-07	6.8143E-04
520053.8	4259023.71	35775.96672	6.98724	0.29497	11.74093	0.28429	6.80E-04	1.64E-05	6.05E-07	2.76E-05	5.60E-07	7.2517E-04
520571.88	4258463.14	35771.13416	0.16662	0.17887	0.16308	0.18818	6.80E-04	3.91E-07	3.67E-07	3.83E-07	3.70E-07	6.8146E-04
520083.44	4259053.59	35757.00821	16.44289	0.28508	21.61832	0.26872	6.80E-04	3.86E-05	5.85E-07	5.08E-05	5.29E-07	7.7015E-04
520512.54	4258173.31	35749.88844	0.15592	0.25731	0.15909	0.27251	6.80E-04	3.66E-07	5.28E-07	3.73E-07	5.36E-07	6.8134E-04
520384.07	4258133.27	35743.76439	0.17673	0.50876	0.18139	0.54238	6.79E-04	4.15E-07	1.04E-06	4.26E-07	1.07E-06	6.8238E-04
520032.21	4258997.21	35736.95246	3.64312	0.3063	4.70944	0.29942	6.79E-04	8.55E-06	6.28E-07	1.11E-05	5.89E-07	7.0012E-04
519980.84	4258692.11	35727.78477	0.85862	1.01263	0.99991	0.94177	6.79E-04	2.02E-06	2.08E-06	2.35E-06	1.85E-06	6.8741E-04
520487.69	4258152.66	35722.18044	0.15916	0.29145	0.16325	0.30847	6.79E-04	3.74E-07	5.98E-07	3.83E-07	6.07E-07	6.8098E-04
519997.12	4258636.77	35720.88891	0.8561	1.53462	1.02438	1.38951	6.79E-04	2.01E-06	3.15E-06	2.40E-06	2.74E-06	6.8929E-04
520456.62	4259017.44	35716.506	0.33443	0.1268	0.31945	0.13345	6.79E-04	7.85E-07	2.60E-07	7.50E-07	2.63E-07	6.8096E-04
520433.01	4258133.42	35714.30056	0.16725	0.38907	0.17138	0.41119	6.79E-04	3.93E-07	7.98E-07	4.02E-07	8.09E-07	6.8127E-04
520571.73	4258298.78	35701.66813	0.15129	0.19553	0.15078	0.20449	6.79E-04	3.55E-07	4.01E-07	3.54E-07	4.03E-07	6.8014E-04
520480.9	4258987.37	35691.4056	0.29762	0.12694	0.28478	0.13299	6.78E-04	6.99E-07	2.60E-07	6.69E-07	2.62E-07	6.8032E-04
520555.43	4258241.74	35690.4536	0.15082	0.21172	0.15037	0.22233	6.78E-04	3.54E-07	4.34E-07	3.53E-07	4.38E-07	6.7999E-04
520550.38	4258229.56	35671.9277	0.15119	0.2163	0.15121	0.22768	6.78E-04	3.55E-07	4.44E-07	3.55E-07	4.48E-07	6.7966E-04

520217.41	4258212.75	35661.03782	0.22834	1.72856	0.23934	1.92314	6.78E-04	5.36E-07	3.55E-06	5.62E-07	3.79E-06	6.8628E-04
520022.04	4258983.02	35660.93825	2.8712	0.31413	3.56282	0.30853	6.78E-04	6.74E-06	6.44E-07	8.36E-06	6.07E-07	6.9421E-04
520451.78	4258137.29	35656.2261	0.16416	0.35213	0.16855	0.37171	6.78E-04	3.85E-07	7.22E-07	3.96E-07	7.32E-07	6.8000E-04
520007.17	4258956.89	35655.82157	2.12382	0.33263	2.53022	0.328	6.78E-04	4.99E-06	6.82E-07	5.94E-06	6.46E-07	6.9001E-04
520148.68	4258282.53	35650.21635	0.26854	4.15199	0.27531	4.7883	6.78E-04	6.30E-07	8.52E-06	6.46E-07	9.43E-06	6.9686E-04
520567.01	4258276.73	35628.2362	0.15056	0.20101	0.14981	0.21004	6.77E-04	3.53E-07	4.12E-07	3.52E-07	4.13E-07	6.7876E-04
519995.42	4258932.06	35614.21961	1.71291	0.35478	1.99369	0.34977	6.77E-04	4.02E-06	7.28E-07	4.68E-06	6.89E-07	6.8708E-04
520043.88	4259013.73	35588.45923	5.02612	0.29792	7.08623	0.28918	6.76E-04	1.18E-05	6.11E-07	1.66E-05	5.69E-07	7.0609E-04
520119.19	4258322.44	35581.80445	0.29834	7.59149	0.30829	8.959	6.76E-04	7.00E-07	1.56E-05	7.24E-07	1.76E-05	7.1098E-04
519999.93	4258628.19	35572.95385	0.85311	1.64747	1.02443	1.48419	6.76E-04	2.00E-06	3.38E-06	2.41E-06	2.92E-06	6.8689E-04
520554.5	4258866.84	35552.52068	0.21329	0.12741	0.20524	0.13299	6.76E-04	5.01E-07	2.61E-07	4.82E-07	2.62E-07	6.7729E-04
520597.57	4258701.32	35542.86902	0.16868	0.14192	0.16205	0.14768	6.76E-04	3.96E-07	2.91E-07	3.80E-07	2.91E-07	6.7696E-04
520596.85	4258726.96	35537.25388	0.1713	0.13824	0.16446	0.14392	6.75E-04	4.02E-07	2.84E-07	3.86E-07	2.83E-07	6.7685E-04
520542.18	4258891.95	35516.12541	0.22539	0.12657	0.21686	0.13236	6.75E-04	5.29E-07	2.60E-07	5.09E-07	2.61E-07	6.7666E-04
520374.28	4258133.24	35501.76525	0.17836	0.53839	0.18349	0.57518	6.75E-04	4.19E-07	1.10E-06	4.31E-07	1.13E-06	6.7791E-04
520093.77	4259064.4	35489.46738	13.63833	0.27993	12.53511	0.26236	6.75E-04	3.20E-05	5.74E-07	2.94E-05	5.16E-07	7.3713E-04
520496.67	4258156.51	35486.91654	0.15753	0.27845	0.16136	0.29484	6.75E-04	3.70E-07	5.71E-07	3.79E-07	5.80E-07	6.7644E-04
519968.48	4258807	35486.2011	0.98676	0.55136	1.1211	0.53081	6.75E-04	2.32E-06	1.13E-06	2.63E-06	1.04E-06	6.8165E-04
520256.66	4258182.87	35479.25287	0.21257	1.20675	0.22473	1.32675	6.74E-04	4.99E-07	2.47E-06	5.28E-07	2.61E-06	6.8051E-04
520442.8	4258133.45	35471.57332	0.16515	0.36955	0.16938	0.39018	6.74E-04	3.88E-07	7.58E-07	3.98E-07	7.68E-07	6.7656E-04
520471.9	4259001.11	35433.15533	0.31073	0.12643	0.29712	0.13261	6.74E-04	7.29E-07	2.59E-07	6.98E-07	2.61E-07	6.7547E-04
520335.1	4258143.12	35426.79034	0.18805	0.6824	0.19561	0.73629	6.73E-04	4.41E-07	1.40E-06	4.59E-07	1.45E-06	6.7715E-04
520592.77	4258760.64	35377.72191	0.17675	0.13471	0.16968	0.13982	6.72E-04	4.15E-07	2.76E-07	3.98E-07	2.75E-07	6.7383E-04
520039.52	4258531.05	35349.10545	0.7784	5.2708	0.91542	4.08555	6.72E-04	1.83E-06	1.08E-05	2.15E-06	8.04E-06	6.9475E-04
519978.31	4258885.03	35307.23942	1.26855	0.40862	1.44431	0.40061	6.71E-04	2.98E-06	8.38E-07	3.39E-06	7.89E-07	6.7912E-04
520530.52	4258191.02	35288.73782	0.15287	0.23673	0.15507	0.25026	6.71E-04	3.59E-07	4.86E-07	3.64E-07	4.93E-07	6.7248E-04
520227.23	4258202.78	35275.71592	0.22268	1.57116	0.23408	1.74173	6.71E-04	5.23E-07	3.22E-06	5.50E-07	3.43E-06	6.7825E-04
520565.95	4258266.27	35273.31495	0.1498	0.20243	0.14898	0.21165	6.70E-04	3.52E-07	4.15E-07	3.50E-07	4.17E-07	6.7202E-04
520447.56	4259031.2	35261.50799	0.3497	0.12602	0.33396	0.13298	6.70E-04	8.21E-07	2.58E-07	7.84E-07	2.62E-07	6.7238E-04
520539.94	4258205.07	35245.61877	0.15166	0.22681	0.15303	0.23942	6.70E-04	3.56E-07	4.65E-07	3.59E-07	4.71E-07	6.7161E-04
519967.9	4258781.48	35226.05062	0.9253	0.61784	1.05795	0.5894	6.70E-04	2.17E-06	1.27E-06	2.48E-06	1.16E-06	6.7667E-04
520522.07	4258930.3	35174.58071	0.24664	0.12543	0.23664	0.13136	6.69E-04	5.79E-07	2.57E-07	5.56E-07	2.59E-07	6.7026E-04
520364.49	4258133.21	35170.36814	0.17986	0.57049	0.18558	0.61067	6.69E-04	4.22E-07	1.17E-06	4.36E-07	1.20E-06	6.7176E-04
520521.26	4258177.04	35168.43631	0.15384	0.24725	0.15666	0.2617	6.68E-04	3.61E-07	5.07E-07	3.68E-07	5.15E-07	6.7024E-04
519987.12	4258664.6	35154.70199	0.83913	1.21556	0.98833	1.11838	6.68E-04	1.97E-06	2.49E-06	2.32E-06	2.20E-06	6.7721E-04
520505.64	4258160.35	35125.64432	0.15573	0.26663	0.1593	0.28231	6.68E-04	3.66E-07	5.47E-07	3.74E-07	5.56E-07	6.6952E-04
519968.89	4258832.1	35119.68409	1.03361	0.4954	1.1763	0.48	6.68E-04	2.43E-06	1.02E-06	2.76E-06	9.45E-07	6.7471E-04
520286.09	4258162.96	35111.56714	0.20152	0.95668	0.21259	1.04457	6.67E-04	4.73E-07	1.96E-06	4.99E-07	2.06E-06	6.7240E-04
520305.7	4258153.02	35109.72263	0.19553	0.83037	0.20531	0.90253	6.67E-04	4.59E-07	1.70E-06	4.82E-07	1.78E-06	6.7179E-04
520138.86	4258292.5	35106.08594	0.27398	4.95029	0.28093	5.74981	6.67E-04	6.43E-07	1.02E-05	6.60E-07	1.13E-05	6.9008E-04
519980.09	4258895.75	35066.73686	1.31575	0.39356	1.49988	0.38645	6.67E-04	3.09E-06	8.07E-07	3.52E-06	7.61E-07	6.7473E-04
520549.55	4258219.19	35030.8955	0.15026	0.21735	0.15067	0.22906	6.66E-04	3.53E-07	4.46E-07	3.54E-07	4.51E-07	6.6748E-04
519996.89	4258942.66	35027.68928	1.76652	0.34258	2.06134	0.33797	6.66E-04	4.15E-06	7.03E-07	4.84E-06	6.65E-07	6.7617E-04
520099.51	4258352.38	34964.48815	0.32378	14.21948	0.33988	15.96441	6.65E-04	7.60E-07	2.92E-05	7.98E-07	3.14E-05	7.2676E-04
520552.17	4258877.81	34964.33822	0.21592	0.12614	0.20788	0.13174	6.65E-04	5.07E-07	2.59E-07	4.88E-07	2.59E-07	6.6612E-04
520531.44	4258916.42	34960.78408	0.23672	0.12515	0.22738	0.13102	6.65E-04	5.56E-07	2.57E-07	5.34E-07	2.58E-07	6.6615E-04
519972.59	4258865.13	34939.73014	1.14218	0.43619	1.29637	0.42605	6.64E-04	2.68E-06	8.95E-07	3.04E-06	8.39E-07	6.7160E-04
520008.36	4258967.38	34928.5309	2.18133	0.32173	2.60394	0.31729	6.64E-04	5.12E-06	6.60E-07	6.11E-06	6.25E-07	6.7645E-04
520596.34	4258752.14	34910.48656	0.17382	0.1347	0.16686	0.13992	6.64E-04	4.08E-07	2.76E-07	3.92E-07	2.75E-07	6.6494E-04
520325.31	4258143.08	34893.68678	0.18925	0.72766	0.1976	0.78717	6.63E-04	4.44E-07	1.49E-06	4.64E-07	1.55E-06	6.6722E-04
520567.74	4258844.38	34890.65845	0.20123	0.12752	0.19366	0.1328	6.63E-04	4.72E-07	2.62E-07	4.55E-07	2.61E-07	6.6466E-04
520571.27	4258835.94	34880.5251	0.19795	0.12807	0.19051	0.13328	6.63E-04	4.65E-07	2.63E-07	4.47E-07	2.62E-07	6.6445E-04
520564.99	4258255.84	34864.43396	0.149	0.20364	0.1482	0.21312	6.63E-04	3.50E-07	4.18E-07	3.48E-07	4.20E-07	6.6424E-04
520465.36	4259013.82	34864.05565	0.32079	0.12533	0.3067	0.13167	6.63E-04	7.53E-07	2.57E-07	7.20E-07	2.59E-07	6.6469E-04
520266.48	4258172.9	34858.05149	0.20697	1.11473	0.21882	1.2223	6.63E-04	4.86E-07	2.29E-06	5.14E-07	2.41E-06	6.6828E-04
520574.8	4258827.51	34839.02641	0.1947	0.12866	0.18741	0.13379	6.62E-04	4.57E-07	2.64E-07	4.40E-07	2.63E-07	6.6365E-04
520237.05	4258192.81	34826.56462	0.2171	1.43488	0.22874	1.58516	6.62E-04	5.10E-07	2.94E-06	5.37E-07	3.12E-06	6.6910E-04
520354.71	4258133.18	34820.99095	0.18134	0.60518	0.18771	0.64941	6.62E-04	4.26E-07	1.24E-06	4.41E-07	1.28E-06	6.6527E-04
520498.65	4258970.02	34786.56512	0.27435	0.12516	0.26277	0.13103	6.61E-04	6.44E-07	2.57E-07	6.17E-07	2.58E-07	6.6301E-04
520023.17	4258993.48	34778.22622	2.9549	0.30414	3.67183	0.29863	6.61E-04	6.94E-06	6.24E-07	8.62E-06	5.88E-07	6.7784E-04
520508.02	4258956.13	34777.05519	0.26288	0.12493	0.2519	0.13081	6.61E-04	6.17E-07	2.56E-07	5.91E-07	2.57E-07	6.6277E-04
520578.33	4258819.08	34763.4806	0.19149	0.12904	0.18426	0.13412	6.61E-04	4.50E-07	2.65E-07	4.33E-07	2.64E-07	6.6220E-04
519981.72	4258906.42	34735.82745	1.36061	0.37925	1.55312	0.37291	6.60E-04	3.19E-06	7.78E-07	3.65E-06	7.34E-07	6.6862E-04
520054.23	4259033.71	34715.59983	7.13321	0.28614	12.12279	0.27579	6.60E-04	1.67E-05	5.87E-07	2.85E-05	5.43E-07	7.0622E-04
520489.45	4258983.84	34708.16886	0.28627	0.12521	0.27415	0.13109	6.60E-04	6.72E-07	2.57E-07	6.44E-07	2.58E-07	6.6157E-04
520600.45	4258718.37	34686.27353	0.16841	0.13798	0.16173	0.14368	6.59E-04	3.95E-07	2.83E-07	3.80E-07	2.83E-07	6.6066E-04
520009.81	4258599.06	34680.56553	0.83797	2.13145	1.02482	1.87578	6.59E-04	1.97E-06	4.37E-06	2.41E-06	3.69E-06	6.7165E-04
520469.58	4258134.9	34671.47207	0.15959	0.32175	0.16391	0.33952	6.59E-04	3.75E-07	6.60E-07	3.85E-07	6.68E-07	6.6113E-04
520514.62	4258164.19	34671.36908	0.15382	0.25555	0.15707	0.27053	6.59E-04	3.61E-07	5.24E-07	3.69E-07	5.33E-07	6.6083E-04
520478.5	4258138.72	34642.18421	0.15834	0.3072	0.16266	0.32429	6.58E-04	3.72E-07	6.30E-07	3.82E-07	6.38E-07	6.6051E-04
520541.01	4258902.44	34640.47266	0.22708	0.12491	0.21841	0.13066	6.58E-04	5.33E-07	2.56E-07	5.13E-07	2.57E-07	6.6001E-04
520487.41	4258142.53	34606.63606	0.1571	0.29326	0.16122	0.30995	6.58E-04	3.69E-07	6.01E-07	3.78E-07	6.10E-07	6.5977E-04
520581.86	4258810.64	34592.64048	0.18826	0.12942	0.1811	0.13443	6.58E-04	4.42E-07	2.65E-07	4.25E-07	2.65E-07	6.5894E-04
519984.69	4258917.64	34589.21604	1.43502	0.36598	1.64352	0.36034	6.57E-04	3.37E-06	7.51E-07	3.86E-06	7.09E-07	6.6617E-04
520460.66	4258131.08	34582.06525	0.16064	0.33727	0.16492	0.3557	6.57E-04	3.77E-07	6.92E-07	3.87E-07	7.00E-07	6.5950E-04
520012.93	4258979.26	34573.43177	2.38653	0.31215	2.88087	0.30755	6.57E-04	5.60E-06	6.40E-07	6.76E-06	6.05E-07	6.7079E-04
520423.26	4258123.39	34552.6581	0.16634	0.41128	0.17026	0.43487	6.57E-04	3.91E-07	8.44E-07	4.00E-07	8.56E-07	6.5927E-04
520413.47	4258123.36	34549.10452	0.16807	0.43365	0.17212	0.45902	6.57E-04	3.95E-07	8.89E-07	4.04E-07	9.04E-07	6.5931E-04
520601.2	4258692.64	34531.60767	0.16595	0.14184	0.15943	0.14744	6.56E-04	3.90E-07	2.91E-07	3.74E-07	2.90E-07	6.5773E-04
520480.39	4258997.59	34529.93402	0.29872	0.12491	0.28596	0.13088	6.56E-04	7.01E-07	2.56E-07	6.71E-07	2.58E-07	6.5824E-04
520575.13	4258471.66	34515.14608	0.16556	0.17597	0.16169	0.18515	6.56E-04	3.89E-07	3.61E-07	3.80E-07	3.64E-07	6.5756E-04
520529.98	4258180.78	34513.32992	0.15169	0.23779	0.15413	0.2515	6.56E-04	3.56E-07	4.88E-07	3.62E-07	4.95E-07	6.5774E-04
520403.68	4258123.33	34508.28209	0.16981	0.45747	0.17405	0.48505	6.56E-04	3.99E-07	9.38E-07	4.09E-07	9.55E-07	6.5864E-04
520083.87	4259064.41	34497.15997	14.75429	0.27595	20.90457	0.26026	6.56E-04	3.46E-05	5.66E-07	4.91E-05	5.12E-07	7.4052E-04
520456.24	4259027.6	34494.96511	0.33532	0.12455	0.32047	0.13119	6.56E-04	7.87E-07	2.55E-07	7.52E-07	2.58E-07	6.5774E-04
520043.9	4259023.73	34493.42178	5.04856	0.28863	7.10193	0.28022	6.56E-04	1.19E-05	5.92E-07	1.67E-05	5.52E-07	6.8533E-04
520539.3	4258194.78	34492.67649	0.15056	0.22791	0.15231	0.24069	6.56E-04	3.53E-07	4.67E-07	3.58E-07	4.74E-07	6.5730E-04
520433.05	4258123.42	34455.35009	0.16449	0.39037	0.16839	0.41232	6.55E-04	3.86E-07	8.01E-07	3.95E-07	8.12E-07	6.5733E-04
520496.33	4258146.35	34441.52645	0.15565	0.28005	0.15955	0.29623	6.55E-04	3.65E-07	5.74E-07	3.75E-07	5.83E-07	6.5657E-04
520451.75	4258127.27	34437.32017	0.1616	0.35364	0.16577	0.37291	6.55E-04	3.79E-07	7.25E-07	3.89E-07	7.34E-07	6.5682E-04
520187.99	4258232.66	34415.9991	0.23632	2.3914	0.2441	2.69216	6.54E-04	5.55E-07	4.90E-06	5.73E-07	5.30E-06	6.6552E-04
520564.11	4258245.45	34406.75445	0.14819	0.20469	0.1475	0.21449	6.54E-04	3.48E-07	4.20E-07	3.46E-07	4.22E-07	6.5555E-04
520393.89	4258123.3	34401.60782	0.17149	0.483	0.17602	0.5131	6.54E-04	4.03E-07	9.91E-07	4.13E-07	1.01E-06	6.5673E-04
520344.92	4258133.15	34397.77248	0.18268	0.64306	0.18978	0.69169	6.54E-04	4.29E-07	1.32E-06	4.46E-07	1.36E-06	6.5739E-04
520178.17	4258242.63	34397.09198	0.24155	2.70194	0.2486	3.05586	6.54E-04	5.67E-07	5.54E-06	5.84E-07	6.02E-06	6.6653E-04
519998.25	4258953.21	34388.83808	1.81754	0.33103	2.12565	0.32675	6.54E-04	4.27E-06	6.79E-07	4.99E-06	6.43E-07	6.6425E-04
520129.04	4258302.47	34388.44548	0.27916	6.04277	0.28681	7.06575	6.54E-04	6.55E-07	1.24E-05	6.73E-07	1.39E-05	6.8129E-04
520599.9	4258743.63	34379.97448	0.17097	0.13472	0.16417	0.14003	6.54E-04	4.01E-07	2.76E-07	3.85E-07	2.76E-07	6.5484E-04
520197.81	4258222.69	34342.25139	0.23111	2.13369	0.23962	2.39238	6.53E-04	5.43E-07	4.38E-06	5.63E-07	4.71E-06	6.6297E-04
519968.81	4258856.03	34337.45934	1.06956	0.44823	1.21251	0.43679	6.53E-04	2.51E-06	9.19E-07	2.85E-06	8.60E-07	6.5983E-04
519964.81	4258798.15	34335.24087	0.91996	0.56598	1.04223	0.54303	6.53E-04	2.16E-06	1.16E-06	2.45E-06	1.07E-06	6.5949E-04
520295.91	4258152.99	34328.11068	0.19599	0.89179	0.20653	0.9708	6.53E-04	4.60E-07	1.83E-06	4.85E-07	1.91E-06	6.5720E-04
520246.87	4258182.84	34326.72262	0.21162	1.31594	0.22336	1.44902	6.52E-04	4.97E-07	2.70E-06	5.24E-07	2.85E-06	6.5906E-04
520588.93	4258793.77	34324.52412	0.18215	0.13036	0.17518	0.13521	6.52E-04	4.28E-07	2.67E-07	4.11E-07	2.66E-07	6.5382E-04
520548.78	4258208.85	34301.10759	0.1492	0.21862	0.1501	0.23045	6.52E-04	3.50E-07	4.48E-07	3.52E-07	4.54E-07	6.5361E-04
520093.79	4259074.4	34277.5253	13.54486	0.27165	12.4973	0.25478	6.52E-04	3.18E-05	5.57E-07	2.93E-05	5.02E-07	7.1375E-04
520384.1	4258123.27	34273.71355	0.1732	0.51037	0.17808	0.54355	6.51E-04	4.07E-07	1.05E-06	4.18E-07	1.07E-06	6.5442E-04
520168.35	4258252.6	34272.57464	0.24676	3.08215	0.25317	3.50454	6.51E-04	5.79E-07	6.32E-06	5.94E-07	6.90E-06	6.6585E-04
520315.52	4258143.05	34270.54781	0.19015	0.77769	0.19933	0.84307	6.51E-04	4.46E-07	1.59E-06	4.68E-07	1.66E-06	6.5559E-04
519967.12	4258755.49	34268.68906	0.85556	0.69275	0.9797	0.65548	6.51E-04	2.01E-06	1.42E-06	2.30E-06	1.29E-06	6.5841E-04
519965.26	4258823.34	34261.05871	0.96936	0.50834	1.09827	0.49125	6.51E-04	2.28E-06	1.04E-06	2.58E-06	9.67E-07	6.5810E-04
520442.83	4258123.45	34257.20785	0.16252	0.37085	0.16649	0.39129	6.51E-04	3.82E-07	7.61E-07	3.91E-07	7.70E-07	6.5347E-04
520577.15	4258291.09	34208.79956	0.14846	0.19222	0.14786	0.20082	6.50E-04	3.49E-07	3.94E-07	3.47E-07	3.95E-07	6.5173E-04
520276.3	4258162.93	34205.82558	0.20152	1.03303	0.21299	1.12969	6.50E-04	4.73E-07	2.12E-06	5.00E-07	2.22E-06	6.5551E-04
520550.82	4258888.38	34200.62453	0.21771	0.12457	0.20963	0.13016	6.50E-04	5.11E-07	2.55E-07	4.92E-07	2.56E-07	6.5161E-04
520562.88	4258863.37	34192.35613	0.20635	0.12547	0.1987	0.13083	6.50E-04	4.84E-07	2.57E-07	4.66E-07	2.58E-07	6.5140E-04
520029.6	4258550.48	34145.60819	0.80449	3.79827	0.97158	3.09311	6.49E-04	1.89E-06	7.79E-06	2.28E-06	6.09E-06	6.6709E-04
520207.63	4258212.72	34143.93513	0.22581	1.91803	0.23509	2.14055	6.49E-04	5.30E-07	3.93E-06	5.52E-07	4.21E-06	6.5824E-04
520505.24	4258150.16	34137.76433	0.154	0.26818	0.15769	0.2837	6.49E-04	3.62E-07	5.50E-07	3.70E-07	5.58E-07	6.5074E-04
519986.36	4258928.32	34133.56662	1.48307	0.35318	1.70185	0.3481	6.49E-04	3.48E-06	7.24E-07	4.00E-06	6.85E-07	6.5770E-04
520523.6	4258168.03	34110.39649	0.15178	0.24532	0.1547	0.25956	6.48E-04	3.56E-07	5.03E-07	3.63E-07	5.11E-07	6.5011E-04
520592.46	4258785.34	34095.4183	0.17915	0.13079	0.17229	0.13559	6.48E-04	4.21E-07	2.68E-07	4.04E-07	2.67E-07	6.4945E-04
520374.31	4258123.24	34035.77436	0.17474	0.53999	0.18013	0.57638	6.47E-04	4.10E-07	1.11E-06	4.23E-07	1.13E-06	6.5003E-04
520530.51	4258926.8	34034.01388	0.23811	0.12352	0.22871	0.12929	6.47E-04	5.59E-07	2.53E-07	5.37E-07	2.55E-07	6.4853E-04
520158.53	4258262.56	34028.75283	0.25192	3.5568	0.25786	4.06928	6.47E-04	5.91E-07	7.29E-06	6.05E-07	8.01E-06	6.6333E-04
520575.9	4258280.54	34025.79737	0.14778	0.194	0.14706	0.20257	6.47E-04	3.47E-07	3.98E-07	3.45E-07	3.99E-07	6.4826E-04
520581.53	4258312.99	33996.86927	0.14914	0.18688	0.14863	0.19575	6.46E-04	3.50E-07	3.83E-07	3.49E-07	3.85E-07	6.4769E-04
520474.1	4259010.2	33992.77608	0.30789	0.12386	0.29467	0.12992	6.46E-04	7.23E-07	2.54E-07	6.92E-07	2.56E-07	6.4807E-04
519971.62	4258718.12	33955.11386	0.81729	0.8406	0.93885	0.78869	6.45E-04	1.92E-06	1.72E-06	2.20E-06	1.55E-06	6.5282E-04
520558.45	4258223	33946.72451	0.14772	0.20965	0.14767	0.22055	6.45E-04	3.47E-07	4.30E-07	3.47E-07	4.34E-07	6.4682E-04
520335.13	4258133.12	33942.76126	0.18392	0.68442	0.19177	0.73812	6.45E-04	4.32E-07	1.40E-06	4.50E-07	1.45E-06	6.4893E-04
520580.35	4258302.47	33935.39188	0.14848	0.18882	0.14798	0.19749	6.45E-04	3.49E-07	3.87E-07	3.47E-07	3.89E-07	6.4652E-04
520604.05	4258709.78	33925.00415	0.16575	0.13801	0.15927	0.14361	6.45E-04	3.89E-07	2.83E-07	3.74E-07	2.83E-07	6.4618E-04
519968.64	4258735.05	33906.92706	0.82638	0.76513	0.94532	0.72085	6.45E-04	1.94E-06	1.57E-06	2.22E-06	1.42E-06	6.5166E-04
520585.36	4258369.19	33869.98038	0.15308	0.17871	0.15111	0.18786	6.44E-04	3.59E-07	3.67E-07	3.55E-07	3.70E-07	6.4526E-04
520217.45	4258202.75	33867.98077	0.22054	1.73453	0.23049	1.92751	6.44E-04	5.18E-07	3.56E-06	5.41E-07	3.79E-06	6.5218E-04
520595.99	4258776.9	33816.15415	0.17621	0.13107	0.16941	0.13586	6.43E-04	4.14E-07	2.69E-07	3.98E-07	2.67E-07	6.4413E-04
520256.69	4258172.87	33805.59689	0.2063	1.21128	0.21798	1.3301	6.43E-04	4.84E-07	2.48E-06	5.12E-07	2.62E-06	6.4868E-04
520364.52	4258123.21	33802.63428	0.17634	0.57188	0.18225	0.61226	6.43E-04	4.14E-07	1.17E-06	4.28E-07	1.21E-06	6.4575E-04
520603.46	4258735.12	33782.45153	0.16819	0.13467	0.16157	0.14006	6.42E-04	3.95E-07	2.76E-07	3.79E-07	2.76E-07	6.4347E-04
520538.7	4258184.51	33781.18872	0.14947	0.22893	0.15152	0.24191	6.42E-04	3.51E-07	4.70E-07	3.56E-07	4.76E-07	6.4377E-04
520539.94	4258912.89	33779.60874	0.22862	0.12326	0.21985	0.12896	6.42E-04	5.37E-07	2.53E-07	5.16E-07	2.54E-07	6.4365E-04
520014.13	4258989.75	33778.83036	2.4537	0.30224	2.96556	0.29775	6.42E-04	5.76E-06	6.20E-07	6.96E-06	5.86E-07	6.5600E-04
519964.19	4258772.54	33769.01993	0.8588	0.63287	0.97715	0.60201	6.42E-04	2.02E-06	1.30E-06	2.29E-06	1.19E-06	6.4868E-04
520062.83	4258443.35	33768.29501	0.46183	18.04345	0.50472	9.2422	6.42E-04	1.08E-06	3.70E-05	1.18E-06	1.82E-05	6.9934E-04
520574.77	4258270.04	33763.46233	0.14706	0.19556	0.14624	0.20418	6.42E-04	3.45E-07	4.01E-07	3.43E-07	4.02E-07	6.4327E-04
520514.16	4258153.98	33754.57384	0.15226	0.2568	0.15566	0.27171	6.42E-04	3.57E-07	5.27E-07	3.65E-07	5.35E-07	6.4340E-04
520507.25	4258966.46	33749.66877	0.26417	0.12322	0.25319	0.12896	6.42E-04	6.20E-07	2.53E-07	5.94E-07	2.54E-07	6.4324E-04
519999.51	4258963.73	33736.79197	1.86669	0.32011	2.18727	0.3161	6.41E-04	4.38E-06	6.57E-07	5.14E-06	6.22E-07	6.5207E-04
520497.99	4258980.3	33724.03205	0.27557	0.12333	0.26399	0.12908	6.41E-04	6.47E-07	2.53E-07	6.20E-07	2.54E-07	6.4281E-04
520464.92	4259024.01	33701.21413	0.32173	0.12313	0.30775	0.12946	6.41E-04	7.55E-07	2.53E-07	7.22E-07	2.55E-07	6.4258E-04
520148.71	4258272.53	33667.94546	0.25702	4.16281	0.26275	4.79977	6.40E-04	6.03E-07	8.54E-06	6.17E-07	9.45E-06	6.5917E-04
519965.04	4258846.93	33652.99072	1.00254	0.46035	1.13344	0.4475	6.40E-04	2.35E-06	9.44E-07	2.66E-06	8.81E-07	6.4652E-04
519987.9	4258938.95	33644.75699	1.52939	0.34107	1.75855	0.33647	6.40E-04	3.59E-06	7.00E-07	4.13E-06	6.62E-07	6.4861E-04
520516.68	4258952.54	33626.90036	0.25317	0.12295	0.24282	0.1287	6.39E-04	5.94E-07	2.52E-07	5.70E-07	2.53E-07	6.4086E-04
520548.08	4258198.54	33624.22733	0.14819	0.21966	0.14949	0.23168	6.39E-04	3.48E-07	4.51E-07	3.51E-07	4.56E-07	6.4074E-04
520488.89	4258994.07	33617.10341	0.28737	0.12331	0.27533	0.12908	6.39E-04	6.75E-07	2.53E-07	6.46E-07	2.54E-07	6.4083E-04
519974.46	4258700.84	33614.18833	0.80075	0.92585	0.92365	0.86503	6.39E-04	1.88E-06	1.90E-06	2.17E-06	1.70E-06	6.4659E-04
520560.89	4258874.2	33606.16564	0.20862	0.12414	0.20097	0.12952	6.39E-04	4.90E-07	2.55E-07	4.72E-07	2.55E-07	6.4026E-04
520053.72	4259043.64	33584.97671	7.04303	0.27724	11.77757	0.2674	6.38E-04	1.65E-05	5.69E-07	2.76E-05	5.26E-07	6.8367E-04
519987.12	4258655.32	33580.84032	0.79771	1.26428	0.93826	1.16076	6.38E-04	1.87E-06	2.59E-06	2.20E-06	2.28E-06	6.4726E-04
520305.73	4258143.02	33568.90827	0.19073	0.83318	0.2007	0.90469	6.38E-04	4.48E-07	1.71E-06	4.71E-07	1.78E-06	6.4249E-04
520286.12	4258152.96	33544.96678	0.19626	0.96002	0.20727	1.04728	6.38E-04	4.61E-07	1.97E-06	4.87E-07	2.06E-06	6.4261E-04
520227.27	4258192.78	33541.89303	0.21537	1.57659	0.22581	1.74577	6.38E-04	5.06E-07	3.23E-06	5.30E-07	3.44E-06	6.4528E-04
520478.3	4258128.62	33522.23634	0.15611	0.30888	0.16035	0.32557	6.37E-04	3.66E-07	6.33E-07	3.76E-07	6.41E-07	6.3921E-04
520044.33	4259033.73	33521.37011	5.13695	0.28013	7.24645	0.27194	6.37E-04	1.21E-05	5.75E-07	1.70E-05	5.35E-07	6.6736E-04
520487.15	4258132.41	33516.91597	0.15499	0.29503	0.15912	0.31133	6.37E-04	3.64E-07	6.05E-07	3.74E-07	6.13E-07	6.3905E-04
520469.44	4258124.83	33515.78755	0.15722	0.32339	0.16141	0.34074	6.37E-04	3.69E-07	6.63E-07	3.79E-07	6.71E-07	6.3916E-04
520526.31	4258938.55	33491.47279	0.2427	0.12263	0.23302	0.12836	6.37E-04	5.70E-07	2.52E-07	5.47E-07	2.53E-07	6.3823E-04
520599.52	4258768.47	33481.84563	0.17333	0.13123	0.1666	0.13606	6.36E-04	4.07E-07	2.69E-07	3.91E-07	2.68E-07	6.3776E-04
520532.58	4258171.88	33477.2947	0.14966	0.23567	0.15222	0.24918	6.36E-04	3.51E-07	4.83E-07	3.57E-07	4.91E-07	6.3803E-04
520354.74	4258123.18	33474.55223	0.17775	0.60656	0.1843	0.65115	6.36E-04	4.17E-07	1.24E-06	4.33E-07	1.28E-06	6.3967E-04
520119.22	4258312.44	33474.37609	0.2839	7.6162	0.2929	8.91623	6.36E-04	6.67E-07	1.56E-05	6.88E-07	1.76E-05	6.7081E-04
520003.83	4258975.5	33460.70894	2.02051	0.31038	2.3865	0.30644	6.36E-04	4.74E-06	6.37E-07	5.60E-06	6.03E-07	6.4761E-04
520573.73	4258259.58	33446.04991	0.14631	0.19689	0.14545	0.20568	6.36E-04	3.43E-07	4.04E-07	3.41E-07	4.05E-07	6.3724E-04
520549.58	4258898.9	33419.30885	0.21937	0.12301	0.21123	0.12857	6.35E-04	5.15E-07	2.52E-07	4.96E-07	2.53E-07	6.3676E-04
520460.58	4258121.03	33414.82387	0.15817	0.33879	0.16227	0.35685	6.35E-04	3.71E-07	6.95E-07	3.81E-07	7.02E-07	6.3730E-04
520578.37	4258480.18	33392.73087	0.16446	0.17322	0.16025	0.18221	6.35E-04	3.86E-07	3.55E-07	3.76E-07	3.59E-07	6.3621E-04
520325.34	4258133.09	33386.27435	0.18487	0.73	0.19354	0.78886	6.35E-04	4.34E-07	1.50E-06	4.54E-07	1.55E-06	6.3855E-04
520496.01	4258136.2	33382.44785	0.15367	0.28207	0.15766	0.29786	6.35E-04	3.61E-07	5.79E-07	3.70E-07	5.86E-07	6.3644E-04
520083.89	4259074.41	33348.62491	14.6463	0.26779	20.78701	0.25275	6.34E-04	3.44E-05	5.49E-07	4.88E-05	4.98E-07	7.1813E-04
519999.89	4258618.49	33312.79328	0.79882	1.70222	0.95529	1.53287	6.33E-04	1.88E-06	3.49E-06	2.24E-06	3.02E-06	6.4384E-04
519961.62	4258814.58	33309.64697	0.90858	0.52094	1.0236	0.50215	6.33E-04	2.13E-06	1.07E-06	2.40E-06	9.88E-07	6.3975E-04
520557.62	4258212.63	33304.31557	0.14674	0.21093	0.14717	0.22199	6.33E-04	3.44E-07	4.33E-07	3.46E-07	4.37E-07	6.3461E-04
520423.29	4258113.39	33294.74458	0.16346	0.41249	0.16728	0.43589	6.33E-04	3.84E-07	8.46E-07	3.93E-07	8.58E-07	6.3535E-04
520413.5	4258113.36	33283.10683	0.16512	0.43481	0.16911	0.46009	6.33E-04	3.88E-07	8.92E-07	3.97E-07	9.06E-07	6.3523E-04
520523.07	4258157.79	33278.81333	0.15037	0.2465	0.15348	0.26073	6.33E-04	3.53E-07	5.06E-07	3.60E-07	5.13E-07	6.3430E-04
519971.16	4258892.07	33277.73752	1.15451	0.3911	1.30356	0.38369	6.33E-04	2.71E-06	8.02E-07	3.06E-06	7.55E-07	6.3988E-04
520451.72	4258117.24	33269.03735	0.15906	0.355	0.163	0.374	6.32E-04	3.73E-07	7.28E-07	3.83E-07	7.36E-07	6.3460E-04
520266.51	4258162.9	33252.5359	0.20112	1.11878	0.21262	1.22532	6.32E-04	4.72E-07	2.29E-06	4.99E-07	2.41E-06	6.3775E-04

520403.71	4258113.33	33238.16089	0.16678	0.45861	0.17102	0.48619	6.32E-04	3.92E-07	9.41E-07	4.02E-07	9.57E-07	6.3449E-04
520433.08	4258113.42	33225.68413	0.16172	0.39159	0.16546	0.41331	6.32E-04	3.80E-07	8.03E-07	3.88E-07	8.14E-07	6.3395E-04
520568.33	4258237.24	33196.56255	0.14584	0.20172	0.14524	0.21137	6.31E-04	3.42E-07	4.14E-07	3.41E-07	4.16E-07	6.3252E-04
520138.89	4258282.5	33154.37817	0.26193	4.96207	0.26787	5.76707	6.30E-04	6.15E-07	1.02E-05	6.29E-07	1.14E-05	6.5298E-04
520504.87	4258139.99	33148.70165	0.15219	0.26995	0.156	0.28519	6.30E-04	3.57E-07	5.54E-07	3.66E-07	5.61E-07	6.3194E-04
520237.09	4258182.81	33142.34965	0.21022	1.43995	0.22105	1.58863	6.30E-04	4.94E-07	2.95E-06	5.19E-07	3.13E-06	6.3707E-04
519989.33	4258949.53	33135.8498	1.57406	0.32965	1.81347	0.32545	6.30E-04	3.70E-06	6.76E-07	4.26E-06	6.41E-07	6.3912E-04
520482.84	4259006.58	33127.4013	0.2957	0.1224	0.28336	0.12822	6.30E-04	6.94E-07	2.51E-07	6.65E-07	2.52E-07	6.3155E-04
520607.02	4258726.61	33120.50022	0.1655	0.13456	0.15905	0.13999	6.30E-04	3.89E-07	2.76E-07	3.73E-07	2.76E-07	6.3087E-04
520393.92	4258113.3	33098.82539	0.16832	0.48419	0.17294	0.51423	6.29E-04	3.95E-07	9.93E-07	4.06E-07	1.01E-06	6.3196E-04
520603.05	4258760.03	33090.22545	0.17053	0.13126	0.16387	0.13618	6.29E-04	4.00E-07	2.69E-07	3.85E-07	2.68E-07	6.3031E-04
520572.79	4258249.17	33083.33663	0.14555	0.19801	0.14473	0.20704	6.29E-04	3.42E-07	4.06E-07	3.40E-07	4.08E-07	6.3035E-04
519961.14	4258789.3	33078.23198	0.85658	0.58024	0.96832	0.5548	6.29E-04	2.01E-06	1.19E-06	2.27E-06	1.09E-06	6.3532E-04
519972.87	4258902.77	33068.49957	1.19487	0.37707	1.35028	0.3705	6.29E-04	2.81E-06	7.73E-07	3.17E-06	7.29E-07	6.3605E-04
520442.86	4258113.45	33067.26202	0.15987	0.37206	0.16365	0.39225	6.29E-04	3.75E-07	7.63E-07	3.84E-07	7.72E-07	6.3084E-04
520607.64	4258701.19	33051.19666	0.16313	0.13811	0.15684	0.14356	6.28E-04	3.83E-07	2.83E-07	3.68E-07	2.83E-07	6.2956E-04
520344.95	4258123.15	33034.57235	0.1789	0.64464	0.18623	0.69343	6.28E-04	4.20E-07	1.32E-06	4.37E-07	1.37E-06	6.3147E-04
520019.69	4258569.92	33028.88897	0.80331	2.84712	0.98169	2.41052	6.28E-04	1.89E-06	5.84E-06	2.30E-06	4.75E-06	6.4259E-04
520581.18	4258461.69	33026.14329	0.162	0.17331	0.15835	0.18218	6.28E-04	3.80E-07	3.55E-07	3.72E-07	3.59E-07	6.2923E-04
520588.66	4258377.86	33009.68514	0.15248	0.17592	0.1502	0.18479	6.27E-04	3.58E-07	3.61E-07	3.53E-07	3.64E-07	6.2889E-04
520063.93	4258432.91	33001.85004	0.43209	19.86185	0.47051	9.65784	6.27E-04	1.01E-06	4.07E-05	1.10E-06	1.90E-05	6.8917E-04
520049.4	4258501.91	32999.41635	0.66306	7.82166	0.74933	5.64922	6.27E-04	1.56E-06	1.60E-05	1.76E-06	1.11E-05	6.5774E-04
520547.42	4258188.24	32982.101	0.1472	0.22062	0.14883	0.23287	6.27E-04	3.46E-07	4.52E-07	3.49E-07	4.58E-07	6.2854E-04
520099.55	4258342.38	32945.5858	0.30696	14.25294	0.32149	15.95838	6.26E-04	7.21E-07	2.92E-05	7.55E-07	3.14E-05	6.8836E-04
519975.54	4258913.86	32943.15602	1.25224	0.36398	1.41802	0.35814	6.26E-04	2.94E-06	7.46E-07	3.33E-06	7.05E-07	6.3391E-04
520559.46	4258884.8	32936.57666	0.21038	0.12268	0.20277	0.12805	6.26E-04	4.94E-07	2.52E-07	4.76E-07	2.52E-07	6.2754E-04
520538.96	4258923.31	32922.6255	0.23	0.12165	0.22115	0.12727	6.26E-04	5.40E-07	2.49E-07	5.19E-07	2.51E-07	6.2736E-04
519965.56	4258872.3	32913.50494	1.04575	0.41632	1.17678	0.40699	6.26E-04	2.46E-06	8.54E-07	2.76E-06	8.01E-07	6.3250E-04
520384.13	4258113.27	32901.62792	0.16979	0.51169	0.1749	0.54451	6.25E-04	3.99E-07	1.05E-06	4.11E-07	1.07E-06	6.2833E-04
520574.77	4258851.53	32896.689	0.19655	0.12405	0.18936	0.12913	6.25E-04	4.61E-07	2.54E-07	4.45E-07	2.54E-07	6.2672E-04
520473.6	4259020.41	32890.61152	0.30888	0.12178	0.29578	0.12782	6.25E-04	7.25E-07	2.50E-07	6.94E-07	2.52E-07	6.2711E-04
519961.27	4258837.83	32881.34844	0.93991	0.47254	1.05885	0.45815	6.25E-04	2.21E-06	9.69E-07	2.49E-06	9.02E-07	6.3158E-04
520092.5	4259085.69	32860.31542	13.99496	0.2623	13.16474	0.2464	6.25E-04	3.29E-05	5.38E-07	3.09E-05	4.85E-07	6.8940E-04
520581.78	4258834.8	32854.27931	0.19034	0.12517	0.18343	0.13011	6.25E-04	4.47E-07	2.57E-07	4.31E-07	2.56E-07	6.2589E-04
520588.23	4258402.59	32851.08815	0.15465	0.17444	0.15194	0.18296	6.24E-04	3.63E-07	3.58E-07	3.57E-07	3.60E-07	6.2588E-04
520513.73	4258143.78	32844.6106	0.15061	0.25844	0.15415	0.27316	6.24E-04	3.54E-07	5.30E-07	3.62E-07	5.38E-07	6.2610E-04
520589.45	4258354.05	32826.55231	0.1501	0.17728	0.14849	0.18639	6.24E-04	3.52E-07	3.64E-07	3.49E-07	3.67E-07	6.2540E-04
520295.94	4258142.99	32823.42032	0.19104	0.89476	0.20163	0.97308	6.24E-04	4.49E-07	1.84E-06	4.73E-07	1.92E-06	6.2859E-04
520585.28	4258826.43	32793.13729	0.1873	0.12562	0.18047	0.1305	6.23E-04	4.40E-07	2.58E-07	4.24E-07	2.57E-07	6.2472E-04
520541.55	4258175.72	32778.14398	0.14748	0.22659	0.14964	0.23941	6.23E-04	3.46E-07	4.65E-07	3.51E-07	4.71E-07	6.2469E-04
520315.55	4258133.05	32774.58458	0.18559	0.78025	0.19503	0.84475	6.23E-04	4.36E-07	1.60E-06	4.58E-07	1.66E-06	6.2714E-04
520005.1	4258986.02	32754.29659	2.07543	0.30062	2.45611	0.29681	6.23E-04	4.87E-06	6.17E-07	5.77E-06	5.84E-07	6.3444E-04
520567.36	4258226.81	32754.21223	0.14508	0.20272	0.14474	0.21271	6.23E-04	3.41E-07	4.16E-07	3.40E-07	4.19E-07	6.2411E-04
520374.34	4258113.24	32741.87632	0.17141	0.54119	0.17698	0.5777	6.22E-04	4.02E-07	1.11E-06	4.15E-07	1.14E-06	6.2543E-04
519977.12	4258683.15	32741.09058	0.77385	1.02154	0.89796	0.94941	6.22E-04	1.82E-06	2.10E-06	2.11E-06	1.87E-06	6.3024E-04
520058.1	4258461.19	32738.39523	0.50816	12.63619	0.55853	7.66387	6.22E-04	1.19E-06	2.59E-05	1.31E-06	1.51E-05	6.6580E-04
520506.54	4258976.76	32731.79435	0.26534	0.1215	0.25437	0.12711	6.22E-04	6.23E-07	2.49E-07	5.97E-07	2.50E-07	6.2389E-04
520531.99	4258161.61	32713.23906	0.14839	0.23682	0.15117	0.25038	6.22E-04	3.48E-07	4.86E-07	3.55E-07	4.93E-07	6.2350E-04
520246.91	4258172.84	32709.68868	0.20519	1.32046	0.21624	1.45226	6.22E-04	4.82E-07	2.71E-06	5.08E-07	2.86E-06	6.2831E-04
520556.85	4258202.29	32695.71133	0.1458	0.21194	0.14665	0.2232	6.21E-04	3.42E-07	4.35E-07	3.44E-07	4.39E-07	6.2305E-04
520497.39	4258990.55	32694.07824	0.27665	0.12152	0.26513	0.12715	6.21E-04	6.49E-07	2.49E-07	6.22E-07	2.50E-07	6.2323E-04
520276.33	4258152.93	32687.27995	0.19611	1.03649	0.20731	1.1326	6.21E-04	4.60E-07	2.13E-06	4.87E-07	2.23E-06	6.2663E-04
520188.02	4258222.66	32663.1605	0.22759	2.39755	0.23421	2.69893	6.21E-04	5.34E-07	4.92E-06	5.50E-07	5.31E-06	6.3218E-04
520515.86	4258962.89	32653.16147	0.25442	0.12132	0.24405	0.12693	6.21E-04	5.97E-07	2.49E-07	5.73E-07	2.50E-07	6.2235E-04
520588.78	4258818.06	32643.84059	0.18422	0.12587	0.17741	0.13071	6.21E-04	4.32E-07	2.58E-07	4.17E-07	2.57E-07	6.2186E-04
520606.58	4258751.6	32638.75295	0.16779	0.13125	0.16124	0.13627	6.20E-04	3.94E-07	2.69E-07	3.79E-07	2.68E-07	6.2171E-04
520548.45	4258909.37	32629.56327	0.22089	0.12142	0.21266	0.12694	6.20E-04	5.19E-07	2.49E-07	4.99E-07	2.50E-07	6.2175E-04
520178.2	4258232.63	32626.78859	0.23236	2.70823	0.23826	3.06413	6.20E-04	5.46E-07	5.55E-06	5.59E-07	6.03E-06	6.3287E-04
519977.29	4258924.58	32609.04867	1.2946	0.35141	1.46809	0.34617	6.20E-04	3.04E-06	7.21E-07	3.45E-06	6.81E-07	6.2773E-04
520197.84	4258212.69	32589.05939	0.22276	2.14049	0.23019	2.39715	6.19E-04	5.23E-07	4.39E-06	5.40E-07	4.72E-06	6.2963E-04
520525.35	4258948.96	32559.66817	0.24404	0.12106	0.23432	0.12667	6.19E-04	5.73E-07	2.48E-07	5.50E-07	2.49E-07	6.2052E-04
519990.66	4258960.07	32552.76768	1.61672	0.31875	1.86574	0.3149	6.19E-04	3.80E-06	6.54E-07	4.38E-06	6.20E-07	6.2822E-04
520335.16	4258123.12	32545.83285	0.1799	0.68629	0.18802	0.73972	6.19E-04	4.22E-07	1.41E-06	4.41E-07	1.46E-06	6.2236E-04
520053.74	4259053.64	32542.44544	7.08229	0.26904	11.85116	0.25957	6.19E-04	1.66E-05	5.52E-07	2.78E-05	5.11E-07	6.6409E-04
520586.13	4258294.93	32511.30218	0.14565	0.18537	0.14504	0.19371	6.18E-04	3.42E-07	3.80E-07	3.41E-07	3.81E-07	6.1943E-04
520364.56	4258113.21	32494.73252	0.17287	0.57311	0.179	0.61356	6.18E-04	4.06E-07	1.18E-06	4.20E-07	1.21E-06	6.2088E-04
519963.37	4258746.45	32481.24864	0.79004	0.70647	0.89865	0.66762	6.17E-04	1.85E-06	1.45E-06	2.11E-06	1.31E-06	6.2414E-04
520168.38	4258242.6	32471.40524	0.23705	3.08983	0.2424	3.51282	6.17E-04	5.57E-07	6.34E-06	5.69E-07	6.91E-06	6.3160E-04
520129.07	4258292.47	32470.72519	0.26654	6.05791	0.27323	7.08338	6.17E-04	6.26E-07	1.24E-05	6.41E-07	1.39E-05	6.4484E-04
520043.82	4259043.65	32454.85322	5.08094	0.27154	7.11513	0.26374	6.17E-04	1.19E-05	5.57E-07	1.67E-05	5.19E-07	6.4662E-04
520109.4	4258322.41	32446.66255	0.28827	10.04247	0.29897	11.82327	6.17E-04	6.77E-07	2.06E-05	7.02E-07	2.33E-05	6.6200E-04
520522.58	4258147.57	32437.09263	0.14889	0.24786	0.15216	0.262	6.17E-04	3.50E-07	5.08E-07	3.57E-07	5.16E-07	6.1830E-04
520207.66	4258202.72	32433.04942	0.21793	1.92423	0.22614	2.14493	6.16E-04	5.12E-07	3.95E-06	5.31E-07	4.22E-06	6.2570E-04
520584.79	4258284.34	32428.20931	0.14504	0.18726	0.14434	0.19547	6.16E-04	3.41E-07	3.84E-07	3.39E-07	3.85E-07	6.1785E-04
520535.04	4258934.94	32397.85056	0.23408	0.12072	0.22499	0.1263	6.16E-04	5.50E-07	2.48E-07	5.28E-07	2.49E-07	6.1740E-04
520610.59	4258718.1	32371.18091	0.16285	0.13434	0.15654	0.13976	6.15E-04	3.82E-07	2.76E-07	3.68E-07	2.75E-07	6.1662E-04
520595.79	4258801.33	32356.25933	0.17832	0.12669	0.17166	0.13138	6.15E-04	4.19E-07	2.60E-07	4.03E-07	2.59E-07	6.1637E-04
519961.82	4258863.29	32351.42892	0.98312	0.42712	1.10382	0.41666	6.15E-04	2.31E-06	8.76E-07	2.59E-06	8.20E-07	6.2154E-04
519994.72	4258971.74	32324.60661	1.73404	0.30891	2.01348	0.3053	6.14E-04	4.07E-06	6.34E-07	4.73E-06	6.01E-07	6.2446E-04
520569.61	4258870.59	32305.87407	0.20164	0.12218	0.19439	0.12735	6.14E-04	4.73E-07	2.51E-07	4.56E-07	2.51E-07	6.1551E-04
520566.46	4258216.42	32265.69377	0.14427	0.20369	0.14428	0.21398	6.13E-04	3.39E-07	4.18E-07	3.39E-07	4.21E-07	6.1483E-04
519978.91	4258935.24	32264.74106	1.33665	0.33956	1.51855	0.33484	6.13E-04	3.14E-06	6.96E-07	3.57E-06	6.59E-07	6.2135E-04
520583.58	4258273.81	32264.55492	0.14438	0.18892	0.14357	0.19708	6.13E-04	3.39E-07	3.87E-07	3.37E-07	3.88E-07	6.1474E-04
519957.99	4258805.82	32255.06124	0.85013	0.53373	0.95462	0.51293	6.13E-04	2.00E-06	1.09E-06	2.24E-06	1.01E-06	6.1945E-04
520588.97	4258306.16	32252.37029	0.14577	0.18224	0.14515	0.19076	6.13E-04	3.42E-07	3.74E-07	3.41E-07	3.76E-07	6.1449E-04
520256.73	4258162.87	32241.22881	0.20026	1.21542	0.21139	1.33291	6.13E-04	4.70E-07	2.49E-06	4.96E-07	2.62E-06	6.1893E-04
520558.15	4258895.35	32231.56585	0.21202	0.12116	0.20436	0.12652	6.13E-04	4.98E-07	2.48E-07	4.80E-07	2.49E-07	6.1414E-04
520491.58	4259002.97	32226.13509	0.28424	0.12072	0.27244	0.12635	6.13E-04	6.67E-07	2.48E-07	6.40E-07	2.49E-07	6.1436E-04
520590.23	4258316.71	32224.54009	0.14636	0.18024	0.14563	0.18897	6.13E-04	3.44E-07	3.70E-07	3.42E-07	3.72E-07	6.1396E-04
520158.56	4258252.57	32223.71944	0.24172	3.56535	0.24668	4.07895	6.13E-04	5.67E-07	7.31E-06	5.79E-07	8.03E-06	6.2900E-04
520599.29	4258792.96	32221.33439	0.17552	0.12712	0.16893	0.13174	6.12E-04	4.12E-07	2.61E-07	3.97E-07	2.59E-07	6.1380E-04
520217.48	4258192.75	32215.15415	0.21315	1.73998	0.22205	1.93184	6.12E-04	5.00E-07	3.57E-06	5.21E-07	3.80E-06	6.2074E-04
519960.48	4258763.6	32194.06734	0.79502	0.64671	0.90144	0.61361	6.12E-04	1.87E-06	1.33E-06	2.12E-06	1.21E-06	6.1847E-04
520354.77	4258113.18	32140.77593	0.1741	0.60803	0.18093	0.65245	6.11E-04	4.09E-07	1.25E-06	4.25E-07	1.28E-06	6.1430E-04
520305.76	4258133.02	32128.48256	0.1861	0.83579	0.19617	0.90664	6.11E-04	4.37E-07	1.71E-06	4.61E-07	1.78E-06	6.1510E-04
520556.14	4258191.98	32126.732	0.1449	0.21283	0.1461	0.22434	6.11E-04	3.40E-07	4.36E-07	3.43E-07	4.42E-07	6.1223E-04
520591.96	4258386.53	32126.37063	0.15183	0.17333	0.14932	0.18188	6.11E-04	3.56E-07	3.55E-07	3.51E-07	3.58E-07	6.1208E-04
520610.12	4258743.17	32125.26936	0.16512	0.13119	0.15872	0.1363	6.11E-04	3.88E-07	2.69E-07	3.73E-07	2.68E-07	6.1194E-04
520611.24	4258692.6	32117.66086	0.16054	0.13808	0.15438	0.14336	6.10E-04	3.77E-07	2.83E-07	3.62E-07	2.82E-07	6.1180E-04
520540.9	4258165.43	32081.95113	0.14633	0.22769	0.14876	0.2406	6.10E-04	3.44E-07	4.67E-07	3.49E-07	4.74E-07	6.1145E-04
520482.29	4259016.82	32081.43552	0.29671	0.12041	0.28447	0.12618	6.10E-04	6.97E-07	2.47E-07	6.68E-07	2.48E-07	6.1167E-04
520286.15	4258142.96	32067.56982	0.19113	0.96322	0.20202	1.04961	6.10E-04	4.49E-07	1.98E-06	4.74E-07	2.07E-06	6.1451E-04
520582.48	4258263.33	32050.59516	0.1437	0.19032	0.1428	0.19856	6.09E-04	3.37E-07	3.90E-07	3.35E-07	3.91E-07	6.1068E-04
520592.92	4258363.18	32019.37044	0.14953	0.17438	0.14755	0.18324	6.09E-04	3.51E-07	3.58E-07	3.46E-07	3.61E-07	6.1005E-04
520009.77	4258589.36	32014.54136	0.78119	2.20028	0.95204	1.92767	6.09E-04	1.83E-06	4.51E-06	2.24E-06	3.79E-06	6.2091E-04
519957.49	4258828.73	32009.46943	0.88024	0.48485	0.98874	0.46868	6.08E-04	2.07E-06	9.94E-07	2.32E-06	9.23E-07	6.1475E-04
520550.53	4258179.56	32008.92671	0.14523	0.2181	0.14699	0.23022	6.08E-04	3.41E-07	4.47E-07	3.45E-07	4.53E-07	6.1002E-04
520082.6	4259085.7	31994.17233	14.69285	0.25847	22.56179	0.24438	6.08E-04	3.45E-05	5.30E-07	5.30E-05	4.81E-07	6.9662E-04
520602.8	4258784.59	31989.46305	0.17271	0.1274	0.16617	0.132	6.08E-04	4.05E-07	2.61E-07	3.90E-07	2.60E-07	6.0938E-04
520325.37	4258123.09	31972.43202	0.18062	0.73213	0.18956	0.79031	6.08E-04	4.24E-07	1.50E-06	4.45E-07	1.56E-06	6.1166E-04
520531.44	4258151.36	31937.51567	0.14704	0.23809	0.15003	0.2516	6.07E-04	3.45E-07	4.88E-07	3.52E-07	4.95E-07	6.0876E-04
520064.67	4258422.61	31935.28788	0.40487	21.21994	0.43947	9.91515	6.07E-04	9.51E-07	4.35E-05	1.03E-06	1.95E-05	6.7205E-04
519987.12	4258646.05	31929.97772	0.75698	1.30981	0.88771	1.20129	6.07E-04	1.78E-06	2.69E-06	2.08E-06	2.36E-06	6.1584E-04
520227.3	4258182.78	31928.9116	0.20839	1.58174	0.21789	1.74948	6.07E-04	4.89E-07	3.24E-06	5.12E-07	3.44E-06	6.1460E-04
520577.31	4258241.09	31915.76491	0.14319	0.19495	0.1424	0.20382	6.07E-04	3.36E-07	4.00E-07	3.34E-07	4.01E-07	6.0813E-04
519965.06	4258726.4	31899.80057	0.76094	0.77682	0.86586	0.73155	6.06E-04	1.79E-06	1.59E-06	2.03E-06	1.44E-06	6.1321E-04
520148.74	4258262.53	31855.61639	0.24629	4.17347	0.25114	4.80852	6.06E-04	5.78E-07	8.56E-06	5.90E-07	9.47E-06	6.2471E-04
520039.48	4258521.35	31854.61498	0.70501	5.32347	0.8131	4.14493	6.05E-04	1.66E-06	1.09E-05	1.91E-06	8.16E-06	6.2814E-04
520547.41	4258919.81	31843.13576	0.22228	0.11985	0.21397	0.12531	6.05E-04	5.22E-07	2.46E-07	5.02E-07	2.47E-07	6.0680E-04
519980.41	4258945.85	31838.57757	1.37607	0.32825	1.56584	0.32399	6.05E-04	3.23E-06	6.73E-07	3.68E-06	6.38E-07	6.1341E-04
520591.56	4258411.35	31829.52838	0.15389	0.17172	0.15101	0.18003	6.05E-04	3.61E-07	3.52E-07	3.55E-07	3.54E-07	6.0644E-04
520584.66	4258470.82	31814.54817	0.16088	0.17043	0.1569	0.17915	6.05E-04	3.78E-07	3.50E-07	3.68E-07	3.53E-07	6.0619E-04
520581.47	4258252.88	31767.8999	0.14297	0.19155	0.14207	0.19993	6.04E-04	3.36E-07	3.93E-07	3.34E-07	3.94E-07	6.0531E-04
520092.52	4259095.69	31764.86042	13.92233	0.25481	13.11874	0.23955	6.04E-04	3.27E-05	5.23E-07	3.08E-05	4.72E-07	6.6827E-04
520266.55	4258152.9	31762.23995	0.1955	1.1224	0.20655	1.22803	6.04E-04	4.59E-07	2.30E-06	4.85E-07	2.42E-06	6.0941E-04
519957.47	4258780.46	31747.74165	0.7977	0.59335	0.89795	0.56586	6.03E-04	1.87E-06	1.22E-06	2.11E-06	1.11E-06	6.0978E-04
520565.63	4258206.05	31740.88508	0.14341	0.20464	0.14382	0.21517	6.03E-04	3.37E-07	4.20E-07	3.38E-07	4.24E-07	6.0485E-04
520505.88	4258987.04	31739.74378	0.26639	0.11976	0.25545	0.12525	6.03E-04	6.25E-07	2.46E-07	6.00E-07	2.47E-07	6.0503E-04
520344.98	4258113.15	31715.66721	0.17514	0.64619	0.18273	0.69481	6.03E-04	4.11E-07	1.33E-06	4.29E-07	1.37E-06	6.0639E-04
520568.1	4258881.22	31712.53887	0.20338	0.12084	0.19621	0.126	6.03E-04	4.77E-07	2.48E-07	4.61E-07	2.48E-07	6.0423E-04
519958.09	4258854.28	31706.7313	0.92404	0.43815	1.03555	0.42636	6.03E-04	2.17E-06	8.99E-07	2.43E-06	8.39E-07	6.0903E-04
519996.06	4258982.29	31705.13852	1.78063	0.29923	2.07202	0.29581	6.03E-04	4.18E-06	6.14E-07	4.86E-06	5.82E-07	6.1290E-04
520515.09	4258973.22	31704.2651	0.25556	0.11968	0.2452	0.12516	6.03E-04	6.00E-07	2.45E-07	5.76E-07	2.46E-07	6.0431E-04
519968	4258709.38	31650.04219	0.74783	0.851	0.8549	0.79838	6.02E-04	1.76E-06	1.75E-06	2.01E-06	1.57E-06	6.0869E-04
520524.46	4258959.33	31646.80486	0.24526	0.1195	0.23551	0.12498	6.02E-04	5.76E-07	2.45E-07	5.53E-07	2.46E-07	6.0317E-04
520614.15	4258709.59	31621.31942	0.16033	0.13433	0.15419	0.13965	6.01E-04	3.76E-07	2.76E-07	3.62E-07	2.75E-07	6.0235E-04
520119.25	4258302.44	31619.70295	0.27075	7.6361	0.27879	8.93373	6.01E-04	6.36E-07	1.57E-05	6.55E-07	1.76E-05	6.3557E-04
520237.12	4258172.81	31583.94638	0.20366	1.44462	0.21364	1.59203	6.00E-04	4.78E-07	2.96E-06	5.02E-07	3.13E-06	6.0743E-04
520054.17	4259063.64	31582.28473	7.21075	0.26145	12.25302	0.25224	6.00E-04	1.69E-05	5.36E-07	2.88E-05	4.97E-07	6.4705E-04
520576.26	4258230.63	31562.40375	0.1425	0.19598	0.1419	0.20517	6.00E-04	3.35E-07	4.02E-07	3.33E-07	4.04E-07	6.0142E-04
520534.01	4258945.37	31515.63945	0.23537	0.1192	0.22623	0.12467	5.99E-04	5.53E-07	2.44E-07	5.31E-07	2.45E-07	6.0063E-04
520556.96	4258905.85	31512.34601	0.21353	0.11963	0.2058	0.12497	5.99E-04	5.01E-07	2.45E-07	4.83E-07	2.46E-07	6.0047E-04
519977.12	4258673.87	31495.96201	0.74121	1.06119	0.85902	0.98478	5.99E-04	1.74E-06	2.18E-06	2.02E-06	1.94E-06	6.0655E-04
520043.84	4259053.65	31481.61187	5.10533	0.26359	7.14471	0.25607	5.98E-04	1.20E-05	5.41E-07	1.68E-05	5.04E-07	6.2821E-04
520295.97	4258132.99	31427.93502	0.18629	0.89749	0.19681	0.97525	5.97E-04	4.37E-07	1.84E-06	4.62E-07	1.92E-06	6.0205E-04
520315.58	4258123.05	31419.84279	0.1813	0.78243	0.19087	0.84655	5.97E-04	4.26E-07	1.60E-06	4.48E-07	1.67E-06	6.0138E-04
519964.02	4258899.11	31416.81936	1.05613	0.37474	1.18381	0.36788	5.97E-04	2.48E-06	7.69E-07	2.78E-06	7.24E-07	6.0393E-04
520609.8	4258767.86	31387.2034	0.16728	0.1278	0.16089	0.13246	5.97E-04	3.93E-07	2.62E-07	3.78E-07	2.61E-07	5.9791E-04
520540.3	4258155.15	31381.80987	0.14513	0.22878	0.14778	0.2417	5.97E-04	3.41E-07	4.69E-07	3.47E-07	4.76E-07	5.9814E-04
520138.92	4258272.5	31377.7961	0.25076	4.97316	0.25583	5.78257	5.96E-04	5.89E-07	1.02E-05	6.01E-07	1.14E-05	6.1921E-04
520549.82	4258169.24	31374.51428	0.14419	0.21918	0.14625	0.23141	5.96E-04	3.39E-07	4.50E-07	3.43E-07	4.56E-07	5.9796E-04
519981.81	4258956.42	31362.51426	1.41395	0.3175	1.61138	0.31363	5.96E-04	3.32E-06	6.51E-07	3.78E-06	6.17E-07	6.0452E-04
520500.32	4258999.35	31333.05873	0.27333	0.11898	0.26209	0.12445	5.96E-04	6.42E-07	2.44E-07	6.15E-07	2.45E-07	5.9733E-04
520543.77	4258931.32	31327.55692	0.22589	0.11885	0.21735	0.12428	5.95E-04	5.30E-07	2.44E-07	5.10E-07	2.45E-07	5.9701E-04
519966.39	4258910.09	31318.00888	1.10074	0.36172	1.23486	0.35568	5.95E-04	2.58E-06	7.42E-07	2.90E-06	7.00E-07	6.0222E-04
520490.97	4259013.22	31241.41052	0.28527	0.11885	0.27357	0.12442	5.94E-04	6.70E-07	2.44E-07	6.42E-07	2.45E-07	5.9564E-04
520564.86	4258195.71	31228.59453	0.14257	0.20549	0.14335	0.21628	5.94E-04	3.35E-07	4.21E-07	3.37E-07	4.26E-07	5.9512E-04
520276.36	4258142.93	31228.06758	0.19077	1.03997	0.20168	1.13476	5.94E-04	4.48E-07	2.13E-06	4.73E-07	2.23E-06	5.9888E-04
520335.19	4258113.12	31220.79746	0.17596	0.68804	0.18434	0.74106	5.93E-04	4.13E-07	1.41E-06	4.33E-07	1.46E-06	5.9717E-04
520595.27	4258395.2	31220.12456	0.15113	0.17072	0.14842	0.179	5.93E-04	3.55E-07	3.50E-07	3.48E-07	3.52E-07	5.9484E-04
520246.94	4258162.84	31206.53256	0.19904	1.3247	0.20934	1.45537	5.93E-04	4.67E-07	2.72E-06	4.91E-07	2.86E-06	5.9972E-04
520596.4	4258372.31	31182.00059	0.1489	0.17158	0.14661	0.18014	5.93E-04	3.50E-07	3.52E-07	3.44E-07	3.55E-07	5.9411E-04
520559.51	4258183.4	31176.31814	0.14294	0.21017	0.14427	0.22159	5.93E-04	3.36E-07	4.31E-07	3.39E-07	4.36E-07	5.9415E-04
520575.3	4258220.2	31174.40693	0.14178	0.19689	0.14144	0.20641	5.93E-04	3.33E-07	4.04E-07	3.32E-07	4.06E-07	5.9404E-04
519985.62	4258967.99	31171.96545	1.50532	0.30762	1.72374	0.30409	5.93E-04	3.53E-06	6.31E-07	4.05E-06	5.99E-07	6.0133E-04
520591.34	4258436.63	31167.89581	0.15573	0.16968	0.1525	0.17799	5.92E-04	3.66E-07	3.48E-07	3.58E-07	3.50E-07	5.9387E-04
520596.62	4258347.02	31156.0985	0.14672	0.17329	0.14515	0.1821	5.92E-04	3.44E-07	3.55E-07	3.41E-07	3.58E-07	5.9362E-04
519968.23	4258920.84	31154.28214	1.14045	0.34959	1.28131	0.34418	5.92E-04	2.68E-06	7.17E-07	3.01E-06	6.78E-07	5.9927E-04
519954.36	4258797.06	31113.23476	0.79465	0.54636	0.89	0.52341	5.91E-04	1.87E-06	1.12E-06	2.09E-06	1.03E-06	5.9751E-04
520566.72	4258891.8	31080.32205	0.20502	0.11936	0.19781	0.12453	5.91E-04	4.81E-07	2.45E-07	4.64E-07	2.45E-07	5.9222E-04
520581.97	4258858.28	31069.59369	0.19184	0.12088	0.1851	0.12576	5.91E-04	4.50E-07	2.48E-07	4.35E-07	2.48E-07	5.9196E-04
519953.72	4258819.63	31062.04939	0.82459	0.49675	0.92182	0.47888	5.90E-04	1.94E-06	1.02E-06	2.16E-06	9.43E-07	5.9649E-04
520585.61	4258849.58	31061.21186	0.18875	0.12129	0.18207	0.12612	5.90E-04	4.43E-07	2.49E-07	4.27E-07	2.48E-07	5.9179E-04
519958.53	4258879.46	31054.88308	0.96144	0.39792	1.07441	0.38929	5.90E-04	2.26E-06	8.16E-07	2.52E-06	7.66E-07	5.9666E-04
519999.85	4258608.79	31034.71824	0.74881	1.75384	0.89451	1.57714	5.90E-04	1.76E-06	3.60E-06	2.10E-06	3.10E-06	6.0047E-04
520589.25	4258840.88	31029.38857	0.18567	0.12187	0.17913	0.12662	5.90E-04	4.36E-07	2.50E-07	4.21E-07	2.49E-07	5.9117E-04
519970.79	4258692	31025.01047	0.72853	0.93336	0.83507	0.87257	5.90E-04	1.71E-06	1.91E-06	1.96E-06	1.72E-06	5.9703E-04
520188.05	4258212.66	31022.83081	0.2193	2.40407	0.22493	2.70385	5.90E-04	5.15E-07	4.93E-06	5.28E-07	5.32E-06	6.0098E-04
520613.31	4258759.49	31002.55702	0.16464	0.12786	0.15835	0.13259	5.89E-04	3.87E-07	2.62E-07	3.72E-07	2.61E-07	5.9058E-04
520049.36	4258492.22	30988.29517	0.60538	7.88068	0.6765	5.67725	5.89E-04	1.42E-06	1.62E-05	1.59E-06	1.12E-05	6.1938E-04
520178.23	4258222.63	30981.3012	0.22368	2.71463	0.2286	3.07054	5.89E-04	5.25E-07	5.57E-06	5.37E-07	6.04E-06	6.0157E-04
519954.35	4258845.28	30975.28595	0.86806	0.44927	0.97096	0.43596	5.89E-04	2.04E-06	9.21E-07	2.28E-06	8.58E-07	5.9488E-04
520197.87	4258202.69	30975.20199	0.21488	2.14652	0.22131	2.40153	5.89E-04	5.04E-07	4.40E-06	5.20E-07	4.73E-06	5.9894E-04
520592.9	4258832.17	30970.54652	0.18263	0.12236	0.17619	0.12705	5.89E-04	4.29E-07	2.51E-07	4.14E-07	2.50E-07	5.9004E-04
520082.62	4259095.7	30954.8127	14.59472	0.25113	22.42507	0.2376	5.88E-04	3.43E-05	5.15E-07	5.26E-05	4.68E-07	6.7629E-04
520617.18	4258726.3	30930.02034	0.16	0.13102	0.15393	0.1362	5.88E-04	3.76E-07	2.69E-07	3.61E-07	2.68E-07	5.8920E-04
520029.56	4258540.79	30924.54814	0.73396	3.8691	0.86901	3.15498	5.88E-04	1.72E-06	7.94E-06	2.04E-06	6.21E-06	6.0573E-04
520593.68	4258288.15	30888.30243	0.14239	0.18063	0.14164	0.18864	5.87E-04	3.34E-07	3.70E-07	3.33E-07	3.71E-07	5.8854E-04
520596.54	4258823.47	30885.67939	0.17966	0.12274	0.17326	0.12737	5.87E-04	4.22E-07	2.52E-07	4.07E-07	2.51E-07	5.8841E-04
520595.11	4258298.77	30875.8885	0.14291	0.17865	0.1422	0.18684	5.87E-04	3.36E-07	3.66E-07	3.34E-07	3.68E-07	5.8830E-04

519969.92	4258931.53	30860.23905	1.17707	0.33783	1.32387	0.33298	5.87E-04	2.76E-06	6.93E-07	3.11E-06	6.55E-07	5.9382E-04
520207.69	4258192.72	30856.11684	0.21047	1.92969	0.21768	2.14903	5.87E-04	4.94E-07	3.96E-06	5.11E-07	4.23E-06	5.9571E-04
520168.41	4258232.6	30832.86998	0.22799	3.09585	0.23237	3.52199	5.86E-04	5.35E-07	6.35E-06	5.46E-07	6.93E-06	6.0044E-04
520592.39	4258277.58	30824.58883	0.1418	0.18238	0.14096	0.19027	5.86E-04	3.33E-07	3.74E-07	3.31E-07	3.75E-07	5.8733E-04
520305.79	4258123.02	30811.33793	0.18169	0.83807	0.19175	0.90866	5.86E-04	4.27E-07	1.72E-06	4.50E-07	1.79E-06	5.9005E-04
520617.71	4258701.09	30801.21817	0.15785	0.13437	0.15188	0.13954	5.85E-04	3.71E-07	2.76E-07	3.57E-07	2.75E-07	5.8675E-04
520256.76	4258152.87	30797.56408	0.1945	1.21921	0.20499	1.33579	5.85E-04	4.57E-07	2.50E-06	4.81E-07	2.63E-06	5.9147E-04
520555.86	4258916.31	30793.62712	0.21491	0.1181	0.20711	0.12339	5.85E-04	5.05E-07	2.42E-07	4.86E-07	2.43E-07	5.8681E-04
520594.9	4258420.11	30788.66838	0.15308	0.16901	0.15004	0.17715	5.85E-04	3.59E-07	3.47E-07	3.52E-07	3.49E-07	5.8664E-04
520514.38	4258983.52	30776.1757	0.25658	0.11803	0.24623	0.12339	5.85E-04	6.02E-07	2.42E-07	5.78E-07	2.43E-07	5.8666E-04
520523.64	4258969.68	30760.06364	0.24638	0.11793	0.23663	0.12329	5.85E-04	5.78E-07	2.42E-07	5.56E-07	2.43E-07	5.8631E-04
520549.16	4258158.95	30749.78604	0.14312	0.22016	0.14543	0.23248	5.84E-04	3.36E-07	4.52E-07	3.41E-07	4.58E-07	5.8608E-04
520574.41	4258209.81	30748.08572	0.14102	0.19775	0.14102	0.20757	5.84E-04	3.31E-07	4.06E-07	3.31E-07	4.09E-07	5.8594E-04
520129.1	4258282.47	30738.19044	0.2549	6.07117	0.26074	7.10685	5.84E-04	5.98E-07	1.25E-05	6.12E-07	1.40E-05	6.1193E-04
520588.13	4258479.95	30737.68809	0.15972	0.16765	0.15539	0.17618	5.84E-04	3.75E-07	3.44E-07	3.65E-07	3.47E-07	5.8570E-04
520600.18	4258814.77	30732.76992	0.17666	0.12304	0.17029	0.12761	5.84E-04	4.15E-07	2.52E-07	4.00E-07	2.51E-07	5.8549E-04
520286.18	4258132.96	30695.77106	0.18621	0.96613	0.19687	1.0518	5.83E-04	4.37E-07	1.98E-06	4.62E-07	2.07E-06	5.8842E-04
520591.22	4258267.07	30693.47424	0.14117	0.1839	0.14023	0.19177	5.83E-04	3.31E-07	3.77E-07	3.29E-07	3.77E-07	5.8484E-04
520217.51	4258182.75	30679.15479	0.20611	1.74496	0.21402	1.93564	5.83E-04	4.84E-07	3.58E-06	5.02E-07	3.81E-06	5.9153E-04
520533.07	4258955.77	30673.40377	0.23659	0.1177	0.22742	0.12306	5.83E-04	5.55E-07	2.41E-07	5.34E-07	2.42E-07	5.8462E-04
520092.95	4259106.51	30670.84015	13.6661	0.24724	12.84313	0.23256	5.83E-04	3.21E-05	5.07E-07	3.02E-05	4.58E-07	6.4620E-04
520325.4	4258113.09	30666.78816	0.17655	0.73403	0.18567	0.7917	5.83E-04	4.14E-07	1.51E-06	4.36E-07	1.56E-06	5.8683E-04
520586.29	4258244.93	30654.73088	0.14063	0.1884	0.13968	0.19664	5.83E-04	3.30E-07	3.86E-07	3.28E-07	3.87E-07	5.8412E-04
519987.03	4258978.56	30637.52506	1.54638	0.29786	1.77303	0.29461	5.82E-04	3.63E-06	6.11E-07	4.16E-06	5.80E-07	5.9135E-04
520558.74	4258173.06	30619.89608	0.14201	0.21114	0.14367	0.22272	5.82E-04	3.33E-07	4.33E-07	3.37E-07	4.38E-07	5.8357E-04
520054.19	4259073.64	30617.15219	7.26964	0.25393	12.32973	0.24508	5.82E-04	1.71E-05	5.21E-07	2.89E-05	4.82E-07	6.2899E-04
519959.62	4258737.41	30612.00119	0.7284	0.71781	0.82353	0.67811	5.82E-04	1.71E-06	1.47E-06	1.93E-06	1.33E-06	5.8833E-04
520109.43	4258312.41	30608.24031	0.27444	10.07957	0.28436	11.60779	5.82E-04	6.44E-07	2.07E-05	6.68E-07	2.28E-05	6.2664E-04
520597.59	4258309.85	30596.69156	0.14309	0.17586	0.14229	0.18423	5.82E-04	3.36E-07	3.61E-07	3.34E-07	3.63E-07	5.8298E-04
520044.27	4259063.65	30585.63122	5.19516	0.25622	7.29918	0.24889	5.81E-04	1.22E-05	5.25E-07	1.71E-05	4.90E-07	6.1173E-04
520158.59	4258242.57	30565.13552	0.23218	3.57342	0.2363	4.08724	5.81E-04	5.45E-07	7.33E-06	5.55E-07	8.05E-06	5.9746E-04
520603.83	4258806.07	30552.04285	0.17371	0.1234	0.1674	0.1279	5.81E-04	4.08E-07	2.53E-07	3.93E-07	2.52E-07	5.8204E-04
519971.49	4258942.17	30535.43802	1.21249	0.32673	1.36552	0.32236	5.80E-04	2.85E-06	6.70E-07	3.21E-06	6.35E-07	5.8778E-04
519956.78	4258754.66	30535.33731	0.73503	0.65879	0.83063	0.62401	5.80E-04	1.73E-06	1.35E-06	1.95E-06	1.23E-06	5.8668E-04
519954.83	4258870.54	30524.50358	0.90651	0.40769	1.01069	0.39803	5.80E-04	2.13E-06	8.36E-07	2.37E-06	7.84E-07	5.8634E-04
520576.74	4258877.65	30523.4699	0.19672	0.11902	0.18992	0.12398	5.80E-04	4.62E-07	2.44E-07	4.46E-07	2.44E-07	5.8159E-04
520052.25	4258475.41	30515.15909	0.53939	9.10304	0.5953	6.26001	5.80E-04	1.27E-06	1.87E-05	1.40E-06	1.23E-05	6.1369E-04
520542.68	4258941.78	30503.6001	0.22714	0.11737	0.21855	0.1227	5.80E-04	5.33E-07	2.41E-07	5.13E-07	2.42E-07	5.8135E-04
520590.14	4258256.59	30502.96004	0.14051	0.18522	0.13951	0.19315	5.80E-04	3.30E-07	3.80E-07	3.28E-07	3.80E-07	5.8122E-04
520598.92	4258320.43	30472.73617	0.14355	0.17409	0.14261	0.18261	5.79E-04	3.37E-07	3.57E-07	3.35E-07	3.59E-07	5.8062E-04
520227.33	4258172.78	30442.84493	0.20176	1.58622	0.21031	1.75311	5.79E-04	4.74E-07	3.25E-06	4.94E-07	3.45E-06	5.8634E-04
520565.46	4258902.33	30430.93096	0.20651	0.11789	0.19926	0.12305	5.78E-04	4.85E-07	2.42E-07	4.68E-07	2.42E-07	5.7987E-04
520600.05	4258356.04	30418.15247	0.14617	0.17048	0.14424	0.17908	5.78E-04	3.43E-07	3.50E-07	3.39E-07	3.53E-07	5.7958E-04
520499.65	4259009.63	30417.18262	0.27439	0.11722	0.26322	0.12261	5.78E-04	6.44E-07	2.40E-07	6.18E-07	2.41E-07	5.7992E-04
520607.47	4258797.37	30415.33493	0.17092	0.12383	0.16468	0.12826	5.78E-04	4.01E-07	2.54E-07	3.87E-07	2.52E-07	5.7943E-04
520585.17	4258234.44	30382.81778	0.13998	0.18948	0.13915	0.19798	5.78E-04	3.29E-07	3.89E-07	3.27E-07	3.90E-07	5.7896E-04
520509.06	4258995.73	30360.36059	0.26283	0.11726	0.2522	0.12258	5.77E-04	6.17E-07	2.40E-07	5.92E-07	2.41E-07	5.7879E-04
519953.81	4258771.61	30337.46751	0.74219	0.60534	0.83205	0.57615	5.77E-04	1.74E-06	1.24E-06	1.95E-06	1.13E-06	5.8273E-04
520266.58	4258142.9	30326.54785	0.18996	1.12609	0.20056	1.22988	5.76E-04	4.46E-07	2.31E-06	4.71E-07	2.42E-06	5.8210E-04
520599.87	4258381.43	30326.09101	0.14824	0.16891	0.14568	0.17717	5.76E-04	3.48E-07	3.46E-07	3.42E-07	3.49E-07	5.7783E-04
520552.5	4258927.71	30318.18825	0.21814	0.11706	0.21013	0.12233	5.76E-04	5.12E-07	2.40E-07	4.93E-07	2.41E-07	5.7778E-04
520591.33	4258462.49	30315.10218	0.15729	0.16733	0.15347	0.17575	5.76E-04	3.69E-07	3.43E-07	3.60E-07	3.46E-07	5.7765E-04
520598.57	4258403.87	30297.38456	0.15041	0.16815	0.14753	0.1762	5.76E-04	3.53E-07	3.45E-07	3.46E-07	3.47E-07	5.7729E-04
520573.59	4258199.44	30296.99871	0.14024	0.19857	0.14061	0.20865	5.76E-04	3.29E-07	4.07E-07	3.30E-07	4.11E-07	5.7737E-04
520568.49	4258187.24	30283.54534	0.14058	0.20276	0.14151	0.21345	5.76E-04	3.30E-07	4.16E-07	3.32E-07	4.20E-07	5.7713E-04
520620.71	4258717.86	30251.49003	0.15754	0.13083	0.1516	0.13598	5.75E-04	3.70E-07	2.68E-07	3.56E-07	2.68E-07	5.7629E-04
520148.77	4258252.53	30222.6557	0.23636	4.18129	0.24039	4.82252	5.74E-04	5.55E-07	8.58E-06	5.64E-07	9.49E-06	5.9367E-04
519987.12	4258636.77	30218.75801	0.71727	1.35169	0.83822	1.23935	5.74E-04	1.68E-06	2.77E-06	1.97E-06	2.44E-06	5.8327E-04
519950.62	4258836.27	30170.00035	0.81552	0.46031	0.90954	0.44539	5.73E-04	1.91E-06	9.44E-07	2.14E-06	8.77E-07	5.7935E-04
519977.12	4258664.6	30164.16001	0.70839	1.09964	0.81929	1.01926	5.73E-04	1.66E-06	2.26E-06	1.92E-06	2.01E-06	5.8121E-04
520315.61	4258113.05	30155.39261	0.17715	0.78441	0.18677	0.84821	5.73E-04	4.16E-07	1.61E-06	4.38E-07	1.67E-06	5.7733E-04
520237.15	4258162.81	30148.99683	0.19744	1.44869	0.20653	1.59543	5.73E-04	4.64E-07	2.97E-06	4.85E-07	3.14E-06	5.8014E-04
519972.95	4258952.77	30148.38168	1.24635	0.31613	1.40542	0.31218	5.73E-04	2.93E-06	6.48E-07	3.30E-06	6.15E-07	5.8055E-04
520296	4258122.99	30137.57729	0.18174	0.89991	0.19209	0.97737	5.73E-04	4.27E-07	1.85E-06	4.51E-07	1.92E-06	5.7751E-04
520019.65	4258560.22	30132.39171	0.74116	2.91354	0.89039	2.46801	5.73E-04	1.74E-06	5.98E-06	2.09E-06	4.86E-06	5.8743E-04
520611.11	4258788.66	30106.58231	0.168	0.12399	0.16179	0.1284	5.72E-04	3.94E-07	2.54E-07	3.80E-07	2.53E-07	5.7355E-04
520620.31	4258742.75	30075.77263	0.15958	0.12775	0.15355	0.13267	5.72E-04	3.75E-07	2.62E-07	3.60E-07	2.61E-07	5.7294E-04
520584.14	4258223.98	30062.73988	0.13931	0.19044	0.13868	0.19922	5.71E-04	3.27E-07	3.91E-07	3.26E-07	3.92E-07	5.7287E-04
520558.02	4258162.74	30062.37317	0.14105	0.21205	0.14299	0.22377	5.71E-04	3.31E-07	4.35E-07	3.36E-07	4.40E-07	5.7297E-04
519949.95	4258810.54	30018.36199	0.77142	0.50845	0.85933	0.48876	5.71E-04	1.81E-06	1.04E-06	2.02E-06	9.62E-07	5.7643E-04
519976.51	4258964.23	30005.55781	1.31869	0.30637	1.49266	0.30281	5.70E-04	3.10E-06	6.28E-07	3.50E-06	5.96E-07	5.7818E-04
519989.93	4258628.23	29971.5234	0.71459	1.43795	0.83758	1.31416	5.70E-04	1.68E-06	2.95E-06	1.97E-06	2.59E-06	5.7888E-04
520575.29	4258888.25	29966.06145	0.19833	0.11762	0.19154	0.12259	5.70E-04	4.66E-07	2.41E-07	4.50E-07	2.41E-07	5.7100E-04
520119.28	4258292.44	29950.23357	0.25867	7.65376	0.26582	8.97114	5.69E-04	6.07E-07	1.57E-05	6.24E-07	1.77E-05	6.0389E-04
520621.27	4258692.58	29940.50118	0.15543	0.13437	0.14957	0.13937	5.69E-04	3.65E-07	2.76E-07	3.51E-07	2.74E-07	5.7038E-04
519951.13	4258861.61	29918.10723	0.85428	0.41773	0.95082	0.40681	5.69E-04	2.01E-06	8.57E-07	2.23E-06	8.01E-07	5.7458E-04
520083.05	4259106.53	29908.15166	16.4484	0.24371	21.66329	0.23068	5.68E-04	3.86E-05	5.00E-07	5.09E-05	4.54E-07	6.5893E-04
520522.88	4258980	29890.10105	0.24738	0.11636	0.23763	0.1216	5.68E-04	5.81E-07	2.39E-07	5.58E-07	2.39E-07	5.6977E-04
519950.72	4258788.29	29885.57995	0.742	0.55807	0.82879	0.53323	5.68E-04	1.74E-06	1.14E-06	1.95E-06	1.05E-06	5.7395E-04
520276.4	4258132.93	29885.52907	0.18568	1.04297	0.19619	1.13684	5.68E-04	4.36E-07	2.14E-06	4.61E-07	2.24E-06	5.7334E-04
520614.76	4258779.96	29877.46678	0.16532	0.12425	0.15916	0.12867	5.68E-04	3.88E-07	2.55E-07	3.74E-07	2.53E-07	5.6919E-04
520532.19	4258966.14	29850.63075	0.2377	0.11621	0.22852	0.12146	5.67E-04	5.58E-07	2.38E-07	5.36E-07	2.39E-07	5.6898E-04
519961.47	4258717.75	29841.8968	0.69994	0.78579	0.79296	0.7401	5.67E-04	1.64E-06	1.61E-06	1.86E-06	1.46E-06	5.7381E-04
520246.97	4258152.84	29818.0898	0.19318	1.32843	0.20268	1.45842	5.67E-04	4.54E-07	2.72E-06	4.76E-07	2.87E-06	5.7331E-04
520567.65	4258176.87	29799.73794	0.13976	0.20367	0.14104	0.21457	5.66E-04	3.28E-07	4.18E-07	3.31E-07	4.22E-07	5.6794E-04
520564.31	4258912.81	29772.73555	0.20788	0.11641	0.20056	0.12153	5.66E-04	4.88E-07	2.39E-07	4.71E-07	2.39E-07	5.6736E-04
519957.25	4258906.31	29764.15638	0.97511	0.35929	1.08573	0.35302	5.66E-04	2.29E-06	7.37E-07	2.55E-06	6.95E-07	5.7203E-04
520138.95	4258262.5	29751.17817	0.24035	4.98416	0.2447	5.7949	5.66E-04	5.64E-07	1.02E-05	5.74E-07	1.14E-05	5.8828E-04
520598.23	4258428.87	29743.27097	0.15223	0.16637	0.14903	0.17438	5.65E-04	3.57E-07	3.41E-07	3.50E-07	3.43E-07	5.6676E-04
520583.19	4258213.56	29716.0298	0.13862	0.19127	0.13827	0.20036	5.65E-04	3.25E-07	3.92E-07	3.25E-07	3.94E-07	5.6628E-04
520541.67	4258952.2	29694.63264	0.22826	0.1159	0.21964	0.12113	5.64E-04	5.36E-07	2.38E-07	5.16E-07	2.38E-07	5.6597E-04
520044.28	4259073.65	29679.73824	5.23124	0.24893	7.32551	0.24186	5.64E-04	1.23E-05	5.11E-07	1.72E-05	4.76E-07	5.9462E-04
520092.96	4259116.51	29678.54192	13.58657	0.24045	12.80452	0.22633	5.64E-04	3.19E-05	4.93E-07	3.01E-05	4.46E-07	6.2703E-04
519959.16	4258917.1	29659.89015	1.01005	0.34735	1.12566	0.34178	5.64E-04	2.37E-06	7.12E-07	2.64E-06	6.73E-07	5.7018E-04
520603.49	4258365.06	29653.60479	0.14558	0.16758	0.1433	0.17595	5.64E-04	3.42E-07	3.44E-07	3.36E-07	3.46E-07	5.6503E-04
520603.8	4258340	29614.43984	0.14345	0.16943	0.14192	0.17794	5.63E-04	3.37E-07	3.47E-07	3.33E-07	3.50E-07	5.6428E-04
520618.4	4258771.26	29596.68579	0.16269	0.12441	0.1566	0.12888	5.63E-04	3.82E-07	2.55E-07	3.68E-07	2.54E-07	5.6384E-04
520305.82	4258113.02	29563.1387	0.17739	0.84021	0.18738	0.91035	5.62E-04	4.16E-07	1.72E-06	4.40E-07	1.79E-06	5.6631E-04
519977.99	4258974.83	29555.105	1.35489	0.29677	1.53587	0.29352	5.62E-04	3.18E-06	6.09E-07	3.61E-06	5.78E-07	5.6976E-04
520551.34	4258938.19	29543.76146	0.21937	0.11561	0.21131	0.12081	5.62E-04	5.15E-07	2.37E-07	4.96E-07	2.38E-07	5.6306E-04
520623.82	4258734.39	29531.60268	0.15715	0.12764	0.15127	0.13261	5.61E-04	3.69E-07	2.62E-07	3.55E-07	2.61E-07	5.6259E-04
520065.62	4258402.25	29530.95626	0.35818	23.24203	0.38646	10.34739	5.61E-04	8.41E-07	4.77E-05	9.07E-07	2.04E-05	6.3111E-04
520624.24	4258709.43	29502.75622	0.15513	0.1307	0.14932	0.13577	5.61E-04	3.64E-07	2.68E-07	3.51E-07	2.67E-07	5.6204E-04
520508.34	4259006.03	29497.6433	0.2639	0.1156	0.2533	0.12083	5.61E-04	6.20E-07	2.37E-07	5.95E-07	2.38E-07	5.6239E-04
520188.08	4258202.66	29492.04914	0.21142	2.41065	0.21623	2.7072	5.61E-04	4.96E-07	4.94E-06	5.08E-07	5.33E-06	5.7187E-04
520099.61	4258322.38	29483.01474	0.27754	14.34204	0.2896	15.74337	5.60E-04	6.52E-07	2.94E-05	6.80E-07	3.10E-05	6.2216E-04
520197.9	4258192.69	29481.31525	0.20742	2.15197	0.21294	2.40538	5.60E-04	4.87E-07	4.41E-06	5.00E-07	4.73E-06	5.7052E-04
519960.94	4258927.82	29479.74552	1.04359	0.33595	1.16411	0.33097	5.60E-04	2.45E-06	6.89E-07	2.73E-06	6.52E-07	5.6688E-04
520517.8	4258992.11	29460.68813	0.25295	0.11558	0.24291	0.12077	5.60E-04	5.94E-07	2.37E-07	5.70E-07	2.38E-07	5.6163E-04
520603.35	4258390.56	29449.06011	0.14752	0.16631	0.14476	0.17428	5.60E-04	3.46E-07	3.41E-07	3.40E-07	3.43E-07	5.6114E-04
520178.26	4258212.63	29448.61668	0.21547	2.72122	0.21958	3.07519	5.60E-04	5.06E-07	5.58E-06	5.16E-07	6.05E-06	5.7242E-04
520009.73	4258579.66	29423.37035	0.72809	2.26632	0.88089	1.97516	5.59E-04	1.71E-06	4.65E-06	2.07E-06	3.89E-06	5.7160E-04
520256.79	4258142.87	29420.22081	0.18888	1.22288	0.19873	1.33782	5.59E-04	4.43E-07	2.51E-06	4.67E-07	2.63E-06	5.6528E-04
520595.26	4258248.77	29419.45348	0.13814	0.18202	0.13705	0.18978	5.59E-04	3.24E-07	3.73E-07	3.22E-07	3.74E-07	5.6060E-04
520286.22	4258122.96	29417.13699	0.18147	0.96868	0.19181	1.05373	5.59E-04	4.26E-07	1.99E-06	4.50E-07	2.07E-06	5.6410E-04
520207.72	4258182.72	29401.4435	0.20342	1.93439	0.20968	2.15295	5.59E-04	4.78E-07	3.97E-06	4.92E-07	4.24E-06	5.6804E-04
520588.99	4258865.44	29397.64856	0.18737	0.11776	0.18105	0.12246	5.59E-04	4.40E-07	2.42E-07	4.25E-07	2.41E-07	5.6014E-04
520052.9	4259085.75	29383.67035	6.97461	0.24471	11.40432	0.23647	5.59E-04	1.64E-05	5.02E-07	2.68E-05	4.65E-07	6.0265E-04
520592.6	4258856.82	29383.4287	0.18445	0.11816	0.17817	0.1228	5.59E-04	4.33E-07	2.42E-07	4.18E-07	2.42E-07	5.5986E-04
520573.97	4258898.8	29378.97059	0.19981	0.11619	0.19298	0.12116	5.58E-04	4.69E-07	2.38E-07	4.53E-07	2.39E-07	5.5984E-04
520601.21	4258281.36	29370.46162	0.13921	0.17611	0.13836	0.18376	5.58E-04	3.27E-07	3.61E-07	3.25E-07	3.62E-07	5.5965E-04
520601.87	4258412.54	29358.62034	0.14964	0.16561	0.1466	0.17348	5.58E-04	3.51E-07	3.40E-07	3.44E-07	3.41E-07	5.5943E-04
520577.46	4258191.09	29357.795	0.13822	0.1958	0.13875	0.20575	5.58E-04	3.24E-07	4.02E-07	3.26E-07	4.05E-07	5.5950E-04
520596.21	4258848.19	29355.35933	0.18155	0.11851	0.17529	0.12311	5.58E-04	4.26E-07	2.43E-07	4.12E-07	2.42E-07	5.5932E-04
520602.58	4258291.96	29350.57298	0.13973	0.17427	0.13892	0.18209	5.58E-04	3.28E-07	3.57E-07	3.26E-07	3.58E-07	5.5927E-04
519951.5	4258886.61	29347.9946	0.88734	0.38086	0.98587	0.37282	5.58E-04	2.08E-06	7.81E-07	2.31E-06	7.34E-07	5.6377E-04
519964.37	4258700.63	29347.31749	0.68451	0.85785	0.77825	0.80535	5.58E-04	1.61E-06	1.76E-06	1.83E-06	1.59E-06	5.6462E-04
520582.31	4258203.17	29340.82602	0.13791	0.19205	0.13789	0.20143	5.58E-04	3.24E-07	3.94E-07	3.24E-07	3.97E-07	5.5915E-04
520561.23	4258924.1	29339.01898	0.21076	0.11532	0.20325	0.12043	5.58E-04	4.95E-07	2.37E-07	4.77E-07	2.37E-07	5.5913E-04
520599.96	4258270.81	29329.30853	0.13866	0.1777	0.1377	0.18526	5.57E-04	3.26E-07	3.64E-07	3.23E-07	3.65E-07	5.5888E-04
520599.83	4258839.56	29306.02753	0.17867	0.11904	0.17253	0.12357	5.57E-04	4.19E-07	2.44E-07	4.05E-07	2.43E-07	5.5837E-04
520566.87	4258166.53	29300.67302	0.13889	0.20458	0.14049	0.21563	5.57E-04	3.26E-07	4.20E-07	3.30E-07	4.24E-07	5.5845E-04
520168.44	4258222.6	29294.07765	0.2194	3.10316	0.22303	3.52711	5.57E-04	5.15E-07	6.36E-06	5.24E-07	6.94E-06	5.7117E-04
519946.88	4258827.26	29284.18096	0.76567	0.47115	0.85116	0.45457	5.57E-04	1.80E-06	9.66E-07	2.00E-06	8.95E-07	5.6230E-04
520594.75	4258471.48	29260.49266	0.1562	0.1647	0.15207	0.17297	5.56E-04	3.67E-07	3.38E-07	3.57E-07	3.40E-07	5.5759E-04
520217.54	4258172.75	29252.7208	0.19941	1.74942	0.20639	1.93903	5.56E-04	4.68E-07	3.59E-06	4.85E-07	3.82E-06	5.6440E-04
520604.08	4258302.61	29246.65554	0.14019	0.17215	0.13933	0.18019	5.56E-04	3.29E-07	3.53E-07	3.27E-07	3.55E-07	5.5729E-04
520622.04	4258762.56	29242.38329	0.1601	0.12445	0.15409	0.129	5.56E-04	3.76E-07	2.55E-07	3.62E-07	2.54E-07	5.5709E-04
520603.44	4258830.94	29234.93289	0.17581	0.11954	0.16979	0.12401	5.56E-04	4.13E-07	2.45E-07	3.99E-07	2.44E-07	5.5700E-04
519947.43	4258852.69	29234.07246	0.8046	0.42785	0.89429	0.41549	5.56E-04	1.89E-06	8.77E-07	2.10E-06	8.18E-07	5.6137E-04
519962.58	4258938.49	29233.36053	1.07559	0.32504	1.20094	0.32057	5.56E-04	2.53E-06	6.67E-07	2.82E-06	6.31E-07	5.6232E-04
520598.82	4258260.31	29228.69255	0.13807	0.17907	0.13701	0.18663	5.56E-04	3.24E-07	3.67E-07	3.22E-07	3.67E-07	5.5697E-04
520594.07	4258238.25	29223.46303	0.13755	0.18318	0.1365	0.19113	5.55E-04	3.23E-07	3.76E-07	3.20E-07	3.76E-07	5.5688E-04
520129.13	4258272.47	29153.08279	0.2441	6.08444	0.24922	7.12524	5.54E-04	5.73E-07	1.25E-05	5.85E-07	1.40E-05	5.8181E-04
520607.05	4258822.31	29139.53497	0.17302	0.11993	0.16704	0.12433	5.54E-04	4.06E-07	2.46E-07	3.92E-07	2.45E-07	5.5518E-04
520158.62	4258232.57	29058.60602	0.2233	3.57944	0.22663	4.09779	5.52E-04	5.24E-07	7.34E-06	5.32E-07	8.07E-06	5.6882E-04
520227.36	4258162.78	29057.64762	0.19544	1.59025	0.20308	1.7563	5.52E-04	4.59E-07	3.26E-06	4.77E-07	3.46E-06	5.5999E-04
520531.37	4258976.48	29048.00529	0.23873	0.11473	0.22955	0.11985	5.52E-04	5.60E-07	2.35E-07	5.39E-07	2.36E-07	5.5372E-04
520039.44	4258511.65	29019.39447	0.64214	5.37061	0.72914	4.19689	5.52E-04	1.51E-06	1.10E-05	1.71E-06	8.26E-06	5.7410E-04
520610.66	4258813.69	29016.18715	0.17026	0.12027	0.16431	0.1246	5.52E-04	4.00E-07	2.47E-07	3.86E-07	2.45E-07	5.5282E-04
520109.46	4258302.41	29009.13892	0.26191	10.10691	0.27092	11.62608	5.51E-04	6.15E-07	2.07E-05	6.36E-07	2.29E-05	5.9628E-04
520266.61	4258132.9	29002.78723	0.18468	1.12933	0.19474	1.23172	5.51E-04	4.34E-07	2.32E-06	4.57E-07	2.42E-06	5.5692E-04
520592.98	4258227.77	28986.01123	0.13694	0.18416	0.13602	0.19236	5.51E-04	3.21E-07	3.78E-07	3.19E-07	3.79E-07	5.5237E-04
520606.21	4258313.54	28977.89824	0.1404	0.1698	0.13939	0.178	5.51E-04	3.30E-07	3.48E-07	3.27E-07	3.50E-07	5.5217E-04
520083.06	4259116.53	28967.40832	16.33531	0.23706	21.55386	0.22453	5.51E-04	3.84E-05	4.86E-07	5.06E-05	4.42E-07	6.4050E-04
520627.32	4258726.02	28940.04019	0.15478	0.12748	0.14903	0.13245	5.50E-04	3.63E-07	2.61E-07	3.50E-07	2.61E-07	5.5133E-04
520607.19	4258348.92	28935.58028	0.14292	0.16679	0.14104	0.17512	5.50E-04	3.36E-07	3.42E-07	3.31E-07	3.45E-07	5.5137E-04
519964.1	4258949.11	28932.39317	1.10618	0.31462	1.23628	0.31059	5.50E-04	2.60E-06	6.45E-07	2.90E-06	6.11E-07	5.5671E-04
520576.57	4258180.69	28922.74549	0.13745	0.19667	0.13836	0.20684	5.50E-04	3.23E-07	4.03E-07	3.25E-07	4.07E-07	5.5123E-04
520540.74	4258962.6	28921.49215	0.22932	0.11445	0.22067	0.11958	5.50E-04	5.38E-07	2.35E-07	5.18E-07	2.35E-07	5.5127E-04
520296.04	4258112.99	28897.20856	0.17725	0.90222	0.1874	0.97889	5.49E-04	4.16E-07	1.85E-06	4.40E-07	1.93E-06	5.5392E-04
519946.17	4258801.44	28893.55938	0.72093	0.51974	0.80046	0.49826	5.49E-04	1.69E-06	1.07E-06	1.88E-06	9.81E-07	5.5483E-04
520583.87	4258884.7	28885.58714	0.19192	0.11593	0.18553	0.1207	5.49E-04	4.51E-07	2.38E-07	4.36E-07	2.38E-07	5.5042E-04
520606.92	4258374.08	28877.14645	0.14495	0.16519	0.1424	0.17325	5.49E-04	3.40E-07	3.39E-07	3.34E-07	3.41E-07	5.5026E-04
519953.07	4258745.73	28864.5328	0.68119	0.6686	0.76523	0.63326	5.49E-04	1.60E-06	1.37E-06	1.80E-06	1.25E-06	5.5468E-04
519947.83	4258877.77	28845.80534	0.83886	0.38967	0.92957	0.3807	5.48E-04	1.97E-06	7.99E-07	2.18E-06	7.49E-07	5.5401E-04
520614.27	4258805.06	28841.99709	0.16751	0.12056	0.16159	0.12483	5.48E-04	3.93E-07	2.47E-07	3.79E-07	2.46E-07	5.4950E-04
520625.69	4258753.86	28840.64258	0.15758	0.12448	0.1517	0.12913	5.48E-04	3.70E-07	2.55E-07	3.56E-07	2.54E-07	5.4944E-04
519950.14	4258762.77	28837.07037	0.6891	0.61595	0.77055	0.58537	5.48E-04	1.62E-06	1.26E-06	1.81E-06	1.15E-06	5.5398E-04
519967.41	4258960.47	28831.85946	1.1643	0.30501	1.30499	0.30138	5.48E-04	2.73E-06	6.26E-07	3.06E-06	5.93E-07	5.5506E-04
520237.18	4258152.81	28809.71837	0.19148	1.45231	0.1997	1.59845	5.48E-04	4.50E-07	2.98E-06	4.69E-07	3.15E-06	5.5466E-04
520094.86	4259127.17	28787.90651	12.75847	0.23408	11.81464	0.22027	5.47E-04	3.00E-05	4.80E-07	2.77E-05	4.34E-07	6.0581E-04
520550.28	4258948.64	28781.49519	0.22044	0.11417	0.21234	0.11928	5.47E-04	5.18E-07	2.34E-07	4.99E-07	2.35E-07	5.4857E-04
520572.76	4258909.31	28779.2717	0.20117	0.11475	0.19428	0.1197	5.47E-04	4.72E-07	2.35E-07	4.56E-07	2.36E-07	5.4844E-04
519999.81	4258599.1	28774.77115	0.70345	1.80416	0.83963	1.61848	5.47E-04	1.65E-06	3.70E-06	1.97E-06	3.19E-06	5.5747E-04
520627.77	4258700.99	28765.41899	0.15284	0.13073	0.14715	0.13564	5.47E-04	3.59E-07	2.68E-07	3.45E-07	2.67E-07	5.4802E-04
519977.12	4258655.32	28756.28996	0.67561	1.13623	0.7794	1.05236	5.47E-04	1.59E-06	2.33E-06	1.83E-06	2.07E-06	5.5442E-04
520055.4	4258436.43	28750.06725	0.41385	10.83102	0.44849	7.09331	5.46E-04	9.72E-07	2.22E-05	1.05E-06	1.40E-05	5.8469E-04
520148.8	4258242.53	28718.59763	0.22708	4.1891	0.2304	4.83399	5.46E-04	5.33E-07	8.59E-06	5.41E-07	9.52E-06	5.6507E-04
520591.97	4258217.32	28717.18287	0.13632	0.18498	0.1356	0.19349	5.46E-04	3.20E-07	3.79E-07	3.18E-07	3.81E-07	5.4726E-04
520601.57	4258437.63	28702.60098	0.15134	0.16376	0.14795	0.17166	5.46E-04	3.55E-07	3.36E-07	3.47E-07	3.38E-07	5.4696E-04
519955.87	4258728.36	28688.81598	0.67091	0.72668	0.75449	0.68678	5.45E-04	1.58E-06	1.49E-06	1.77E-06	1.35E-06	5.5151E-04
520517.02	4259002.44	28683.16101	0.25412	0.11406	0.24412	0.11914	5.45E-04	5.97E-07	2.34E-07	5.73E-07	2.35E-07	5.4685E-04
520617.88	4258796.43	28634.69433	0.16481	0.12085	0.15893	0.12508	5.44E-04	3.87E-07	2.48E-07	3.73E-07	2.46E-07	5.4555E-04
520276.43	4258122.93	28628.7912	0.18077	1.04576	0.19081	1.13877	5.44E-04	4.24E-07	2.14E-06	4.48E-07	2.24E-06	5.4944E-04
520526.54	4258988.49	28624.73371	0.24372	0.11396	0.23427	0.11902	5.44E-04	5.72E-07	2.34E-07	5.50E-07	2.34E-07	5.4569E-04
520560.01	4258934.61	28617.53577	0.21199	0.1139	0.20442	0.11896	5.44E-04	4.98E-07	2.34E-07	4.80E-07	2.34E-07	5.4541E-04
519947.09	4258779.53	28605.11767	0.69296	0.56842	0.77061	0.54228	5.44E-04	1.63E-06	1.17E-06	1.81E-06	1.07E-06	5.4940E-04
520606.82	4258399.69	28556.56477	0.14677	0.16376	0.14383	0.17149	5.43E-04	3.45E-07	3.36E-07	3.38E-07	3.38E-07	5.4416E-04
520043	4259085.77	28514.32982	5.0542	0.24002	6.9801	0.23343	5.42E-04	1.19E-05	4.92E-07	1.64E-05	4.60E-07	5.7121E-04

520052.91	4259095.75	28506.06325	7.03898	0.23793	11.46657	0.23001	5.42E-04	1.65E-05	4.88E-07	2.69E-05	4.53E-07	5.8623E-04
520247	4258142.84	28499.1456	0.18749	1.33201	0.19623	1.46067	5.42E-04	4.40E-07	2.73E-06	4.61E-07	2.88E-06	5.4823E-04
519943.73	4258843.77	28481.80603	0.75773	0.43783	0.84016	0.42397	5.41E-04	1.78E-06	8.98E-07	1.97E-06	8.35E-07	5.4687E-04
520575.73	4258170.32	28481.16013	0.13666	0.19752	0.13792	0.20788	5.41E-04	3.21E-07	4.05E-07	3.24E-07	4.09E-07	5.4283E-04
519968.96	4258971.1	28462.60928	1.19671	0.29556	1.34319	0.29226	5.41E-04	2.81E-06	6.06E-07	3.15E-06	5.75E-07	5.4817E-04
520621.5	4258787.81	28444.66187	0.16222	0.12114	0.15639	0.12534	5.41E-04	3.81E-07	2.48E-07	3.67E-07	2.47E-07	5.4192E-04
520586.44	4258194.93	28432.6273	0.1359	0.18918	0.136	0.19847	5.40E-04	3.19E-07	3.88E-07	3.19E-07	3.91E-07	5.4187E-04
519967.12	4258683.15	28430.92084	0.66159	0.93715	0.75594	0.87606	5.40E-04	1.55E-06	1.92E-06	1.77E-06	1.72E-06	5.4739E-04
520119.31	4258282.44	28417.51476	0.24746	7.67211	0.25389	8.99117	5.40E-04	5.81E-07	1.57E-05	5.96E-07	1.77E-05	5.7478E-04
520605.17	4258421.21	28408.84953	0.14884	0.16306	0.14564	0.17079	5.40E-04	3.49E-07	3.34E-07	3.42E-07	3.36E-07	5.4136E-04
520591.03	4258206.91	28403.96514	0.13565	0.18577	0.13523	0.19457	5.40E-04	3.18E-07	3.81E-07	3.17E-07	3.83E-07	5.4131E-04
520582.48	4258895.28	28362.25321	0.1934	0.11455	0.18699	0.11933	5.39E-04	4.54E-07	2.35E-07	4.39E-07	2.35E-07	5.4048E-04
520569.96	4258920.48	28360.18034	0.20372	0.11362	0.19668	0.11858	5.39E-04	4.78E-07	2.33E-07	4.62E-07	2.33E-07	5.4048E-04
519943.15	4258818.26	28329.46027	0.71866	0.48146	0.79565	0.46335	5.38E-04	1.69E-06	9.87E-07	1.87E-06	9.12E-07	5.4395E-04
520629.33	4258745.15	28322.19506	0.15505	0.1243	0.14929	0.12904	5.38E-04	3.64E-07	2.55E-07	3.50E-07	2.54E-07	5.3958E-04
520598.18	4258480.46	28318.75977	0.15507	0.16216	0.15061	0.17023	5.38E-04	3.64E-07	3.33E-07	3.54E-07	3.35E-07	5.3967E-04
519944.16	4258868.92	28276.81311	0.79249	0.39879	0.87663	0.38865	5.37E-04	1.86E-06	8.18E-07	2.06E-06	7.65E-07	5.4299E-04
520138.98	4258252.5	28242.72671	0.23061	4.9968	0.2344	5.7973	5.37E-04	5.41E-07	1.02E-05	5.50E-07	1.14E-05	5.5959E-04
520610.59	4258357.85	28242.26534	0.14235	0.16418	0.14014	0.17229	5.37E-04	3.34E-07	3.37E-07	3.29E-07	3.39E-07	5.3817E-04
519950.1	4258913.35	28183.23467	0.89965	0.34498	0.99588	0.33918	5.36E-04	2.11E-06	7.08E-07	2.34E-06	6.68E-07	5.4154E-04
520539.87	4258972.96	28183.00633	0.23036	0.11305	0.2217	0.11806	5.36E-04	5.41E-07	2.32E-07	5.20E-07	2.32E-07	5.3723E-04
520625.11	4258779.18	28180.6478	0.15968	0.12133	0.1539	0.12556	5.36E-04	3.75E-07	2.49E-07	3.61E-07	2.47E-07	5.3690E-04
520286.25	4258112.96	28168.93268	0.17673	0.97142	0.18677	1.05492	5.35E-04	4.15E-07	1.99E-06	4.38E-07	2.08E-06	5.4036E-04
520604.24	4258252.61	28162.2107	0.13566	0.17589	0.13451	0.18321	5.35E-04	3.18E-07	3.61E-07	3.16E-07	3.61E-07	5.3667E-04
520256.82	4258132.87	28150.53498	0.18353	1.22607	0.19269	1.33991	5.35E-04	4.31E-07	2.51E-06	4.52E-07	2.64E-06	5.4113E-04
520084.96	4259127.18	28140.38529	15.52793	0.23098	19.02608	0.21864	5.35E-04	3.65E-05	4.74E-07	4.47E-05	4.30E-07	6.1692E-04
520197.93	4258182.69	28100.50236	0.20038	2.1567	0.20506	2.40895	5.34E-04	4.70E-07	4.42E-06	4.81E-07	4.74E-06	5.4426E-04
520188.11	4258192.66	28099.73112	0.20406	2.41554	0.20806	2.71161	5.34E-04	4.79E-07	4.95E-06	4.88E-07	5.34E-06	5.4538E-04
519951.95	4258924.11	28093.21584	0.93018	0.33381	1.03038	0.32868	5.34E-04	2.18E-06	6.85E-07	2.42E-06	6.47E-07	5.3994E-04
520029.52	4258531.09	28085.34454	0.67132	3.92845	0.78019	3.20825	5.34E-04	1.58E-06	8.06E-06	1.83E-06	6.32E-06	5.5163E-04
520610.36	4258383.1	28082.16998	0.14426	0.16275	0.1415	0.17052	5.34E-04	3.39E-07	3.34E-07	3.32E-07	3.36E-07	5.3513E-04
520585.48	4258184.51	28064.15133	0.13521	0.18999	0.13569	0.19954	5.33E-04	3.17E-07	3.90E-07	3.19E-07	3.93E-07	5.3487E-04
520549.29	4258959.06	28050.02133	0.22144	0.11276	0.2133	0.11777	5.33E-04	5.20E-07	2.31E-07	5.01E-07	2.32E-07	5.3466E-04
520602.98	4258242.06	28048.07024	0.13513	0.1771	0.13395	0.18456	5.33E-04	3.17E-07	3.63E-07	3.14E-07	3.63E-07	5.3450E-04
520207.75	4258172.72	28045.99523	0.19672	1.93869	0.2021	2.15627	5.33E-04	4.62E-07	3.98E-06	4.74E-07	4.24E-06	5.4226E-04
519989.89	4258618.53	28036.40424	0.67422	1.47729	0.78852	1.35068	5.33E-04	1.58E-06	3.03E-06	1.85E-06	2.66E-06	5.4204E-04
520178.29	4258202.63	28015.28992	0.20768	2.72821	0.21112	3.07762	5.33E-04	4.88E-07	5.60E-06	4.96E-07	6.06E-06	5.4516E-04
520608.71	4258274.55	27971.33122	0.13616	0.17174	0.1352	0.17904	5.32E-04	3.20E-07	3.52E-07	3.17E-07	3.52E-07	5.3303E-04
520631.3	4258692.56	27969.62689	0.15058	0.13073	0.14498	0.13547	5.32E-04	3.54E-07	2.68E-07	3.40E-07	2.67E-07	5.3288E-04
520607.5	4258264.02	27944.95626	0.13563	0.17318	0.13456	0.1804	5.31E-04	3.18E-07	3.55E-07	3.16E-07	3.55E-07	5.3253E-04
520610.02	4258285.13	27936.61329	0.13665	0.17014	0.13576	0.17759	5.31E-04	3.21E-07	3.49E-07	3.19E-07	3.50E-07	5.3236E-04
519953.66	4258934.81	27933.87065	0.95938	0.32313	1.06346	0.31856	5.31E-04	2.25E-06	6.63E-07	2.50E-06	6.27E-07	5.3701E-04
520601.46	4258463.23	27932.8972	0.15277	0.1617	0.1488	0.1697	5.31E-04	3.59E-07	3.32E-07	3.49E-07	3.34E-07	5.3233E-04
520099.64	4258312.38	27931.524	0.2645	14.38467	0.27573	15.31853	5.31E-04	6.21E-07	2.95E-05	6.47E-07	3.02E-05	5.9185E-04
520217.57	4258162.75	27928.62509	0.19304	1.75331	0.19915	1.94212	5.31E-04	4.53E-07	3.60E-06	4.68E-07	3.82E-06	5.3921E-04
520558.88	4258945.08	27924.11751	0.21311	0.11253	0.20549	0.11751	5.31E-04	5.00E-07	2.31E-07	4.82E-07	2.31E-07	5.3223E-04
520094.88	4259137.17	27891.188	12.66773	0.22792	11.77934	0.21461	5.30E-04	2.97E-05	4.67E-07	2.77E-05	4.22E-07	5.8844E-04
520168.47	4258212.6	27876.75029	0.21133	3.1097	0.21431	3.53184	5.30E-04	4.96E-07	6.38E-06	5.03E-07	6.95E-06	5.4422E-04
520601.82	4258231.55	27876.01049	0.13455	0.17819	0.13344	0.18583	5.30E-04	3.16E-07	3.65E-07	3.13E-07	3.66E-07	5.3123E-04
520628.72	4258770.56	27867.10616	0.15717	0.12141	0.15146	0.1257	5.30E-04	3.69E-07	2.49E-07	3.56E-07	2.47E-07	5.3092E-04
520525.7	4258998.84	27861.99259	0.24477	0.11247	0.23532	0.11743	5.30E-04	5.75E-07	2.31E-07	5.52E-07	2.31E-07	5.3120E-04
520596.02	4258872.6	27853.51096	0.183	0.11472	0.17706	0.11925	5.29E-04	4.30E-07	2.35E-07	4.16E-07	2.35E-07	5.3076E-04
520611.47	4258295.76	27841.53692	0.13709	0.16826	0.13618	0.17591	5.29E-04	3.22E-07	3.45E-07	3.20E-07	3.46E-07	5.3055E-04
520599.6	4258864.04	27839.56553	0.18024	0.11513	0.17432	0.1196	5.29E-04	4.23E-07	2.36E-07	4.09E-07	2.35E-07	5.3048E-04
520535.28	4258984.87	27815.13624	0.235	0.11235	0.2261	0.1173	5.29E-04	5.52E-07	2.30E-07	5.31E-07	2.31E-07	5.3026E-04
520581.2	4258905.82	27813.78359	0.19476	0.11312	0.18827	0.11791	5.29E-04	4.57E-07	2.32E-07	4.42E-07	2.32E-07	5.3005E-04
520603.18	4258855.48	27813.06286	0.1775	0.11547	0.1716	0.1199	5.29E-04	4.17E-07	2.37E-07	4.03E-07	2.36E-07	5.2997E-04
520632.97	4258736.45	27781.71358	0.15262	0.12419	0.14701	0.12897	5.28E-04	3.58E-07	2.55E-07	3.45E-07	2.54E-07	5.2929E-04
519957.88	4258709.1	27781.67634	0.644	0.79196	0.72629	0.74641	5.28E-04	1.51E-06	1.62E-06	1.71E-06	1.47E-06	5.3439E-04
520050.29	4258455.9	27771.76966	0.45467	8.40345	0.49504	5.95118	5.28E-04	1.07E-06	1.72E-05	1.16E-06	1.17E-05	5.5907E-04
520266.64	4258122.9	27769.36693	0.17961	1.13225	0.18908	1.23339	5.28E-04	4.22E-07	2.32E-06	4.44E-07	2.43E-06	5.3346E-04
520606.77	4258846.93	27769.32782	0.17475	0.11584	0.16891	0.12022	5.28E-04	4.10E-07	2.38E-07	3.97E-07	2.37E-07	5.2913E-04
519944.31	4258893.39	27758.40357	0.82017	0.3652	0.90607	0.35769	5.28E-04	1.93E-06	7.49E-07	2.13E-06	7.04E-07	5.3314E-04
520227.39	4258152.78	27737.51884	0.18931	1.59437	0.19614	1.75823	5.27E-04	4.44E-07	3.27E-06	4.60E-07	3.46E-06	5.3488E-04
520568.67	4258931.02	27733.69225	0.20499	0.11226	0.19788	0.11717	5.27E-04	4.81E-07	2.30E-07	4.65E-07	2.31E-07	5.2857E-04
519955.25	4258945.46	27716.32044	0.98738	0.31291	1.09527	0.30882	5.27E-04	2.32E-06	6.42E-07	2.57E-06	6.08E-07	5.3298E-04
520610.35	4258838.37	27710.39394	0.17205	0.11639	0.16634	0.12071	5.27E-04	4.04E-07	2.39E-07	3.91E-07	2.38E-07	5.2800E-04
520129.16	4258262.47	27697.99358	0.23404	6.09769	0.23856	7.13881	5.26E-04	5.49E-07	1.25E-05	5.60E-07	1.41E-05	5.5416E-04
519942.4	4258792.34	27696.22017	0.67329	0.53008	0.74507	0.50712	5.26E-04	1.58E-06	1.09E-06	1.75E-06	9.98E-07	5.3187E-04
520053.34	4259105.75	27694.86895	7.23313	0.23162	11.83937	0.22392	5.26E-04	1.70E-05	4.75E-07	2.78E-05	4.41E-07	5.7212E-04
520043.01	4259095.77	27688.06454	5.09162	0.23346	7.00506	0.2271	5.26E-04	1.20E-05	4.79E-07	1.64E-05	4.47E-07	5.5563E-04
520600.74	4258221.08	27682.22474	0.13399	0.17902	0.13301	0.18695	5.26E-04	3.15E-07	3.67E-07	3.12E-07	3.68E-07	5.2755E-04
520584.59	4258174.11	27676.41057	0.13448	0.19078	0.13533	0.20055	5.26E-04	3.16E-07	3.91E-07	3.18E-07	3.95E-07	5.2750E-04
520613.06	4258306.46	27673.04476	0.13747	0.16623	0.13644	0.17408	5.26E-04	3.23E-07	3.41E-07	3.20E-07	3.43E-07	5.2734E-04
519940.03	4258834.84	27663.95346	0.71342	0.44753	0.78843	0.4322	5.26E-04	1.67E-06	9.18E-07	1.85E-06	8.51E-07	5.3114E-04
519958.3	4258956.71	27652.91168	1.03445	0.30348	1.14996	0.29979	5.26E-04	2.43E-06	6.22E-07	2.70E-06	5.90E-07	5.3197E-04
520610.3	4258408.81	27646.01308	0.14598	0.16118	0.14288	0.16873	5.26E-04	3.43E-07	3.31E-07	3.35E-07	3.32E-07	5.2684E-04
520158.65	4258222.57	27636.98135	0.21487	3.58758	0.21764	4.10158	5.25E-04	5.04E-07	7.36E-06	5.11E-07	8.07E-06	5.4178E-04
519940.49	4258860.07	27635.17538	0.74811	0.40804	0.82671	0.39653	5.25E-04	1.76E-06	8.37E-07	1.94E-06	7.81E-07	5.3061E-04
520613.93	4258829.81	27630.67172	0.16938	0.11684	0.16374	0.12108	5.25E-04	3.98E-07	2.40E-07	3.84E-07	2.38E-07	5.2647E-04
520614.34	4258341.83	27566.58129	0.13979	0.16307	0.13795	0.17115	5.24E-04	3.28E-07	3.34E-07	3.24E-07	3.37E-07	5.2531E-04
520634.33	4258709.28	27564.87933	0.15016	0.12722	0.14467	0.13203	5.24E-04	3.53E-07	2.61E-07	3.40E-07	2.60E-07	5.2517E-04
520109.49	4258292.41	27563.92643	0.25039	10.13268	0.25855	11.69529	5.24E-04	5.88E-07	2.08E-05	6.07E-07	2.30E-05	5.6894E-04
520237.21	4258142.81	27537.48385	0.18571	1.45586	0.19313	1.60058	5.23E-04	4.36E-07	2.99E-06	4.53E-07	3.15E-06	5.3046E-04
520613.99	4258366.77	27530.23864	0.14176	0.16155	0.13923	0.16942	5.23E-04	3.33E-07	3.31E-07	3.27E-07	3.34E-07	5.2462E-04
520617.51	4258821.26	27526.94163	0.16675	0.11722	0.16117	0.12139	5.23E-04	3.91E-07	2.40E-07	3.78E-07	2.39E-07	5.2449E-04
520595.42	4258198.77	27516.13011	0.13363	0.18284	0.13331	0.19155	5.23E-04	3.14E-07	3.75E-07	3.13E-07	3.77E-07	5.2441E-04
520632.33	4258761.93	27506.56169	0.15473	0.12139	0.14909	0.12578	5.23E-04	3.63E-07	2.49E-07	3.50E-07	2.48E-07	5.2406E-04
520019.6	4258550.53	27459.82534	0.68419	2.97292	0.80953	2.51846	5.22E-04	1.61E-06	6.10E-06	1.90E-06	4.96E-06	5.3652E-04
520608.47	4258429.88	27458.23525	0.148	0.16054	0.14464	0.16817	5.22E-04	3.47E-07	3.29E-07	3.40E-07	3.31E-07	5.2328E-04
520057.08	4258415.76	27448.96678	0.36667	11.88426	0.39541	7.52444	5.22E-04	8.61E-07	2.44E-05	9.28E-07	1.48E-05	5.6273E-04
520599.75	4258210.64	27437.19612	0.13339	0.17981	0.13263	0.18802	5.22E-04	3.13E-07	3.69E-07	3.11E-07	3.70E-07	5.2289E-04
520578.69	4258916.87	27406.65312	0.19699	0.11197	0.19038	0.11677	5.21E-04	4.62E-07	2.30E-07	4.47E-07	2.30E-07	5.2232E-04
520276.46	4258112.93	27402.68904	0.17588	1.04859	0.18549	1.13968	5.21E-04	4.13E-07	2.15E-06	4.35E-07	2.24E-06	5.2612E-04
520621.1	4258812.7	27396.93169	0.16416	0.11755	0.1586	0.12166	5.21E-04	3.85E-07	2.41E-07	3.72E-07	2.39E-07	5.2200E-04
520590.99	4258891.76	27365.80788	0.18728	0.1129	0.18121	0.11751	5.20E-04	4.40E-07	2.32E-07	4.25E-07	2.31E-07	5.2150E-04
519959.92	4258967.37	27361.92278	1.06385	0.29419	1.18396	0.29085	5.20E-04	2.50E-06	6.03E-07	2.78E-06	5.73E-07	5.2655E-04
520548.37	4258969.45	27354.25117	0.22244	0.1114	0.21427	0.11631	5.20E-04	5.22E-07	2.28E-07	5.03E-07	2.29E-07	5.2144E-04
520148.83	4258232.53	27319.36723	0.21835	4.1977	0.22112	4.84025	5.19E-04	5.13E-07	8.61E-06	5.19E-07	9.53E-06	5.3846E-04
519939.41	4258809.25	27297.74038	0.6738	0.49127	0.7433	0.47172	5.19E-04	1.58E-06	1.01E-06	1.75E-06	9.29E-07	5.2414E-04
519977.12	4258646.05	27291.23633	0.64282	1.16867	0.7375	1.08375	5.19E-04	1.51E-06	2.40E-06	1.73E-06	2.13E-06	5.2653E-04
519967.12	4258673.87	27285.32447	0.63489	0.96834	0.72391	0.9046	5.19E-04	1.49E-06	1.99E-06	1.70E-06	1.78E-06	5.2560E-04
520613.79	4258392.11	27274.69901	0.14355	0.16034	0.1406	0.16787	5.18E-04	3.37E-07	3.29E-07	3.30E-07	3.30E-07	5.1977E-04
520084.98	4259137.18	27268.55673	15.37999	0.22491	18.93128	0.21303	5.18E-04	3.61E-05	4.61E-07	4.44E-05	4.19E-07	5.9976E-04
519943.46	4258770.77	27265.29979	0.64668	0.57743	0.71605	0.55047	5.18E-04	1.52E-06	1.18E-06	1.68E-06	1.08E-06	5.2373E-04
520247.03	4258132.84	27261.20776	0.18202	1.33526	0.19002	1.46246	5.18E-04	4.27E-07	2.74E-06	4.46E-07	2.88E-06	5.2468E-04
519940.52	4258884.25	27259.08204	0.77518	0.37372	0.8546	0.36522	5.18E-04	1.82E-06	7.66E-07	2.01E-06	7.19E-07	5.2346E-04
520636.62	4258727.75	27252.83194	0.15032	0.12418	0.14488	0.12894	5.18E-04	3.53E-07	2.55E-07	3.40E-07	2.54E-07	5.1923E-04
519946.47	4258753.92	27243.4916	0.6377	0.62485	0.71251	0.59313	5.18E-04	1.50E-06	1.28E-06	1.67E-06	1.17E-06	5.2347E-04
520624.68	4258804.14	27239.18476	0.16161	0.11785	0.15608	0.1219	5.18E-04	3.79E-07	2.42E-07	3.66E-07	2.40E-07	5.1900E-04
520557.84	4258955.52	27224.22289	0.21404	0.11114	0.20637	0.11603	5.17E-04	5.02E-07	2.28E-07	4.84E-07	2.28E-07	5.1893E-04
520594.4	4258188.32	27208.81692	0.133	0.18362	0.13304	0.19261	5.17E-04	3.12E-07	3.77E-07	3.12E-07	3.79E-07	5.1857E-04
519949.36	4258736.79	27142.21194	0.63057	0.67632	0.70474	0.64095	5.16E-04	1.48E-06	1.39E-06	1.65E-06	1.26E-06	5.2171E-04
520635.94	4258753.3	27098.16987	0.15234	0.12131	0.14681	0.12579	5.15E-04	3.58E-07	2.49E-07	3.45E-07	2.48E-07	5.1629E-04
520534.39	4258995.25	27088.61155	0.23599	0.11092	0.22707	0.11577	5.15E-04	5.54E-07	2.27E-07	5.33E-07	2.28E-07	5.1645E-04
520567.49	4258941.52	27082.24116	0.20609	0.11091	0.19892	0.11576	5.15E-04	4.84E-07	2.27E-07	4.67E-07	2.28E-07	5.1619E-04
519960.75	4258691.89	27068.38764	0.62655	0.86139	0.70889	0.8093	5.15E-04	1.47E-06	1.77E-06	1.66E-06	1.59E-06	5.2102E-04
520628.26	4258795.59	27048.53939	0.15911	0.11812	0.15361	0.12214	5.14E-04	3.74E-07	2.42E-07	3.61E-07	2.40E-07	5.1536E-04
520119.34	4258272.44	27031.18079	0.23713	7.68679	0.24286	9.04061	5.14E-04	5.57E-07	1.58E-05	5.70E-07	1.78E-05	5.4850E-04
520604.84	4258472.09	27006.86845	0.1517	0.15928	0.14744	0.16713	5.13E-04	3.56E-07	3.27E-07	3.46E-07	3.29E-07	5.1471E-04
520544.02	4258981.26	26991.85409	0.22659	0.1107	0.21819	0.11554	5.13E-04	5.32E-07	2.27E-07	5.12E-07	2.27E-07	5.1457E-04
520009.69	4258569.96	26980.96469	0.67937	2.32234	0.81052	2.02174	5.13E-04	1.59E-06	4.76E-06	1.90E-06	3.98E-06	5.2510E-04
520095.31	4259147.99	26975.83372	12.42387	0.22163	11.55381	0.20878	5.13E-04	2.92E-05	4.55E-07	2.71E-05	4.11E-07	5.6992E-04
520256.85	4258122.87	26962.40632	0.17839	1.22892	0.18685	1.34172	5.13E-04	4.19E-07	2.52E-06	4.39E-07	2.64E-06	5.1853E-04
519936.82	4258851.23	26933.1338	0.70616	0.41706	0.77868	0.40417	5.12E-04	1.66E-06	8.55E-07	1.83E-06	7.96E-07	5.1709E-04
520043.44	4259105.77	26924.54648	5.20521	0.22732	7.14831	0.22113	5.12E-04	1.22E-05	4.66E-07	1.68E-05	4.35E-07	5.4169E-04
520617.71	4258350.66	26924.30707	0.13923	0.16064	0.13707	0.16852	5.12E-04	3.27E-07	3.29E-07	3.22E-07	3.32E-07	5.1309E-04
520637.83	4258700.92	26918.43397	0.14806	0.12728	0.14267	0.13193	5.12E-04	3.48E-07	2.61E-07	3.35E-07	2.60E-07	5.1287E-04
520613.22	4258256.46	26898.23935	0.13318	0.17007	0.13203	0.17702	5.11E-04	3.13E-07	3.49E-07	3.10E-07	3.48E-07	5.1261E-04
520593.45	4258177.9	26882.95095	0.13236	0.18435	0.13276	0.19361	5.11E-04	3.11E-07	3.78E-07	3.12E-07	3.81E-07	5.1238E-04
520139.01	4258242.5	26877.61037	0.22159	5.00612	0.22482	5.80904	5.11E-04	5.20E-07	1.03E-05	5.28E-07	1.14E-05	5.3364E-04
520589.65	4258902.32	26874.58234	0.18862	0.11154	0.1825	0.11616	5.11E-04	4.43E-07	2.29E-07	4.28E-07	2.29E-07	5.1217E-04
520053.36	4259115.75	26867.38762	7.31064	0.22539	11.90904	0.21798	5.11E-04	1.72E-05	4.62E-07	2.80E-05	4.29E-07	5.5671E-04
520611.88	4258245.87	26863.19484	0.13272	0.17131	0.13148	0.17833	5.11E-04	3.12E-07	3.51E-07	3.09E-07	3.51E-07	5.1194E-04
520577.34	4258927.43	26855.53143	0.19827	0.11064	0.19158	0.1154	5.10E-04	4.65E-07	2.27E-07	4.50E-07	2.27E-07	5.1184E-04
520039.4	4258501.95	26844.93713	0.58784	5.41337	0.65921	4.24396	5.10E-04	1.38E-06	1.11E-05	1.55E-06	8.35E-06	5.3266E-04
520631.84	4258787.03	26822.2246	0.15665	0.11834	0.15119	0.12236	5.10E-04	3.68E-07	2.43E-07	3.55E-07	2.41E-07	5.1105E-04
520197.96	4258172.69	26815.868	0.1937	2.16097	0.19763	2.41194	5.10E-04	4.55E-07	4.43E-06	4.64E-07	4.75E-06	5.1982E-04
520188.14	4258182.66	26807.67916	0.1971	2.41987	0.20038	2.71551	5.10E-04	4.63E-07	4.96E-06	4.70E-07	5.35E-06	5.2081E-04
520617.39	4258375.69	26806.6119	0.14112	0.15912	0.13834	0.16673	5.10E-04	3.31E-07	3.26E-07	3.25E-07	3.28E-07	5.1086E-04
520207.78	4258162.72	26783.87106	0.19035	1.9425	0.19495	2.15911	5.09E-04	4.47E-07	3.98E-06	4.58E-07	4.25E-06	5.1825E-04
519936.33	4258825.92	26778.66908	0.67124	0.45685	0.73933	0.44009	5.09E-04	1.58E-06	9.37E-07	1.74E-06	8.66E-07	5.1413E-04
520610.66	4258235.33	26759.58735	0.13219	0.17247	0.13096	0.17962	5.09E-04	3.10E-07	3.54E-07	3.07E-07	3.54E-07	5.0998E-04
519952.12	4258719.32	26734.78615	0.61744	0.7331	0.69152	0.69332	5.08E-04	1.45E-06	1.50E-06	1.62E-06	1.36E-06	5.1412E-04
520613.77	4258417.94	26726.20483	0.14516	0.15857	0.1419	0.16599	5.08E-04	3.41E-07	3.25E-07	3.33E-07	3.27E-07	5.0934E-04
520608.24	4258455.15	26724.92555	0.14944	0.1587	0.14559	0.16643	5.08E-04	3.51E-07	3.25E-07	3.42E-07	3.28E-07	5.0934E-04
519942.96	4258920.4	26720.8677	0.83299	0.33143	0.91714	0.32608	5.08E-04	1.96E-06	6.80E-07	2.15E-06	6.42E-07	5.1335E-04
520178.32	4258192.63	26704.01499	0.20038	2.73362	0.2032	3.08093	5.08E-04	4.70E-07	5.61E-06	4.77E-07	6.06E-06	5.2021E-04
519936.73	4258875.11	26693.74822	0.7323	0.38237	0.80588	0.37271	5.07E-04	1.72E-06	7.84E-07	1.89E-06	7.34E-07	5.1253E-04
520217.6	4258152.75	26664.75217	0.18689	1.75744	0.19224	1.94364	5.07E-04	4.39E-07	3.60E-06	4.51E-07	3.83E-06	5.1517E-04
520616.18	4258267.74	26659.45235	0.13319	0.16765	0.13215	0.17459	5.07E-04	3.13E-07	3.44E-07	3.10E-07	3.44E-07	5.0806E-04
519944.74	4258931.13	26643.82248	0.85984	0.32103	0.94728	0.31632	5.06E-04	2.02E-06	6.58E-07	2.22E-06	6.23E-07	5.1197E-04
520640.26	4258719.05	26636.25577	0.14804	0.12411	0.14275	0.1288	5.06E-04	3.48E-07	2.55E-07	3.35E-07	2.54E-07	5.0750E-04
520617.45	4258278.29	26625.82391	0.13367	0.16614	0.1327	0.17322	5.06E-04	3.14E-07	3.41E-07	3.12E-07	3.41E-07	5.0742E-04
520609.52	4258224.83	26624.10938	0.13167	0.17339	0.1305	0.18075	5.06E-04	3.09E-07	3.56E-07	3.06E-07	3.56E-07	5.0740E-04
520639.55	4258744.68	26614.86961	0.14999	0.12117	0.14459	0.12572	5.06E-04	3.52E-07	2.49E-07	3.39E-07	2.47E-07	5.0709E-04
520266.67	4258112.9	26612.30041	0.17473	1.13486	0.18359	1.23477	5.06E-04	4.10E-07	2.33E-06	4.31E-07	2.43E-06	5.1145E-04
520046.63	4258464.79	26585.29349	0.4697	7.19013	0.51282	5.29979	5.05E-04	1.10E-06	1.47E-05	1.20E-06	1.04E-05	5.3282E-04
520168.5	4258202.6	26574.48811	0.20378	3.11499	0.20615	3.53715	5.05E-04	4.78E-07	6.39E-06	4.84E-07	6.96E-06	5.1945E-04
520099.67	4258302.38	26570.75636	0.25267	14.43189	0.26294	15.36141	5.05E-04	5.93E-07	2.96E-05	6.17E-07	3.02E-05	5.6611E-04
520604.4	4258202.61	26569.47034	0.13135	0.17683	0.13066	0.18496	5.05E-04	3.08E-07	3.63E-07	3.07E-07	3.64E-07	5.0638E-04
519999.77	4258589.4	26569.0798	0.6616	1.85436	0.78751	1.65747	5.05E-04	1.55E-06	3.80E-06	1.85E-06	3.26E-06	5.1550E-04
520556.87	4258965.93	26563.78057	0.21497	0.10981	0.20726	0.11461	5.05E-04	5.05E-07	2.25E-07	4.87E-07	2.26E-07	5.0637E-04
520635.43	4258778.47	26550.13762	0.15423	0.11833	0.14877	0.1224	5.05E-04	3.62E-07	2.43E-07	3.49E-07	2.41E-07	5.0587E-04
520618.84	4258288.9	26533.64836	0.1341	0.16448	0.13314	0.17174	5.04E-04	3.15E-07	3.37E-07	3.13E-07	3.38E-07	5.0566E-04
520227.42	4258142.78	26525.06327	0.18352	1.59768	0.18956	1.76041	5.04E-04	4.31E-07	3.28E-06	4.45E-07	3.47E-06	5.1181E-04
520611.77	4258438.55	26520.66105	0.14712	0.15806	0.14358	0.16562	5.04E-04	3.45E-07	3.24E-07	3.37E-07	3.26E-07	5.0544E-04
519946.4	4258941.81	26505.50513	0.88562	0.31106	0.97629	0.30687	5.04E-04	2.08E-06	6.38E-07	2.29E-06	6.04E-07	5.0943E-04
520587.42	4258913.25	26479.51258	0.19056	0.11035	0.18434	0.11499	5.03E-04	4.47E-07	2.26E-07	4.33E-07	2.26E-07	5.0466E-04
519949.19	4258952.95	26474.50172	0.92413	0.30174	1.02017	0.29801	5.03E-04	2.17E-06	6.19E-07	2.40E-06	5.87E-07	5.0900E-04
520617.22	4258401.13	26452.33033	0.1428	0.15793	0.1397	0.16526	5.03E-04	3.35E-07	3.24E-07	3.28E-07	3.25E-07	5.0412E-04
520608.47	4258214.37	26449.35374	0.13112	0.17416	0.1301	0.18179	5.03E-04	3.08E-07	3.57E-07	3.05E-07	3.58E-07	5.0408E-04
520566.39	4258951.98	26440.08956	0.20706	0.10959	0.19984	0.11436	5.03E-04	4.86E-07	2.25E-07	4.69E-07	2.25E-07	5.0398E-04
519938.63	4258783.24	26437.40809	0.62836	0.53918	0.69293	0.51521	5.03E-04	1.48E-06	1.11E-06	1.63E-06	1.01E-06	5.0775E-04
520606.6	4258871.25	26419.03051	0.1761	0.11222	0.17056	0.11653	5.02E-04	4.13E-07	2.30E-07	4.00E-07	2.29E-07	5.0345E-04
520085.41	4259148.01	26390.22001	16.47279	0.21875	18.38497	0.20727	5.02E-04	3.87E-05	4.49E-07	4.32E-05	4.08E-07	5.8432E-04
520610.16	4258862.76	26389.34695	0.1735	0.1126	0.16798	0.11686	5.02E-04	4.07E-07	2.31E-07	3.94E-07	2.30E-07	5.0288E-04
520620.36	4258299.57	26387.38926	0.13447	0.16266	0.13343	0.17013	5.02E-04	3.16E-07	3.34E-07	3.13E-07	3.35E-07	5.0287E-04
520063.61	4258383.1	26380.1825	0.31685	18.89278	0.3399	9.72538	5.01E-04	7.44E-07	3.87E-05	7.98E-07	1.91E-05	5.6087E-04
520129.19	4258252.47	26357.99834	0.22468	6.11096	0.22868	7.1475	5.01E-04	5.27E-07	1.25E-05	5.37E-07	1.41E-05	5.2869E-04
520613.72	4258854.27	26350.3729	0.17092	0.11295	0.16543	0.11717	5.01E-04	4.01E-07	2.32E-07	3.88E-07	2.31E-07	5.0212E-04
520543.07	4258991.65	26342.1278	0.22769	0.10939	0.21926	0.11413	5.01E-04	5.35E-07	2.24E-07	5.15E-07	2.25E-07	5.0221E-04
520158.68	4258212.57	26339.75288	0.20702	3.59369	0.20923	4.10779	5.01E-04	4.86E-07	7.37E-06	4.91E-07	8.09E-06	5.1710E-04
520237.24	4258132.81	26326.77289	0.18012	1.45929	0.18681	1.60169	5.00E-04	4.23E-07	2.99E-06	4.39E-07	3.15E-06	5.0743E-04
520603.31	4258192.14	26324.66473	0.13079	0.17761	0.13042	0.18603	5.00E-04	3.07E-07	3.64E-07	3.06E-07	3.66E-07	5.0173E-04
519937.28	4258900.55	26312.35916	0.76255	0.35017	0.83794	0.34318	5.00E-04	1.79E-06	7.18E-07	1.97E-06	6.76E-07	5.0530E-04
520617.27	4258845.77	26299.65714	0.16836	0.11335	0.16292	0.11752	5.00E-04	3.95E-07	2.32E-07	3.82E-07	2.31E-07	5.0115E-04
520621.07	4258359.5	26276.0081	0.13865	0.1583	0.1362	0.16593	4.99E-04	3.26E-07	3.25E-07	3.20E-07	3.27E-07	5.0076E-04
519950.89	4258963.64	26260.22523	0.95105	0.29267	1.051	0.2893	4.99E-04	2.23E-06	6.00E-07	2.47E-06	5.69E-07	5.0503E-04
520576.09	4258937.95	26252.0077	0.19937	0.10933	0.19262	0.11404	4.99E-04	4.68E-07	2.24E-07	4.52E-07	2.24E-07	5.0037E-04

520109.52	4258282.41	26236.21276	0.23973	10.15774	0.24714	11.75557	4.99E-04	5.63E-07	2.08E-05	5.80E-07	2.31E-05	5.4382E-04
520620.83	4258837.28	26230.64942	0.1658	0.11381	0.16047	0.11791	4.99E-04	3.89E-07	2.33E-07	3.77E-07	2.32E-07	4.9983E-04
520552.76	4258977.64	26216.3725	0.21871	0.10911	0.21079	0.11385	4.98E-04	5.13E-07	2.24E-07	4.95E-07	2.24E-07	4.9978E-04
519935.68	4258800.24	26206.34413	0.63136	0.50032	0.69399	0.47959	4.98E-04	1.48E-06	1.03E-06	1.63E-06	9.44E-07	5.0322E-04
520639.01	4258769.92	26190.85145	0.15182	0.11828	0.14642	0.12243	4.98E-04	3.56E-07	2.43E-07	3.44E-07	2.41E-07	4.9902E-04
520641.33	4258692.55	26181.68131	0.14593	0.12729	0.14062	0.13177	4.98E-04	3.43E-07	2.61E-07	3.30E-07	2.59E-07	4.9886E-04
520608.22	4258480.96	26180.95342	0.15061	0.15697	0.14606	0.16462	4.98E-04	3.54E-07	3.22E-07	3.43E-07	3.24E-07	4.9900E-04
519933.15	4258842.38	26173.25517	0.66643	0.4258	0.73265	0.41156	4.98E-04	1.56E-06	8.73E-07	1.72E-06	8.10E-07	5.0247E-04
520095.33	4259157.99	26143.8389	12.33657	0.21597	11.51765	0.20358	4.97E-04	2.90E-05	4.43E-07	2.70E-05	4.01E-07	5.5379E-04
520624.38	4258828.79	26143.57436	0.16331	0.11414	0.158	0.11819	4.97E-04	3.83E-07	2.34E-07	3.71E-07	2.33E-07	4.9816E-04
520643.17	4258736.05	26142.53598	0.14776	0.12124	0.14255	0.12579	4.97E-04	3.47E-07	2.49E-07	3.35E-07	2.48E-07	4.9810E-04
520043.46	4259115.77	26127.53376	5.24457	0.22125	7.17551	0.21528	4.97E-04	1.23E-05	4.54E-07	1.68E-05	4.24E-07	5.2667E-04
520247.06	4258122.84	26119.54325	0.17683	1.33794	0.18406	1.46439	4.96E-04	4.15E-07	2.74E-06	4.32E-07	2.88E-06	5.0296E-04
519989.85	4258608.84	26111.20312	0.6371	1.51554	0.74521	1.38437	4.96E-04	1.50E-06	3.11E-06	1.75E-06	2.73E-06	5.0541E-04
520055.26	4259127.23	26076.2879	7.91443	0.21933	13.65884	0.21194	4.96E-04	1.86E-05	4.50E-07	3.21E-05	4.17E-07	5.4718E-04
520620.78	4258384.62	26074.73393	0.14043	0.15699	0.13749	0.16433	4.96E-04	3.30E-07	3.22E-07	3.23E-07	3.23E-07	4.9693E-04
519967.12	4258664.6	26069.13946	0.60798	0.99823	0.69188	0.93199	4.96E-04	1.43E-06	2.05E-06	1.62E-06	1.83E-06	5.0246E-04
519932.94	4258865.97	26061.02349	0.6913	0.39106	0.75969	0.38009	4.95E-04	1.62E-06	8.02E-07	1.78E-06	7.48E-07	5.0033E-04
520602.3	4258181.69	26056.68456	0.13021	0.1783	0.13018	0.18702	4.95E-04	3.06E-07	3.66E-07	3.06E-07	3.68E-07	4.9664E-04
520627.94	4258820.29	26034.20002	0.16083	0.11451	0.15557	0.11848	4.95E-04	3.78E-07	2.35E-07	3.65E-07	2.33E-07	4.9607E-04
520148.86	4258222.53	26029.34724	0.21018	4.20561	0.21247	4.84596	4.95E-04	4.93E-07	8.63E-06	4.99E-07	9.54E-06	5.1393E-04
520586	4258923.84	25993.60261	0.19186	0.10907	0.18557	0.11368	4.94E-04	4.50E-07	2.24E-07	4.36E-07	2.24E-07	4.9542E-04
520643.91	4258710.34	25992.23429	0.14584	0.12409	0.14067	0.12866	4.94E-04	3.42E-07	2.54E-07	3.30E-07	2.53E-07	4.9525E-04
520598.1	4258898.82	25963.70019	0.18275	0.11	0.17697	0.11445	4.94E-04	4.29E-07	2.26E-07	4.15E-07	2.25E-07	4.9482E-04
520631.5	4258811.8	25900.16578	0.15839	0.11485	0.15317	0.11876	4.92E-04	3.72E-07	2.36E-07	3.60E-07	2.34E-07	4.9352E-04
520642.59	4258761.36	25894.41089	0.1496	0.11836	0.14431	0.1226	4.92E-04	3.51E-07	2.43E-07	3.39E-07	2.41E-07	4.9338E-04
519939.82	4258762.01	25854.67519	0.60233	0.58525	0.66561	0.55764	4.91E-04	1.41E-06	1.20E-06	1.56E-06	1.10E-06	4.9673E-04
520256.88	4258112.87	25843.47367	0.17344	1.23147	0.1812	1.34313	4.91E-04	4.07E-07	2.53E-06	4.25E-07	2.64E-06	4.9724E-04
519933.52	4258891.5	25837.87121	0.72212	0.35804	0.7924	0.35007	4.91E-04	1.70E-06	7.34E-07	1.86E-06	6.89E-07	4.9611E-04
519932.63	4258817	25834.67934	0.6313	0.46541	0.69247	0.44751	4.91E-04	1.48E-06	9.55E-07	1.63E-06	8.81E-07	4.9601E-04
520611.58	4258463.91	25826.45038	0.14843	0.15633	0.14432	0.16394	4.91E-04	3.48E-07	3.21E-07	3.39E-07	3.23E-07	4.9224E-04
520565.36	4258962.41	25805.72147	0.20791	0.10827	0.20063	0.11296	4.91E-04	4.88E-07	2.22E-07	4.71E-07	2.22E-07	4.9192E-04
520617.25	4258427.06	25803.36852	0.1443	0.15597	0.14086	0.16331	4.90E-04	3.39E-07	3.20E-07	3.31E-07	3.21E-07	4.9179E-04
519977.12	4258636.77	25776.8955	0.61172	1.1995	0.7	1.11302	4.90E-04	1.44E-06	2.46E-06	1.64E-06	2.19E-06	4.9770E-04
519954.29	4258700.45	25758.59544	0.59322	0.79508	0.66501	0.7504	4.90E-04	1.39E-06	1.63E-06	1.56E-06	1.48E-06	4.9569E-04
520635.05	4258803.31	25739.6893	0.15599	0.11517	0.15082	0.11902	4.89E-04	3.66E-07	2.36E-07	3.54E-07	2.34E-07	4.9046E-04
520119.37	4258262.44	25732.71182	0.22745	7.70584	0.23266	9.04117	4.89E-04	5.34E-07	1.58E-05	5.46E-07	1.78E-05	5.2381E-04
520029.48	4258521.39	25713.45453	0.61609	3.97682	0.70406	3.25444	4.89E-04	1.45E-06	8.16E-06	1.65E-06	6.41E-06	5.0643E-04
519942.8	4258745.07	25702.12254	0.59329	0.63163	0.65944	0.60008	4.89E-04	1.39E-06	1.30E-06	1.55E-06	1.18E-06	4.9397E-04
520624.83	4258343.51	25700.07873	0.13623	0.15716	0.13411	0.16481	4.89E-04	3.20E-07	3.22E-07	3.15E-07	3.24E-07	4.8979E-04
520620.79	4258249.68	25660.77268	0.13029	0.1659	0.12908	0.17251	4.88E-04	3.06E-07	3.40E-07	3.03E-07	3.40E-07	4.8905E-04
520574.94	4258948.44	25645.84751	0.2003	0.10802	0.19349	0.11267	4.87E-04	4.70E-07	2.22E-07	4.54E-07	2.22E-07	4.8885E-04
520619.5	4258239.12	25637.30293	0.12984	0.16703	0.12856	0.17373	4.87E-04	3.05E-07	3.43E-07	3.02E-07	3.42E-07	4.8861E-04
520622.2	4258260.3	25628.31896	0.13069	0.16458	0.1296	0.17118	4.87E-04	3.07E-07	3.38E-07	3.04E-07	3.37E-07	4.8843E-04
520139.04	4258232.5	25627.03687	0.21318	5.01367	0.2159	5.82424	4.87E-04	5.00E-07	1.03E-05	5.07E-07	1.15E-05	5.0988E-04
520625.51	4258319.42	25625.67419	0.13431	0.15816	0.13281	0.16579	4.87E-04	3.15E-07	3.24E-07	3.12E-07	3.26E-07	4.8838E-04
520197.99	4258162.69	25621.2753	0.18737	2.16468	0.19063	2.41454	4.87E-04	4.40E-07	4.44E-06	4.48E-07	4.75E-06	4.9709E-04
520624.44	4258368.34	25616.98366	0.13804	0.15602	0.13533	0.1634	4.87E-04	3.24E-07	3.20E-07	3.18E-07	3.22E-07	4.8822E-04
520620.66	4258410.15	25615.82311	0.14202	0.15547	0.13877	0.16266	4.87E-04	3.33E-07	3.19E-07	3.26E-07	3.20E-07	4.8821E-04
520551.75	4258988.06	25609.92361	0.2198	0.10786	0.21183	0.1125	4.87E-04	5.16E-07	2.21E-07	4.97E-07	2.21E-07	4.8825E-04
520188.17	4258172.66	25605.20002	0.19051	2.42372	0.19317	2.71882	4.87E-04	4.47E-07	4.97E-06	4.54E-07	5.35E-06	4.9793E-04
520646.78	4258727.42	25602.55578	0.14553	0.12127	0.14051	0.12577	4.87E-04	3.42E-07	2.49E-07	3.30E-07	2.48E-07	4.8783E-04
520613.37	4258206.46	25600.10261	0.12906	0.17121	0.12809	0.17875	4.87E-04	3.03E-07	3.51E-07	3.01E-07	3.52E-07	4.8792E-04
520085.43	4259158.01	25591.79397	16.40962	0.21316	18.29117	0.2021	4.86E-04	3.85E-05	4.37E-07	4.29E-05	3.98E-07	5.6876E-04
520596.15	4258909.64	25577.70311	0.18441	0.1088	0.17856	0.11327	4.86E-04	4.33E-07	2.23E-07	4.19E-07	2.23E-07	4.8748E-04
520207.81	4258152.72	25575.853	0.18419	1.94677	0.18815	2.15986	4.86E-04	4.32E-07	3.99E-06	4.42E-07	4.25E-06	4.9527E-04
520618.3	4258228.59	25560.0225	0.12936	0.16803	0.12808	0.17488	4.86E-04	3.04E-07	3.45E-07	3.01E-07	3.44E-07	4.8714E-04
520638.61	4258794.82	25546.36443	0.15364	0.11539	0.14849	0.11922	4.86E-04	3.61E-07	2.37E-07	3.49E-07	2.35E-07	4.8677E-04
520039.36	4258492.26	25512.17175	0.5417	5.45468	0.60135	4.27519	4.85E-04	1.27E-06	1.12E-05	1.41E-06	8.42E-06	5.0723E-04
520217.63	4258142.75	25511.03479	0.18111	1.76051	0.18572	1.94583	4.85E-04	4.25E-07	3.61E-06	4.36E-07	3.83E-06	4.9322E-04
520042.98	4258473.67	25501.90201	0.48518	6.2486	0.53192	4.74921	4.85E-04	1.14E-06	1.28E-05	1.25E-06	9.35E-06	5.0930E-04
520646.17	4258752.8	25501.63933	0.14736	0.1184	0.14222	0.1227	4.85E-04	3.46E-07	2.43E-07	3.34E-07	2.42E-07	4.8590E-04
520178.35	4258182.63	25495.533	0.19353	2.73799	0.19577	3.08464	4.85E-04	4.54E-07	5.62E-06	4.60E-07	6.07E-06	4.9723E-04
520561.49	4258974.02	25467.23512	0.21125	0.10755	0.20378	0.11218	4.84E-04	4.96E-07	2.21E-07	4.78E-07	2.21E-07	4.8550E-04
520617.19	4258218.1	25448.23359	0.12887	0.16882	0.12766	0.17591	4.84E-04	3.03E-07	3.46E-07	3.00E-07	3.46E-07	4.8502E-04
520584.7	4258934.39	25441.95837	0.19295	0.10778	0.18659	0.11236	4.84E-04	4.53E-07	2.21E-07	4.38E-07	2.21E-07	4.8494E-04
520064.11	4258372.91	25425.2137	0.30089	19.68454	0.32213	9.93187	4.83E-04	7.06E-07	4.04E-05	7.56E-07	1.96E-05	5.4467E-04
520612.23	4258195.95	25417.13734	0.12856	0.17194	0.12784	0.17979	4.83E-04	3.02E-07	3.53E-07	3.00E-07	3.54E-07	4.8444E-04
520624.86	4258271.45	25409.95069	0.1308	0.16225	0.12975	0.16898	4.83E-04	3.07E-07	3.33E-07	3.05E-07	3.33E-07	4.8427E-04
519945.66	4258727.85	25399.92897	0.58354	0.682	0.64922	0.64699	4.83E-04	1.37E-06	1.40E-06	1.52E-06	1.27E-06	4.8837E-04
520045.36	4259127.25	25386.86661	5.60187	0.21537	7.80977	0.20939	4.83E-04	1.32E-05	4.42E-07	1.83E-05	4.12E-07	5.1490E-04
520227.45	4258132.78	25383.72452	0.17798	1.6007	0.18327	1.76192	4.82E-04	4.18E-07	3.28E-06	4.30E-07	3.47E-06	4.9010E-04
519929.15	4258856.83	25370.04645	0.6525	0.39951	0.71532	0.38725	4.82E-04	1.53E-06	8.19E-07	1.68E-06	7.62E-07	4.8703E-04
519935.82	4258927.45	25367.50145	0.77384	0.31869	0.84786	0.31375	4.82E-04	1.82E-06	6.54E-07	1.99E-06	6.18E-07	4.8727E-04
520168.53	4258192.6	25360.03364	0.19663	3.12028	0.19851	3.54089	4.82E-04	4.62E-07	6.40E-06	4.66E-07	6.97E-06	4.9635E-04
519929.49	4258833.54	25356.69185	0.62867	0.43413	0.68887	0.41865	4.82E-04	1.48E-06	8.90E-07	1.62E-06	8.24E-07	4.8679E-04
520055.28	4259137.23	25356.10449	7.98042	0.21378	13.76745	0.20664	4.82E-04	1.87E-05	4.38E-07	3.23E-05	4.07E-07	5.3388E-04
520095.34	4259167.99	25347.08696	12.22931	0.21055	11.4864	0.19859	4.82E-04	2.87E-05	4.32E-07	2.70E-05	3.91E-07	5.3830E-04
520624.18	4258393.54	25327.03218	0.13971	0.15473	0.13662	0.16186	4.81E-04	3.28E-07	3.17E-07	3.21E-07	3.19E-07	4.8271E-04
520099.7	4258292.38	25322.1174	0.24174	14.47958	0.25116	15.42029	4.81E-04	5.68E-07	2.97E-05	5.90E-07	3.04E-05	5.4254E-04
520626.19	4258282.04	25320.25051	0.13122	0.16073	0.1302	0.16763	4.81E-04	3.08E-07	3.30E-07	3.06E-07	3.30E-07	4.8257E-04
520642.16	4258786.32	25320.02337	0.15134	0.1155	0.1462	0.11935	4.81E-04	3.55E-07	2.37E-07	3.43E-07	2.35E-07	4.8246E-04
519929.76	4258882.44	25306.97459	0.68369	0.36591	0.74878	0.35686	4.81E-04	1.61E-06	7.50E-07	1.76E-06	7.02E-07	4.8586E-04
520647.55	4258701.64	25304.4457	0.14369	0.12409	0.13861	0.12849	4.81E-04	3.37E-07	2.54E-07	3.25E-07	2.53E-07	4.8216E-04
519937.54	4258938.15	25302.75208	0.79763	0.30901	0.87448	0.30467	4.81E-04	1.87E-06	6.34E-07	2.05E-06	6.00E-07	4.8612E-04
519940.09	4258949.2	25302.73606	0.82951	0.29987	0.91045	0.29605	4.81E-04	1.95E-06	6.15E-07	2.14E-06	5.83E-07	4.8624E-04
520237.27	4258122.81	25228.63696	0.17489	1.46182	0.18082	1.60356	4.80E-04	4.11E-07	3.00E-06	4.25E-07	3.16E-06	4.8654E-04
520611.16	4258185.48	25204.28491	0.12803	0.17262	0.12763	0.18077	4.79E-04	3.01E-07	3.54E-07	3.00E-07	3.56E-07	4.8040E-04
520627.65	4258292.67	25187.60335	0.1316	0.15903	0.13051	0.16615	4.79E-04	3.09E-07	3.26E-07	3.06E-07	3.27E-07	4.8004E-04
519941.85	4258959.92	25158.33892	0.8542	0.29095	0.9383	0.28755	4.78E-04	2.01E-06	5.97E-07	2.20E-06	5.66E-07	4.8359E-04
520594.67	4258920.26	25139.08736	0.18571	0.10755	0.17979	0.11202	4.78E-04	4.36E-07	2.21E-07	4.22E-07	2.21E-07	4.7915E-04
520158.71	4258202.57	25136.49035	0.19962	3.5994	0.20137	4.113	4.78E-04	4.69E-07	7.38E-06	4.73E-07	8.10E-06	4.9422E-04
519934.85	4258774.14	25130.72929	0.58619	0.54676	0.6438	0.52235	4.78E-04	1.38E-06	1.12E-06	1.51E-06	1.03E-06	4.8273E-04
520129.22	4258242.47	25129.41088	0.21596	6.12265	0.2195	7.16076	4.78E-04	5.07E-07	1.26E-05	5.15E-07	1.41E-05	5.0534E-04
520628.17	4258352.27	25110.41188	0.13569	0.15482	0.13325	0.16227	4.77E-04	3.19E-07	3.18E-07	3.13E-07	3.19E-07	4.7857E-04
520613.61	4258878.45	25095.14855	0.17207	0.10938	0.16681	0.11354	4.77E-04	4.04E-07	2.24E-07	3.92E-07	2.24E-07	4.7826E-04
520610.08	4258886.89	25093.87732	0.17459	0.10893	0.16922	0.11316	4.77E-04	4.10E-07	2.23E-07	3.97E-07	2.23E-07	4.7824E-04
520019.56	4258540.83	25079.88416	0.63263	3.02761	0.73768	2.56388	4.77E-04	1.49E-06	6.21E-06	1.73E-06	5.05E-06	4.9120E-04
520617.14	4258870.02	25079.15045	0.16958	0.1098	0.1644	0.11391	4.77E-04	3.98E-07	2.25E-07	3.86E-07	2.24E-07	4.7794E-04
520649.76	4258744.25	25065.4676	0.14517	0.11837	0.14019	0.1227	4.76E-04	3.41E-07	2.43E-07	3.29E-07	2.42E-07	4.7760E-04
520573.86	4258958.89	25060.86971	0.20115	0.10674	0.19428	0.11132	4.76E-04	4.72E-07	2.19E-07	4.56E-07	2.19E-07	4.7773E-04
519931.94	4258791.23	25053.74825	0.59102	0.50842	0.64768	0.48681	4.76E-04	1.39E-06	1.04E-06	1.52E-06	9.58E-07	4.8114E-04
520247.09	4258112.84	25044.22778	0.17184	1.34028	0.17834	1.46587	4.76E-04	4.03E-07	2.75E-06	4.19E-07	2.89E-06	4.8250E-04
520620.68	4258861.59	25036.79454	0.16713	0.11014	0.16196	0.11421	4.76E-04	3.92E-07	2.26E-07	3.80E-07	2.25E-07	4.7713E-04
520650.39	4258718.8	25022.01253	0.1434	0.12117	0.13849	0.12559	4.76E-04	3.37E-07	2.49E-07	3.25E-07	2.47E-07	4.7678E-04
520109.55	4258272.41	25015.16374	0.22984	10.18168	0.23659	11.81758	4.75E-04	5.40E-07	2.09E-05	5.55E-07	2.33E-05	5.2073E-04
520614.91	4258472.67	25010.46701	0.1474	0.15404	0.14302	0.16151	4.75E-04	3.46E-07	3.16E-07	3.36E-07	3.18E-07	4.7672E-04
520624.21	4258853.15	24990.60063	0.16471	0.11047	0.15956	0.1145	4.75E-04	3.87E-07	2.27E-07	3.75E-07	2.25E-07	4.7624E-04
519930.24	4258907.71	24973.60378	0.71111	0.33597	0.7774	0.32949	4.75E-04	1.67E-06	6.89E-07	1.83E-06	6.49E-07	4.7954E-04
520645.72	4258777.83	24959.52114	0.14894	0.11531	0.14379	0.11925	4.74E-04	3.50E-07	2.36E-07	3.38E-07	2.35E-07	4.7559E-04
520627.8	4258377.18	24948.3264	0.1374	0.15381	0.13448	0.16094	4.74E-04	3.23E-07	3.15E-07	3.16E-07	3.17E-07	4.7549E-04
520048.09	4258429.46	24926.58895	0.3737	7.68649	0.402	5.63349	4.74E-04	8.77E-07	1.58E-05	9.44E-07	1.11E-05	5.0248E-04
520620.72	4258436.19	24895.70684	0.14339	0.15353	0.13978	0.16078	4.73E-04	3.37E-07	3.15E-07	3.28E-07	3.16E-07	4.7452E-04
520583.48	4258944.9	24894.1607	0.19393	0.10653	0.1875	0.11106	4.73E-04	4.55E-07	2.18E-07	4.40E-07	2.19E-07	4.7453E-04
520560.44	4258984.46	24880.70023	0.21222	0.10632	0.20468	0.11086	4.73E-04	4.98E-07	2.18E-07	4.81E-07	2.18E-07	4.7435E-04
520631.27	4258836.28	24857.624	0.1599	0.11124	0.15488	0.11515	4.72E-04	3.75E-07	2.28E-07	3.64E-07	2.27E-07	4.7369E-04
520148.89	4258212.53	24834.37366	0.2025	4.21308	0.2044	4.85041	4.72E-04	4.75E-07	8.64E-06	4.80E-07	9.55E-06	4.9120E-04
519957.12	4258683.15	24832.72823	0.57349	0.86143	0.64606	0.80998	4.72E-04	1.35E-06	1.77E-06	1.52E-06	1.59E-06	4.7825E-04
519928.93	4258808.07	24831.65265	0.59318	0.47342	0.64844	0.45453	4.72E-04	1.39E-06	9.71E-07	1.52E-06	8.95E-07	4.7679E-04
519967.12	4258655.32	24827.07198	0.58213	1.02509	0.6592	0.9583	4.72E-04	1.37E-06	2.10E-06	1.55E-06	1.89E-06	4.7882E-04
520085.44	4259168.01	24826.1237	16.35577	0.20779	18.20768	0.19713	4.72E-04	3.84E-05	4.26E-07	4.27E-05	3.88E-07	5.5386E-04
519948.37	4258710.28	24785.83095	0.56826	0.73706	0.63402	0.69765	4.71E-04	1.33E-06	1.51E-06	1.49E-06	1.37E-06	4.7684E-04
520624.09	4258419.17	24775.38042	0.1412	0.15307	0.1378	0.16015	4.71E-04	3.31E-07	3.14E-07	3.24E-07	3.15E-07	4.7222E-04
520618.37	4258455.89	24753.761	0.14525	0.15334	0.14127	0.16073	4.71E-04	3.41E-07	3.14E-07	3.32E-07	3.16E-07	4.7183E-04
520570.23	4258970.4	24725.99414	0.2041	0.10599	0.19705	0.11052	4.70E-04	4.79E-07	2.17E-07	4.63E-07	2.18E-07	4.7137E-04
520634.8	4258827.85	24724.33141	0.15748	0.11145	0.15246	0.11531	4.70E-04	3.70E-07	2.29E-07	3.58E-07	2.27E-07	4.7115E-04
519926.01	4258873.38	24720.75305	0.64709	0.37373	0.70722	0.36353	4.70E-04	1.52E-06	7.66E-07	1.66E-06	7.16E-07	4.7456E-04
520045.38	4259137.25	24713.72123	5.64302	0.21001	7.85107	0.2042	4.70E-04	1.32E-05	4.31E-07	1.84E-05	4.02E-07	5.0228E-04
520009.65	4258560.27	24709.80679	0.63378	2.3707	0.74578	2.06469	4.70E-04	1.49E-06	4.86E-06	1.75E-06	4.06E-06	4.8185E-04
520604.88	4258906.02	24702.69683	0.17853	0.10728	0.17301	0.11159	4.70E-04	4.19E-07	2.20E-07	4.06E-07	2.20E-07	4.7082E-04
520593.3	4258930.83	24684.22782	0.18686	0.10631	0.18087	0.11075	4.69E-04	4.39E-07	2.18E-07	4.25E-07	2.18E-07	4.7050E-04
520055.71	4259147.23	24661.89529	8.13276	0.2086	14.31301	0.20162	4.69E-04	1.91E-05	4.28E-07	3.36E-05	3.97E-07	5.2230E-04
520649.28	4258769.34	24655.61212	0.14673	0.1153	0.14164	0.11931	4.69E-04	3.44E-07	2.36E-07	3.33E-07	2.35E-07	4.6981E-04
520638.33	4258819.41	24640.16403	0.15519	0.11183	0.15022	0.11562	4.68E-04	3.64E-07	2.29E-07	3.53E-07	2.28E-07	4.6954E-04
520622.35	4258210.3	24627.19276	0.1268	0.16582	0.1256	0.17282	4.68E-04	2.98E-07	3.40E-07	2.95E-07	3.40E-07	4.6939E-04
519925.35	4258847.69	24619.03331	0.61555	0.40764	0.67284	0.39412	4.68E-04	1.45E-06	8.36E-07	1.58E-06	7.76E-07	4.7260E-04
520653.34	4258735.69	24591.55001	0.14304	0.11831	0.13822	0.12265	4.67E-04	3.36E-07	2.43E-07	3.24E-07	2.41E-07	4.6859E-04
520651.19	4258692.94	24588.43318	0.1416	0.12394	0.13654	0.1282	4.67E-04	3.32E-07	2.54E-07	3.21E-07	2.52E-07	4.6854E-04
520095.36	4259177.99	24577.28283	12.18774	0.20529	11.44472	0.19376	4.67E-04	2.86E-05	4.21E-07	2.69E-05	3.81E-07	5.2345E-04
520119.4	4258252.44	24576.50676	0.21855	7.71638	0.22316	9.11469	4.67E-04	5.13E-07	1.58E-05	5.24E-07	1.79E-05	5.0196E-04
520627.58	4258402.46	24567.64966	0.13897	0.15243	0.13573	0.1594	4.67E-04	3.26E-07	3.13E-07	3.19E-07	3.14E-07	4.6826E-04
520039.32	4258482.56	24550.56962	0.50121	5.49239	0.55201	4.28891	4.67E-04	1.18E-06	1.13E-05	1.30E-06	8.44E-06	4.8884E-04
519926.52	4258898.73	24528.45038	0.67477	0.34333	0.73685	0.33587	4.66E-04	1.58E-06	7.04E-07	1.73E-06	6.61E-07	4.7092E-04
520054.1	4258397.01	24527.51633	0.32208	10.06846	0.34506	6.87415	4.66E-04	7.56E-07	2.06E-05	8.10E-07	1.35E-05	5.0197E-04
520628.33	4258242.9	24516.09981	0.12751	0.16182	0.12624	0.16813	4.66E-04	2.99E-07	3.32E-07	2.96E-07	3.31E-07	4.6727E-04
520641.86	4258810.98	24515.61659	0.15293	0.11224	0.14802	0.11596	4.66E-04	3.59E-07	2.30E-07	3.48E-07	2.28E-07	4.6716E-04
520631.5	4258361.03	24506.0456	0.1351	0.15263	0.1324	0.15984	4.66E-04	3.17E-07	3.13E-07	3.11E-07	3.15E-07	4.6707E-04
520627.08	4258232.35	24495.32882	0.12707	0.16287	0.12575	0.16927	4.66E-04	2.98E-07	3.34E-07	2.95E-07	3.33E-07	4.6687E-04
520629.7	4258253.5	24491.86012	0.12792	0.16056	0.12673	0.16688	4.66E-04	3.00E-07	3.29E-07	2.98E-07	3.29E-07	4.6680E-04
520064.53	4258362.75	24490.46865	0.28621	20.35148	0.30587	10.05851	4.66E-04	6.72E-07	4.17E-05	7.18E-07	1.98E-05	5.2845E-04
520632.69	4258312.41	24490.39673	0.13147	0.15461	0.12997	0.16196	4.66E-04	3.09E-07	3.17E-07	3.05E-07	3.19E-07	4.6677E-04
520621.14	4258199.77	24490.1549	0.12632	0.16663	0.12534	0.1739	4.66E-04	2.97E-07	3.42E-07	2.94E-07	3.42E-07	4.6679E-04
520198.02	4258152.69	24485.54687	0.18128	2.1687	0.18401	2.41506	4.65E-04	4.26E-07	4.45E-06	4.32E-07	4.75E-06	4.7549E-04
519925.82	4258824.69	24483.28352	0.59261	0.44191	0.64715	0.42536	4.65E-04	1.39E-06	9.06E-07	1.52E-06	8.37E-07	4.7004E-04
520207.84	4258142.72	24482.09181	0.17845	1.94957	0.18175	2.16205	4.65E-04	4.19E-07	4.00E-06	4.27E-07	4.26E-06	4.7446E-04
520632.46	4258337.68	24480.25348	0.13324	0.15341	0.13113	0.1608	4.65E-04	3.13E-07	3.15E-07	3.08E-07	3.17E-07	4.6658E-04
520188.2	4258162.66	24474.44245	0.18424	2.42769	0.18637	2.72072	4.65E-04	4.33E-07	4.98E-06	4.38E-07	5.36E-06	4.7642E-04
519999.73	4258579.7	24461.43823	0.62241	1.90211	0.73561	1.69457	4.65E-04	1.46E-06	3.90E-06	1.73E-06	3.34E-06	4.7539E-04
520139.07	4258222.5	24457.3604	0.20526	5.02259	0.20759	5.83078	4.65E-04	4.82E-07	1.03E-05	4.87E-07	1.15E-05	4.8764E-04
520625.91	4258221.84	24444.63378	0.12663	0.16371	0.12531	0.17031	4.65E-04	2.97E-07	3.36E-07	2.94E-07	3.35E-07	4.6591E-04
520217.66	4258132.75	24437.7424	0.17562	1.76298	0.17954	1.9479	4.65E-04	4.12E-07	3.62E-06	4.22E-07	3.83E-06	4.7280E-04
520652.83	4258760.84	24412.07286	0.14473	0.11546	0.13977	0.11954	4.64E-04	3.40E-07	2.37E-07	3.28E-07	2.35E-07	4.6517E-04
520654	4258710.17	24409.35378	0.14132	0.12112	0.13651	0.12541	4.64E-04	3.32E-07	2.48E-07	3.20E-07	2.47E-07	4.6513E-04
520631.17	4258264.14	24406.40295	0.12828	0.15917	0.12719	0.16555	4.64E-04	3.01E-07	3.26E-07	2.99E-07	3.26E-07	4.6517E-04
519936.19	4258753.25	24375.86386	0.55938	0.59161	0.61827	0.56342	4.63E-04	1.31E-06	1.21E-06	1.45E-06	1.11E-06	4.6843E-04
520178.39	4258172.63	24366.56221	0.18703	2.74183	0.18879	3.08667	4.63E-04	4.39E-07	5.62E-06	4.43E-07	6.08E-06	4.7575E-04
520645.4	4258802.55	24350.97148	0.15066	0.11253	0.1458	0.1162	4.63E-04	3.54E-07	2.31E-07	3.42E-07	2.29E-07	4.6402E-04
520582.36	4258955.37	24346.01731	0.19476	0.10528	0.18826	0.10975	4.63E-04	4.57E-07	2.16E-07	4.42E-07	2.16E-07	4.6410E-04
520620.02	4258189.27	24337.4922	0.12586	0.16726	0.12513	0.17484	4.63E-04	2.95E-07	3.43E-07	2.94E-07	3.44E-07	4.6389E-04
520227.48	4258122.78	24330.08958	0.17273	1.60303	0.17731	1.76366	4.62E-04	4.06E-07	3.29E-06	4.16E-07	3.47E-06	4.7005E-04
520603.33	4258916.67	24309.04856	0.17982	0.10609	0.17425	0.1104	4.62E-04	4.22E-07	2.18E-07	4.09E-07	2.17E-07	4.6334E-04
520618.25	4258481.43	24278.904	0.14633	0.15181	0.14168	0.15909	4.61E-04	3.44E-07	3.11E-07	3.33E-07	3.13E-07	4.6280E-04
520631.17	4258386.02	24266.86702	0.13672	0.15161	0.13363	0.15854	4.61E-04	3.21E-07	3.11E-07	3.14E-07	3.12E-07	4.6253E-04
520168.57	4258182.6	24233.64043	0.1899	3.12452	0.19134	3.54364	4.61E-04	4.46E-07	6.41E-06	4.49E-07	6.98E-06	4.7492E-04
519989.81	4258599.14	24220.22366	0.60273	1.55402	0.70523	1.41582	4.60E-04	1.42E-06	3.19E-06	1.66E-06	2.79E-06	4.6943E-04
520633.54	4258275.17	24204.50464	0.12845	0.157	0.12735	0.16359	4.60E-04	3.02E-07	3.22E-07	2.99E-07	3.22E-07	4.6133E-04
520237.3	4258112.81	24202.22634	0.1699	1.46386	0.1751	1.6052	4.60E-04	3.99E-07	3.00E-06	4.11E-07	3.16E-06	4.6701E-04
520569.12	4258980.87	24186.63084	0.20508	0.10482	0.19795	0.10927	4.60E-04	4.81E-07	2.15E-07	4.65E-07	2.15E-07	4.6112E-04
520043.36	4258448.48	24185.20678	0.40703	6.40089	0.43972	4.88744	4.60E-04	9.56E-07	1.31E-05	1.03E-06	9.62E-06	4.8445E-04
520099.73	4258282.38	24182.80639	0.23165	14.52717	0.24028	15.60521	4.60E-04	5.44E-07	2.98E-05	5.64E-07	3.07E-05	5.2129E-04
520592.03	4258941.36	24171.1186	0.18785	0.10508	0.18177	0.10949	4.59E-04	4.41E-07	2.16E-07	4.27E-07	2.16E-07	4.6075E-04
520648.93	4258794.11	24157.83601	0.14846	0.1127	0.1436	0.11637	4.59E-04	3.49E-07	2.31E-07	3.37E-07	2.29E-07	4.6034E-04
519939.13	4258736.23	24150.29045	0.55213	0.63652	0.61026	0.60564	4.59E-04	1.30E-06	1.31E-06	1.43E-06	1.19E-06	4.6428E-04
519930.98	4258945.44	24139.45444	0.74757	0.29781	0.81629	0.29382	4.59E-04	1.76E-06	6.11E-07	1.92E-06	5.78E-07	4.6371E-04
519928.69	4258934.5	24114.86169	0.72116	0.30679	0.78675	0.30219	4.58E-04	1.69E-06	6.29E-07	1.85E-06	5.95E-07	4.6314E-04
520085.46	4259178.01	24088.43505	16.27538	0.20264	18.11618	0.19236	4.58E-04	3.82E-05	4.16E-07	4.25E-05	3.79E-07	5.3941E-04
520656.92	4258727.13	24079.82293	0.14098	0.11824	0.13628	0.12253	4.58E-04	3.31E-07	2.43E-07	3.20E-07	2.41E-07	4.5885E-04
519922.25	4258864.32	24078.12065	0.61215	0.38136	0.66732	0.36999	4.58E-04	1.44E-06	7.82E-07	1.57E-06	7.28E-07	4.6220E-04
520634.94	4258285.78	24071.76332	0.12881	0.15548	0.12769	0.16226	4.58E-04	3.02E-07	3.19E-07	3.00E-07	3.19E-07	4.5880E-04
519932.82	4258956.19	24063.93367	0.7705	0.28909	0.84191	0.2856	4.57E-04	1.81E-06	5.93E-07	1.98E-06	5.62E-07	4.6235E-04

520045.81	4259147.25	24058.55565	5.72878	0.20501	8.04072	0.19931	4.57E-04	1.34E-05	4.20E-07	1.89E-05	3.92E-07	4.9045E-04
520656.39	4258752.35	24032.84248	0.14262	0.11551	0.13782	0.11964	4.57E-04	3.35E-07	2.37E-07	3.24E-07	2.36E-07	4.5795E-04
519922.79	4258889.74	24028.62931	0.64009	0.35055	0.69779	0.34207	4.57E-04	1.50E-06	7.19E-07	1.64E-06	6.73E-07	4.6127E-04
520158.75	4258192.57	24016.95309	0.19265	3.60439	0.19402	4.11604	4.57E-04	4.52E-07	7.39E-06	4.55E-07	8.10E-06	4.7292E-04
520578.97	4258966.78	24007.33836	0.19732	0.10448	0.19064	0.1089	4.56E-04	4.63E-07	2.14E-07	4.48E-07	2.14E-07	4.5768E-04
520129.25	4258232.47	24002.65574	0.20783	6.13214	0.21093	7.18204	4.56E-04	4.88E-07	1.26E-05	4.95E-07	1.41E-05	4.8394E-04
520049.63	4258408.85	23979.504	0.33415	8.19372	0.35782	5.94987	4.56E-04	7.84E-07	1.68E-05	8.40E-07	1.17E-05	4.8595E-04
520055.72	4259157.23	23962.05873	8.186	0.20341	14.40907	0.19667	4.55E-04	1.92E-05	4.17E-07	3.38E-05	3.87E-07	5.0933E-04
520621.67	4258464.56	23956.65913	0.14427	0.15115	0.14005	0.15842	4.55E-04	3.39E-07	3.10E-07	3.29E-07	3.12E-07	4.5666E-04
520627.53	4258428.19	23937.11718	0.14035	0.15067	0.13679	0.15767	4.55E-04	3.29E-07	3.09E-07	3.21E-07	3.10E-07	4.5627E-04
520652.46	4258785.68	23931.79361	0.1463	0.11275	0.14145	0.11646	4.55E-04	3.43E-07	2.31E-07	3.32E-07	2.29E-07	4.5604E-04
520635.94	4258346.8	23908.87399	0.1327	0.15104	0.13024	0.15825	4.54E-04	3.12E-07	3.10E-07	3.06E-07	3.12E-07	4.5570E-04
520601.91	4258927.27	23899.05878	0.18099	0.10489	0.17534	0.10919	4.54E-04	4.25E-07	2.15E-07	4.12E-07	2.15E-07	4.5554E-04
520634.84	4258369.79	23890.23928	0.13447	0.15059	0.13157	0.15754	4.54E-04	3.16E-07	3.09E-07	3.09E-07	3.10E-07	4.5535E-04
520054.92	4258386.69	23886.61801	0.30613	10.47884	0.32744	7.09565	4.54E-04	7.19E-07	2.15E-05	7.69E-07	1.40E-05	4.9099E-04
520109.58	4258262.41	23874.45137	0.22059	10.20896	0.22682	11.8116	4.54E-04	5.18E-07	2.09E-05	5.33E-07	2.33E-05	4.9905E-04
520617.26	4258893.69	23866.47322	0.1704	0.10624	0.16529	0.11032	4.54E-04	4.00E-07	2.18E-07	3.88E-07	2.17E-07	4.5488E-04
519979.89	4258618.58	23865.46296	0.57997	1.298	0.66666	1.20137	4.54E-04	1.36E-06	2.66E-06	1.57E-06	2.36E-06	4.6159E-04
520620.91	4258884.98	23863.0545	0.16792	0.10666	0.16291	0.11069	4.54E-04	3.94E-07	2.19E-07	3.82E-07	2.18E-07	4.5481E-04
519928.21	4258782.23	23861.37885	0.55314	0.51518	0.60415	0.49321	4.54E-04	1.30E-06	1.06E-06	1.42E-06	9.71E-07	4.5831E-04
520095.38	4259187.99	23848.69627	12.09062	0.20029	11.40588	0.18916	4.53E-04	2.84E-05	4.11E-07	2.68E-05	3.72E-07	5.0927E-04
520624.55	4258876.26	23848.48276	0.16547	0.10709	0.16054	0.11106	4.53E-04	3.88E-07	2.20E-07	3.77E-07	2.19E-07	4.5452E-04
520029.44	4258511.69	23831.3498	0.56745	4.01668	0.63926	3.29541	4.53E-04	1.33E-06	8.24E-06	1.50E-06	6.49E-06	4.7055E-04
520628.2	4258867.55	23817.37588	0.16304	0.10749	0.15818	0.11141	4.53E-04	3.83E-07	2.20E-07	3.71E-07	2.19E-07	4.5392E-04
519921.56	4258838.55	23813.31155	0.5804	0.41533	0.6325	0.40068	4.53E-04	1.36E-06	8.52E-07	1.48E-06	7.89E-07	4.5714E-04
520630.98	4258411.39	23799.74963	0.1382	0.15013	0.13482	0.15698	4.52E-04	3.24E-07	3.08E-07	3.17E-07	3.09E-07	4.5365E-04
519931.08	4258765.04	23781.9357	0.54647	0.55303	0.59837	0.52853	4.52E-04	1.28E-06	1.13E-06	1.40E-06	1.04E-06	4.5691E-04
519925.23	4258799.15	23776.26634	0.55693	0.48058	0.60712	0.46098	4.52E-04	1.31E-06	9.86E-07	1.43E-06	9.07E-07	4.5657E-04
519957.12	4258673.87	23774.04112	0.55108	0.88625	0.61977	0.83301	4.52E-04	1.29E-06	1.82E-06	1.46E-06	1.64E-06	4.5811E-04
519950.71	4258691.8	23771.34985	0.54647	0.79541	0.60925	0.75182	4.52E-04	1.28E-06	1.63E-06	1.43E-06	1.48E-06	4.5767E-04
520657.61	4258701.55	23767.39848	0.1393	0.12099	0.13453	0.12514	4.52E-04	3.27E-07	2.48E-07	3.16E-07	2.46E-07	4.5291E-04
520631.85	4258858.83	23766.97207	0.16065	0.10781	0.1558	0.11169	4.52E-04	3.77E-07	2.21E-07	3.66E-07	2.20E-07	4.5295E-04
519923.21	4258914.86	23736.79121	0.66493	0.32283	0.72381	0.31675	4.51E-04	1.56E-06	6.62E-07	1.70E-06	6.24E-07	4.5574E-04
520148.93	4258202.53	23730.70544	0.19531	4.21888	0.19684	4.85442	4.51E-04	4.59E-07	8.65E-06	4.62E-07	9.56E-06	4.7021E-04
520635.5	4258850.12	23711.04891	0.15827	0.10816	0.15346	0.11199	4.51E-04	3.72E-07	2.22E-07	3.60E-07	2.20E-07	4.5188E-04
520590.85	4258951.86	23659.68137	0.1887	0.10387	0.18254	0.10822	4.50E-04	4.43E-07	2.13E-07	4.29E-07	2.13E-07	4.5103E-04
520639.15	4258841.4	23640.93291	0.15591	0.10856	0.15117	0.11233	4.49E-04	3.66E-07	2.23E-07	3.55E-07	2.21E-07	4.5054E-04
520631.33	4258214.14	23638.11284	0.12453	0.16075	0.1232	0.16723	4.49E-04	2.92E-07	3.30E-07	2.89E-07	3.29E-07	4.5056E-04
519941.95	4258718.91	23634.55212	0.53931	0.68578	0.5983	0.65103	4.49E-04	1.27E-06	1.41E-06	1.40E-06	1.28E-06	4.5461E-04
520659.94	4258743.86	23618.66812	0.14057	0.11546	0.13592	0.11962	4.49E-04	3.30E-07	2.37E-07	3.19E-07	2.35E-07	4.5007E-04
520064.89	4258352.61	23582.61859	0.27271	20.91151	0.29095	10.16797	4.48E-04	6.40E-07	4.29E-05	6.83E-07	2.00E-05	5.1249E-04
520634.53	4258394.85	23577.00431	0.13601	0.14943	0.13279	0.15619	4.48E-04	3.19E-07	3.06E-07	3.12E-07	3.07E-07	4.4940E-04
520630.06	4258203.59	23569.0063	0.12413	0.16152	0.12292	0.16826	4.48E-04	2.91E-07	3.31E-07	2.89E-07	3.31E-07	4.4925E-04
519922.15	4258815.84	23560.72294	0.55832	0.44895	0.60757	0.43161	4.48E-04	1.31E-06	9.21E-07	1.43E-06	8.50E-07	4.5235E-04
520642.8	4258832.68	23553.50163	0.15358	0.10889	0.14887	0.11259	4.48E-04	3.61E-07	2.23E-07	3.49E-07	2.22E-07	4.4886E-04
520660.51	4258718.58	23533.67206	0.13897	0.11817	0.13438	0.12236	4.47E-04	3.26E-07	2.42E-07	3.15E-07	2.41E-07	4.4846E-04
520577.8	4258977.27	23506.04596	0.19828	0.10335	0.19151	0.1077	4.47E-04	4.65E-07	2.12E-07	4.50E-07	2.12E-07	4.4815E-04
520612	4258913.08	23501.46164	0.17417	0.10466	0.16891	0.10881	4.47E-04	4.09E-07	2.15E-07	3.97E-07	2.14E-07	4.4795E-04
519919.07	4258880.76	23479.78503	0.60704	0.35768	0.66041	0.34812	4.46E-04	1.43E-06	7.34E-07	1.55E-06	6.85E-07	4.5070E-04
520600.58	4258937.82	23479.40125	0.18204	0.10371	0.1763	0.10799	4.46E-04	4.27E-07	2.13E-07	4.14E-07	2.13E-07	4.4757E-04
520207.88	4258132.72	23466.83534	0.17301	1.9515	0.17571	2.16402	4.46E-04	4.06E-07	4.00E-06	4.13E-07	4.26E-06	4.5514E-04
520628.88	4258193.07	23464.91045	0.12371	0.16217	0.12269	0.16921	4.46E-04	2.90E-07	3.33E-07	2.88E-07	3.33E-07	4.4727E-04
520635.85	4258236.11	23458.98373	0.12485	0.15781	0.12349	0.16389	4.46E-04	2.93E-07	3.24E-07	2.90E-07	3.23E-07	4.4714E-04
520198.06	4258142.69	23454.57795	0.17561	2.17096	0.17779	2.41705	4.46E-04	4.12E-07	4.45E-06	4.17E-07	4.76E-06	4.5587E-04
520119.43	4258242.44	23454.04248	0.21009	7.73703	0.21436	9.08695	4.46E-04	4.93E-07	1.59E-05	5.03E-07	1.79E-05	4.8057E-04
519967.12	4258646.05	23448.27507	0.55411	1.04994	0.62504	0.98265	4.46E-04	1.30E-06	2.15E-06	1.47E-06	1.93E-06	4.5257E-04
520646.45	4258823.97	23446.13559	0.15128	0.1092	0.1466	0.11284	4.46E-04	3.55E-07	2.24E-07	3.44E-07	2.22E-07	4.4681E-04
520634.63	4258225.57	23445.70361	0.12442	0.15877	0.12304	0.16494	4.46E-04	2.92E-07	3.26E-07	2.89E-07	3.25E-07	4.4689E-04
520639.88	4258305.41	23431.57207	0.12871	0.15131	0.12722	0.15835	4.45E-04	3.02E-07	3.10E-07	2.99E-07	3.12E-07	4.4661E-04
520637.17	4258246.68	23428.78758	0.12524	0.15669	0.12396	0.16274	4.45E-04	2.94E-07	3.21E-07	2.91E-07	3.20E-07	4.4657E-04
520217.7	4258122.75	23417.25371	0.17034	1.76529	0.17365	1.94858	4.45E-04	4.00E-07	3.62E-06	4.08E-07	3.84E-06	4.5338E-04
520188.24	4258152.66	23415.15872	0.17828	2.43115	0.17996	2.72115	4.45E-04	4.19E-07	4.99E-06	4.22E-07	5.36E-06	4.5626E-04
520045.82	4259157.25	23392.01788	5.78934	0.1999	8.0689	0.1944	4.45E-04	1.36E-05	4.10E-07	1.89E-05	3.83E-07	4.7797E-04
519918.5	4258855.26	23383.66091	0.57885	0.38871	0.62932	0.37622	4.44E-04	1.36E-06	7.97E-07	1.48E-06	7.41E-07	4.4886E-04
520085.48	4259188.01	23378.47815	16.19473	0.1977	18.02497	0.18778	4.44E-04	3.80E-05	4.05E-07	4.23E-05	3.70E-07	5.2549E-04
520139.11	4258212.5	23375.36212	0.19784	5.02977	0.19983	5.83576	4.44E-04	4.64E-07	1.03E-05	4.69E-07	1.15E-05	4.6706E-04
520227.52	4258112.78	23347.50697	0.16773	1.60466	0.17165	1.76506	4.44E-04	3.94E-07	3.29E-06	4.03E-07	3.47E-06	4.5136E-04
520638.6	4258257.31	23344.28834	0.12558	0.15541	0.1244	0.1615	4.44E-04	2.95E-07	3.19E-07	2.92E-07	3.18E-07	4.4496E-04
520587.71	4258963.16	23338.3425	0.19099	0.10306	0.18467	0.10737	4.44E-04	4.48E-07	2.11E-07	4.34E-07	2.11E-07	4.4492E-04
520639.41	4258355.93	23322.97248	0.13211	0.14877	0.12936	0.15575	4.43E-04	3.10E-07	3.05E-07	3.04E-07	3.07E-07	4.4455E-04
520650.1	4258815.25	23316.32291	0.14901	0.10949	0.14435	0.11307	4.43E-04	3.50E-07	2.25E-07	3.39E-07	2.23E-07	4.4434E-04
519919.51	4258905.94	23315.0329	0.63215	0.32951	0.68711	0.32253	4.43E-04	1.48E-06	6.76E-07	1.61E-06	6.35E-07	4.4758E-04
520178.42	4258162.63	23310.2344	0.18087	2.74569	0.18221	3.08811	4.43E-04	4.25E-07	5.63E-06	4.28E-07	6.08E-06	4.5565E-04
520659.52	4258768.81	23297.36592	0.14199	0.11254	0.13722	0.11641	4.43E-04	3.33E-07	2.31E-07	3.22E-07	2.29E-07	4.4396E-04
520055.74	4259167.23	23282.08738	8.30476	0.19836	14.50856	0.19186	4.43E-04	1.95E-05	4.07E-07	3.41E-05	3.78E-07	4.9689E-04
520638.18	4258378.55	23269.19934	0.13382	0.1485	0.13075	0.15524	4.42E-04	3.14E-07	3.05E-07	3.07E-07	3.06E-07	4.4354E-04
520624.97	4258473.23	23231.3259	0.14326	0.14903	0.13879	0.15615	4.42E-04	3.36E-07	3.06E-07	3.26E-07	3.07E-07	4.4286E-04
520640.15	4258267.98	23224.05388	0.1259	0.15394	0.12478	0.16016	4.41E-04	2.96E-07	3.16E-07	2.93E-07	3.15E-07	4.4267E-04
520039.85	4258457.01	23223.5358	0.41853	5.66527	0.45334	4.42804	4.41E-04	9.83E-07	1.16E-05	1.06E-06	8.72E-06	4.6382E-04
520055.59	4258376.43	23199.71239	0.29136	10.82716	0.31116	7.27638	4.41E-04	6.84E-07	2.22E-05	7.31E-07	1.43E-05	4.7893E-04
520168.6	4258172.6	23170.79373	0.1835	3.12981	0.1846	3.54394	4.40E-04	4.31E-07	6.42E-06	4.33E-07	6.98E-06	4.5469E-04
520663.5	4258735.36	23165.31515	0.13858	0.11535	0.13405	0.1195	4.40E-04	3.25E-07	2.37E-07	3.15E-07	2.35E-07	4.4144E-04
520653.75	4258806.54	23161.23668	0.14679	0.10984	0.14219	0.11336	4.40E-04	3.45E-07	2.25E-07	3.34E-07	2.23E-07	4.4138E-04
520610.51	4258923.7	23132.32818	0.17533	0.10351	0.17001	0.10767	4.40E-04	4.12E-07	2.12E-07	3.99E-07	2.12E-07	4.4094E-04
520630.96	4258437.21	23117.84318	0.13946	0.14839	0.13574	0.15532	4.39E-04	3.27E-07	3.04E-07	3.19E-07	3.06E-07	4.4068E-04
520099.76	4258272.38	23114.46709	0.22224	14.5729	0.23022	15.63921	4.39E-04	5.22E-07	2.99E-05	5.40E-07	3.08E-05	5.0110E-04
520661.22	4258692.92	23101.89752	0.13736	0.12073	0.13255	0.12476	4.39E-04	3.22E-07	2.48E-07	3.11E-07	2.46E-07	4.4025E-04
520663.05	4258760.37	23046.75285	0.14009	0.11265	0.13545	0.11659	4.38E-04	3.29E-07	2.31E-07	3.18E-07	2.30E-07	4.3918E-04
520599.35	4258948.34	23031.11502	0.18295	0.10255	0.17713	0.10678	4.38E-04	4.30E-07	2.10E-07	4.16E-07	2.10E-07	4.3905E-04
520634.38	4258420.31	23030.79356	0.13739	0.14788	0.13388	0.15465	4.38E-04	3.23E-07	3.03E-07	3.14E-07	3.04E-07	4.3902E-04
520642.21	4258278.88	23019.32858	0.12609	0.15208	0.12494	0.1585	4.38E-04	2.96E-07	3.12E-07	2.93E-07	3.12E-07	4.3877E-04
520019.52	4258531.13	23005.26402	0.58549	3.07551	0.67301	2.60592	4.37E-04	1.37E-06	6.31E-06	1.58E-06	5.13E-06	4.5168E-04
520094.86	4259199.84	23004.63348	12.10895	0.19453	11.59905	0.1839	4.37E-04	2.84E-05	3.99E-07	2.72E-05	3.62E-07	4.9370E-04
519921.88	4258941.68	22991.56255	0.67611	0.2957	0.73513	0.29139	4.37E-04	1.59E-06	6.06E-07	1.73E-06	5.74E-07	4.4152E-04
519923.78	4258952.46	22977.75188	0.69736	0.28716	0.7587	0.28345	4.37E-04	1.64E-06	5.89E-07	1.78E-06	5.58E-07	4.4133E-04
520657.4	4258797.82	22976.58277	0.1446	0.11003	0.14002	0.11354	4.37E-04	3.39E-07	2.26E-07	3.29E-07	2.24E-07	4.3786E-04
520664.09	4258710.02	22960.30826	0.13701	0.1181	0.1325	0.12216	4.36E-04	3.22E-07	2.42E-07	3.11E-07	2.40E-07	4.3755E-04
520158.78	4258182.57	22957.32893	0.18603	3.61134	0.18711	4.11445	4.36E-04	4.37E-07	7.41E-06	4.39E-07	8.10E-06	4.5276E-04
519917.77	4258829.41	22954.30457	0.54688	0.42243	0.59423	0.40684	4.36E-04	1.28E-06	8.66E-07	1.40E-06	8.01E-07	4.4067E-04
520129.29	4258222.47	22952.70116	0.20021	6.14098	0.20295	7.19255	4.36E-04	4.70E-07	1.26E-05	4.76E-07	1.42E-05	4.6399E-04
520643.29	4258314.37	22936.25512	0.12823	0.1491	0.12649	0.1561	4.36E-04	3.01E-07	3.06E-07	2.97E-07	3.07E-07	4.3719E-04
519932.56	4258744.48	22933.19194	0.52127	0.5962	0.57447	0.56825	4.36E-04	1.22E-06	1.22E-06	1.35E-06	1.12E-06	4.4083E-04
520643.02	4258339.53	22894.76208	0.1299	0.14792	0.12751	0.1549	4.35E-04	3.05E-07	3.03E-07	2.99E-07	3.05E-07	4.3640E-04
519944.62	4258701.24	22891.14518	0.52384	0.73815	0.58109	0.69978	4.35E-04	1.23E-06	1.51E-06	1.36E-06	1.38E-06	4.4060E-04
519915.34	4258871.78	22882.31903	0.5755	0.36453	0.62433	0.35395	4.35E-04	1.35E-06	7.48E-07	1.47E-06	6.97E-07	4.3921E-04
520637.9	4258403.69	22875.89102	0.13528	0.14724	0.13193	0.15387	4.35E-04	3.18E-07	3.02E-07	3.10E-07	3.03E-07	4.3606E-04
520586.48	4258973.68	22859.6558	0.19188	0.10194	0.18545	0.10619	4.35E-04	4.50E-07	2.09E-07	4.35E-07	2.09E-07	4.3582E-04
519915.82	4258897.03	22847.78384	0.60084	0.33616	0.652	0.32821	4.34E-04	1.41E-06	6.89E-07	1.53E-06	6.46E-07	4.3857E-04
520109.62	4258252.41	22839.28243	0.21205	10.22686	0.21773	11.89476	4.34E-04	4.98E-07	2.10E-05	5.11E-07	2.34E-05	4.7953E-04
520661.05	4258789.11	22759.51189	0.14247	0.11009	0.1379	0.11364	4.33E-04	3.34E-07	2.26E-07	3.24E-07	2.24E-07	4.3372E-04
520609.13	4258934.28	22750.83403	0.17638	0.10237	0.17098	0.10651	4.32E-04	4.14E-07	2.10E-07	4.01E-07	2.10E-07	4.3369E-04
520642.89	4258365.05	22730.29148	0.13146	0.1468	0.12852	0.15352	4.32E-04	3.09E-07	3.01E-07	3.02E-07	3.02E-07	4.3328E-04
520624.29	4258900.84	22728.92019	0.1664	0.10365	0.16152	0.1076	4.32E-04	3.91E-07	2.13E-07	3.79E-07	2.12E-07	4.3323E-04
520627.91	4258892.19	22722.89265	0.16406	0.10404	0.15926	0.10793	4.32E-04	3.85E-07	2.13E-07	3.74E-07	2.12E-07	4.3311E-04
520045.84	4259167.25	22722.2932	5.83543	0.19496	8.09977	0.18965	4.32E-04	1.37E-05	4.00E-07	1.90E-05	3.73E-07	4.6540E-04
520631.53	4258883.54	22707.31096	0.16174	0.10444	0.15702	0.10828	4.32E-04	3.80E-07	2.14E-07	3.69E-07	2.13E-07	4.3280E-04
520148.96	4258192.53	22702.01557	0.18853	4.22502	0.18976	4.85807	4.32E-04	4.43E-07	8.67E-06	4.45E-07	9.56E-06	4.5064E-04
520596.45	4258959.54	22697.16735	0.18495	0.10168	0.17895	0.10589	4.31E-04	4.34E-07	2.09E-07	4.20E-07	2.08E-07	4.3270E-04
519957.12	4258664.6	22684.43285	0.52919	0.90952	0.59369	0.85506	4.31E-04	1.24E-06	1.87E-06	1.39E-06	1.68E-06	4.3737E-04
520666.58	4258751.94	22682.96868	0.13811	0.11269	0.13363	0.11666	4.31E-04	3.24E-07	2.31E-07	3.14E-07	2.30E-07	4.3226E-04
519921.53	4258790.23	22682.78212	0.52272	0.48657	0.56813	0.4667	4.31E-04	1.23E-06	9.98E-07	1.33E-06	9.19E-07	4.3564E-04
520635.15	4258874.89	22682.54032	0.15943	0.10484	0.15479	0.10863	4.31E-04	3.74E-07	2.15E-07	3.63E-07	2.14E-07	4.3232E-04
520667.06	4258726.87	22680.44043	0.13666	0.11515	0.1322	0.11926	4.31E-04	3.21E-07	2.36E-07	3.10E-07	2.35E-07	4.3222E-04
520009.61	4258550.57	22660.34989	0.5914	2.41549	0.68775	2.10303	4.31E-04	1.39E-06	4.95E-06	1.61E-06	4.14E-06	4.4283E-04
520638.98	4258207.4	22642.89764	0.12195	0.15663	0.12058	0.16289	4.30E-04	2.86E-07	3.21E-07	2.83E-07	3.21E-07	4.3161E-04
520638.77	4258866.24	22642.40584	0.15715	0.1052	0.15256	0.10894	4.30E-04	3.69E-07	2.16E-07	3.58E-07	2.14E-07	4.3155E-04
520641.51	4258387.31	22639.89524	0.13315	0.14641	0.12994	0.15298	4.30E-04	3.13E-07	3.00E-07	3.05E-07	3.01E-07	4.3156E-04
520640.31	4258217.98	22638.61406	0.12225	0.15587	0.12087	0.16186	4.30E-04	2.87E-07	3.20E-07	2.84E-07	3.19E-07	4.3153E-04
519914.74	4258846.2	22633.51397	0.54687	0.3957	0.59318	0.38216	4.30E-04	1.28E-06	8.12E-07	1.39E-06	7.52E-07	4.3446E-04
519924.47	4258773.22	22632.01581	0.5174	0.52067	0.56341	0.49873	4.30E-04	1.21E-06	1.07E-06	1.32E-06	9.82E-07	4.3478E-04
520055.76	4259177.23	22624.27858	8.37566	0.19355	14.61722	0.18727	4.30E-04	1.97E-05	3.97E-07	3.43E-05	3.69E-07	4.8479E-04
520637.74	4258196.86	22600.652	0.12159	0.15726	0.12033	0.16382	4.30E-04	2.85E-07	3.23E-07	2.82E-07	3.22E-07	4.3081E-04
519918.48	4258807	22590.30133	0.5256	0.45524	0.57041	0.43735	4.29E-04	1.23E-06	9.34E-07	1.34E-06	8.61E-07	4.3377E-04
520642.4	4258857.59	22588.68168	0.15489	0.10543	0.15029	0.10914	4.29E-04	3.64E-07	2.16E-07	3.53E-07	2.15E-07	4.3052E-04
519916.17	4258922	22588.48017	0.62325	0.31049	0.67579	0.30476	4.29E-04	1.46E-06	6.37E-07	1.59E-06	6.00E-07	4.3365E-04
520628.28	4258481.9	22579.9256	0.14222	0.14702	0.13752	0.15394	4.29E-04	3.34E-07	3.02E-07	3.23E-07	3.03E-07	4.3046E-04
520084.96	4259199.85	22561.86465	16.23762	0.19199	18.48339	0.18254	4.29E-04	3.81E-05	3.94E-07	4.34E-05	3.59E-07	5.1113E-04
519935.46	4258727.38	22550.45274	0.51237	0.64005	0.56496	0.60942	4.29E-04	1.20E-06	1.31E-06	1.33E-06	1.20E-06	4.3368E-04
520646.02	4258848.94	22508.05849	0.15262	0.10573	0.14805	0.10939	4.28E-04	3.58E-07	2.17E-07	3.48E-07	2.15E-07	4.2898E-04
520056.13	4258366.21	22491.27721	0.27764	11.12471	0.29615	7.41828	4.28E-04	6.52E-07	2.28E-05	6.95E-07	1.46E-05	4.6628E-04
519999.69	4258570	22491.02055	0.58548	1.94363	0.68423	1.72989	4.28E-04	1.37E-06	3.99E-06	1.61E-06	3.41E-06	4.3789E-04
520207.91	4258122.72	22486.90932	0.16773	1.95411	0.16995	2.16398	4.27E-04	3.94E-07	4.01E-06	3.99E-07	4.26E-06	4.3650E-04
520198.09	4258132.69	22485.08716	0.17021	2.17317	0.1719	2.41859	4.27E-04	4.00E-07	4.46E-06	4.04E-07	4.76E-06	4.3742E-04
520664.69	4258780.39	22470.71961	0.14033	0.10998	0.13576	0.1136	4.27E-04	3.29E-07	2.26E-07	3.19E-07	2.24E-07	4.2823E-04
520217.73	4258112.75	22469.35682	0.16533	1.7671	0.16808	1.94961	4.27E-04	3.88E-07	3.62E-06	3.95E-07	3.84E-06	4.3535E-04
520649.64	4258840.29	22455.16805	0.15042	0.10626	0.14598	0.10984	4.27E-04	3.53E-07	2.18E-07	3.43E-07	2.16E-07	4.2796E-04
520643.35	4258229.3	22448.93518	0.12222	0.154	0.12083	0.1598	4.27E-04	2.87E-07	3.16E-07	2.84E-07	3.15E-07	4.2791E-04
520119.47	4258232.44	22442.70689	0.20227	7.74917	0.20614	9.10789	4.27E-04	4.75E-07	1.59E-05	4.84E-07	1.79E-05	4.6138E-04
520188.27	4258142.66	22435.78345	0.17266	2.43379	0.17392	2.72261	4.26E-04	4.05E-07	4.99E-06	4.08E-07	5.36E-06	4.3763E-04
520631.15	4258463.57	22414.17939	0.14045	0.14668	0.13619	0.15363	4.26E-04	3.30E-07	3.01E-07	3.20E-07	3.02E-07	4.2731E-04
520644.63	4258239.86	22413.22265	0.12259	0.15298	0.12127	0.15873	4.26E-04	2.88E-07	3.14E-07	2.85E-07	3.12E-07	4.2723E-04
520029.4	4258502	22405.19666	0.52468	4.05088	0.58428	3.33118	4.26E-04	1.23E-06	8.31E-06	1.37E-06	6.56E-06	4.4335E-04
520647.06	4258298.41	22399.85274	0.12595	0.14828	0.12455	0.15492	4.26E-04	2.96E-07	3.04E-07	2.92E-07	3.05E-07	4.2698E-04
519989.77	4258589.44	22391.05145	0.57069	1.59211	0.66639	1.44582	4.26E-04	1.34E-06	3.27E-06	1.56E-06	2.85E-06	4.3463E-04
520619.12	4258920.14	22387.75169	0.16992	0.10213	0.16487	0.10614	4.26E-04	3.99E-07	2.09E-07	3.87E-07	2.09E-07	4.2676E-04
519927.31	4258755.94	22383.97815	0.50852	0.55816	0.55652	0.53352	4.25E-04	1.19E-06	1.14E-06	1.31E-06	1.05E-06	4.3017E-04
520139.14	4258202.5	22366.00542	0.19086	5.03777	0.19256	5.83952	4.25E-04	4.48E-07	1.03E-05	4.52E-07	1.15E-05	4.4786E-04
520653.26	4258831.64	22365.78403	0.14822	0.10662	0.14384	0.11013	4.25E-04	3.48E-07	2.19E-07	3.38E-07	2.17E-07	4.2625E-04
520667.67	4258701.46	22361.5786	0.13512	0.11794	0.13062	0.12187	4.25E-04	3.17E-07	2.42E-07	3.07E-07	2.40E-07	4.2616E-04
520607.85	4258944.82	22359.06363	0.17733	0.10125	0.17183	0.10537	4.25E-04	4.16E-07	2.08E-07	4.03E-07	2.07E-07	4.2624E-04
520094.88	4259209.84	22340.17167	12.01625	0.18995	11.54891	0.17967	4.25E-04	2.82E-05	3.90E-07	2.71E-05	3.54E-07	4.8071E-04
519912.12	4258888.12	22331.39948	0.57078	0.3427	0.61826	0.33373	4.24E-04	1.34E-06	7.03E-07	1.45E-06	6.57E-07	4.2863E-04
520646.01	4258250.47	22330.31344	0.12293	0.1518	0.1217	0.15758	4.24E-04	2.89E-07	3.11E-07	2.86E-07	3.10E-07	4.2565E-04
520178.45	4258152.63	22325.66205	0.17504	2.74891	0.17602	3.08917	4.24E-04	4.11E-07	5.64E-06	4.13E-07	6.08E-06	4.3691E-04
520036.34	4258465.54	22305.19546	0.43028	5.0577	0.46772	4.02895	4.24E-04	1.01E-06	1.04E-05	1.10E-06	7.93E-06	4.4439E-04
520063.14	4258343.35	22294.95143	0.25853	17.72939	0.27538	9.49938	4.24E-04	6.07E-07	3.64E-05	6.47E-07	1.87E-05	4.8010E-04
520670.12	4258743.5	22284.22167	0.13619	0.11261	0.13183	0.11659	4.24E-04	3.20E-07	2.31E-07	3.09E-07	2.30E-07	4.2467E-04
520637.77	4258429.23	22270.87058	0.13655	0.14568	0.13291	0.15238	4.23E-04	3.21E-07	2.99E-07	3.12E-07	3.00E-07	4.2456E-04
520656.88	4258822.99	22254.58227	0.14608	0.10684	0.14168	0.11029	4.23E-04	3.43E-07	2.19E-07	3.33E-07	2.17E-07	4.2413E-04
520595.17	4258970.08	22252.4573	0.18583	0.10059	0.17972	0.10474	4.23E-04	4.36E-07	2.06E-07	4.22E-07	2.06E-07	4.2425E-04
519979.85	4258608.88	22236.97671	0.55146	1.32736	0.6343	1.2277	4.23E-04	1.29E-06	2.72E-06	1.49E-06	2.42E-06	4.3061E-04
519911.62	4258862.8	22236.72401	0.54535	0.37112	0.58996	0.35955	4.23E-04	1.28E-06	7.61E-07	1.39E-06	7.08E-07	4.2681E-04
519967.12	4258636.77	22236.26939	0.53208	1.07388	0.60001	1.00578	4.23E-04	1.25E-06	2.20E-06	1.41E-06	1.98E-06	4.2951E-04
520647.51	4258261.12	22207.33431	0.12322	0.15046	0.12207	0.15634	4.22E-04	2.89E-07	3.09E-07	2.87E-07	3.08E-07	4.2331E-04
519912.5	4258913.15	22189.78586	0.5936	0.3166	0.64259	0.31003	4.22E-04	1.39E-06	6.49E-07	1.51E-06	6.10E-07	4.2595E-04
520168.63	4258162.6	22181.16998	0.17745	3.13431	0.17825	3.54362	4.22E-04	4.17E-07	6.43E-06	4.18E-07	6.98E-06	4.3586E-04
520670.61	4258718.38	22169.63714	0.13477	0.11513	0.13041	0.11913	4.21E-04	3.16E-07	2.36E-07	3.06E-07	2.35E-07	4.2250E-04
520668.34	4258771.68	22141.62622	0.1382	0.10986	0.13369	0.11356	4.21E-04	3.24E-07	2.25E-07	3.14E-07	2.24E-07	4.2196E-04
520099.8	4258262.38	22127.29528	0.21349	14.61157	0.22087	15.68769	4.21E-04	5.01E-07	3.00E-05	5.19E-07	3.09E-05	4.8247E-04
520045.86	4259177.25	22113.01952	5.87577	0.19034	8.13971	0.18519	4.20E-04	1.38E-05	3.90E-07	1.91E-05	3.65E-07	4.5399E-04
520660.51	4258814.34	22111.17503	0.14393	0.10703	0.13953	0.11044	4.20E-04	3.38E-07	2.20E-07	3.28E-07	2.17E-07	4.2140E-04
520605.19	4258955.93	22072.07856	0.17914	0.10036	0.17347	0.10445	4.20E-04	4.21E-07	2.06E-07	4.07E-07	2.06E-07	4.2079E-04
520649.13	4258271.83	22048.50142	0.12348	0.14897	0.12235	0.15501	4.19E-04	2.90E-07	3.06E-07	2.87E-07	3.05E-07	4.2029E-04
519913.98	4258820.27	22047.54135	0.51496	0.42878	0.55801	0.41253	4.19E-04	1.21E-06	8.79E-07	1.31E-06	8.12E-07	4.2329E-04
520617.68	4258930.74	22040.98457	0.17096	0.10103	0.16583	0.10504	4.19E-04	4.01E-07	2.07E-07	3.89E-07	2.07E-07	4.2016E-04
520055.77	4259187.23	22005.07425	8.43678	0.18896	14.7269	0.18289	4.18E-04	1.98E-05	3.88E-07	3.46E-05	3.60E-07	4.7341E-04
520045.22	4258400.68	21996.90603	0.3101	6.8756	0.33054	5.24635	4.18E-04	7.28E-07	1.41E-05	7.76E-07	1.03E-05	4.4405E-04
520158.81	4258172.57	21984.34144	0.17982	3.61595	0.18061	4.11612	4.18E-04	4.22E-07	7.42E-06	4.24E-07	8.10E-06	4.3425E-04
520129.32	4258212.47	21965.22566	0.19301	6.15272	0.19548	7.19041	4.18E-04	4.53E-07	1.26E-05	4.59E-07	1.42E-05	4.4520E-04
520664.13	4258805.69	21964.66357	0.14186	0.10734	0.13751	0.11071	4.18E-04	3.33E-07	2.20E-07	3.23E-07	2.18E-07	4.1860E-04

520650.45	4258307.3	21950.3704	0.12551	0.14602	0.12386	0.15268	4.17E-04	2.95E-07	2.99E-07	2.91E-07	3.01E-07	4.1842E-04
520084.98	4259209.85	21920.88291	16.0936	0.18749	18.37711	0.17836	4.17E-04	3.78E-05	3.85E-07	4.31E-05	3.51E-07	4.9834E-04
520040.84	4258422.46	21916.90013	0.33981	5.89923	0.36327	4.61787	4.17E-04	7.98E-07	1.21E-05	8.53E-07	9.09E-06	4.3944E-04
519914.74	4258948.73	21904.55547	0.63321	0.2851	0.68615	0.28105	4.16E-04	1.49E-06	5.85E-07	1.61E-06	5.53E-07	4.2060E-04
519938.24	4258709.97	21902.41614	0.49892	0.68741	0.55147	0.65321	4.16E-04	1.17E-06	1.41E-06	1.29E-06	1.29E-06	4.2149E-04
520109.65	4258242.41	21859.06159	0.204	10.25357	0.20927	11.87741	4.16E-04	4.79E-07	2.10E-05	4.91E-07	2.34E-05	4.6088E-04
520671.99	4258762.96	21858.35334	0.13628	0.10986	0.13187	0.11364	4.15E-04	3.20E-07	2.25E-07	3.10E-07	2.24E-07	4.1657E-04
519910.98	4258837.14	21838.90512	0.51646	0.40206	0.55867	0.3877	4.15E-04	1.21E-06	8.25E-07	1.31E-06	7.63E-07	4.1923E-04
520673.65	4258735.07	21816.69491	0.13428	0.11229	0.12997	0.11628	4.15E-04	3.15E-07	2.30E-07	3.05E-07	2.29E-07	4.1578E-04
519947.12	4258683.15	21806.38265	0.50295	0.79367	0.55946	0.75043	4.14E-04	1.18E-06	1.63E-06	1.31E-06	1.48E-06	4.2010E-04
520667.75	4258797.04	21779.9798	0.13981	0.10748	0.13547	0.11085	4.14E-04	3.28E-07	2.20E-07	3.18E-07	2.18E-07	4.1508E-04
519908.43	4258879.21	21774.47485	0.54216	0.34896	0.58575	0.33904	4.14E-04	1.27E-06	7.16E-07	1.38E-06	6.67E-07	4.1792E-04
519908.83	4258904.31	21748.91201	0.56513	0.3227	0.61077	0.31521	4.13E-04	1.33E-06	6.62E-07	1.43E-06	6.20E-07	4.1745E-04
520671.25	4258692.91	21734.91315	0.13327	0.11758	0.12871	0.12141	4.13E-04	3.13E-07	2.41E-07	3.02E-07	2.39E-07	4.1424E-04
520148.99	4258182.53	21734.13692	0.18211	4.23212	0.18311	4.85666	4.13E-04	4.28E-07	8.68E-06	4.30E-07	9.56E-06	4.3222E-04
520646.59	4258200.65	21722.36263	0.11947	0.15263	0.11806	0.15872	4.13E-04	2.80E-07	3.13E-07	2.77E-07	3.12E-07	4.1409E-04
520634.62	4258472.69	21715.82923	0.13941	0.1446	0.13492	0.1514	4.13E-04	3.27E-07	2.97E-07	3.17E-07	2.98E-07	4.1402E-04
520647.89	4258211.22	21701.97585	0.11974	0.15196	0.11831	0.15775	4.13E-04	2.81E-07	3.12E-07	2.78E-07	3.11E-07	4.1370E-04
520616.34	4258941.3	21683.79938	0.1719	0.09993	0.16667	0.10392	4.12E-04	4.04E-07	2.05E-07	3.91E-07	2.05E-07	4.1337E-04
520603.85	4258966.49	21678.15081	0.18004	0.0993	0.17423	0.10334	4.12E-04	4.23E-07	2.04E-07	4.09E-07	2.03E-07	4.1330E-04
520649.28	4258221.83	21675.52869	0.12007	0.15108	0.11863	0.15671	4.12E-04	2.82E-07	3.10E-07	2.79E-07	3.08E-07	4.1319E-04
520095.31	4259220.66	21667.64588	11.78707	0.18528	11.30752	0.17533	4.12E-04	2.77E-05	3.80E-07	2.65E-05	3.45E-07	4.6681E-04
520631.32	4258907.99	21666.69247	0.16249	0.10113	0.15778	0.10496	4.12E-04	3.81E-07	2.07E-07	3.70E-07	2.07E-07	4.1301E-04
520634.91	4258899.4	21661.92698	0.16028	0.10151	0.15565	0.10528	4.12E-04	3.76E-07	2.08E-07	3.65E-07	2.07E-07	4.1291E-04
520638.51	4258890.81	21645.0008	0.15807	0.10188	0.15352	0.1056	4.11E-04	3.71E-07	2.09E-07	3.60E-07	2.08E-07	4.1258E-04
520674.17	4258709.89	21632.43669	0.13291	0.11512	0.12864	0.11897	4.11E-04	3.12E-07	2.36E-07	3.02E-07	2.34E-07	4.1228E-04
520642.11	4258882.22	21621.48989	0.15588	0.10226	0.15141	0.10593	4.11E-04	3.66E-07	2.10E-07	3.55E-07	2.09E-07	4.1213E-04
520046.24	4258390.27	21609.27118	0.29544	7.13838	0.31452	5.41589	4.11E-04	6.94E-07	1.46E-05	7.38E-07	1.07E-05	4.3749E-04
520645.7	4258873.63	21587.55408	0.15371	0.10262	0.1493	0.10624	4.10E-04	3.61E-07	2.10E-07	3.51E-07	2.09E-07	4.1147E-04
520637.83	4258455.25	21584.3424	0.13757	0.14404	0.13347	0.15081	4.10E-04	3.23E-07	2.95E-07	3.13E-07	2.97E-07	4.1151E-04
519914.81	4258798.15	21583.16131	0.49454	0.46059	0.53538	0.44248	4.10E-04	1.16E-06	9.45E-07	1.26E-06	8.71E-07	4.1449E-04
520207.94	4258112.72	21581.23858	0.16276	1.95586	0.16451	2.16442	4.10E-04	3.82E-07	4.01E-06	3.86E-07	4.26E-06	4.1926E-04
519957.12	4258655.32	21579.40761	0.50808	0.93077	0.56808	0.87603	4.10E-04	1.19E-06	1.91E-06	1.33E-06	1.72E-06	4.1635E-04
520198.12	4258122.69	21572.26872	0.16505	2.17512	0.16632	2.4193	4.10E-04	3.87E-07	4.46E-06	3.90E-07	4.76E-06	4.2005E-04
519917.82	4258781.3	21558.25079	0.49044	0.4914	0.53146	0.47164	4.10E-04	1.15E-06	1.01E-06	1.25E-06	9.28E-07	4.1412E-04
520675.64	4258754.24	21552.55334	0.13441	0.10992	0.13014	0.11373	4.10E-04	3.16E-07	2.25E-07	3.06E-07	2.24E-07	4.1075E-04
519907.89	4258853.81	21544.04826	0.51639	0.37739	0.55721	0.36493	4.10E-04	1.21E-06	7.74E-07	1.31E-06	7.18E-07	4.1353E-04
520649.3	4258865.04	21543.46457	0.15157	0.10289	0.14718	0.10648	4.10E-04	3.56E-07	2.11E-07	3.46E-07	2.10E-07	4.1062E-04
520045.87	4259187.25	21536.31597	5.898	0.18593	8.17959	0.18093	4.09E-04	1.38E-05	3.81E-07	1.92E-05	3.56E-07	4.4315E-04
520063.58	4258333.18	21534.87008	0.24735	18.29936	0.26303	9.6878	4.09E-04	5.81E-07	3.75E-05	6.18E-07	1.91E-05	4.6714E-04
520671.37	4258788.38	21532.57284	0.13776	0.10741	0.13341	0.11084	4.09E-04	3.23E-07	2.20E-07	3.13E-07	2.18E-07	4.1037E-04
520188.3	4258132.66	21528.64559	0.16736	2.43547	0.16822	2.72473	4.09E-04	3.93E-07	4.99E-06	3.95E-07	5.36E-06	4.2037E-04
520641.17	4258438.16	21528.23171	0.13568	0.14354	0.13188	0.15018	4.09E-04	3.19E-07	2.94E-07	3.10E-07	2.96E-07	4.1043E-04
519928.92	4258735.72	21524.73295	0.48705	0.5992	0.53411	0.57204	4.09E-04	1.14E-06	1.23E-06	1.25E-06	1.13E-06	4.1390E-04
519909	4258928.82	21509.18344	0.58455	0.29913	0.63157	0.29367	4.09E-04	1.37E-06	6.13E-07	1.48E-06	5.78E-07	4.1290E-04
520653.83	4258316.18	21508.93212	0.12508	0.14383	0.12311	0.15047	4.09E-04	2.94E-07	2.95E-07	2.89E-07	2.96E-07	4.1002E-04
520119.5	4258222.44	21504.06249	0.19495	7.762	0.19845	9.13619	4.09E-04	4.58E-07	1.59E-05	4.66E-07	1.80E-05	4.4358E-04
520652.9	4258856.44	21488.47926	0.14942	0.10317	0.14506	0.10672	4.08E-04	3.51E-07	2.12E-07	3.41E-07	2.10E-07	4.0957E-04
520032.83	4258474.07	21478.54246	0.44214	4.54755	0.48265	3.67788	4.08E-04	1.04E-06	9.33E-06	1.13E-06	7.24E-06	4.2701E-04
520652.07	4258233.03	21471.25971	0.12005	0.14934	0.11867	0.15485	4.08E-04	2.82E-07	3.06E-07	2.79E-07	3.05E-07	4.0930E-04
520654.25	4258291.42	21459.16066	0.12334	0.1451	0.12195	0.15142	4.08E-04	2.90E-07	2.98E-07	2.86E-07	2.98E-07	4.0907E-04
520029.36	4258492.3	21456.00994	0.48734	4.0818	0.53773	3.35986	4.08E-04	1.14E-06	8.37E-06	1.26E-06	6.61E-06	4.2523E-04
520656.5	4258847.85	21427.75959	0.14731	0.10363	0.14306	0.1071	4.07E-04	3.46E-07	2.13E-07	3.36E-07	2.11E-07	4.0841E-04
520139.17	4258192.5	21423.74751	0.18428	5.04568	0.18574	5.8407	4.07E-04	4.33E-07	1.03E-05	4.36E-07	1.15E-05	4.2994E-04
520178.48	4258142.63	21413.88246	0.16955	2.75115	0.17018	3.0912	4.07E-04	3.98E-07	5.64E-06	4.00E-07	6.08E-06	4.1956E-04
520613.93	4258952.31	21406.69531	0.17348	0.09907	0.16812	0.10305	4.07E-04	4.07E-07	2.03E-07	3.95E-07	2.03E-07	4.0811E-04
520653.41	4258243.62	21391.93252	0.12038	0.14826	0.11909	0.15378	4.07E-04	2.83E-07	3.04E-07	2.80E-07	3.03E-07	4.0779E-04
519920.74	4258764.21	21378.58328	0.48382	0.52504	0.52567	0.50332	4.06E-04	1.14E-06	1.08E-06	1.23E-06	9.91E-07	4.1081E-04
520677.18	4258726.64	21365.75251	0.13246	0.11222	0.12826	0.11614	4.06E-04	3.11E-07	2.30E-07	3.01E-07	2.29E-07	4.0720E-04
520660.09	4258839.26	21355.18312	0.1452	0.10405	0.14105	0.10744	4.06E-04	3.41E-07	2.13E-07	3.31E-07	2.11E-07	4.0702E-04
520626.23	4258927.2	21347.25164	0.16577	0.09967	0.16086	0.10355	4.06E-04	3.89E-07	2.04E-07	3.78E-07	2.04E-07	4.0695E-04
520036.38	4258441.17	21312.87662	0.36748	5.1098	0.39463	4.09337	4.05E-04	8.63E-07	1.05E-05	9.26E-07	8.06E-06	4.2545E-04
520019.48	4258521.43	21312.1974	0.54311	3.11741	0.61576	2.64249	4.05E-04	1.28E-06	6.39E-06	1.45E-06	5.20E-06	4.1942E-04
520654.85	4258254.25	21287.27911	0.12069	0.14701	0.11947	0.15264	4.05E-04	2.83E-07	3.02E-07	2.80E-07	3.00E-07	4.0580E-04
520674.99	4258779.73	21278.33961	0.13578	0.10739	0.13149	0.11089	4.04E-04	3.19E-07	2.20E-07	3.09E-07	2.18E-07	4.0553E-04
520085.41	4259220.68	21274.03973	15.74677	0.18291	17.82027	0.17407	4.04E-04	3.70E-05	3.75E-07	4.18E-05	3.43E-07	4.8390E-04
519905.17	4258895.46	21266.79744	0.53782	0.32873	0.58031	0.32029	4.04E-04	1.26E-06	6.74E-07	1.36E-06	6.30E-07	4.0817E-04
520168.66	4258152.6	21260.04375	0.17174	3.13782	0.17227	3.54327	4.04E-04	4.03E-07	6.44E-06	4.04E-07	6.97E-06	4.1833E-04
520663.69	4258830.67	21259.57254	0.14314	0.10435	0.13901	0.10767	4.04E-04	3.36E-07	2.14E-07	3.26E-07	2.12E-07	4.0519E-04
520055.26	4259199.9	21237.40478	8.3029	0.18328	14.25239	0.1775	4.04E-04	1.95E-05	3.76E-07	3.35E-05	3.49E-07	4.5736E-04
520099.83	4258252.38	21206.84799	0.20533	14.65645	0.21217	15.72365	4.03E-04	4.82E-07	3.01E-05	4.98E-07	3.10E-05	4.6510E-04
519904.73	4258870.3	21171.6787	0.51471	0.35488	0.55452	0.3441	4.02E-04	1.21E-06	7.28E-07	1.30E-06	6.77E-07	4.0635E-04
520679.29	4258745.53	21167.35049	0.1325	0.1099	0.12839	0.11372	4.02E-04	3.11E-07	2.25E-07	3.01E-07	2.24E-07	4.0341E-04
520656.41	4258264.93	21144.38484	0.12097	0.14563	0.11976	0.15141	4.02E-04	2.84E-07	2.99E-07	2.81E-07	2.98E-07	4.0308E-04
520667.29	4258822.08	21144.16031	0.14113	0.10449	0.13696	0.10777	4.02E-04	3.31E-07	2.14E-07	3.22E-07	2.12E-07	4.0299E-04
520047.06	4258379.95	21139.65758	0.2817	7.35746	0.29957	5.55724	4.02E-04	6.61E-07	1.51E-05	7.03E-07	1.09E-05	4.2922E-04
519905.23	4258919.72	21116.96492	0.55669	0.30497	0.60048	0.29867	4.01E-04	1.31E-06	6.25E-07	1.41E-06	5.88E-07	4.0533E-04
519910.19	4258811.13	21106.0122	0.48483	0.43419	0.52373	0.41766	4.01E-04	1.14E-06	8.90E-07	1.23E-06	8.22E-07	4.0527E-04
520638.09	4258481.82	21090.89776	0.13835	0.14258	0.13364	0.14919	4.01E-04	3.25E-07	2.92E-07	3.14E-07	2.94E-07	4.0212E-04
520677.72	4258701.39	21074.3778	0.13113	0.11497	0.12687	0.1187	4.01E-04	3.08E-07	2.36E-07	2.98E-07	2.34E-07	4.0166E-04
520158.84	4258162.57	21071.20597	0.17393	3.62043	0.1745	4.11545	4.01E-04	4.08E-07	7.43E-06	4.10E-07	8.10E-06	4.1687E-04
520095.33	4259230.66	21057.33166	11.72894	0.18105	11.2421	0.17142	4.00E-04	2.75E-05	3.71E-07	2.64E-05	3.37E-07	4.5490E-04
520129.35	4258202.47	21054.06771	0.18628	6.16192	0.18848	7.19834	4.00E-04	4.37E-07	1.26E-05	4.42E-07	1.42E-05	4.2789E-04
520657.61	4258300.24	21052.4063	0.12295	0.14289	0.12131	0.14929	4.00E-04	2.89E-07	2.93E-07	2.85E-07	2.94E-07	4.0133E-04
520612.53	4258962.89	21047.85431	0.1744	0.09802	0.16888	0.10196	4.00E-04	4.09E-07	2.01E-07	3.96E-07	2.01E-07	4.0129E-04
519940.87	4258692.19	21026.70548	0.48269	0.73699	0.53331	0.69943	4.00E-04	1.13E-06	1.51E-06	1.25E-06	1.38E-06	4.0495E-04
520624.84	4258937.78	21023.17104	0.1667	0.09861	0.16169	0.10248	4.00E-04	3.91E-07	2.02E-07	3.80E-07	2.02E-07	4.0079E-04
519907.23	4258828.09	21005.69672	0.48758	0.4077	0.52597	0.39282	3.99E-04	1.14E-06	8.36E-07	1.23E-06	7.73E-07	4.0327E-04
520678.62	4258771.08	21000.63915	0.13386	0.10734	0.12964	0.11091	3.99E-04	3.14E-07	2.20E-07	3.04E-07	2.18E-07	4.0024E-04
520670.88	4258813.49	20983.85832	0.13909	0.10465	0.13492	0.1079	3.99E-04	3.27E-07	2.15E-07	3.17E-07	2.12E-07	3.9994E-04
519931.79	4258718.53	20969.0141	0.47566	0.64186	0.52312	0.61159	3.99E-04	1.12E-06	1.32E-06	1.23E-06	1.20E-06	4.0345E-04
519923.53	4258746.84	20968.54431	0.47286	0.56176	0.51725	0.53714	3.99E-04	1.11E-06	1.15E-06	1.21E-06	1.06E-06	4.0311E-04
520109.68	4258232.41	20963.87994	0.19654	10.27337	0.20136	11.9517	3.98E-04	4.61E-07	2.11E-05	4.73E-07	2.35E-05	4.4402E-04
520656.94	4258350.21	20938.84714	0.12605	0.14094	0.12322	0.14726	3.98E-04	2.96E-07	2.89E-07	2.89E-07	2.90E-07	3.9917E-04
520653.31	4258392.43	20901.49855	0.1294	0.14064	0.12604	0.14682	3.97E-04	3.04E-07	2.88E-07	2.96E-07	2.89E-07	3.9848E-04
520641.26	4258464.26	20897.25349	0.13659	0.14207	0.13228	0.14871	3.97E-04	3.21E-07	2.91E-07	3.11E-07	2.93E-07	3.9843E-04
520009.56	4258540.87	20866.49543	0.55231	2.45583	0.63502	2.13794	3.97E-04	1.30E-06	5.04E-06	1.49E-06	4.21E-06	4.0867E-04
520674.48	4258804.9	20852.55573	0.13716	0.10488	0.13302	0.1081	3.96E-04	3.22E-07	2.15E-07	3.12E-07	2.13E-07	3.9743E-04
520655.45	4258204.44	20845.08248	0.11737	0.14816	0.11585	0.15381	3.96E-04	2.76E-07	3.04E-07	2.72E-07	3.03E-07	3.9738E-04
519947.12	4258673.87	20842.58495	0.48421	0.81349	0.53777	0.76919	3.96E-04	1.14E-06	1.67E-06	1.26E-06	1.51E-06	4.0176E-04
520149.02	4258172.53	20837.37993	0.17607	4.23751	0.17685	4.85736	3.96E-04	4.13E-07	8.69E-06	4.15E-07	9.56E-06	4.1516E-04
520656.81	4258215.03	20811.30406	0.11767	0.14736	0.11615	0.15283	3.96E-04	2.76E-07	3.02E-07	2.73E-07	3.01E-07	3.9674E-04
519904.17	4258844.83	20808.95654	0.48874	0.38316	0.52614	0.36998	3.96E-04	1.15E-06	7.86E-07	1.24E-06	7.28E-07	3.9944E-04
520063.96	4258323.03	20793.6551	0.23693	18.78887	0.25158	9.82144	3.95E-04	5.56E-07	3.85E-05	5.91E-07	1.93E-05	4.5426E-04
520045.36	4259199.92	20784.36055	5.85024	0.18034	8.03087	0.17558	3.95E-04	1.37E-05	3.70E-07	1.89E-05	3.46E-07	4.2838E-04
520029.32	4258482.6	20768.00252	0.45428	4.11072	0.49767	3.37868	3.95E-04	1.07E-06	8.43E-06	1.17E-06	6.65E-06	4.1208E-04
520622.67	4258948.69	20754.61656	0.16807	0.0977	0.16292	0.10157	3.95E-04	3.95E-07	2.00E-07	3.82E-07	2.00E-07	3.9569E-04
520682.94	4258736.81	20750.97498	0.13067	0.10973	0.12665	0.11354	3.94E-04	3.07E-07	2.25E-07	2.97E-07	2.24E-07	3.9549E-04
520658.26	4258225.67	20745.5361	0.11795	0.14641	0.11648	0.15178	3.94E-04	2.77E-07	3.00E-07	2.73E-07	2.99E-07	3.9548E-04
519901.5	4258886.61	20743.64558	0.51165	0.33448	0.55083	0.32515	3.94E-04	1.20E-06	6.86E-07	1.29E-06	6.40E-07	3.9812E-04
520198.15	4258112.69	20710.70292	0.16013	2.17684	0.16104	2.41905	3.94E-04	3.76E-07	4.46E-06	3.78E-07	4.76E-06	4.0365E-04
520682.24	4258762.43	20699.24892	0.13201	0.10727	0.12789	0.11091	3.93E-04	3.10E-07	2.20E-07	3.00E-07	2.18E-07	3.9450E-04
520656.79	4258375.69	20698.62791	0.12743	0.13995	0.12422	0.14606	3.93E-04	2.99E-07	2.87E-07	2.92E-07	2.88E-07	3.9461E-04
519999.65	4258560.31	20695.50058	0.55058	1.98023	0.63651	1.76235	3.93E-04	1.29E-06	4.06E-06	1.49E-06	3.47E-06	4.0370E-04
519901.45	4258910.62	20682.46033	0.5299	0.31075	0.57056	0.30357	3.93E-04	1.24E-06	6.37E-07	1.34E-06	5.98E-07	3.9695E-04
520638.35	4258915.13	20677.68898	0.15866	0.09872	0.15407	0.10242	3.93E-04	3.72E-07	2.02E-07	3.62E-07	2.02E-07	3.9418E-04
520085.43	4259230.68	20675.7744	15.79691	0.17873	17.66177	0.17018	3.93E-04	3.71E-05	3.67E-07	4.15E-05	3.35E-07	4.7226E-04
519989.73	4258579.74	20674.37442	0.54068	1.62784	0.62715	1.47508	3.93E-04	1.27E-06	3.34E-06	1.47E-06	2.90E-06	4.0197E-04
520188.33	4258122.66	20672.90001	0.16231	2.43701	0.16282	2.72582	3.93E-04	3.81E-07	5.00E-06	3.82E-07	5.37E-06	4.0408E-04
520641.92	4258906.59	20672.10396	0.15656	0.09908	0.15206	0.10273	3.93E-04	3.68E-07	2.03E-07	3.57E-07	2.02E-07	3.9407E-04
520678.08	4258796.31	20667.84733	0.13523	0.10498	0.13112	0.10822	3.93E-04	3.17E-07	2.15E-07	3.08E-07	2.13E-07	3.9391E-04
520055.28	4259209.9	20666.86716	8.32508	0.17911	14.36016	0.17351	3.93E-04	1.95E-05	3.67E-07	3.37E-05	3.42E-07	4.4681E-04
519979.81	4258599.18	20656.42493	0.52484	1.35722	0.60391	1.2525	3.93E-04	1.23E-06	2.78E-06	1.42E-06	2.47E-06	4.0054E-04
520645.5	4258898.06	20656.14146	0.15446	0.09944	0.15005	0.10304	3.93E-04	3.63E-07	2.04E-07	3.52E-07	2.03E-07	3.9376E-04
520660.97	4258309.06	20648.18784	0.12254	0.14075	0.1206	0.14717	3.92E-04	2.88E-07	2.89E-07	2.83E-07	2.90E-07	3.9363E-04
520649.07	4258889.52	20635.82308	0.15239	0.09981	0.14806	0.10336	3.92E-04	3.58E-07	2.05E-07	3.48E-07	2.03E-07	3.9336E-04
520047.74	4258369.68	20632.10161	0.26897	7.54648	0.28579	5.67799	3.92E-04	6.31E-07	1.55E-05	6.71E-07	1.12E-05	4.2014E-04
520119.53	4258212.44	20618.41027	0.18804	7.77724	0.19126	9.13248	3.92E-04	4.41E-07	1.60E-05	4.49E-07	1.80E-05	4.2674E-04
520652.65	4258880.99	20607.97794	0.15031	0.10018	0.14607	0.10368	3.92E-04	3.53E-07	2.05E-07	3.43E-07	2.04E-07	3.9283E-04
520661.58	4258284.79	20584.51992	0.12084	0.14186	0.11942	0.14794	3.91E-04	2.84E-07	2.91E-07	2.80E-07	2.91E-07	3.9242E-04
520178.51	4258132.63	20567.69602	0.16438	2.75241	0.16468	3.09419	3.91E-04	3.86E-07	5.64E-06	3.87E-07	6.09E-06	4.0346E-04
520656.22	4258872.46	20566.31483	0.14828	0.10047	0.14407	0.10394	3.91E-04	3.48E-07	2.06E-07	3.38E-07	2.05E-07	3.9203E-04
520054.26	4258347.01	20563.43368	0.25083	10.03674	0.26679	6.94661	3.91E-04	5.89E-07	2.06E-05	6.26E-07	1.37E-05	4.2635E-04
519911.14	4258789.3	20557.36981	0.46546	0.46481	0.50223	0.44693	3.91E-04	1.09E-06	9.53E-07	1.18E-06	8.80E-07	3.9486E-04
520660.79	4258236.77	20553.36257	0.11801	0.14477	0.11659	0.15013	3.91E-04	2.77E-07	2.97E-07	2.74E-07	2.96E-07	3.9183E-04
520139.2	4258182.5	20542.31207	0.17807	5.05349	0.17933	5.83902	3.90E-04	4.18E-07	1.04E-05	4.21E-07	1.15E-05	4.1317E-04
519901.03	4258861.38	20528.6378	0.48836	0.36049	0.52475	0.34896	3.90E-04	1.15E-06	7.39E-07	1.23E-06	6.87E-07	3.9402E-04
519969.89	4258618.62	20527.1137	0.5065	1.15231	0.57411	1.0773	3.90E-04	1.19E-06	2.36E-06	1.35E-06	2.12E-06	3.9720E-04
520659.79	4258863.92	20521.40625	0.14625	0.10076	0.14209	0.10419	3.90E-04	3.43E-07	2.07E-07	3.34E-07	2.05E-07	3.9116E-04
520032.97	4258449.47	20520.88354	0.37658	4.61742	0.40539	3.75703	3.90E-04	8.84E-07	9.47E-06	9.52E-07	7.40E-06	4.0877E-04
519901.96	4258935.97	20515.18549	0.55024	0.2883	0.59299	0.28306	3.90E-04	1.29E-06	5.91E-07	1.39E-06	5.57E-07	3.9379E-04
520681.28	4258692.9	20497.21156	0.1294	0.1147	0.1251	0.11832	3.90E-04	3.04E-07	2.35E-07	2.94E-07	2.33E-07	3.9068E-04
520095.34	4259240.66	20471.17866	11.68977	0.17698	11.17173	0.16766	3.89E-04	2.74E-05	3.63E-07	2.62E-05	3.30E-07	4.4348E-04
520663.37	4258855.39	20466.87288	0.14423	0.10117	0.14016	0.10453	3.89E-04	3.39E-07	2.07E-07	3.29E-07	2.06E-07	3.9012E-04
519957.12	4258646.05	20452.06007	0.48759	0.95035	0.54413	0.89559	3.89E-04	1.14E-06	1.95E-06	1.28E-06	1.76E-06	3.9489E-04
520662.19	4258247.38	20451.52988	0.11831	0.14362	0.11697	0.14906	3.89E-04	2.78E-07	2.95E-07	2.75E-07	2.93E-07	3.8989E-04
520681.67	4258787.72	20445.50447	0.13334	0.10498	0.12925	0.10828	3.89E-04	3.13E-07	2.15E-07	3.03E-07	2.13E-07	3.8968E-04
520660.35	4258359.17	20434.42235	0.12545	0.13905	0.12243	0.14516	3.88E-04	2.95E-07	2.85E-07	2.87E-07	2.86E-07	3.8957E-04
520621.22	4258959.3	20428.11653	0.16897	0.09671	0.16369	0.10054	3.88E-04	3.97E-07	1.98E-07	3.84E-07	1.98E-07	3.8948E-04
520684.24	4258709.77	20414.33128	0.12899	0.11225	0.12496	0.11591	3.88E-04	3.03E-07	2.30E-07	2.93E-07	2.28E-07	3.8909E-04
520168.69	4258142.6	20410.62146	0.16638	3.13997	0.16664	3.54552	3.88E-04	3.91E-07	6.44E-06	3.91E-07	6.98E-06	4.0217E-04
519914.12	4258772.38	20409.17189	0.45995	0.49531	0.49751	0.47577	3.88E-04	1.08E-06	1.02E-06	1.17E-06	9.37E-07	3.9214E-04
520666.94	4258846.85	20404.50429	0.14222	0.10154	0.13824	0.10483	3.88E-04	3.34E-07	2.08E-07	3.25E-07	2.06E-07	3.8893E-04
520685.86	4258753.78	20393.37171	0.13023	0.10727	0.12624	0.11094	3.88E-04	3.06E-07	2.20E-07	2.96E-07	2.18E-07	3.8868E-04
520633.34	4258934.27	20378.36431	0.16171	0.0973	0.15689	0.10105	3.87E-04	3.80E-07	2.00E-07	3.68E-07	1.99E-07	3.8850E-04
520099.86	4258242.38	20345.04431	0.19768	14.70342	0.20406	15.68575	3.87E-04	4.64E-07	3.02E-05	4.79E-07	3.09E-05	4.4870E-04
520670.51	4258838.32	20324.96019	0.14026	0.10185	0.13632	0.10507	3.86E-04	3.29E-07	2.09E-07	3.20E-07	2.07E-07	3.8741E-04
520663.69	4258258.03	20317.88214	0.11859	0.14235	0.11728	0.14792	3.86E-04	2.78E-07	2.92E-07	2.75E-07	2.91E-07	3.8734E-04
520686.59	4258728.1	20307.29609	0.12887	0.10963	0.12494	0.11336	3.86E-04	3.03E-07	2.25E-07	2.93E-07	2.23E-07	3.8705E-04
520644.69	4258473.28	20272.84284	0.13557	0.14025	0.13109	0.14671	3.85E-04	3.18E-07	2.88E-07	3.08E-07	2.89E-07	3.8655E-04
520656.79	4258401.56	20269.14633	0.12865	0.13867	0.1252	0.14474	3.85E-04	3.02E-07	2.84E-07	2.94E-07	2.85E-07	3.8645E-04
520045.38	4259209.92	20240.89581	5.87893	0.17626	8.07374	0.17164	3.85E-04	1.38E-05	3.61E-07	1.90E-05	3.38E-07	4.1820E-04
519934.53	4258701.03	20236.26888	0.4625	0.68657	0.50822	0.65358	3.85E-04	1.09E-06	1.41E-06	1.19E-06	1.29E-06	3.8963E-04
520664.33	4258317.88	20231.73792	0.12209	0.13872	0.11983	0.14508	3.85E-04	2.87E-07	2.85E-07	2.81E-07	2.86E-07	3.8571E-04
520674.09	4258829.78	20225.13151	0.13833	0.10209	0.13439	0.10525	3.84E-04	3.25E-07	2.09E-07	3.16E-07	2.07E-07	3.8550E-04
520158.87	4258152.57	20219.45916	0.16838	3.62397	0.16873	4.11477	3.84E-04	3.95E-07	7.43E-06	3.96E-07	8.10E-06	4.0066E-04
519897.68	4258901.52	20207.2529	0.50417	0.31645	0.54197	0.30835	3.84E-04	1.18E-06	6.49E-07	1.27E-06	6.07E-07	3.8782E-04
520665.05	4258293.92	20201.71223	0.12049	0.1396	0.1188	0.1458	3.84E-04	2.83E-07	2.86E-07	2.79E-07	2.87E-07	3.8513E-04
520129.38	4258192.47	20192.34757	0.17991	6.17362	0.18191	7.18863	3.84E-04	4.22E-07	1.27E-05	4.27E-07	1.42E-05	4.1148E-04
519897.83	4258877.77	20183.31123	0.48662	0.33987	0.52244	0.32976	3.84E-04	1.14E-06	6.97E-07	1.23E-06	6.49E-07	3.8736E-04
520685.27	4258779.13	20174.96377	0.13145	0.1049	0.12741	0.10827	3.83E-04	3.09E-07	2.15E-07	2.99E-07	2.13E-07	3.8453E-04
520647.97	4258456	20148.48562	0.13382	0.1396	0.1297	0.14606	3.83E-04	3.14E-07	2.86E-07	3.04E-07	2.88E-07	3.8418E-04
519898.22	4258926.94	20144.90772	0.52489	0.29366	0.56462	0.28764	3.83E-04	1.23E-06	6.02E-07	1.33E-06	5.66E-07	3.8664E-04
519903.47	4258819.03	20139.85292	0.46024	0.41248	0.49486	0.39744	3.83E-04	1.08E-06	8.46E-07	1.16E-06	7.82E-07	3.8669E-04
520660.23	4258384.72	20136.6087	0.12676	0.13798	0.12343	0.14396	3.83E-04	2.98E-07	2.83E-07	2.90E-07	2.83E-07	3.8391E-04
519906.4	4258801.98	20136.39137	0.45643	0.43863	0.49142	0.4222	3.83E-04	1.07E-06	9.00E-07	1.15E-06	8.31E-07	3.8671E-04
520055.71	4259219.9	20133.91703	8.47172	0.17521	14.95748	0.16973	3.83E-04	1.99E-05	3.59E-07	3.51E-05	3.34E-07	4.3841E-04
520663.98	4258342.85	20127.78447	0.1235	0.13802	0.12071	0.14418	3.83E-04	2.90E-07	2.83E-07	2.83E-07	2.84E-07	3.8373E-04
520631.41	4258945.07	20117.60027	0.16289	0.09636	0.15793	0.10011	3.82E-04	3.82E-07	1.98E-07	3.71E-07	1.97E-07	3.8355E-04
520109.71	4258222.41	20117.44065	0.18949	10.29732	0.19397	11.94461	3.82E-04	4.45E-07	2.11E-05	4.55E-07	2.35E-05	4.2793E-04
520677.66	4258821.25	20110.51796	0.13641	0.10221	0.13245	0.10533	3.82E-04	3.20E-07	2.10E-07	3.11E-07	2.07E-07	3.8331E-04
520085.44	4259240.68	20108.86279	15.71945	0.17473	17.48792	0.16646	3.82E-04	3.69E-05	3.58E-07	4.11E-05	3.28E-07	4.6088E-04
519917	4258755.21	20105.52742	0.45214	0.52833	0.49067	0.50683	3.82E-04	1.06E-06	1.08E-06	1.15E-06	9.98E-07	3.8646E-04
520048.31	4258359.46	20097.79486	0.25715	7.71063	0.27305	5.78155	3.82E-04	6.04E-07	1.58E-05	6.41E-07	1.14E-05	4.1046E-04
520064.3	4258312.91	20084.78507	0.22726	19.23788	0.24096	9.97406	3.82E-04	5.34E-07	3.95E-05	5.66E-07	1.96E-05	4.4196E-04
519925.29	4258726.96	20081.78069	0.45375	0.60104	0.4966	0.57417	3.82E-04	1.07E-06	1.23E-06	1.17E-06	1.13E-06	3.8631E-04
519900.44	4258835.85	20035.39242	0.46233	0.38824	0.49652	0.3746	3.81E-04	1.09E-06	7.96E-07	1.17E-06	7.37E-07	3.8462E-04
520019.44	4258511.74	20029.22996	0.50527	3.15246	0.56563	2.67421	3.81E-04	1.19E-06	6.47E-06	1.33E-06	5.26E-06	3.9496E-04
520689.48	4258745.13	20026.33313	0.12845	0.10726	0.12461	0.11092	3.81E-04	3.02E-07	2.20E-07	2.93E-07	2.18E-07	3.8170E-04
520149.05	4258162.53	20000.16386	0.17037	4.24204	0.17096	4.858	3.80E-04	4.00E-07	8.70E-06	4.01E-07	9.56E-06	3.9923E-04

520664.31	4258208.23	19999.23357	0.11534	0.14378	0.11374	0.14911	3.80E-04	2.71E-07	2.95E-07	2.67E-07	2.94E-07	3.8128E-04
520681.23	4258812.71	19969.67304	0.13453	0.1024	0.13058	0.10549	3.80E-04	3.16E-07	2.10E-07	3.07E-07	2.08E-07	3.8063E-04
520054.84	4258336.79	19963.55788	0.24036	10.30052	0.25539	7.09594	3.79E-04	5.64E-07	2.11E-05	6.00E-07	1.40E-05	4.1573E-04
520665.72	4258218.85	19938.13237	0.11563	0.1429	0.11405	0.14813	3.79E-04	2.71E-07	2.93E-07	2.68E-07	2.92E-07	3.8011E-04
520663.76	4258368.13	19929.14063	0.12484	0.13717	0.12166	0.1431	3.79E-04	2.93E-07	2.81E-07	2.86E-07	2.82E-07	3.7996E-04
520684.84	4258684.41	19907.5946	0.1277	0.11448	0.12338	0.11801	3.78E-04	3.00E-07	2.35E-07	2.90E-07	2.32E-07	3.7946E-04
520095.36	4259250.66	19905.24901	11.69115	0.17304	11.0871	0.16403	3.78E-04	2.74E-05	3.55E-07	2.60E-05	3.23E-07	4.3252E-04
520688.87	4258770.54	19893.29917	0.12963	0.1048	0.12567	0.10825	3.78E-04	3.04E-07	2.15E-07	2.95E-07	2.13E-07	3.7916E-04
520687.77	4258701.33	19892.43439	0.12729	0.11218	0.12329	0.1157	3.78E-04	2.99E-07	2.30E-07	2.89E-07	2.28E-07	3.7917E-04
519947.12	4258664.6	19862.53455	0.46604	0.83188	0.51656	0.78703	3.78E-04	1.09E-06	1.71E-06	1.21E-06	1.55E-06	3.8311E-04
520667.24	4258229.51	19859.70174	0.11593	0.14183	0.11439	0.14707	3.77E-04	2.72E-07	2.91E-07	2.69E-07	2.90E-07	3.7862E-04
520188.36	4258112.66	19854.56096	0.15745	2.43901	0.15771	2.72446	3.77E-04	3.70E-07	5.00E-06	3.70E-07	5.36E-06	3.8850E-04
519897.34	4258852.47	19849.95687	0.4632	0.36565	0.49644	0.35352	3.77E-04	1.09E-06	7.50E-07	1.17E-06	6.96E-07	3.8101E-04
520690.24	4258719.38	19839.74301	0.12712	0.10958	0.12327	0.1132	3.77E-04	2.98E-07	2.25E-07	2.89E-07	2.23E-07	3.7815E-04
520629.9	4258955.7	19822.08149	0.16379	0.09537	0.15868	0.09911	3.77E-04	3.85E-07	1.96E-07	3.73E-07	1.95E-07	3.7793E-04
520668.53	4258303.05	19804.98978	0.12007	0.13738	0.11808	0.14362	3.76E-04	2.82E-07	2.82E-07	2.77E-07	2.83E-07	3.7758E-04
520684.81	4258804.18	19796.43829	0.13266	0.1025	0.12873	0.1056	3.76E-04	3.11E-07	2.10E-07	3.02E-07	2.08E-07	3.7733E-04
520668.77	4258277.8	19796.2655	0.11849	0.13874	0.11699	0.14463	3.76E-04	2.78E-07	2.85E-07	2.75E-07	2.85E-07	3.7741E-04
520119.56	4258202.44	19792.77796	0.18156	7.79141	0.18451	9.1313	3.76E-04	4.26E-07	1.60E-05	4.33E-07	1.80E-05	4.1104E-04
520178.54	4258122.63	19770.45398	0.15945	2.75337	0.15947	3.09617	3.76E-04	3.74E-07	5.65E-06	3.74E-07	6.09E-06	3.8829E-04
520645.39	4258922.27	19752.40743	0.15491	0.09637	0.15038	0.09995	3.75E-04	3.64E-07	1.98E-07	3.53E-07	1.97E-07	3.7657E-04
520648.94	4258913.78	19746.26371	0.15291	0.09672	0.14849	0.10026	3.75E-04	3.59E-07	1.98E-07	3.49E-07	1.97E-07	3.7644E-04
519894.48	4258917.91	19738.25108	0.50055	0.29893	0.53727	0.2921	3.75E-04	1.18E-06	6.13E-07	1.26E-06	5.75E-07	3.7881E-04
520652.49	4258905.3	19732.55642	0.15093	0.09708	0.14661	0.10057	3.75E-04	3.54E-07	1.99E-07	3.44E-07	1.98E-07	3.7618E-04
520139.23	4258172.5	19732.20315	0.17226	5.05745	0.1733	5.84905	3.75E-04	4.04E-07	1.04E-05	4.07E-07	1.15E-05	3.9777E-04
520045.81	4259219.92	19730.08532	5.98326	0.17245	8.27515	0.16793	3.75E-04	1.40E-05	3.54E-07	1.94E-05	3.31E-07	4.0919E-04
520036.34	4258404.35	19727.09991	0.29839	5.13151	0.31683	4.15242	3.75E-04	7.01E-07	1.05E-05	7.44E-07	8.17E-06	3.9512E-04
520656.04	4258896.82	19713.73734	0.14895	0.09744	0.14472	0.10088	3.75E-04	3.50E-07	2.00E-07	3.40E-07	1.99E-07	3.7581E-04
520648.13	4258482.3	19711.298	0.13454	0.13846	0.12989	0.14472	3.75E-04	3.16E-07	2.84E-07	3.05E-07	2.85E-07	3.7587E-04
519893.91	4258892.43	19695.57417	0.47962	0.32181	0.5143	0.31289	3.74E-04	1.13E-06	6.60E-07	1.21E-06	6.16E-07	3.7799E-04
520659.59	4258888.33	19689.24808	0.14699	0.0978	0.14285	0.10119	3.74E-04	3.45E-07	2.01E-07	3.35E-07	1.99E-07	3.7534E-04
520669.52	4258240.5	19683.25469	0.11605	0.14026	0.11455	0.14559	3.74E-04	2.72E-07	2.88E-07	2.69E-07	2.87E-07	3.7526E-04
520684.89	4258674.93	19668.31814	0.12727	0.11517	0.1228	0.11872	3.74E-04	2.99E-07	2.36E-07	2.88E-07	2.34E-07	3.7492E-04
520667.37	4258351.74	19666.19584	0.12293	0.13621	0.11993	0.14216	3.74E-04	2.89E-07	2.79E-07	2.82E-07	2.80E-07	3.7495E-04
520663.15	4258879.85	19659.28056	0.14502	0.09816	0.14099	0.1015	3.74E-04	3.40E-07	2.01E-07	3.31E-07	2.00E-07	3.7476E-04
520660.26	4258410.69	19636.75726	0.12787	0.13671	0.12435	0.14269	3.73E-04	3.00E-07	2.80E-07	2.92E-07	2.81E-07	3.7441E-04
520693.1	4258736.48	19632.33065	0.1267	0.10724	0.12299	0.11084	3.73E-04	2.97E-07	2.20E-07	2.89E-07	2.18E-07	3.7420E-04
520168.72	4258132.6	19625.39065	0.16133	3.1407	0.16133	3.55034	3.73E-04	3.79E-07	6.44E-06	3.79E-07	6.99E-06	3.8723E-04
520692.46	4258761.95	19623.05703	0.12792	0.10477	0.12407	0.10827	3.73E-04	3.00E-07	2.15E-07	2.91E-07	2.13E-07	3.7402E-04
520666.7	4258871.37	19612.97495	0.14311	0.0984	0.13909	0.10171	3.73E-04	3.36E-07	2.02E-07	3.27E-07	2.00E-07	3.7387E-04
520055.72	4259229.9	19602.9869	8.55555	0.17129	15.13791	0.16599	3.73E-04	2.01E-05	3.51E-07	3.55E-05	3.27E-07	4.2892E-04
519919.76	4258737.74	19592.64565	0.44084	0.56397	0.48107	0.53973	3.72E-04	1.03E-06	1.16E-06	1.13E-06	1.06E-06	3.7680E-04
520688.38	4258795.64	19592.12583	0.13082	0.10252	0.1269	0.10565	3.72E-04	3.07E-07	2.10E-07	2.98E-07	2.08E-07	3.7343E-04
519894.16	4258868.92	19585.11416	0.46259	0.3449	0.4953	0.33414	3.72E-04	1.09E-06	7.07E-07	1.16E-06	6.58E-07	3.7589E-04
520670.25	4258862.89	19565.61031	0.1412	0.09873	0.13724	0.10199	3.72E-04	3.31E-07	2.02E-07	3.22E-07	2.01E-07	3.7296E-04
520663.67	4258393.76	19564.01361	0.12606	0.13604	0.12264	0.14192	3.72E-04	2.96E-07	2.79E-07	2.88E-07	2.79E-07	3.7302E-04
520085.46	4259250.68	19563.18816	15.66186	0.17087	17.2853	0.16287	3.72E-04	3.68E-05	3.50E-07	4.06E-05	3.21E-07	4.4988E-04
520099.89	4258232.38	19556.62523	0.19058	14.7417	0.19647	15.88256	3.72E-04	4.47E-07	3.02E-05	4.61E-07	3.13E-05	4.3414E-04
520670.97	4258251.13	19553.14054	0.11631	0.13909	0.11486	0.14453	3.72E-04	2.73E-07	2.85E-07	2.70E-07	2.85E-07	3.7278E-04
520037.55	4258393.86	19538.64378	0.28501	5.32387	0.30216	4.28954	3.71E-04	6.69E-07	1.09E-05	7.09E-07	8.44E-06	3.9214E-04
520651.36	4258464.93	19528.33809	0.13286	0.13779	0.12857	0.1441	3.71E-04	3.12E-07	2.83E-07	3.02E-07	2.84E-07	3.7238E-04
520673.8	4258854.4	19509.32005	0.13929	0.09907	0.13541	0.10227	3.71E-04	3.27E-07	2.03E-07	3.18E-07	2.01E-07	3.7189E-04
519907.47	4258780.46	19505.3606	0.43782	0.46825	0.47147	0.45066	3.71E-04	1.03E-06	9.60E-07	1.11E-06	8.87E-07	3.7474E-04
520640.15	4258941.45	19496.06371	0.15792	0.09506	0.15313	0.0987	3.71E-04	3.71E-07	1.95E-07	3.60E-07	1.94E-07	3.7170E-04
520033.64	4258415.45	19491.94429	0.31093	4.74342	0.33078	3.87537	3.71E-04	7.30E-07	9.73E-06	7.77E-07	7.63E-06	3.8937E-04
519928.13	4258709.69	19453.45345	0.44275	0.64164	0.48445	0.61235	3.70E-04	1.04E-06	1.32E-06	1.14E-06	1.21E-06	3.7447E-04
520677.35	4258845.92	19441.29684	0.13742	0.09936	0.13358	0.10249	3.70E-04	3.23E-07	2.04E-07	3.14E-07	2.02E-07	3.7059E-04
520158.9	4258142.57	19433.11661	0.16316	3.62597	0.1633	4.11823	3.69E-04	3.83E-07	7.44E-06	3.83E-07	8.11E-06	3.8570E-04
520672.21	4258286.85	19430.20256	0.11812	0.13654	0.1164	0.14255	3.69E-04	2.77E-07	2.80E-07	2.73E-07	2.81E-07	3.7044E-04
520684.94	4258665.44	19424.75725	0.12689	0.11597	0.12232	0.11957	3.69E-04	2.98E-07	2.38E-07	2.87E-07	2.35E-07	3.7029E-04
520658.19	4258431.12	19419.22395	0.12936	0.13651	0.12564	0.14263	3.69E-04	3.04E-07	2.80E-07	2.95E-07	2.81E-07	3.7028E-04
520667.17	4258377.09	19411.3212	0.1242	0.13531	0.1209	0.1411	3.69E-04	2.92E-07	2.78E-07	2.84E-07	2.78E-07	3.7010E-04
520129.41	4258182.47	19395.00844	0.17393	6.18218	0.17573	7.19121	3.69E-04	4.08E-07	1.27E-05	4.13E-07	1.42E-05	3.9632E-04
520064.6	4258302.8	19394.15944	0.21821	19.6311	0.23109	10.05715	3.69E-04	5.12E-07	4.03E-05	5.43E-07	1.98E-05	4.2976E-04
520672	4258312.17	19392.08647	0.11961	0.13532	0.11731	0.1415	3.69E-04	2.81E-07	2.78E-07	2.75E-07	2.79E-07	3.6972E-04
520691.95	4258787.11	19390.06791	0.12906	0.10254	0.12519	0.10572	3.69E-04	3.03E-07	2.10E-07	2.94E-07	2.08E-07	3.6959E-04
520055.34	4258326.6	19367.21491	0.23057	10.52954	0.24474	7.22773	3.68E-04	5.41E-07	2.16E-05	5.75E-07	1.42E-05	4.0507E-04
520671.05	4258335.53	19361.86318	0.12102	0.13516	0.11827	0.14115	3.68E-04	2.84E-07	2.77E-07	2.78E-07	2.78E-07	3.6915E-04
520680.9	4258837.44	19359.72192	0.13557	0.09961	0.13176	0.10268	3.68E-04	3.18E-07	2.04E-07	3.09E-07	2.02E-07	3.6903E-04
520095.38	4259260.66	19358.52312	11.70573	0.16925	10.99748	0.16052	3.68E-04	2.75E-05	3.47E-07	2.58E-05	3.16E-07	4.2193E-04
520691.3	4258692.9	19354.67302	0.12565	0.11199	0.12163	0.1154	3.68E-04	2.95E-07	2.30E-07	2.86E-07	2.27E-07	3.6893E-04
520693.89	4258710.67	19351.05602	0.1254	0.10958	0.12162	0.11305	3.68E-04	2.94E-07	2.25E-07	2.86E-07	2.23E-07	3.6886E-04
520109.74	4258212.41	19336.88921	0.18292	10.31592	0.18703	12.0048	3.68E-04	4.29E-07	2.12E-05	4.39E-07	2.36E-05	4.1322E-04
520009.52	4258531.17	19329.75075	0.51618	2.49318	0.58698	2.17029	3.67E-04	1.21E-06	5.11E-06	1.38E-06	4.27E-06	3.7940E-04
519957.12	4258636.77	19323.0011	0.46813	0.96858	0.52212	0.91391	3.67E-04	1.10E-06	1.99E-06	1.23E-06	1.80E-06	3.7341E-04
520696.06	4258753.36	19322.50101	0.12624	0.10479	0.12253	0.10831	3.67E-04	2.96E-07	2.15E-07	2.88E-07	2.13E-07	3.6830E-04
519890.73	4258908.88	19293.22798	0.47707	0.30406	0.51097	0.29643	3.67E-04	1.12E-06	6.24E-07	1.20E-06	5.84E-07	3.7026E-04
520684.46	4258828.95	19261.73554	0.13373	0.09984	0.12994	0.10285	3.66E-04	3.14E-07	2.05E-07	3.05E-07	2.02E-07	3.6716E-04
519937.12	4258683.15	19248.48916	0.44561	0.73301	0.49006	0.69676	3.66E-04	1.05E-06	1.50E-06	1.15E-06	1.37E-06	3.7095E-04
519910.42	4258763.46	19246.14786	0.43124	0.49829	0.46591	0.47901	3.66E-04	1.01E-06	1.02E-06	1.09E-06	9.43E-07	3.6991E-04
519899.71	4258809.97	19244.22131	0.43426	0.41646	0.4656	0.40152	3.66E-04	1.02E-06	8.54E-07	1.09E-06	7.90E-07	3.6955E-04
520038.53	4258383.47	19238.82263	0.27226	5.48569	0.28829	4.40686	3.66E-04	6.39E-07	1.13E-05	6.77E-07	8.67E-06	3.8694E-04
519896.72	4258826.87	19233.91479	0.43731	0.39258	0.46844	0.37879	3.66E-04	1.03E-06	8.05E-07	1.10E-06	7.46E-07	3.6928E-04
520638.58	4258952.11	19229.02908	0.15881	0.09413	0.15389	0.09776	3.66E-04	3.73E-07	1.93E-07	3.61E-07	1.92E-07	3.6663E-04
520045.82	4259229.92	19219.90283	6.01483	0.16865	8.32552	0.16426	3.65E-04	1.41E-05	3.46E-07	1.95E-05	3.23E-07	3.9967E-04
520149.08	4258152.53	19215.42744	0.16497	4.24599	0.1654	4.85748	3.65E-04	3.87E-07	8.71E-06	3.88E-07	9.56E-06	3.8430E-04
520696.73	4258727.83	19212.1974	0.12501	0.10715	0.12138	0.11068	3.65E-04	2.93E-07	2.20E-07	2.85E-07	2.18E-07	3.6621E-04
520670.75	4258360.62	19200.19455	0.12234	0.13442	0.11918	0.14019	3.65E-04	2.87E-07	2.76E-07	2.80E-07	2.76E-07	3.6608E-04
520673.17	4258212.02	19169.57905	0.11336	0.13953	0.1117	0.1446	3.64E-04	2.66E-07	2.86E-07	2.62E-07	2.85E-07	3.6548E-04
519969.85	4258608.92	19151.39117	0.48405	1.1755	0.54914	1.09825	3.64E-04	1.14E-06	2.41E-06	1.29E-06	2.16E-06	3.7103E-04
520685	4258655.96	19145.55574	0.12649	0.11671	0.12184	0.12039	3.64E-04	2.97E-07	2.39E-07	2.86E-07	2.37E-07	3.6498E-04
519890.13	4258883.33	19145.14707	0.45602	0.32685	0.48771	0.31722	3.64E-04	1.07E-06	6.70E-07	1.14E-06	6.24E-07	3.6742E-04
519979.77	4258589.48	19142.73486	0.49963	1.387	0.57406	1.27613	3.64E-04	1.17E-06	2.84E-06	1.35E-06	2.51E-06	3.7175E-04
519902.61	4258792.84	19141.82873	0.42954	0.44217	0.4612	0.42607	3.64E-04	1.01E-06	9.07E-07	1.08E-06	8.39E-07	3.6769E-04
520695.53	4258778.57	19141.16317	0.1273	0.10246	0.1235	0.10572	3.64E-04	2.99E-07	2.10E-07	2.90E-07	2.08E-07	3.6485E-04
520688.01	4258820.47	19134.31536	0.13191	0.1	0.12813	0.10298	3.64E-04	3.10E-07	2.05E-07	3.01E-07	2.03E-07	3.6473E-04
519893.64	4258843.56	19134.30818	0.43909	0.37023	0.46953	0.35773	3.64E-04	1.03E-06	7.59E-07	1.10E-06	7.04E-07	3.6731E-04
519999.61	4258550.61	19101.93836	0.51793	2.01437	0.59321	1.79191	3.63E-04	1.22E-06	4.13E-06	1.39E-06	3.53E-06	3.7336E-04
520055.74	4259239.9	19091.77945	8.60538	0.16754	15.38308	0.1624	3.63E-04	2.02E-05	3.44E-07	3.61E-05	3.20E-07	4.1988E-04
520674.64	4258222.66	19087.97445	0.11364	0.13856	0.11202	0.14362	3.63E-04	2.67E-07	2.84E-07	2.63E-07	2.83E-07	3.6392E-04
519989.69	4258570.05	19084.88471	0.51192	1.65962	0.58831	1.50242	3.63E-04	1.20E-06	3.40E-06	1.38E-06	2.96E-06	3.7171E-04
520675.95	4258270.8	19050.94863	0.11619	0.13568	0.11463	0.1414	3.62E-04	2.73E-07	2.78E-07	2.69E-07	2.78E-07	3.6322E-04
520675.66	4258295.9	19048.73604	0.11771	0.13437	0.11572	0.14043	3.62E-04	2.76E-07	2.76E-07	2.72E-07	2.76E-07	3.6318E-04
520019.4	4258502.04	19045.97721	0.47115	3.18109	0.52164	2.70255	3.62E-04	1.11E-06	6.52E-06	1.22E-06	5.32E-06	3.7620E-04
520085.48	4259260.68	19035.45382	15.64757	0.16714	17.07409	0.15939	3.62E-04	3.67E-05	3.43E-07	4.01E-05	3.14E-07	4.3931E-04
520026.15	4258466.06	19029.41185	0.39509	3.83016	0.42781	3.19431	3.62E-04	9.28E-07	7.86E-06	1.00E-06	6.29E-06	3.7779E-04
520663.74	4258419.81	19012.33298	0.12708	0.13473	0.12347	0.14067	3.61E-04	2.98E-07	2.76E-07	2.90E-07	2.77E-07	3.6253E-04
520119.59	4258192.44	19006.37974	0.17539	7.81034	0.17817	9.08187	3.61E-04	4.12E-07	1.60E-05	4.18E-07	1.79E-05	3.9600E-04
520178.57	4258112.63	19004.65954	0.1547	2.75524	0.15453	3.09456	3.61E-04	3.63E-07	5.65E-06	3.63E-07	6.09E-06	3.7371E-04
520676.22	4258233.35	19001.07453	0.11395	0.13731	0.11234	0.14251	3.61E-04	2.68E-07	2.82E-07	2.64E-07	2.81E-07	3.6227E-04
520691.56	4258811.99	18987.37156	0.13013	0.10014	0.12636	0.1031	3.61E-04	3.06E-07	2.05E-07	2.97E-07	2.03E-07	3.6193E-04
520667.11	4258402.8	18983.26977	0.12532	0.13415	0.12184	0.13994	3.61E-04	2.94E-07	2.75E-07	2.86E-07	2.75E-07	3.6197E-04
520029.38	4258433.94	18978.01154	0.33424	4.21109	0.35718	3.49151	3.61E-04	7.85E-07	8.64E-06	8.39E-07	6.87E-06	3.7787E-04
520699.66	4258744.77	18972.29863	0.12455	0.10481	0.12099	0.10829	3.61E-04	2.92E-07	2.15E-07	2.84E-07	2.13E-07	3.6163E-04
520654.76	4258473.85	18960.98497	0.13187	0.13605	0.12743	0.14219	3.60E-04	3.10E-07	2.79E-07	2.99E-07	2.80E-07	3.6158E-04
520139.26	4258162.5	18960.71709	0.16672	5.06368	0.16762	5.8466	3.60E-04	3.91E-07	1.04E-05	3.94E-07	1.15E-05	3.8309E-04
519890.49	4258860.07	18953.33508	0.43956	0.3495	0.46941	0.33826	3.60E-04	1.03E-06	7.17E-07	1.10E-06	6.66E-07	3.6379E-04
520045.38	4258350.68	18937.74456	0.24313	6.88366	0.25759	5.31291	3.60E-04	5.71E-07	1.41E-05	6.05E-07	1.05E-05	3.8572E-04
520674.4	4258344.35	18935.74323	0.12047	0.13343	0.11752	0.13922	3.60E-04	2.83E-07	2.74E-07	2.76E-07	2.74E-07	3.6104E-04
520652.54	4258929.11	18890.85357	0.15118	0.09415	0.14668	0.09763	3.59E-04	3.55E-07	1.93E-07	3.44E-07	1.92E-07	3.6017E-04
520670.58	4258386.05	18886.16444	0.12353	0.13347	0.12015	0.13914	3.59E-04	2.90E-07	2.74E-07	2.82E-07	2.74E-07	3.6011E-04
520656.2	4258920.38	18882.56718	0.14921	0.09448	0.14483	0.09791	3.59E-04	3.50E-07	1.94E-07	3.40E-07	1.93E-07	3.6000E-04
520699.1	4258770.04	18880.56364	0.12561	0.10238	0.12189	0.10571	3.59E-04	2.95E-07	2.10E-07	2.86E-07	2.08E-07	3.5988E-04
520168.75	4258122.6	18879.40497	0.15652	3.1416	0.15629	3.55243	3.59E-04	3.67E-07	6.44E-06	3.67E-07	6.99E-06	3.7303E-04
519947.12	4258655.32	18873.88321	0.44857	0.84872	0.49621	0.80389	3.59E-04	1.05E-06	1.74E-06	1.16E-06	1.58E-06	3.6430E-04
520659.85	4258911.66	18868.32107	0.14726	0.09483	0.14299	0.09821	3.59E-04	3.46E-07	1.94E-07	3.36E-07	1.93E-07	3.5972E-04
520039.34	4258373.15	18866.58445	0.2603	5.62352	0.27536	4.506	3.59E-04	6.11E-07	1.15E-05	6.46E-07	8.87E-06	3.8028E-04
520663.5	4258902.93	18848.38071	0.14533	0.09518	0.14115	0.09851	3.58E-04	3.41E-07	1.95E-07	3.31E-07	1.94E-07	3.5934E-04
520658.09	4258456.72	18847.87469	0.13022	0.13531	0.1261	0.14147	3.58E-04	3.06E-07	2.78E-07	2.96E-07	2.78E-07	3.5942E-04
520685.05	4258646.48	18847.50972	0.12611	0.11731	0.1214	0.12111	3.58E-04	2.96E-07	2.41E-07	2.85E-07	2.38E-07	3.5932E-04
520697.54	4258701.95	18843.71066	0.12373	0.10948	0.11997	0.11281	3.58E-04	2.90E-07	2.25E-07	2.82E-07	2.22E-07	3.5920E-04
520099.92	4258222.38	18823.11626	0.18393	14.77425	0.18935	16.12868	3.58E-04	4.32E-07	3.03E-05	4.45E-07	3.17E-05	4.2072E-04
520695.11	4258803.51	18822.46452	0.12838	0.10022	0.12463	0.10319	3.58E-04	3.01E-07	2.06E-07	2.93E-07	2.03E-07	3.5878E-04
520678.24	4258244.23	18822.1073	0.11408	0.13592	0.11251	0.14121	3.58E-04	2.68E-07	2.79E-07	2.64E-07	2.78E-07	3.5886E-04
520667.16	4258894.21	18821.67527	0.14339	0.09554	0.13932	0.09882	3.58E-04	3.37E-07	1.96E-07	3.27E-07	1.95E-07	3.5882E-04
519886.99	4258899.85	18814.42376	0.45457	0.30896	0.4857	0.30059	3.58E-04	1.07E-06	6.34E-07	1.14E-06	5.92E-07	3.6106E-04
519913.27	4258746.2	18811.91833	0.42187	0.53069	0.45807	0.50911	3.58E-04	9.90E-07	1.09E-06	1.08E-06	1.00E-06	3.6174E-04
520661.53	4258439.88	18808.76278	0.12853	0.13462	0.12467	0.14069	3.58E-04	3.02E-07	2.76E-07	2.93E-07	2.77E-07	3.5867E-04
520694.84	4258684.46	18803.57535	0.12405	0.11171	0.11999	0.11504	3.57E-04	2.91E-07	2.29E-07	2.82E-07	2.26E-07	3.5845E-04
520670.81	4258885.48	18793.27012	0.14147	0.0959	0.1375	0.09913	3.57E-04	3.32E-07	1.97E-07	3.23E-07	1.95E-07	3.5827E-04
520055.77	4258316.43	18779.4655	0.2214	10.72754	0.2348	7.3244	3.57E-04	5.20E-07	2.20E-05	5.51E-07	1.44E-05	3.9445E-04
520700.35	4258719.18	18772.0444	0.12336	0.10709	0.1198	0.11049	3.57E-04	2.90E-07	2.20E-07	2.81E-07	2.17E-07	3.5783E-04
520674.46	4258876.76	18755.45101	0.13957	0.09623	0.13568	0.09942	3.57E-04	3.28E-07	1.97E-07	3.19E-07	1.96E-07	3.5755E-04
520045.84	4259239.92	18728.14155	6.03691	0.16501	8.39069	0.16073	3.56E-04	1.42E-05	3.38E-07	1.97E-05	3.16E-07	3.9051E-04
520096.39	4259273.23	18727.14007	11.41923	0.16484	10.49985	0.15637	3.56E-04	2.68E-05	3.38E-07	2.47E-05	3.08E-07	4.0807E-04
520674.14	4258369.51	18720.35024	0.12171	0.13267	0.11845	0.13828	3.56E-04	2.86E-07	2.72E-07	2.78E-07	2.72E-07	3.5695E-04
520678.12	4258868.03	18707.94563	0.1377	0.09649	0.13385	0.09963	3.56E-04	3.23E-07	1.98E-07	3.14E-07	1.96E-07	3.5664E-04
520158.93	4258132.57	18701.84298	0.15823	3.62666	0.15817	4.12419	3.55E-04	3.71E-07	7.44E-06	3.71E-07	8.12E-06	3.7179E-04
520679.37	4258279.79	18688.06887	0.1158	0.13366	0.11407	0.13946	3.55E-04	2.72E-07	2.74E-07	2.68E-07	2.75E-07	3.5631E-04
519921.65	4258718.2	18683.61573	0.4235	0.60123	0.46175	0.57501	3.55E-04	9.94E-07	1.23E-06	1.08E-06	1.13E-06	3.5959E-04
520679.11	4258304.95	18660.145	0.11725	0.13242	0.11499	0.13843	3.55E-04	2.75E-07	2.72E-07	2.70E-07	2.72E-07	3.5578E-04
520681.77	4258859.31	18654.70531	0.13583	0.09678	0.13204	0.09987	3.55E-04	3.19E-07	1.98E-07	3.10E-07	1.97E-07	3.5562E-04
520129.44	4258172.47	18650.06812	0.16829	6.18924	0.16991	7.19675	3.55E-04	3.95E-07	1.27E-05	3.99E-07	1.42E-05	3.8216E-04
520647.27	4258948.51	18649.24994	0.15403	0.09289	0.14926	0.09641	3.54E-04	3.62E-07	1.91E-07	3.50E-07	1.90E-07	3.5558E-04
520698.66	4258795.02	18646.01942	0.12668	0.10026	0.12297	0.10327	3.54E-04	2.97E-07	2.06E-07	2.89E-07	2.03E-07	3.5542E-04
520702.67	4258761.5	18637.92262	0.12403	0.10238	0.12043	0.10574	3.54E-04	2.91E-07	2.10E-07	2.83E-07	2.08E-07	3.5527E-04
519930.83	4258692.09	18614.72996	0.4288	0.68378	0.46909	0.65189	3.54E-04	1.01E-06	1.40E-06	1.10E-06	1.28E-06	3.5863E-04
520055.76	4259249.9	18598.98899	8.67635	0.16391	15.67614	0.15893	3.54E-04	2.04E-05	3.36E-07	3.68E-05	3.13E-07	4.1135E-04
520703.25	4258736.18	18598.78408	0.12291	0.10476	0.11947	0.10818	3.54E-04	2.89E-07	2.15E-07	2.80E-07	2.13E-07	3.5453E-04
520109.77	4258202.41	18591.45668	0.17669	10.34008	0.18053	11.96041	3.53E-04	4.15E-07	2.12E-05	4.24E-07	2.35E-05	3.9898E-04
520685.42	4258850.58	18591.14138	0.13399	0.09708	0.13025	0.10011	3.53E-04	3.15E-07	1.99E-07	3.06E-07	1.97E-07	3.5440E-04
520694.89	4258674.98	18581.8938	0.12368	0.11241	0.11948	0.11577	3.53E-04	2.90E-07	2.31E-07	2.81E-07	2.28E-07	3.5424E-04
519886.36	4258874.23	18561.12347	0.43345	0.3315	0.46234	0.3213	3.53E-04	1.02E-06	6.80E-07	1.09E-06	6.32E-07	3.5623E-04
520063.3	4258293.35	18540.01116	0.20891	17.35354	0.22096	9.65838	3.52E-04	4.90E-07	3.56E-05	5.19E-07	1.90E-05	4.0802E-04
520685.1	4258637	18535.43147	0.12575	0.11782	0.12101	0.12176	3.52E-04	2.95E-07	2.42E-07	2.84E-07	2.40E-07	3.5339E-04
520689.08	4258841.86	18513.72506	0.13216	0.09736	0.12847	0.10032	3.52E-04	3.10E-07	2.00E-07	3.02E-07	1.97E-07	3.5292E-04
520677.76	4258353.17	18509.62549	0.11992	0.1317	0.11679	0.13733	3.52E-04	2.82E-07	2.70E-07	2.74E-07	2.70E-07	3.5293E-04
520149.11	4258142.53	18500.32975	0.15995	4.24595	0.16016	4.8699	3.52E-04	3.76E-07	8.71E-06	3.76E-07	9.59E-06	3.7070E-04
520046.09	4258340.4	18481.49415	0.23329	7.05446	0.2471	5.41804	3.51E-04	5.48E-07	1.45E-05	5.80E-07	1.07E-05	3.7756E-04
520658.16	4258482.77	18461.68841	0.13091	0.13427	0.12629	0.14024	3.51E-04	3.07E-07	2.75E-07	2.96E-07	2.76E-07	3.5208E-04
520702.21	4258786.54	18447.03642	0.12503	0.10025	0.12137	0.10332	3.51E-04	2.94E-07	2.06E-07	2.85E-07	2.03E-07	3.5163E-04
519903.81	4258771.61	18436.69654	0.41163	0.47101	0.44292	0.45366	3.50E-04	9.66E-07	9.66E-07	1.04E-06	8.93E-07	3.5431E-04
520086.48	4259273.24	18430.47624	15.24018	0.16285	15.97494	0.15532	3.50E-04	3.58E-05	3.34E-07	3.75E-05	3.06E-07	4.2425E-04
520692.73	4258833.13	18422.24049	0.13036	0.09761	0.1267	0.1005	3.50E-04	3.06E-07	2.00E-07	2.97E-07	1.98E-07	3.5118E-04
519892.99	4258817.88	18407.50096	0.41357	0.39612	0.44178	0.38248	3.50E-04	9.71E-07	8.12E-07	1.04E-06	7.53E-07	3.5347E-04
520670.55	4258411.84	18405.14795	0.12457	0.13226	0.12102	0.138	3.50E-04	2.92E-07	2.71E-07	2.84E-07	2.72E-07	3.5097E-04
520667.21	4258428.94	18402.51112	0.12627	0.13278	0.12255	0.13868	3.50E-04	2.96E-07	2.72E-07	2.88E-07	2.73E-07	3.5093E-04
519889.95	4258834.65	18389.39655	0.4161	0.3742	0.44409	0.36154	3.50E-04	9.77E-07	7.67E-07	1.04E-06	7.12E-07	3.5305E-04
520022.73	4258474.35	18387.60803	0.40425	3.51081	0.43921	2.95493	3.50E-04	9.49E-07	7.20E-06	1.03E-06	5.82E-06	3.6451E-04
519937.12	4258673.87	18382.58803	0.42999	0.74884	0.47202	0.7122	3.49E-04	1.01E-06	1.54E-06	1.11E-06	1.40E-06	3.5448E-04
520682.02	4258215.81	18365.75859	0.11142	0.1354	0.10973	0.14029	3.49E-04	2.62E-07	2.78E-07	2.58E-07	2.76E-07	3.5017E-04
520673.99	4258395.01	18354.20031	0.12284	0.13165	0.1194	0.13724	3.49E-04	2.88E-07	2.70E-07	2.80E-07	2.70E-07	3.4999E-04
520019.36	4258492.34	18352.72355	0.44076	3.20558	0.48362	2.7269	3.49E-04	1.03E-06	6.57E-06	1.14E-06	5.37E-06	3.6296E-04
520683.14	4258263.81	18335.50879	0.11394	0.13276	0.11232	0.13828	3.49E-04	2.67E-07	2.72E-07	2.64E-07	2.72E-07	3.4960E-04
520694.94	4258665.5	18335.13734	0.12332	0.11306	0.11899	0.11648	3.49E-04	2.90E-07	2.32E-07	2.79E-07	2.29E-07	3.4955E-04
520682.8	4258288.77	18333.25251	0.1154	0.13162	0.11344	0.13747	3.48E-04	2.71E-07	2.70E-07	2.66E-07	2.71E-07	3.4956E-04
520706.25	4258752.97	18330.24585	0.12242	0.10241	0.11897	0.10577	3.48E-04	2.87E-07	2.10E-07	2.79E-07	2.08E-07	3.4941E-04
519895.96	4258800.91	18327.15598	0.40966	0.41968	0.43823	0.40504	3.48E-04	9.62E-07	8.61E-07	1.03E-06	7.97E-07	3.5201E-04
519882.82	4258922.25	18321.9331	0.45211	0.28683	0.48247	0.28003	3.48E-04	1.06E-06	5.88E-07	1.13E-06	5.51E-07	3.5160E-04
520701.19	4258693.24	18320.81424	0.12212	0.10925	0.11833	0.11249	3.48E-04	2.87E-07	2.24E-07	2.78E-07	2.21E-07	3.4926E-04

520703.97	4258710.53	18312.5041	0.12175	0.10699	0.11822	0.11027	3.48E-04	2.86E-07	2.19E-07	2.78E-07	2.17E-07	3.4909E-04
520696.38	4258824.41	18308.82451	0.12857	0.0978	0.12494	0.10064	3.48E-04	3.02E-07	2.01E-07	2.93E-07	1.98E-07	3.4901E-04
519883.24	4258890.82	18300.221	0.43293	0.31353	0.46139	0.30452	3.48E-04	1.02E-06	6.43E-07	1.08E-06	5.99E-07	3.5120E-04
519886.82	4258851.23	18291.13112	0.41751	0.35359	0.44481	0.34206	3.48E-04	9.80E-07	7.25E-07	1.04E-06	6.73E-07	3.5110E-04
520661.45	4258465.56	18290.79808	0.1293	0.13356	0.12502	0.1396	3.48E-04	3.04E-07	2.74E-07	2.94E-07	2.75E-07	3.4882E-04
520119.62	4258182.44	18287.18717	0.16965	7.82114	0.1722	9.09417	3.48E-04	3.98E-07	1.60E-05	4.04E-07	1.79E-05	3.8235E-04
520682.55	4258314.01	18274.5752	0.11676	0.13065	0.11424	0.13654	3.47E-04	2.74E-07	2.68E-07	2.68E-07	2.69E-07	3.4845E-04
520683.55	4258226.48	18268.65798	0.1117	0.13433	0.11004	0.13929	3.47E-04	2.62E-07	2.76E-07	2.58E-07	2.74E-07	3.4832E-04
520045.86	4259249.92	18251.50847	6.08114	0.16145	8.46322	0.1573	3.47E-04	1.43E-05	3.31E-07	1.99E-05	3.10E-07	3.8171E-04
519915.99	4258728.64	18247.41579	0.41155	0.56481	0.44756	0.54114	3.47E-04	9.66E-07	1.16E-06	1.05E-06	1.07E-06	3.5109E-04
520139.29	4258152.5	18239.59569	0.1615	5.06849	0.16225	5.84583	3.47E-04	3.79E-07	1.04E-05	3.81E-07	1.15E-05	3.6936E-04
520677.52	4258378.4	18236.01905	0.12107	0.13093	0.11773	0.13641	3.47E-04	2.84E-07	2.69E-07	2.76E-07	2.69E-07	3.4773E-04
520096.4	4259283.23	18232.80974	11.41462	0.16135	10.41881	0.15315	3.47E-04	2.68E-05	3.31E-07	2.45E-05	3.01E-07	3.9846E-04
520685.16	4258627.52	18213.75445	0.1254	0.11831	0.12065	0.1224	3.46E-04	2.94E-07	2.43E-07	2.83E-07	2.41E-07	3.4727E-04
520705.77	4258778.06	18208.05134	0.12338	0.10016	0.1198	0.10331	3.46E-04	2.90E-07	2.05E-07	2.81E-07	2.03E-07	3.4708E-04
520706.85	4258727.59	18201.63895	0.12132	0.10466	0.11795	0.108	3.46E-04	2.85E-07	2.15E-07	2.77E-07	2.13E-07	3.4697E-04
520056.16	4258306.28	18200.55583	0.21281	10.90763	0.22553	7.40153	3.46E-04	5.00E-07	2.24E-05	5.29E-07	1.46E-05	3.8393E-04
520700.04	4258815.68	18171.6703	0.12682	0.09794	0.12321	0.10077	3.45E-04	2.98E-07	2.01E-07	2.89E-07	1.98E-07	3.4640E-04
520168.78	4258112.6	18161.39777	0.15187	3.14367	0.15152	3.54925	3.45E-04	3.57E-07	6.45E-06	3.56E-07	6.99E-06	3.5936E-04
519881.35	4258911.69	18152.42536	0.43945	0.29428	0.46835	0.28672	3.45E-04	1.03E-06	6.04E-07	1.10E-06	5.64E-07	3.4834E-04
520685.19	4258237.2	18149.70995	0.11195	0.13305	0.1103	0.13817	3.45E-04	2.63E-07	2.73E-07	2.59E-07	2.72E-07	3.4606E-04
519898.82	4258783.7	18131.34036	0.40417	0.44486	0.43294	0.42922	3.45E-04	9.49E-07	9.12E-07	1.02E-06	8.45E-07	3.4837E-04
520682.43	4258339.55	18126.63381	0.11794	0.13023	0.11497	0.13581	3.45E-04	2.77E-07	2.67E-07	2.70E-07	2.67E-07	3.4564E-04
520055.77	4259259.9	18121.59877	8.72331	0.16041	15.97142	0.15557	3.44E-04	2.05E-05	3.29E-07	3.75E-05	3.06E-07	4.0307E-04
520099.95	4258212.38	18119.40482	0.17763	14.81669	0.18269	16.12089	3.44E-04	4.17E-07	3.04E-05	4.29E-07	3.17E-05	4.0738E-04
520009.48	4258521.48	18100.38872	0.48322	2.52748	0.54365	2.19921	3.44E-04	1.13E-06	5.18E-06	1.28E-06	4.33E-06	3.5598E-04
520659.58	4258936.25	18083.01001	0.14759	0.09199	0.14308	0.09536	3.44E-04	3.46E-07	1.89E-07	3.36E-07	1.88E-07	3.4478E-04
519906.72	4258754.54	18080.76413	0.40429	0.50035	0.43639	0.4813	3.44E-04	9.49E-07	1.03E-06	1.02E-06	9.47E-07	3.4763E-04
520663.21	4258927.58	18074.34596	0.14573	0.09228	0.14133	0.0956	3.44E-04	3.42E-07	1.89E-07	3.32E-07	1.88E-07	3.4461E-04
520681.12	4258361.99	18067.89636	0.11932	0.13005	0.11608	0.1355	3.43E-04	2.80E-07	2.67E-07	2.73E-07	2.67E-07	3.4452E-04
520695	4258656.02	18065.29259	0.12296	0.11368	0.11855	0.1172	3.43E-04	2.89E-07	2.33E-07	2.78E-07	2.31E-07	3.4442E-04
520666.84	4258918.91	18060.15705	0.14388	0.0926	0.13959	0.09588	3.43E-04	3.38E-07	1.90E-07	3.28E-07	1.89E-07	3.4434E-04
520670.47	4258910.24	18040.97771	0.14204	0.09294	0.13786	0.09617	3.43E-04	3.33E-07	1.91E-07	3.24E-07	1.89E-07	3.4396E-04
520674.1	4258901.58	18016.93882	0.1402	0.0933	0.13614	0.09648	3.42E-04	3.29E-07	1.91E-07	3.20E-07	1.90E-07	3.4350E-04
520046.71	4258330.16	18013.50923	0.2241	7.2038	0.23726	5.52231	3.42E-04	5.26E-07	1.48E-05	5.57E-07	1.09E-05	3.6913E-04
520158.96	4258122.57	18001.69824	0.15351	3.62826	0.1533	4.12425	3.42E-04	3.60E-07	7.44E-06	3.60E-07	8.12E-06	3.5846E-04
520703.69	4258806.96	18001.19786	0.12508	0.098	0.12149	0.10084	3.42E-04	2.94E-07	2.01E-07	2.85E-07	1.99E-07	3.4315E-04
520709.82	4258744.43	17996.93449	0.12083	0.10239	0.11751	0.10571	3.42E-04	2.84E-07	2.10E-07	2.76E-07	2.08E-07	3.4307E-04
520686.54	4258272.74	17990.54502	0.11354	0.13084	0.11181	0.13643	3.42E-04	2.67E-07	2.68E-07	2.62E-07	2.69E-07	3.4303E-04
520677.73	4258892.91	17988.48878	0.13838	0.09362	0.13441	0.09676	3.42E-04	3.25E-07	1.92E-07	3.16E-07	1.90E-07	3.4295E-04
519924.46	4258700.84	17976.87101	0.41223	0.6395	0.44876	0.61134	3.42E-04	9.68E-07	1.31E-06	1.05E-06	1.20E-06	3.4624E-04
520686.22	4258297.76	17969.87416	0.11497	0.12959	0.11274	0.13543	3.42E-04	2.70E-07	2.66E-07	2.65E-07	2.67E-07	3.4264E-04
520709.32	4258769.57	17957.17477	0.12179	0.10008	0.11831	0.10328	3.41E-04	2.86E-07	2.05E-07	2.78E-07	2.03E-07	3.4231E-04
520681.36	4258884.24	17955.36247	0.13657	0.09397	0.1327	0.09706	3.41E-04	3.21E-07	1.93E-07	3.12E-07	1.91E-07	3.4231E-04
520086.5	4259283.24	17953.57969	15.16056	0.15944	15.78644	0.15213	3.41E-04	3.56E-05	3.27E-07	3.71E-05	2.99E-07	4.1455E-04
520129.47	4258162.47	17948.73231	0.16296	6.19612	0.16441	7.19761	3.41E-04	3.83E-07	1.27E-05	3.86E-07	1.42E-05	3.6882E-04
519882.59	4258865.13	17944.82181	0.41184	0.33565	0.43813	0.32509	3.41E-04	9.67E-07	6.88E-07	1.03E-06	6.40E-07	3.4442E-04
520063.64	4258283.22	17942.73312	0.20113	17.72943	0.2125	9.76668	3.41E-04	4.72E-07	3.64E-05	4.99E-07	1.92E-05	3.9762E-04
520684.98	4258875.57	17918.26517	0.13477	0.09431	0.131	0.09735	3.41E-04	3.16E-07	1.93E-07	3.08E-07	1.92E-07	3.4160E-04
519947.12	4258646.05	17890.38505	0.432	0.86409	0.4772	0.81973	3.40E-04	1.01E-06	1.77E-06	1.12E-06	1.61E-06	3.4558E-04
520685.21	4258618.03	17890.24322	0.12505	0.11883	0.12035	0.12304	3.40E-04	2.94E-07	2.44E-07	2.83E-07	2.42E-07	3.4112E-04
520109.8	4258192.41	17877.88222	0.17076	10.36886	0.17441	11.80161	3.40E-04	4.01E-07	2.13E-05	4.09E-07	2.32E-05	3.8513E-04
520688.61	4258866.9	17871.31867	0.13299	0.09461	0.12929	0.0976	3.40E-04	3.12E-07	1.94E-07	3.04E-07	1.92E-07	3.4070E-04
520707.59	4258701.88	17836.46907	0.12019	0.10682	0.11665	0.10999	3.39E-04	2.82E-07	2.19E-07	2.74E-07	2.17E-07	3.4003E-04
520707.34	4258798.23	17834.99668	0.12343	0.09804	0.11987	0.10092	3.39E-04	2.90E-07	2.01E-07	2.81E-07	1.99E-07	3.3998E-04
520673.99	4258420.88	17834.33812	0.12381	0.13039	0.12017	0.13609	3.39E-04	2.91E-07	2.67E-07	2.82E-07	2.68E-07	3.4011E-04
519969.81	4258599.22	17828.75657	0.46285	1.19921	0.52534	1.11813	3.39E-04	1.09E-06	2.46E-06	1.23E-06	2.20E-06	3.4587E-04
519959.89	4258618.66	17827.56056	0.44784	1.03195	0.5018	0.97281	3.39E-04	1.05E-06	2.12E-06	1.18E-06	1.91E-06	3.4513E-04
520677.4	4258403.97	17819.45754	0.12213	0.12984	0.11863	0.13537	3.39E-04	2.87E-07	2.66E-07	2.79E-07	2.66E-07	3.3981E-04
520692.24	4258858.23	17816.50809	0.13124	0.09485	0.12759	0.09779	3.39E-04	3.08E-07	1.95E-07	3.00E-07	1.92E-07	3.3965E-04
520149.14	4258132.54	17811.78251	0.15512	4.24828	0.1552	4.87086	3.39E-04	3.64E-07	8.71E-06	3.64E-07	9.59E-06	3.5760E-04
520670.69	4258438.06	17809.35232	0.12542	0.1309	0.12159	0.13676	3.39E-04	2.94E-07	2.68E-07	2.85E-07	2.69E-07	3.3964E-04
520045.87	4259259.92	17789.34351	6.10454	0.15803	8.54294	0.15401	3.38E-04	1.43E-05	3.24E-07	2.01E-05	3.03E-07	3.7316E-04
520704.84	4258684.52	17786.05247	0.12055	0.10896	0.11671	0.11213	3.38E-04	2.83E-07	2.23E-07	2.74E-07	2.21E-07	3.3908E-04
520710.45	4258719	17785.26879	0.11977	0.10455	0.11644	0.10779	3.38E-04	2.81E-07	2.14E-07	2.73E-07	2.12E-07	3.3905E-04
520664.82	4258474.39	17784.06255	0.12836	0.13188	0.12393	0.13776	3.38E-04	3.01E-07	2.70E-07	2.91E-07	2.71E-07	3.3918E-04
520695.05	4258646.54	17778.76221	0.12261	0.11423	0.11814	0.11787	3.38E-04	2.88E-07	2.34E-07	2.77E-07	2.32E-07	3.3897E-04
520096.42	4259293.23	17763.42573	11.36135	0.15802	10.33526	0.15005	3.38E-04	2.67E-05	3.24E-07	2.43E-05	2.95E-07	3.8921E-04
519879.5	4258881.79	17755.69846	0.41219	0.31775	0.43819	0.30825	3.38E-04	9.68E-07	6.52E-07	1.03E-06	6.07E-07	3.4076E-04
520695.87	4258849.56	17750.9293	0.1295	0.09511	0.12589	0.09797	3.37E-04	3.04E-07	1.95E-07	2.96E-07	1.93E-07	3.3840E-04
520680.9	4258387.29	17749.21511	0.12042	0.12918	0.11702	0.13457	3.37E-04	2.83E-07	2.65E-07	2.75E-07	2.65E-07	3.3847E-04
519979.73	4258579.79	17736.69483	0.47589	1.41467	0.54363	1.29929	3.37E-04	1.12E-06	2.90E-06	1.28E-06	2.56E-06	3.4500E-04
519999.56	4258540.91	17727.7182	0.48745	2.04543	0.55332	1.819	3.37E-04	1.14E-06	4.20E-06	1.30E-06	3.58E-06	3.4719E-04
520685.9	4258348.68	17713.60129	0.11737	0.12854	0.11424	0.13394	3.37E-04	2.76E-07	2.64E-07	2.68E-07	2.64E-07	3.3777E-04
520712.87	4258761.09	17707.9625	0.12028	0.10006	0.11691	0.10329	3.37E-04	2.82E-07	2.05E-07	2.74E-07	2.03E-07	3.3756E-04
520027.45	4258408.01	17705.42129	0.28722	4.03022	0.30444	3.3828	3.37E-04	6.74E-07	8.27E-06	7.15E-07	6.66E-06	3.5286E-04
520668.2	4258457.4	17679.32654	0.12679	0.13109	0.12266	0.13701	3.36E-04	2.98E-07	2.69E-07	2.88E-07	2.70E-07	3.3718E-04
520699.5	4258840.9	17672.41842	0.12778	0.09536	0.12421	0.09816	3.36E-04	3.00E-07	1.96E-07	2.92E-07	1.93E-07	3.3690E-04
520028.87	4258397.44	17668.7709	0.27495	4.18292	0.29081	3.50053	3.36E-04	6.45E-07	8.58E-06	6.83E-07	6.89E-06	3.5265E-04
520690.33	4258256.83	17662.0149	0.11175	0.12991	0.11009	0.13525	3.36E-04	2.62E-07	2.66E-07	2.58E-07	2.66E-07	3.3678E-04
520689.94	4258281.66	17652.43328	0.11315	0.12893	0.11122	0.13458	3.36E-04	2.66E-07	2.64E-07	2.61E-07	2.65E-07	3.3660E-04
519989.65	4258560.35	17651.45848	0.48451	1.68792	0.55185	1.52776	3.36E-04	1.14E-06	3.46E-06	1.30E-06	3.01E-06	3.4442E-04
520022.69	4258450.19	17647.77569	0.34893	3.5502	0.37448	3.00497	3.35E-04	8.19E-07	7.28E-06	8.79E-07	5.92E-06	3.5035E-04
520713.39	4258735.9	17639.92041	0.11931	0.10226	0.11606	0.10553	3.35E-04	2.80E-07	2.10E-07	2.72E-07	2.08E-07	3.3627E-04
520711	4258789.51	17636.92227	0.12179	0.09801	0.11829	0.10096	3.35E-04	2.86E-07	2.01E-07	2.78E-07	1.99E-07	3.3621E-04
519886.25	4258825.74	17623.44082	0.3943	0.3774	0.41984	0.36489	3.35E-04	9.26E-07	7.74E-07	9.86E-07	7.18E-07	3.3839E-04
520684.48	4258370.81	17620.12075	0.1187	0.1284	0.11539	0.1337	3.35E-04	2.79E-07	2.63E-07	2.71E-07	2.63E-07	3.3600E-04
520119.65	4258172.44	17611.90221	0.16422	7.83074	0.16657	9.10763	3.35E-04	3.86E-07	1.61E-05	3.91E-07	1.79E-05	3.6954E-04
520689.64	4258306.74	17609.06478	0.1145	0.12778	0.11201	0.13353	3.35E-04	2.69E-07	2.62E-07	2.63E-07	2.63E-07	3.3577E-04
519883.15	4258842.38	17599.20413	0.39638	0.35718	0.42156	0.34554	3.35E-04	9.31E-07	7.33E-07	9.90E-07	6.80E-07	3.3786E-04
520690.88	4258219.6	17585.31389	0.10953	0.13137	0.10781	0.13614	3.34E-04	2.57E-07	2.69E-07	2.53E-07	2.68E-07	3.3531E-04
520703.13	4258832.23	17579.04295	0.12607	0.09557	0.12254	0.09832	3.34E-04	2.96E-07	1.96E-07	2.88E-07	1.94E-07	3.3512E-04
520139.32	4258142.5	17575.16661	0.1566	5.06941	0.15719	5.85904	3.34E-04	3.68E-07	1.04E-05	3.69E-07	1.15E-05	3.5674E-04
520704.89	4258675.04	17570.38647	0.12022	0.10962	0.11624	0.11281	3.34E-04	2.82E-07	2.25E-07	2.73E-07	2.22E-07	3.3498E-04
520685.26	4258608.55	17569.97017	0.12473	0.11933	0.12007	0.12363	3.34E-04	2.93E-07	2.45E-07	2.82E-07	2.43E-07	3.3504E-04
519909.53	4258737.19	17567.6603	0.39478	0.53164	0.42761	0.51047	3.34E-04	9.27E-07	1.09E-06	1.00E-06	1.00E-06	3.3796E-04
519889.27	4258808.9	17559.69366	0.39102	0.39902	0.41686	0.38567	3.34E-04	9.18E-07	8.18E-07	9.79E-07	7.59E-07	3.3725E-04
520047.25	4258319.95	17540.46536	0.21548	7.33462	0.22802	5.61451	3.33E-04	5.06E-07	1.50E-05	5.35E-07	1.11E-05	3.6055E-04
520030	4258386.98	17525.84029	0.26322	4.3102	0.27791	3.59891	3.33E-04	6.18E-07	8.84E-06	6.52E-07	7.08E-06	3.5033E-04
519937.12	4258664.6	17504.2284	0.41479	0.76352	0.45474	0.72676	3.33E-04	9.74E-07	1.57E-06	1.07E-06	1.43E-06	3.3776E-04
520086.52	4259293.24	17494.4617	15.07173	0.15614	15.59979	0.14906	3.33E-04	3.54E-05	3.20E-07	3.66E-05	2.93E-07	4.0516E-04
520695.1	4258637.05	17478.89696	0.12228	0.11474	0.11778	0.11851	3.32E-04	2.87E-07	2.35E-07	2.77E-07	2.33E-07	3.3327E-04
520692.47	4258230.3	17478.47282	0.1098	0.13019	0.10809	0.13511	3.32E-04	2.58E-07	2.67E-07	2.54E-07	2.66E-07	3.3328E-04
520706.76	4258823.56	17468.53018	0.12441	0.09576	0.1209	0.09847	3.32E-04	2.92E-07	1.96E-07	2.84E-07	1.94E-07	3.3301E-04
520099.98	4258202.38	17452.47096	0.17168	14.86159	0.17643	15.99199	3.32E-04	4.03E-07	3.05E-05	4.14E-07	3.15E-05	3.9452E-04
520051.83	4259272.06	17443.63894	7.50513	0.15542	12.08496	0.15108	3.32E-04	1.76E-05	3.19E-07	2.84E-05	2.97E-07	3.7818E-04
520036.49	4258354.35	17418.44102	0.23555	5.15313	0.24839	4.20998	3.31E-04	5.53E-07	1.06E-05	5.83E-07	8.29E-06	3.5109E-04
520714.65	4258780.78	17417.60487	0.12019	0.09795	0.11677	0.10096	3.31E-04	2.82E-07	2.01E-07	2.74E-07	1.99E-07	3.3203E-04
520716.42	4258752.61	17410.00689	0.11876	0.10007	0.11553	0.10329	3.31E-04	2.79E-07	2.05E-07	2.71E-07	2.03E-07	3.3189E-04
519892.2	4258791.85	17393.01381	0.38637	0.42216	0.41254	0.40792	3.31E-04	9.07E-07	8.66E-07	9.69E-07	8.03E-07	3.3415E-04
520054.41	4258297.01	17383.71009	0.20354	9.92769	0.21547	6.99899	3.30E-04	4.78E-07	2.04E-05	5.06E-07	1.38E-05	3.6555E-04
519900.14	4258762.77	17373.18774	0.38723	0.47281	0.41598	0.45583	3.30E-04	9.09E-07	9.70E-07	9.77E-07	8.97E-07	3.3399E-04
520063.95	4258273.1	17362.33975	0.19382	18.06496	0.20457	9.84206	3.30E-04	4.55E-07	3.70E-05	4.80E-07	1.94E-05	3.8739E-04
520714.04	4258710.4	17352.6035	0.11827	0.10441	0.11494	0.10753	3.30E-04	2.78E-07	2.14E-07	2.70E-07	2.12E-07	3.3081E-04
520711.21	4258693.23	17347.04686	0.11868	0.10659	0.11509	0.10967	3.30E-04	2.79E-07	2.19E-07	2.70E-07	2.16E-07	3.3072E-04
520710.39	4258814.89	17338.86817	0.12277	0.09588	0.11929	0.09858	3.30E-04	2.88E-07	1.97E-07	2.80E-07	1.94E-07	3.3054E-04
520159	4258112.57	17337.11544	0.14901	3.62941	0.14869	4.12012	3.30E-04	3.50E-07	7.44E-06	3.49E-07	8.11E-06	3.4580E-04
520693.71	4258265.69	17336.98739	0.11137	0.12806	0.10961	0.13347	3.30E-04	2.61E-07	2.63E-07	2.57E-07	2.63E-07	3.3059E-04
519918.02	4258709.44	17335.57702	0.39584	0.59975	0.42946	0.57453	3.30E-04	9.29E-07	1.23E-06	1.01E-06	1.13E-06	3.3382E-04
519874.04	4258918.7	17332.56187	0.41594	0.28323	0.44189	0.27603	3.29E-04	9.76E-07	5.81E-07	1.04E-06	5.43E-07	3.3260E-04
520704.94	4258665.56	17331.23255	0.1199	0.11018	0.11579	0.11345	3.29E-04	2.81E-07	2.26E-07	2.72E-07	2.23E-07	3.3044E-04
520668.18	4258483.23	17327.22142	0.12743	0.1302	0.12285	0.13591	3.29E-04	2.99E-07	2.67E-07	2.88E-07	2.68E-07	3.3048E-04
520693.33	4258290.58	17319.09193	0.11275	0.12695	0.11057	0.13262	3.29E-04	2.65E-07	2.60E-07	2.60E-07	2.61E-07	3.3025E-04
519878.81	4258856.03	17298.15331	0.39113	0.33927	0.4151	0.32855	3.29E-04	9.18E-07	6.96E-07	9.75E-07	6.47E-07	3.3204E-04
520689.38	4258357.8	17292.47879	0.11678	0.12687	0.11353	0.13211	3.29E-04	2.74E-07	2.60E-07	2.67E-07	2.60E-07	3.2976E-04
520129.5	4258152.47	17291.22682	0.15791	6.20159	0.15923	7.20094	3.29E-04	3.71E-07	1.27E-05	3.74E-07	1.42E-05	3.5631E-04
520030.94	4258376.61	17288.1181	0.25209	4.41898	0.26579	3.68365	3.29E-04	5.92E-07	9.06E-06	6.24E-07	7.25E-06	3.4615E-04
520680.82	4258412.93	17285.09424	0.1214	0.12805	0.11784	0.13354	3.29E-04	2.85E-07	2.63E-07	2.77E-07	2.63E-07	3.2965E-04
520677.44	4258429.92	17269.2358	0.123	0.1286	0.11928	0.13426	3.28E-04	2.89E-07	2.64E-07	2.80E-07	2.64E-07	3.2935E-04
520716.97	4258727.36	17263.68346	0.11781	0.10216	0.11462	0.10534	3.28E-04	2.77E-07	2.10E-07	2.69E-07	2.07E-07	3.2911E-04
520684.29	4258396.18	17259.49001	0.11976	0.12742	0.11629	0.13276	3.28E-04	2.81E-07	2.61E-07	2.73E-07	2.61E-07	3.2915E-04
520685.32	4258599.07	17257.36996	0.12441	0.1198	0.11981	0.12417	3.28E-04	2.92E-07	2.46E-07	2.81E-07	2.44E-07	3.2909E-04
520693.06	4258315.73	17251.83448	0.114	0.12632	0.11129	0.1319	3.28E-04	2.68E-07	2.59E-07	2.61E-07	2.60E-07	3.2897E-04
520109.83	4258182.41	17225.52692	0.16523	10.38729	0.16864	11.79446	3.27E-04	3.88E-07	2.13E-05	3.96E-07	2.32E-05	3.7273E-04
520714.02	4258806.22	17183.41816	0.12115	0.09593	0.11771	0.09865	3.27E-04	2.84E-07	1.97E-07	2.76E-07	1.94E-07	3.2758E-04
519875.75	4258872.76	17180.76239	0.39225	0.32153	0.41601	0.3117	3.27E-04	9.21E-07	6.59E-07	9.77E-07	6.14E-07	3.2975E-04
520718.3	4258772.05	17176.27324	0.11864	0.09786	0.11531	0.10093	3.26E-04	2.79E-07	2.01E-07	2.71E-07	1.99E-07	3.2744E-04
520671.53	4258466.16	17174.11015	0.1259	0.12942	0.12163	0.13521	3.26E-04	2.96E-07	2.65E-07	2.86E-07	2.66E-07	3.2756E-04
520687.84	4258379.63	17173.25566	0.11809	0.12672	0.11471	0.13193	3.26E-04	2.77E-07	2.60E-07	2.69E-07	2.60E-07	3.2750E-04
520695.16	4258627.57	17170.58791	0.12195	0.1152	0.11745	0.11911	3.26E-04	2.86E-07	2.36E-07	2.76E-07	2.34E-07	3.2741E-04
520092.31	4259304.47	17150.56632	12.72305	0.15367	11.94546	0.14631	3.26E-04	2.99E-05	3.15E-07	2.80E-05	2.88E-07	3.8452E-04
520149.18	4258122.54	17150.441	0.15048	4.25158	0.1505	4.86062	3.26E-04	3.53E-07	8.72E-06	3.53E-07	9.57E-06	3.4499E-04
520009.44	4258511.78	17145.172	0.45302	2.55742	0.50431	2.22523	3.26E-04	1.06E-06	5.25E-06	1.18E-06	4.38E-06	3.3777E-04
520041.93	4259272.07	17133.49297	5.38645	0.15319	7.24762	0.14956	3.26E-04	1.26E-05	3.14E-07	1.70E-05	2.94E-07	3.5595E-04
519872.52	4258908.12	17128.07961	0.40401	0.29013	0.4286	0.28229	3.26E-04	9.48E-07	5.95E-07	1.01E-06	5.56E-07	3.2868E-04
519895.03	4258774.56	17108.32386	0.38019	0.44694	0.40671	0.43166	3.25E-04	8.93E-07	9.17E-07	9.55E-07	8.50E-07	3.2881E-04
520692.89	4258341.17	17100.934	0.1151	0.12598	0.11202	0.13125	3.25E-04	2.70E-07	2.58E-07	2.63E-07	2.58E-07	3.2611E-04
520719.97	4258744.13	17091.6466	0.11726	0.10002	0.11416	0.1032	3.25E-04	2.75E-07	2.05E-07	2.68E-07	2.03E-07	3.2583E-04
520037.34	4258344.01	17089.44427	0.22637	5.27908	0.23866	4.30336	3.25E-04	5.31E-07	1.08E-05	5.60E-07	8.47E-06	3.4523E-04
520705	4258656.07	17071.27907	0.11957	0.11077	0.11538	0.11413	3.24E-04	2.81E-07	2.27E-07	2.71E-07	2.25E-07	3.2550E-04
519927.12	4258683.15	17068.96143	0.39817	0.67877	0.43376	0.64827	3.24E-04	9.35E-07	1.39E-06	1.02E-06	1.28E-06	3.2907E-04
520022.36	4258426.74	17047.55935	0.30586	3.55203	0.32553	3.02045	3.24E-04	7.18E-07	7.28E-06	7.64E-07	5.95E-06	3.3876E-04
520031.72	4258366.3	17024.91962	0.24172	4.51135	0.25458	3.75647	3.24E-04	5.67E-07	9.25E-06	5.98E-07	7.39E-06	3.4143E-04
520697.08	4258274.56	17021.83588	0.111	0.12618	0.10907	0.13166	3.24E-04	2.61E-07	2.59E-07	2.56E-07	2.59E-07	3.2459E-04
520019.35	4258458.31	17021.41641	0.35631	3.27749	0.38324	2.79822	3.24E-04	8.37E-07	6.72E-06	9.00E-07	5.51E-06	3.3751E-04
520697.65	4258250.16	17017.45636	0.10962	0.12704	0.1079	0.13221	3.23E-04	2.57E-07	2.61E-07	2.53E-07	2.60E-07	3.2450E-04
520051.84	4259282.06	17012.88221	7.39373	0.15229	12.24817	0.14806	3.23E-04	1.74E-05	3.12E-07	2.88E-05	2.91E-07	3.7010E-04
520717.65	4258797.55	17004.91021	0.11957	0.09591	0.11617	0.09869	3.23E-04	2.81E-07	1.97E-07	2.73E-07	1.94E-07	3.2418E-04
520696.73	4258299.51	16980.94778	0.11231	0.12517	0.10987	0.13077	3.23E-04	2.64E-07	2.57E-07	2.58E-07	2.57E-07	3.2381E-04
520119.68	4258162.44	16976.85398	0.1591	7.83906	0.16126	9.12156	3.23E-04	3.74E-07	1.61E-05	3.79E-07	1.80E-05	3.5748E-04
520685.37	4258589.59	16959.71285	0.12411	0.12031	0.11955	0.12471	3.22E-04	2.91E-07	2.47E-07	2.81E-07	2.45E-07	3.2344E-04
520139.36	4258132.5	16937.35661	0.1519	5.07212	0.15239	5.8555	3.22E-04	3.57E-07	1.04E-05	3.58E-07	1.15E-05	3.4459E-04
519912.21	4258719.55	16934.00077	0.38445	0.56413	0.41643	0.54118	3.22E-04	9.03E-07	1.16E-06	9.78E-07	1.07E-06	3.2599E-04
519903.02	4258745.61	16925.35106	0.37912	0.50146	0.40873	0.48263	3.22E-04	8.90E-07	1.03E-06	9.60E-07	9.50E-07	3.2555E-04
520721.96	4258763.33	16924.35815	0.11713	0.09779	0.11392	0.1009	3.22E-04	2.75E-07	2.01E-07	2.67E-07	1.99E-07	3.2264E-04
519947.12	4258636.77	16918.08316	0.41632	0.87852	0.45981	0.83464	3.22E-04	9.77E-07	1.80E-06	1.08E-06	1.64E-06	3.2708E-04
520717.64	4258701.81	16904.83475	0.1168	0.10423	0.11344	0.10724	3.21E-04	2.74E-07	2.14E-07	2.66E-07	2.11E-07	3.2230E-04
519879.49	4258833.54	16887.54596	0.37629	0.36014	0.39954	0.3486	3.21E-04	8.83E-07	7.39E-07	9.38E-07	6.86E-07	3.2425E-04
520054.86	4258286.84	16881.04395	0.1962	10.10755	0.20752	7.11162	3.21E-04	4.61E-07	2.07E-05	4.87E-07	1.40E-05	3.5655E-04
519870.89	4258897.5	16875.83215	0.3917	0.29694	0.41494	0.28852	3.21E-04	9.20E-07	6.09E-07	9.74E-07	5.68E-07	3.2385E-04
520720.54	4258718.83	16871.11411	0.11635	0.10201	0.11318	0.1051	3.21E-04	2.73E-07	2.09E-07	2.66E-07	2.07E-07	3.2164E-04
520082.41	4259304.48	16869.75814	15.83084	0.15168	19.20433	0.14522	3.21E-04	3.72E-05	3.11E-07	4.51E-05	2.86E-07	4.0351E-04
520695.21	4258618.09	16861.14067	0.12164	0.11564	0.11717	0.11969	3.20E-04	2.86E-07	2.37E-07	2.75E-07	2.36E-07	3.2153E-04
520692.85	4258366.93	16860.25631	0.11616	0.12524	0.11285	0.13033	3.20E-04	2.73E-07	2.57E-07	2.65E-07	2.57E-07	3.2153E-04
520714.83	4258684.58	16847.08807	0.1172	0.1063	0.11357	0.10931	3.20E-04	2.75E-07	2.18E-07	2.67E-07	2.15E-07	3.2121E-04
519882.56	4258816.83	16839.44921	0.37359	0.38001	0.39704	0.36779	3.20E-04	8.77E-07	7.79E-07	9.32E-07	7.24E-07	3.2340E-04
520699.74	4258223.39	16833.98056	0.10767	0.12747	0.10593	0.13217	3.20E-04	2.53E-07	2.61E-07	2.49E-07	2.60E-07	3.2101E-04
520721.28	4258788.88	16814.47575	0.11804	0.09587	0.11471	0.09871	3.20E-04	2.77E-07	1.97E-07	2.69E-07	1.94E-07	3.2055E-04
520100.01	4258192.38	16810.26871	0.16601	14.90134	0.17054	15.57916	3.20E-04	3.90E-07	3.06E-05	4.00E-07	3.07E-05	3.8155E-04
520064.23	4258263	16802.94892	0.18695	18.34822	0.19714	9.89889	3.19E-04	4.39E-07	3.76E-05	4.63E-07	1.95E-05	3.7741E-04
520705.05	4258646.59	16795.88171	0.11925	0.1113	0.11501	0.11479	3.19E-04	2.80E-07	2.28E-07	2.70E-07	2.26E-07	3.2026E-04
520687.67	4258405.06	16765.40987	0.11907	0.12569	0.11556	0.131	3.19E-04	2.80E-07	2.58E-07	2.71E-07	2.58E-07	3.1975E-04
520684.23	4258421.89	16757.49961	0.12064	0.1263	0.11702	0.13177	3.19E-04	2.83E-07	2.59E-07	2.75E-07	2.59E-07	3.1961E-04
520723.52	4258735.64	16752.31763	0.11582	0.0999	0.11278	0.10302	3.18E-04	2.72E-07	2.05E-07	2.65E-07	2.03E-07	3.1938E-04
520038.08	4258333.72	16735.63655	0.2177	5.39226	0.22954	4.38017	3.18E-04	5.11E-07	1.11E-05	5.39E-07	8.62E-06	3.3885E-04
520680.88	4258438.96	16726.96032	0.12217	0.12685	0.11836	0.13246	3.18E-04	2.87E-07	2.60E-07	2.78E-07	2.61E-07	3.1903E-04
520691.2	4258388.46	16721.8921	0.11746	0.12502	0.11402	0.13019	3.18E-04	2.76E-07	2.56E-07	2.68E-07	2.56E-07	3.1891E-04
520041.94	4259282.07	16718.47338	5.34692	0.15014	7.31716	0.1466	3.18E-04	1.26E-05	3.08E-07	1.72E-05	2.89E-07	3.4812E-04
520696.34	4258350.22	16712.24245	0.11453	0.1244	0.11133	0.12949	3.18E-04	2.69E-07	2.55E-07	2.61E-07	2.55E-07	3.1871E-04
520674.87	4258474.92	16710.70554	0.12499	0.12785	0.1206	0.13349	3.18E-04	2.93E-07	2.62E-07	2.83E-07	2.63E-07	3.1874E-04

520677.64	4258456.32	16710.68648	0.12366	0.12739	0.11958	0.13308	3.18E-04	2.90E-07	2.61E-07	2.81E-07	2.62E-07	3.1873E-04
520092.32	4259314.47	16706.97309	12.82561	0.15053	11.83066	0.1434	3.18E-04	3.01E-05	3.09E-07	2.78E-05	2.82E-07	3.7605E-04
520700.46	4258283.43	16702.51377	0.11059	0.12442	0.10846	0.12992	3.17E-04	2.60E-07	2.55E-07	2.55E-07	2.56E-07	3.1851E-04
520701.12	4258259.29	16699.33494	0.10925	0.12521	0.10744	0.13046	3.17E-04	2.56E-07	2.57E-07	2.52E-07	2.57E-07	3.1845E-04
519885.54	4258799.92	16694.82215	0.36958	0.40131	0.39347	0.38831	3.17E-04	8.68E-07	8.23E-07	9.24E-07	7.64E-07	3.2072E-04
520685.42	4258580.11	16680.68189	0.12382	0.12082	0.11928	0.12522	3.17E-04	2.91E-07	2.48E-07	2.80E-07	2.46E-07	3.1813E-04
520129.54	4258142.47	16673.09348	0.15314	6.2048	0.15432	7.20189	3.17E-04	3.60E-07	1.27E-05	3.62E-07	1.42E-05	3.4455E-04
519959.85	4258608.96	16664.70385	0.42975	1.05064	0.48197	0.98977	3.17E-04	1.01E-06	2.15E-06	1.13E-06	1.95E-06	3.2301E-04
520700.13	4258308.43	16646.94528	0.11183	0.12367	0.10917	0.12913	3.16E-04	2.63E-07	2.54E-07	2.56E-07	2.54E-07	3.1745E-04
520714.89	4258675.09	16636.29603	0.1169	0.10689	0.11313	0.10994	3.16E-04	2.74E-07	2.19E-07	2.66E-07	2.16E-07	3.1720E-04
520725.61	4258754.6	16635.16912	0.11564	0.09777	0.11257	0.10087	3.16E-04	2.71E-07	2.01E-07	2.64E-07	1.99E-07	3.1714E-04
519937.12	4258655.32	16628.65181	0.40029	0.77694	0.43836	0.7405	3.16E-04	9.40E-07	1.59E-06	1.03E-06	1.46E-06	3.2110E-04
519875.04	4258846.93	16625.47711	0.37132	0.34244	0.39345	0.33171	3.16E-04	8.72E-07	7.02E-07	9.24E-07	6.53E-07	3.1917E-04
520109.86	4258172.41	16614.49276	0.16002	10.40377	0.1632	11.81847	3.16E-04	3.76E-07	2.13E-05	3.83E-07	2.33E-05	3.6117E-04
520724.91	4258780.21	16596.98357	0.11653	0.09578	0.11329	0.09869	3.15E-04	2.74E-07	1.96E-07	2.66E-07	1.94E-07	3.1641E-04
520051.86	4259292.06	16595.42506	7.30459	0.14925	12.41777	0.14512	3.15E-04	1.71E-05	3.06E-07	2.92E-05	2.86E-07	3.6234E-04
519872.01	4258863.73	16580.74354	0.3732	0.32483	0.39496	0.31488	3.15E-04	8.76E-07	6.66E-07	9.27E-07	6.20E-07	3.1826E-04
519969.77	4258589.53	16571.40155	0.4426	1.2229	0.50181	1.13712	3.15E-04	1.04E-06	2.51E-06	1.18E-06	2.24E-06	3.2196E-04
519999.52	4258531.21	16559.24122	0.45924	2.07456	0.51681	1.84421	3.15E-04	1.08E-06	4.25E-06	1.21E-06	3.63E-06	3.2494E-04
520695.26	4258608.61	16555.11295	0.12135	0.1161	0.11691	0.12023	3.15E-04	2.85E-07	2.38E-07	2.74E-07	2.37E-07	3.1572E-04
519920.79	4258692	16552.30571	0.38406	0.63573	0.41656	0.60863	3.15E-04	9.02E-07	1.30E-06	9.78E-07	1.20E-06	3.1901E-04
520149.21	4258112.54	16537.47067	0.14611	4.25292	0.14604	4.85883	3.14E-04	3.43E-07	8.72E-06	3.43E-07	9.56E-06	3.3332E-04
520705.1	4258637.11	16508.32819	0.11894	0.11176	0.11467	0.11538	3.14E-04	2.79E-07	2.29E-07	2.69E-07	2.27E-07	3.1480E-04
519868.5	4258886.57	16496.72798	0.37675	0.30316	0.39842	0.29428	3.14E-04	8.84E-07	6.22E-07	9.35E-07	5.79E-07	3.1659E-04
520724.11	4258710.29	16463.22722	0.11493	0.10186	0.11176	0.10484	3.13E-04	2.70E-07	2.09E-07	2.62E-07	2.06E-07	3.1388E-04
519888.44	4258782.79	16450.99941	0.3644	0.42394	0.38846	0.41013	3.13E-04	8.55E-07	8.69E-07	9.12E-07	8.07E-07	3.1615E-04
520721.24	4258693.22	16445.12209	0.11537	0.10399	0.11197	0.10692	3.13E-04	2.71E-07	2.13E-07	2.63E-07	2.10E-07	3.1355E-04
519979.69	4258570.09	16444.64425	0.45294	1.43973	0.51339	1.32095	3.13E-04	1.06E-06	2.95E-06	1.21E-06	2.60E-06	3.2040E-04
520082.42	4259314.48	16444.11344	15.90091	0.14861	18.91807	0.14235	3.13E-04	3.73E-05	3.05E-07	4.44E-05	2.80E-07	3.9490E-04
520696.33	4258376.05	16428.13875	0.11554	0.12356	0.11217	0.12858	3.12E-04	2.71E-07	2.53E-07	2.63E-07	2.53E-07	3.1331E-04
520685.48	4258570.63	16423.66438	0.12356	0.12118	0.11899	0.12561	3.12E-04	2.90E-07	2.49E-07	2.79E-07	2.47E-07	3.1325E-04
520009.4	4258502.08	16422.74489	0.42546	2.58246	0.4689	2.24849	3.12E-04	9.99E-07	5.30E-06	1.10E-06	4.43E-06	3.2399E-04
520704.83	4258243.18	16418.40152	0.10758	0.1243	0.10579	0.12931	3.12E-04	2.53E-07	2.55E-07	2.48E-07	2.55E-07	3.1309E-04
520714.94	4258665.61	16405.32534	0.1166	0.10746	0.11272	0.11058	3.12E-04	2.74E-07	2.20E-07	2.65E-07	2.18E-07	3.1281E-04
520727.08	4258727.16	16395.32902	0.11441	0.09979	0.11142	0.10283	3.12E-04	2.69E-07	2.05E-07	2.62E-07	2.02E-07	3.1258E-04
519989.61	4258550.65	16394.64822	0.45857	1.71424	0.51831	1.55112	3.12E-04	1.08E-06	3.52E-06	1.22E-06	3.05E-06	3.2050E-04
520055.27	4258276.69	16388.0124	0.18927	10.27597	0.20006	7.19542	3.12E-04	4.44E-07	2.11E-05	4.70E-07	1.42E-05	3.4766E-04
520703.84	4258292.29	16385.68651	0.11017	0.12269	0.1078	0.12815	3.11E-04	2.59E-07	2.52E-07	2.53E-07	2.52E-07	3.1248E-04
520704.6	4258268.42	16385.0199	0.10885	0.12339	0.10691	0.12871	3.11E-04	2.56E-07	2.53E-07	2.51E-07	2.53E-07	3.1246E-04
519865.27	4258915.14	16378.19053	0.38344	0.2793	0.4056	0.27184	3.11E-04	9.00E-07	5.73E-07	9.52E-07	5.35E-07	3.1428E-04
520119.72	4258152.44	16376.82808	0.15423	7.84537	0.15623	9.12063	3.11E-04	3.62E-07	1.61E-05	3.67E-07	1.80E-05	3.4607E-04
520038.72	4258323.47	16364.16915	0.20958	5.48863	0.22093	4.45692	3.11E-04	4.92E-07	1.13E-05	5.19E-07	8.77E-06	3.3209E-04
520728.54	4258771.55	16353.09758	0.11505	0.09566	0.11191	0.09863	3.11E-04	2.70E-07	1.96E-07	2.63E-07	1.94E-07	3.1177E-04
519905.8	4258728.19	16352.48618	0.36972	0.53141	0.3993	0.51071	3.11E-04	8.68E-07	1.09E-06	9.37E-07	1.01E-06	3.1473E-04
520139.39	4258122.5	16331.21059	0.14742	5.07602	0.14784	5.84708	3.10E-04	3.46E-07	1.04E-05	3.47E-07	1.15E-05	3.3304E-04
519896.47	4258753.92	16325.19281	0.36457	0.47363	0.39049	0.45716	3.10E-04	8.56E-07	9.71E-07	9.17E-07	9.00E-07	3.1396E-04
520729.26	4258745.88	16324.87562	0.11418	0.09772	0.11123	0.10078	3.10E-04	2.68E-07	2.00E-07	2.61E-07	1.98E-07	3.1123E-04
520699.79	4258359.27	16318.79892	0.11395	0.12282	0.11067	0.12777	3.10E-04	2.68E-07	2.52E-07	2.60E-07	2.52E-07	3.1122E-04
520041.96	4259292.07	16314.972	5.32238	0.14715	7.38698	0.14369	3.10E-04	1.25E-05	3.02E-07	1.73E-05	2.83E-07	3.4054E-04
520703.53	4258317.35	16314.50015	0.11132	0.12227	0.10847	0.12756	3.10E-04	2.61E-07	2.51E-07	2.55E-07	2.51E-07	3.1113E-04
519927.12	4258673.87	16292.10239	0.38505	0.69152	0.41874	0.66105	3.10E-04	9.04E-07	1.42E-06	9.83E-07	1.30E-06	3.1429E-04
520678.21	4258483.68	16291.78551	0.12408	0.12636	0.11958	0.13182	3.10E-04	2.91E-07	2.59E-07	2.81E-07	2.59E-07	3.1077E-04
520064.49	4258252.91	16282.52963	0.18054	18.60954	0.19014	10.03676	3.10E-04	4.24E-07	3.82E-05	4.46E-07	1.98E-05	3.6830E-04
520045.53	4258300.68	16280.5128	0.19815	6.84725	0.20938	5.33975	3.09E-04	4.65E-07	1.40E-05	4.92E-07	1.05E-05	3.3497E-04
520092.34	4259324.47	16276.83213	12.95923	0.14748	11.70976	0.14057	3.09E-04	3.04E-05	3.02E-07	2.75E-05	2.77E-07	3.6789E-04
520691.06	4258413.95	16269.12062	0.11835	0.12401	0.1148	0.12929	3.09E-04	2.78E-07	2.54E-07	2.70E-07	2.55E-07	3.1030E-04
520694.56	4258397.28	16260.7368	0.1168	0.12339	0.11333	0.1285	3.09E-04	2.74E-07	2.53E-07	2.66E-07	2.53E-07	3.1013E-04
520695.32	4258599.13	16257.05741	0.12105	0.11657	0.11667	0.12076	3.09E-04	2.84E-07	2.39E-07	2.74E-07	2.38E-07	3.1005E-04
520687.64	4258430.85	16241.9711	0.11986	0.12459	0.11617	0.13003	3.09E-04	2.81E-07	2.56E-07	2.73E-07	2.56E-07	3.0980E-04
520100.05	4258182.38	16221.96072	0.16072	14.92564	0.16498	15.50809	3.08E-04	3.77E-07	3.06E-05	3.87E-07	3.05E-05	3.7025E-04
520681.11	4258465.44	16218.48367	0.12276	0.12574	0.11855	0.13131	3.08E-04	2.88E-07	2.58E-07	2.78E-07	2.58E-07	3.0937E-04
520705.16	4258627.63	16213.19634	0.11865	0.11219	0.11438	0.11595	3.08E-04	2.79E-07	2.30E-07	2.69E-07	2.28E-07	3.0919E-04
520685.53	4258561.14	16193.83258	0.1233	0.12158	0.11869	0.12602	3.08E-04	2.89E-07	2.49E-07	2.79E-07	2.48E-07	3.0888E-04
519866.94	4258875.98	16178.80738	0.36493	0.30971	0.38546	0.30049	3.08E-04	8.57E-07	6.35E-07	9.05E-07	5.92E-07	3.1052E-04
519875.82	4258824.69	16161.58274	0.35726	0.36243	0.37853	0.35122	3.07E-04	8.39E-07	7.43E-07	8.89E-07	6.91E-07	3.1036E-04
520703.32	4258342.69	16160.78692	0.11236	0.12194	0.1092	0.12692	3.07E-04	2.64E-07	2.50E-07	2.56E-07	2.50E-07	3.0821E-04
520715	4258656.13	16154.67269	0.1163	0.10799	0.11234	0.11121	3.07E-04	2.73E-07	2.21E-07	2.64E-07	2.19E-07	3.0805E-04
519863.68	4258904.54	16141.51843	0.37215	0.28558	0.39307	0.27763	3.07E-04	8.74E-07	5.86E-07	9.23E-07	5.47E-07	3.0975E-04
520052.7	4259304.53	16116.6157	7.50665	0.1457	13.47389	0.14166	3.06E-04	1.76E-05	2.99E-07	3.16E-05	2.79E-07	3.5618E-04
520708.29	4258252.24	16116.42076	0.1072	0.12258	0.10537	0.12767	3.06E-04	2.52E-07	2.51E-07	2.47E-07	2.51E-07	3.0735E-04
520732.17	4258762.88	16105.73713	0.11363	0.09558	0.1106	0.09857	3.06E-04	2.67E-07	1.96E-07	2.60E-07	1.94E-07	3.0706E-04
520129.57	4258132.47	16092.25774	0.14862	6.20763	0.14967	7.21008	3.06E-04	3.49E-07	1.27E-05	3.51E-07	1.42E-05	3.3351E-04
519891.24	4258765.42	16086.67476	0.35767	0.4483	0.38214	0.43332	3.06E-04	8.40E-07	9.19E-07	8.97E-07	8.53E-07	3.0929E-04
520708.07	4258277.54	16076.39943	0.10845	0.12162	0.10631	0.12697	3.06E-04	2.55E-07	2.49E-07	2.50E-07	2.50E-07	3.0659E-04
520707.21	4258301.16	16073.37917	0.10972	0.12112	0.10712	0.12648	3.06E-04	2.58E-07	2.48E-07	2.51E-07	2.49E-07	3.0653E-04
520109.9	4258162.41	16042.15075	0.15511	10.41422	0.15806	11.86834	3.05E-04	3.64E-07	2.14E-05	3.71E-07	2.34E-05	3.5039E-04
520727.69	4258701.76	16041.50044	0.11354	0.10165	0.11034	0.10454	3.05E-04	2.67E-07	2.08E-07	2.59E-07	2.06E-07	3.0586E-04
519878.86	4258807.91	16037.97881	0.35385	0.3821	0.37562	0.37021	3.05E-04	8.31E-07	7.84E-07	8.82E-07	7.29E-07	3.0808E-04
520082.44	4259324.48	16034.1997	15.91924	0.14565	18.63394	0.13957	3.05E-04	3.74E-05	2.99E-07	4.37E-05	2.75E-07	3.8647E-04
519914.39	4258700.67	16033.29726	0.37022	0.59668	0.39979	0.5726	3.05E-04	8.69E-07	1.22E-06	9.39E-07	1.13E-06	3.0892E-04
520730.63	4258718.68	16023.80271	0.11304	0.09965	0.11006	0.10258	3.05E-04	2.65E-07	2.04E-07	2.58E-07	2.02E-07	3.0551E-04
520027.61	4258358.01	16006.97461	0.2282	4.05937	0.23976	3.43629	3.04E-04	5.36E-07	8.33E-06	5.63E-07	6.76E-06	3.2045E-04
520732.92	4258737.15	15994.72809	0.11277	0.09761	0.10988	0.10061	3.04E-04	2.65E-07	2.00E-07	2.58E-07	1.98E-07	3.0495E-04
520685.58	4258551.66	15993.18904	0.12305	0.12188	0.11839	0.12637	3.04E-04	2.89E-07	2.50E-07	2.78E-07	2.49E-07	3.0507E-04
520699.8	4258385.18	15991.63159	0.11491	0.12188	0.11149	0.12684	3.04E-04	2.70E-07	2.50E-07	2.62E-07	2.50E-07	3.0500E-04
520020.18	4258401.03	15986.17555	0.26529	3.39902	0.2803	2.92213	3.04E-04	6.23E-07	6.97E-06	6.58E-07	5.75E-06	3.1787E-04
520039.28	4258313.25	15982.96698	0.20192	5.5738	0.21284	4.52268	3.04E-04	4.74E-07	1.14E-05	5.00E-07	8.90E-06	3.2512E-04
520680.86	4258510.71	15977.06868	0.12373	0.12466	0.11898	0.1297	3.04E-04	2.90E-07	2.56E-07	2.79E-07	2.55E-07	3.0478E-04
520724.83	4258684.63	15976.98525	0.11397	0.10371	0.11053	0.10659	3.04E-04	2.68E-07	2.13E-07	2.59E-07	2.10E-07	3.0464E-04
520695.37	4258589.65	15974.32189	0.12077	0.11705	0.11643	0.12127	3.04E-04	2.84E-07	2.40E-07	2.73E-07	2.39E-07	3.0468E-04
520021.48	4258390.5	15959.73454	0.25451	3.50495	0.26837	3.00751	3.03E-04	5.98E-07	7.19E-06	6.30E-07	5.92E-06	3.1770E-04
519868.26	4258854.71	15954.96669	0.35492	0.32767	0.37502	0.31773	3.03E-04	8.33E-07	6.72E-07	8.80E-07	6.25E-07	3.0629E-04
520012.66	4258474.56	15943.87679	0.3708	2.81823	0.40094	2.43911	3.03E-04	8.71E-07	5.78E-06	9.41E-07	4.80E-06	3.1546E-04
519871.27	4258837.83	15933.10801	0.35247	0.34501	0.37293	0.33446	3.03E-04	8.27E-07	7.08E-07	8.76E-07	6.58E-07	3.0593E-04
520681.2	4258501.58	15928.68257	0.12344	0.12473	0.11876	0.12989	3.03E-04	2.90E-07	2.56E-07	2.79E-07	2.56E-07	3.0386E-04
520009.36	4258492.38	15920.10755	0.40069	2.60367	0.43773	2.2687	3.03E-04	9.41E-07	5.34E-06	1.03E-06	4.47E-06	3.1439E-04
520703.23	4258368.33	15919.55494	0.11336	0.12124	0.11002	0.12609	3.03E-04	2.66E-07	2.49E-07	2.58E-07	2.48E-07	3.0362E-04
520705.21	4258618.15	15917.20986	0.11837	0.1126	0.11412	0.11648	3.03E-04	2.78E-07	2.31E-07	2.68E-07	2.29E-07	3.0356E-04
520681.54	4258492.44	15916.95774	0.12316	0.12493	0.1186	0.13019	3.03E-04	2.89E-07	2.56E-07	2.78E-07	2.56E-07	3.0363E-04
520055.63	4258266.55	15908.04325	0.18274	10.42051	0.19302	7.27358	3.02E-04	4.29E-07	2.14E-05	4.53E-07	1.43E-05	3.3895E-04
520015.77	4258442.74	15899.95718	0.31785	3.05378	0.33934	2.63912	3.02E-04	7.46E-07	6.26E-06	7.97E-07	5.20E-06	3.1523E-04
520715.05	4258646.65	15890.04704	0.11601	0.10847	0.112	0.11181	3.02E-04	2.72E-07	2.22E-07	2.63E-07	2.20E-07	3.0302E-04
520092.36	4259334.47	15870.98586	12.9653	0.14457	11.59682	0.13786	3.02E-04	3.04E-05	2.97E-07	2.72E-05	2.71E-07	3.5991E-04
520046.09	4258290.46	15866.78021	0.19123	6.96703	0.20198	5.43134	3.02E-04	4.49E-07	1.43E-05	4.74E-07	1.07E-05	3.2750E-04
519861.99	4258893.9	15860.51045	0.36058	0.29172	0.38032	0.28337	3.01E-04	8.47E-07	5.98E-07	8.93E-07	5.58E-07	3.0438E-04
520022.54	4258380.08	15856.19319	0.24427	3.59457	0.25711	3.08006	3.01E-04	5.73E-07	7.37E-06	6.04E-07	6.06E-06	3.1601E-04
520042.8	4259304.55	15852.07143	5.44814	0.14368	7.74943	0.14029	3.01E-04	1.28E-05	2.95E-07	1.82E-05	2.76E-07	3.3287E-04
520712.03	4258236.19	15848.33141	0.10558	0.12173	0.10374	0.12656	3.01E-04	2.48E-07	2.50E-07	2.44E-07	2.49E-07	3.0224E-04
520735.8	4258754.21	15832.49589	0.11224	0.09551	0.10932	0.09849	3.01E-04	2.64E-07	1.96E-07	2.57E-07	1.94E-07	3.0186E-04
519881.82	4258790.94	15825.93432	0.34941	0.40296	0.37145	0.39036	3.01E-04	8.20E-07	8.26E-07	8.72E-07	7.68E-07	3.0411E-04
520685.64	4258542.18	15823.70812	0.12281	0.12219	0.11812	0.12674	3.01E-04	2.88E-07	2.51E-07	2.77E-07	2.49E-07	3.0185E-04
520711.74	4258261.3	15820.43565	0.10683	0.12077	0.10488	0.12595	3.01E-04	2.51E-07	2.48E-07	2.46E-07	2.48E-07	3.0171E-04
520119.75	4258142.44	15816.31654	0.14965	7.84944	0.15148	9.15061	3.01E-04	3.51E-07	1.61E-05	3.56E-07	1.80E-05	3.3546E-04
519899.32	4258736.69	15799.36067	0.35593	0.50149	0.38285	0.483	3.00E-04	8.36E-07	1.03E-06	8.99E-07	9.51E-07	3.0403E-04
520697.92	4258406.1	15797.72005	0.11611	0.12178	0.11263	0.12686	3.00E-04	2.73E-07	2.50E-07	2.64E-07	2.50E-07	3.0132E-04
520028.6	4258347.62	15788.40846	0.21963	4.15991	0.23065	3.51465	3.00E-04	5.16E-07	8.53E-06	5.41E-07	6.92E-06	3.1662E-04
520694.44	4258422.84	15780.54074	0.11761	0.12237	0.11401	0.12762	3.00E-04	2.76E-07	2.51E-07	2.68E-07	2.51E-07	3.0101E-04
520724.89	4258675.15	15772.31763	0.1137	0.10426	0.11013	0.10718	3.00E-04	2.67E-07	2.14E-07	2.59E-07	2.11E-07	3.0075E-04
520684.58	4258474.57	15769.82912	0.12183	0.12422	0.11753	0.12963	3.00E-04	2.86E-07	2.55E-07	2.76E-07	2.55E-07	3.0083E-04
520711.54	4258286.67	15769.63206	0.10801	0.12	0.10567	0.1253	3.00E-04	2.54E-07	2.46E-07	2.48E-07	2.47E-07	3.0075E-04
520139.42	4258112.5	15767.30283	0.1432	5.07727	0.14353	5.84917	3.00E-04	3.36E-07	1.04E-05	3.37E-07	1.15E-05	3.2231E-04
519937.12	4258646.05	15766.53398	0.38661	0.78932	0.42324	0.75345	3.00E-04	9.08E-07	1.62E-06	9.94E-07	1.48E-06	3.0470E-04
520710.59	4258310.02	15762.68806	0.10925	0.11969	0.10644	0.12489	3.00E-04	2.56E-07	2.45E-07	2.50E-07	2.46E-07	3.0062E-04
520691.05	4258439.81	15743.21699	0.11906	0.12296	0.11528	0.12836	2.99E-04	2.80E-07	2.52E-07	2.71E-07	2.53E-07	3.0031E-04
520052.72	4259314.53	15729.71568	7.49717	0.14282	13.7302	0.1389	2.99E-04	1.76E-05	2.93E-07	3.22E-05	2.73E-07	3.4939E-04
520687.76	4258457.04	15725.34115	0.12047	0.12357	0.11644	0.12903	2.99E-04	2.83E-07	2.53E-07	2.73E-07	2.54E-07	2.9997E-04
520695.42	4258580.16	15708.02879	0.12049	0.11758	0.11618	0.12179	2.99E-04	2.83E-07	2.41E-07	2.73E-07	2.40E-07	2.9962E-04
520685.69	4258532.7	15688.62408	0.12259	0.12249	0.11788	0.12713	2.98E-04	2.88E-07	2.51E-07	2.77E-07	2.50E-07	2.9928E-04
520100.08	4258172.38	15675.462	0.15576	14.96626	0.15973	15.6528	2.98E-04	3.66E-07	3.07E-05	3.75E-07	3.08E-05	3.6021E-04
519908.44	4258710.45	15673.58459	0.35967	0.5619	0.38766	0.53997	2.98E-04	8.44E-07	1.15E-06	9.10E-07	1.06E-06	3.0190E-04
520063.45	4258243.35	15667.68562	0.17396	16.89893	0.18306	9.64845	2.98E-04	4.08E-07	3.47E-05	4.30E-07	1.90E-05	3.5230E-04
520736.57	4258728.43	15648.81295	0.11137	0.09755	0.10856	0.10045	2.97E-04	2.61E-07	2.00E-07	2.55E-07	1.98E-07	2.9837E-04
520082.46	4259334.48	15642.35225	15.82203	0.1428	18.37836	0.1369	2.97E-04	3.71E-05	2.93E-07	4.31E-05	2.69E-07	3.7819E-04
520734.18	4258710.19	15638.52723	0.11169	0.09952	0.10872	0.10234	2.97E-04	2.62E-07	2.04E-07	2.55E-07	2.01E-07	2.9818E-04
519999.48	4258521.52	15627.62468	0.43308	2.10159	0.4833	1.86737	2.97E-04	1.02E-06	4.31E-06	1.13E-06	3.68E-06	3.0719E-04
520705.26	4258608.67	15624.9238	0.1181	0.11301	0.11389	0.11698	2.97E-04	2.77E-07	2.32E-07	2.67E-07	2.30E-07	2.9801E-04
519949.89	4258618.7	15622.58145	0.40001	0.93111	0.44393	0.88381	2.97E-04	9.39E-07	1.91E-06	1.04E-06	1.74E-06	3.0259E-04
520715.1	4258637.17	15614.47807	0.11574	0.10887	0.11169	0.11235	2.97E-04	2.72E-07	2.23E-07	2.62E-07	2.21E-07	2.9778E-04
520731.26	4258693.22	15610.11702	0.11218	0.10147	0.10896	0.10427	2.97E-04	2.63E-07	2.08E-07	2.56E-07	2.05E-07	2.9765E-04
520685.75	4258523.22	15586.73664	0.12238	0.12268	0.11767	0.12744	2.96E-04	2.87E-07	2.52E-07	2.76E-07	2.51E-07	2.9734E-04
520715.45	4258245.19	15562.19976	0.10521	0.1201	0.10336	0.12501	2.96E-04	2.47E-07	2.46E-07	2.43E-07	2.46E-07	2.9679E-04
519959.81	4258599.26	15555.50399	0.41254	1.06971	0.46281	1.00599	2.96E-04	9.69E-07	2.19E-06	1.09E-06	1.98E-06	3.0191E-04
520724.94	4258665.67	15548.99997	0.11343	0.10481	0.10976	0.1078	2.96E-04	2.66E-07	2.15E-07	2.58E-07	2.12E-07	2.9651E-04
520129.6	4258122.47	15546.10156	0.14433	6.2087	0.14526	7.22412	2.96E-04	3.39E-07	1.27E-05	3.41E-07	1.42E-05	3.2314E-04
520703.28	4258394.31	15544.68814	0.11424	0.12024	0.11081	0.12516	2.95E-04	2.68E-07	2.47E-07	2.60E-07	2.46E-07	2.9650E-04
520739.43	4258745.54	15535.96152	0.11087	0.09545	0.10806	0.09839	2.95E-04	2.60E-07	1.96E-07	2.54E-07	1.94E-07	2.9621E-04
520029.45	4258337.28	15532.31925	0.21151	4.24793	0.22205	3.58367	2.95E-04	4.97E-07	8.71E-06	5.21E-07	7.05E-06	3.1203E-04
520715.19	4258270.36	15526.97125	0.10644	0.11905	0.10432	0.12427	2.95E-04	2.50E-07	2.44E-07	2.45E-07	2.45E-07	2.9612E-04
519927.12	4258664.6	15514.54089	0.3724	0.70324	0.40449	0.67309	2.95E-04	8.74E-07	1.44E-06	9.50E-07	1.32E-06	2.9949E-04
520706.68	4258377.38	15512.3567	0.11274	0.11967	0.10938	0.12445	2.95E-04	2.65E-07	2.45E-07	2.57E-07	2.45E-07	2.9587E-04
519884.69	4258773.74	15508.41777	0.3437	0.42524	0.366	0.41172	2.95E-04	8.07E-07	8.72E-07	8.59E-07	8.10E-07	2.9814E-04
520109.93	4258152.41	15500.57112	0.15045	10.42545	0.15319	11.92105	2.95E-04	3.53E-07	2.14E-05	3.60E-07	2.35E-05	3.4020E-04
519859.86	4258883.07	15495.66851	0.34768	0.29742	0.36623	0.2888	2.95E-04	8.16E-07	6.10E-07	8.60E-07	5.68E-07	2.9740E-04
520042.82	4259314.55	15477.2618	5.45125	0.14087	7.83104	0.13757	2.94E-04	1.28E-05	2.89E-07	1.84E-05	2.71E-07	3.2594E-04
520695.48	4258570.68	15467.73416	0.12026	0.11794	0.11591	0.12217	2.94E-04	2.82E-07	2.42E-07	2.72E-07	2.40E-07	2.9505E-04
520715.02	4258295.79	15466.10442	0.10757	0.11838	0.10499	0.1236	2.94E-04	2.53E-07	2.43E-07	2.46E-07	2.43E-07	2.9497E-04
520092.79	4259345.29	15461.40228	12.73861	0.14161	11.30437	0.13508	2.94E-04	2.99E-05	2.90E-07	2.65E-05	2.66E-07	3.5089E-04
519856.49	4258911.59	15458.08704	0.35415	0.2749	0.373	0.26738	2.94E-04	8.31E-07	5.64E-07	8.76E-07	5.26E-07	2.9663E-04
520055.96	4258256.43	15453.08673	0.17661	10.54756	0.18638	7.3588	2.94E-04	4.15E-07	2.16E-05	4.38E-07	1.45E-05	3.3071E-04
520046.58	4258280.27	15453.08023	0.18466	7.07317	0.19499	5.5055	2.94E-04	4.34E-07	1.45E-05	4.58E-07	1.08E-05	3.1997E-04
520713.96	4258318.89	15449.59271	0.10873	0.11843	0.10578	0.12343	2.94E-04	2.55E-07	2.43E-07	2.48E-07	2.43E-07	2.9466E-04
519872.15	4258815.84	15418.53852	0.33906	0.36432	0.35887	0.35343	2.93E-04	7.96E-07	7.47E-07	8.43E-07	6.96E-07	2.9616E-04
519969.73	4258579.83	15415.52802	0.42341	1.24492	0.47763	1.15578	2.93E-04	9.94E-07	2.55E-06	1.12E-06	2.28E-06	2.9997E-04
520014.92	4258420.56	15366.58308	0.28202	3.02335	0.29909	2.62484	2.92E-04	6.62E-07	6.20E-06	7.02E-07	5.17E-06	3.0482E-04
520688.06	4258483.69	15364.31329	0.12089	0.12283	0.11652	0.12805	2.92E-04	2.84E-07	2.52E-07	2.74E-07	2.52E-07	2.9311E-04
520052.74	4259324.53	15355.93396	7.50525	0.14004	13.98496	0.13623	2.92E-04	1.76E-05	2.87E-07	3.28E-05	2.68E-07	3.4290E-04
520701.28	4258414.92	15341.2015	0.11542	0.12014	0.1119	0.12522	2.92E-04	2.71E-07	2.46E-07	2.63E-07	2.46E-07	2.9264E-04
520705.32	4258599.18	15341.04234	0.11783	0.11345	0.11366	0.11748	2.92E-04	2.77E-07	2.33E-07	2.67E-07	2.31E-07	2.9261E-04
520715.16	4258627.69	15331.91973	0.11547	0.10927	0.11143	0.11289	2.91E-04	2.71E-07	2.24E-07	2.62E-07	2.22E-07	2.9241E-04
519989.56	4258540.95	15313.79697	0.43445	1.73883	0.4876	1.57246	2.91E-04	1.02E-06	3.57E-06	1.14E-06	3.10E-06	2.9991E-04
519864.52	4258845.68	15310.2832	0.33748	0.33003	0.3562	0.32025	2.91E-04	7.92E-07	6.77E-07	8.36E-07	6.30E-07	2.9396E-04
520725	4258656.19	15307.8122	0.11315	0.10531	0.10941	0.1084	2.91E-04	2.66E-07	2.16E-07	2.57E-07	2.13E-07	2.9193E-04
520697.82	4258431.73	15302.87927	0.11685	0.12079	0.1132	0.12601	2.91E-04	2.74E-07	2.48E-07	2.66E-07	2.48E-07	2.9192E-04
519979.65	4258560.39	15290.61825	0.43101	1.46209	0.48483	1.34114	2.91E-04	1.01E-06	3.00E-06	1.14E-06	2.64E-06	2.9844E-04
520119.78	4258132.44	15287.77568	0.1453	7.85158	0.14697	9.18409	2.91E-04	3.41E-07	1.61E-05	3.45E-07	1.81E-05	3.2546E-04
520740.22	4258719.7	15286.75623	0.11002	0.09743	0.10723	0.10023	2.91E-04	2.58E-07	2.00E-07	2.52E-07	1.97E-07	2.9148E-04
520691.2	4258466.08	15275.80269	0.11959	0.12205	0.11546	0.12738	2.90E-04	2.81E-07	2.50E-07	2.71E-07	2.51E-07	2.9142E-04
520718.88	4258254.2	15275.43891	0.10483	0.11847	0.1029	0.12345	2.90E-04	2.46E-07	2.43E-07	2.42E-07	2.43E-07	2.9133E-04
519892.8	4258745.07	15265.90599	0.34273	0.47415	0.36715	0.45763	2.90E-04	8.05E-07	9.72E-07	8.62E-07	9.01E-07	2.9372E-04
520695.53	4258561.2	15252.05656	0.12003	0.11826	0.11563	0.12251	2.90E-04	2.82E-07	2.43E-07	2.71E-07	2.41E-07	2.9095E-04
520030.19	4258326.99	15251.20441	0.20383	4.32546	0.21395	3.64536	2.90E-04	4.79E-07	8.87E-06	5.02E-07	7.18E-06	3.0693E-04
520082.89	4259345.31	15244.01047	14.18758	0.1399	17.71265	0.13415	2.90E-04	3.33E-05	2.87E-07	4.16E-05	2.64E-07	3.6520E-04
520737.73	4258701.71	15241.63616	0.11038	0.09934	0.10738	0.10208	2.90E-04	2.59E-07	2.04E-07	2.52E-07	2.01E-07	2.9063E-04
520718.64	4258279.43	15238.48915	0.10602	0.11754	0.10371	0.12273	2.90E-04	2.49E-07	2.41E-07	2.43E-07	2.42E-07	2.9063E-04
519875.16	4258799	15229.53312	0.33517	0.38366	0.35543	0.37211	2.89E-04	7.87E-07	7.87E-07	8.34E-07	7.32E-07	2.9263E-04
519867.49	4258828.73	15227.76334	0.33461	0.34692	0.35338	0.33675	2.89E-04	7.86E-07	7.12E-07	8.30E-07	6.63E-07	2.9244E-04
520743.06	4258736.87	15222.28988	0.10953	0.09541	0.10681	0.09827	2.89E-04	2.57E-07	1.96E-07	2.51E-07	1.93E-07	2.9025E-04
519917.12	4258683.15	15204.04509	0.35847	0.63018	0.38748	0.6044	2.89E-04	8.42E-07	1.29E-06	9.10E-07	1.19E-06	2.9323E-04
520063.74	4258233.24	15197.68779	0.16831	17.14835	0.17691	9.73966	2.89E-04	3.95E-07	3.52E-05	4.15E-07	1.92E-05	3.4403E-04
519854.84	4258900.97	15195.11542	0.3435	0.28058	0.36129	0.27273	2.89E-04	8.06E-07	5.75E-07	8.48E-07	5.37E-07	2.9160E-04

519902.06	4258719.18	15174.16914	0.34655	0.52989	0.37302	0.50981	2.88E-04	8.14E-07	1.09E-06	8.76E-07	1.00E-06	2.9221E-04
520734.83	4258684.69	15170.27029	0.11085	0.10122	0.1076	0.10398	2.88E-04	2.60E-07	2.08E-07	2.53E-07	2.05E-07	2.8928E-04
520718.49	4258304.92	15166.41201	0.1071	0.11689	0.10431	0.12197	2.88E-04	2.51E-07	2.40E-07	2.45E-07	2.40E-07	2.8926E-04
520100.11	4258162.38	15160.16116	0.15106	14.99827	0.15476	15.85769	2.88E-04	3.55E-07	3.08E-05	3.63E-07	3.12E-05	3.5086E-04
520042.84	4259324.55	15115.00865	5.45596	0.13815	7.91258	0.13494	2.87E-04	1.28E-05	2.83E-07	1.86E-05	2.66E-07	3.1924E-04
520706.75	4258403.43	15097.23054	0.11356	0.11861	0.11011	0.12351	2.87E-04	2.67E-07	2.43E-07	2.59E-07	2.43E-07	2.8798E-04
520092.8	4259355.29	15086.3754	12.69207	0.13889	11.20425	0.13255	2.87E-04	2.98E-05	2.85E-07	2.63E-05	2.61E-07	3.4341E-04
519887.45	4258756.28	15078.11	0.33667	0.44876	0.35897	0.43414	2.87E-04	7.90E-07	9.20E-07	8.43E-07	8.55E-07	2.9002E-04
520705.37	4258589.7	15072.39623	0.11757	0.11392	0.11344	0.11797	2.86E-04	2.76E-07	2.34E-07	2.66E-07	2.32E-07	2.8751E-04
520695.58	4258551.72	15065.17332	0.1198	0.11858	0.11535	0.12287	2.86E-04	2.81E-07	2.43E-07	2.71E-07	2.42E-07	2.8740E-04
520690.85	4258511.08	15053.71739	0.12051	0.12123	0.11593	0.12604	2.86E-04	2.83E-07	2.49E-07	2.72E-07	2.48E-07	2.8720E-04
520725.05	4258646.71	15053.62612	0.1129	0.10574	0.1091	0.10896	2.86E-04	2.65E-07	2.17E-07	2.56E-07	2.14E-07	2.8709E-04
520715.21	4258618.2	15048.94509	0.11521	0.10968	0.11119	0.11341	2.86E-04	2.70E-07	2.25E-07	2.61E-07	2.23E-07	2.8703E-04
520047.03	4258270.1	15041.23875	0.17844	7.17285	0.1884	5.56741	2.86E-04	4.19E-07	1.47E-05	4.42E-07	1.10E-05	3.1244E-04
520129.63	4258112.47	15024.82122	0.14024	6.21097	0.14108	7.22608	2.86E-04	3.29E-07	1.27E-05	3.31E-07	1.42E-05	3.1322E-04
520691.19	4258501.95	15011.55438	0.12024	0.12129	0.11572	0.12621	2.85E-04	2.82E-07	2.49E-07	2.72E-07	2.48E-07	2.8639E-04
520722.31	4258263.2	15006.49958	0.10448	0.11672	0.10239	0.12178	2.85E-04	2.45E-07	2.39E-07	2.40E-07	2.40E-07	2.8621E-04
520691.53	4258492.82	15002.58732	0.11996	0.12144	0.11554	0.12646	2.85E-04	2.82E-07	2.49E-07	2.71E-07	2.49E-07	2.8622E-04
520052.75	4259334.53	14994.65095	7.5258	0.13735	14.22908	0.13364	2.85E-04	1.77E-05	2.82E-07	3.34E-05	2.63E-07	3.3664E-04
520109.96	4258142.41	14990.11578	0.14604	10.43302	0.14858	11.98875	2.85E-04	3.43E-07	2.14E-05	3.49E-07	2.36E-05	3.3062E-04
520734.89	4258675.21	14971.57139	0.11061	0.10173	0.10724	0.10453	2.85E-04	2.60E-07	2.09E-07	2.52E-07	2.06E-07	2.8551E-04
520722.09	4258288.49	14954.4451	0.10558	0.11602	0.10307	0.12113	2.84E-04	2.48E-07	2.38E-07	2.42E-07	2.38E-07	2.8522E-04
520030.84	4258316.73	14952.36096	0.19659	4.39365	0.20633	3.70121	2.84E-04	4.62E-07	9.01E-06	4.84E-07	7.29E-06	3.0146E-04
519878.09	4258781.96	14951.16246	0.33031	0.40406	0.35072	0.39179	2.84E-04	7.75E-07	8.29E-07	8.23E-07	7.71E-07	2.8739E-04
519937.12	4258636.77	14921.6155	0.37368	0.80119	0.40941	0.76569	2.84E-04	8.77E-07	1.64E-06	9.61E-07	1.51E-06	2.8862E-04
519999.44	4258511.82	14916.92714	0.40894	2.12648	0.45261	1.88851	2.84E-04	9.60E-07	4.36E-06	1.06E-06	3.72E-06	2.9365E-04
520743.87	4258710.98	14911.28123	0.1087	0.09729	0.10591	0.09998	2.83E-04	2.55E-07	2.00E-07	2.49E-07	1.97E-07	2.8434E-04
520695.64	4258542.24	14907.70145	0.11958	0.1188	0.11508	0.12317	2.83E-04	2.81E-07	2.44E-07	2.70E-07	2.42E-07	2.8441E-04
520037.31	4258294.09	14897.66231	0.18626	5.23396	0.19607	4.30669	2.83E-04	4.37E-07	1.07E-05	4.60E-07	8.48E-06	3.0329E-04
520746.69	4258728.2	14892.87957	0.10822	0.09531	0.10555	0.09808	2.83E-04	2.54E-07	1.95E-07	2.48E-07	1.93E-07	2.8398E-04
519853.09	4258890.3	14890.37448	0.33263	0.28607	0.34945	0.27799	2.83E-04	7.81E-07	5.87E-07	8.20E-07	5.47E-07	2.8577E-04
520704.63	4258423.74	14887.09914	0.11469	0.11862	0.11114	0.12367	2.83E-04	2.69E-07	2.43E-07	2.61E-07	2.43E-07	2.8399E-04
520082.9	4259355.31	14878.35828	14.12594	0.13722	17.49195	0.13164	2.83E-04	3.32E-05	2.81E-07	4.11E-05	2.59E-07	3.5758E-04
520721.97	4258314.05	14867.77638	0.1066	0.1156	0.10365	0.12048	2.83E-04	2.50E-07	2.37E-07	2.43E-07	2.37E-07	2.8358E-04
520694.64	4258475.12	14865.61534	0.1187	0.12066	0.1145	0.12582	2.83E-04	2.79E-07	2.47E-07	2.69E-07	2.48E-07	2.8361E-04
520054.57	4258247.01	14856.30836	0.17008	9.7882	0.17936	7.01779	2.82E-04	3.99E-07	2.01E-05	4.21E-07	1.38E-05	3.1710E-04
520009.19	4258458.73	14840.57631	0.32975	2.65368	0.35317	2.32304	2.82E-04	7.74E-07	5.44E-06	8.29E-07	4.57E-06	2.9371E-04
520741.28	4258693.23	14834.9504	0.1091	0.0991	0.10606	0.10177	2.82E-04	2.56E-07	2.03E-07	2.49E-07	2.00E-07	2.8289E-04
520697.87	4258457.73	14822.34055	0.11739	0.11996	0.11345	0.12517	2.82E-04	2.76E-07	2.46E-07	2.66E-07	2.46E-07	2.8278E-04
520705.42	4258580.22	14820.53233	0.11731	0.11441	0.11321	0.11845	2.82E-04	2.75E-07	2.35E-07	2.66E-07	2.33E-07	2.8272E-04
520720.71	4258336.62	14806.72886	0.10765	0.11583	0.10453	0.12042	2.81E-04	2.53E-07	2.38E-07	2.45E-07	2.37E-07	2.8242E-04
520011.26	4258429.45	14802.62341	0.28763	2.79869	0.30536	2.44862	2.81E-04	6.75E-07	5.74E-06	7.17E-07	4.82E-06	2.9332E-04
520725.1	4258637.22	14789.16945	0.11265	0.10612	0.10883	0.10947	2.81E-04	2.64E-07	2.18E-07	2.55E-07	2.15E-07	2.8207E-04
520119.81	4258122.44	14785.16607	0.14115	7.85414	0.14269	9.20502	2.81E-04	3.31E-07	1.61E-05	3.35E-07	1.81E-05	3.1593E-04
520695.69	4258532.76	14783.72937	0.11938	0.11909	0.11486	0.12353	2.81E-04	2.80E-07	2.44E-07	2.70E-07	2.43E-07	2.8205E-04
519910.75	4258691.91	14783.43051	0.34655	0.59226	0.37302	0.56925	2.81E-04	8.14E-07	1.21E-06	8.76E-07	1.12E-06	2.8503E-04
520715.26	4258608.72	14770.43226	0.11496	0.11008	0.11098	0.1139	2.81E-04	2.70E-07	2.26E-07	2.61E-07	2.24E-07	2.8174E-04
520042.85	4259334.55	14764.49393	5.46518	0.13552	7.9915	0.13239	2.81E-04	1.28E-05	2.78E-07	1.88E-05	2.61E-07	3.1278E-04
520734.94	4258665.73	14755.85206	0.11037	0.10224	0.1069	0.10511	2.80E-04	2.59E-07	2.10E-07	2.51E-07	2.07E-07	2.8141E-04
520064	4258223.15	14746.21532	0.16295	17.40711	0.17112	9.81808	2.80E-04	3.83E-07	3.57E-05	4.02E-07	1.93E-05	3.3611E-04
519927.12	4258655.32	14742.89504	0.36031	0.71407	0.39121	0.68444	2.80E-04	8.46E-07	1.46E-06	9.18E-07	1.35E-06	2.8481E-04
520725.74	4258272.21	14734.39648	0.10407	0.11518	0.10181	0.12024	2.80E-04	2.44E-07	2.36E-07	2.39E-07	2.37E-07	2.8103E-04
520092.82	4259365.29	14724.19497	12.63571	0.13626	11.09954	0.1301	2.80E-04	2.97E-05	2.79E-07	2.61E-05	2.56E-07	3.3614E-04
520018.73	4258361.68	14702.17606	0.22112	3.30649	0.23196	2.86913	2.79E-04	5.19E-07	6.78E-06	5.45E-07	5.65E-06	2.9295E-04
520695.75	4258523.27	14690.86864	0.11918	0.11925	0.11465	0.12381	2.79E-04	2.80E-07	2.45E-07	2.69E-07	2.44E-07	2.8028E-04
519895.62	4258727.77	14680.97162	0.33373	0.50051	0.35866	0.48214	2.79E-04	7.83E-07	1.03E-06	8.42E-07	9.49E-07	2.8266E-04
520725.54	4258297.55	14673.90199	0.10513	0.1146	0.10242	0.11959	2.79E-04	2.47E-07	2.35E-07	2.40E-07	2.35E-07	2.7988E-04
519868.48	4258807	14666.98087	0.32178	0.36578	0.34035	0.35519	2.79E-04	7.55E-07	7.50E-07	7.99E-07	6.99E-07	2.8180E-04
520100.14	4258152.38	14663.7744	0.14658	15.02436	0.15006	15.85514	2.79E-04	3.44E-07	3.08E-05	3.52E-07	3.12E-05	3.4145E-04
520053.18	4259344.53	14654.75487	7.69063	0.13481	14.97615	0.13118	2.79E-04	1.81E-05	2.76E-07	3.52E-05	2.58E-07	3.3231E-04
519860.78	4258836.65	14653.74431	0.32094	0.33185	0.3383	0.32239	2.79E-04	7.53E-07	6.81E-07	7.94E-07	6.35E-07	2.8140E-04
520047.43	4258259.95	14647.72851	0.1726	7.25673	0.18214	5.63286	2.78E-04	4.05E-07	1.49E-05	4.28E-07	1.11E-05	3.0523E-04
519949.85	4258609	14638.07597	0.38517	0.94644	0.42781	0.89773	2.78E-04	9.04E-07	1.94E-06	1.00E-06	1.77E-06	2.8386E-04
520720.52	4258361.97	14609.94761	0.10861	0.11524	0.10533	0.11973	2.78E-04	2.55E-07	2.36E-07	2.47E-07	2.36E-07	2.7868E-04
519854.6	4258863.81	14605.08885	0.32129	0.30531	0.33772	0.29665	2.78E-04	7.54E-07	6.26E-07	7.93E-07	5.84E-07	2.8037E-04
520705.48	4258570.74	14593.6653	0.11709	0.11475	0.11296	0.11881	2.77E-04	2.75E-07	2.35E-07	2.65E-07	2.34E-07	2.7841E-04
519847.71	4258908.04	14574.61512	0.32771	0.27013	0.34376	0.26273	2.77E-04	7.69E-07	5.54E-07	8.07E-07	5.17E-07	2.7968E-04
520019.85	4258351.23	14572.86798	0.21312	3.38911	0.22332	2.93651	2.77E-04	5.00E-07	6.95E-06	5.24E-07	5.78E-06	2.9076E-04
519880.93	4258764.68	14571.60298	0.32421	0.42591	0.34483	0.4126	2.77E-04	7.61E-07	8.74E-07	8.10E-07	8.12E-07	2.8024E-04
520037.9	4258283.86	14555.67372	0.18006	5.31391	0.18955	4.37136	2.77E-04	4.23E-07	1.09E-05	4.45E-07	8.60E-06	2.9705E-04
520750.32	4258719.53	14549.10918	0.10695	0.09513	0.10428	0.09781	2.77E-04	2.51E-07	1.95E-07	2.45E-07	1.93E-07	2.7744E-04
520012.95	4258394.02	14537.16838	0.24609	2.92041	0.25925	2.55849	2.76E-04	5.78E-07	5.99E-06	6.09E-07	5.04E-06	2.8854E-04
520082.92	4259365.31	14523.57991	15.70952	0.13463	17.25251	0.1292	2.76E-04	3.69E-05	2.76E-07	4.05E-05	2.54E-07	3.5398E-04
520747.53	4258702.25	14523.48259	0.10742	0.09707	0.10459	0.09968	2.76E-04	2.52E-07	1.99E-07	2.46E-07	1.96E-07	2.7696E-04
520735	4258656.24	14523.3266	0.11013	0.10269	0.10659	0.10567	2.76E-04	2.59E-07	2.11E-07	2.50E-07	2.08E-07	2.7699E-04
520725.16	4258627.74	14519.12696	0.11241	0.10649	0.10859	0.10997	2.76E-04	2.64E-07	2.18E-07	2.55E-07	2.16E-07	2.7694E-04
520014.14	4258383.54	14518.92111	0.23662	2.99651	0.24885	2.62189	2.76E-04	5.56E-07	6.15E-06	5.84E-07	5.16E-06	2.8842E-04
519917.12	4258673.87	14509.4049	0.34739	0.64051	0.37494	0.61505	2.76E-04	8.16E-07	1.31E-06	8.80E-07	1.21E-06	2.8002E-04
519863.72	4258819.63	14508.43744	0.31759	0.34848	0.3351	0.33865	2.76E-04	7.46E-07	7.15E-07	7.87E-07	6.67E-07	2.7869E-04
520109.99	4258132.41	14506.38579	0.14185	10.43818	0.14421	12.05007	2.76E-04	3.33E-07	2.14E-05	3.39E-07	2.37E-05	3.2154E-04
520724.09	4258345.48	14506.19695	0.10718	0.1144	0.10395	0.11889	2.76E-04	2.52E-07	2.35E-07	2.44E-07	2.34E-07	2.7670E-04
519959.77	4258589.57	14506.05203	0.39593	1.08894	0.44387	1.02148	2.76E-04	9.30E-07	2.23E-06	1.04E-06	2.01E-06	2.8195E-04
520715.32	4258599.24	14500.34474	0.11472	0.11047	0.11078	0.11435	2.76E-04	2.69E-07	2.27E-07	2.60E-07	2.25E-07	2.7661E-04
520698.09	4258484.15	14492.46164	0.11779	0.11934	0.11354	0.12432	2.75E-04	2.77E-07	2.45E-07	2.67E-07	2.45E-07	2.7651E-04
520729.17	4258281.21	14466.8689	0.10367	0.11355	0.1012	0.11858	2.75E-04	2.43E-07	2.33E-07	2.38E-07	2.33E-07	2.7594E-04
519904.67	4258701.35	14464.06876	0.33678	0.55816	0.36134	0.53741	2.75E-04	7.91E-07	1.14E-06	8.48E-07	1.06E-06	2.7878E-04
520054.94	4258236.87	14443.55596	0.16468	9.9189	0.17353	7.0919	2.75E-04	3.87E-07	2.03E-05	4.07E-07	1.40E-05	3.0964E-04
520015.14	4258373.14	14442.68389	0.2276	3.0623	0.23899	2.67703	2.75E-04	5.34E-07	6.28E-06	5.61E-07	5.27E-06	2.8717E-04
520043.28	4259344.55	14434.82779	5.55415	0.13304	8.22942	0.12997	2.74E-04	1.30E-05	2.73E-07	1.93E-05	2.56E-07	3.0727E-04
519989.52	4258531.26	14425.57278	0.41206	1.76187	0.45928	1.59249	2.74E-04	9.67E-07	3.61E-06	1.08E-06	3.13E-06	2.8300E-04
519871.47	4258790.09	14420.74264	0.31757	0.38468	0.33637	0.37346	2.74E-04	7.46E-07	7.89E-07	7.90E-07	7.35E-07	2.7717E-04
520744.83	4258684.75	14420.72666	0.10785	0.09881	0.10478	0.10145	2.74E-04	2.53E-07	2.03E-07	2.46E-07	2.00E-07	2.7501E-04
520701.29	4258466.69	14411.56046	0.11655	0.1185	0.11252	0.1236	2.74E-04	2.74E-07	2.43E-07	2.64E-07	2.43E-07	2.7496E-04
520020.82	4258340.84	14402.6648	0.20552	3.46188	0.21513	2.99744	2.74E-04	4.82E-07	7.10E-06	5.05E-07	5.90E-06	2.8776E-04
520728.99	4258306.62	14395.50825	0.10467	0.11323	0.10177	0.11805	2.74E-04	2.46E-07	2.32E-07	2.39E-07	2.32E-07	2.7458E-04
520705.53	4258561.26	14391.07705	0.11688	0.11504	0.11269	0.11913	2.74E-04	2.74E-07	2.36E-07	2.65E-07	2.35E-07	2.7456E-04
520092.84	4259375.29	14371.19927	12.60874	0.13369	10.98905	0.12771	2.73E-04	2.96E-05	2.74E-07	2.58E-05	2.51E-07	3.2910E-04
519969.69	4258570.13	14359.50609	0.40473	1.26526	0.45362	1.17316	2.73E-04	9.50E-07	2.59E-06	1.06E-06	2.31E-06	2.7987E-04
519999.4	4258502.12	14354.94726	0.38642	2.14822	0.42408	1.90778	2.73E-04	9.07E-07	4.41E-06	9.96E-07	3.76E-06	2.8293E-04
520053.2	4259354.53	14317.09151	7.75148	0.13229	15.27015	0.12876	2.72E-04	1.82E-05	2.71E-07	3.58E-05	2.53E-07	3.2671E-04
520064.24	4258213.06	14312.54883	0.15789	17.62013	0.16563	9.88711	2.72E-04	3.71E-07	3.61E-05	3.89E-07	1.95E-05	3.2842E-04
520119.84	4258112.44	14304.22998	0.13719	7.85872	0.13862	9.20207	2.72E-04	3.22E-07	1.61E-05	3.25E-07	1.81E-05	3.0678E-04
519846.01	4258897.39	14290.67221	0.31771	0.27522	0.33289	0.26764	2.72E-04	7.46E-07	5.64E-07	7.82E-07	5.27E-07	2.7426E-04
519979.61	4258550.69	14285.54215	0.41015	1.48279	0.45838	1.35989	2.72E-04	9.63E-07	3.04E-06	1.08E-06	2.68E-06	2.7930E-04
520720.43	4258387.62	14284.43809	0.10943	0.11445	0.10611	0.11899	2.72E-04	2.57E-07	2.35E-07	2.49E-07	2.34E-07	2.7250E-04
520735.05	4258646.76	14279.25377	0.1099	0.10309	0.10631	0.10619	2.71E-04	2.58E-07	2.11E-07	2.50E-07	2.09E-07	2.7235E-04
519889.13	4258736.23	14257.67052	0.32301	0.47329	0.34491	0.45729	2.71E-04	7.58E-07	9.71E-07	8.10E-07	9.00E-07	2.7445E-04
520723.91	4258370.89	14255.78725	0.10804	0.11383	0.10475	0.11825	2.71E-04	2.54E-07	2.33E-07	2.46E-07	2.33E-07	2.7194E-04
520725.21	4258618.26	14249.32684	0.11217	0.10687	0.10838	0.11046	2.71E-04	2.63E-07	2.19E-07	2.54E-07	2.17E-07	2.7181E-04
520715.37	4258589.76	14245.14559	0.11449	0.11087	0.11057	0.11478	2.71E-04	2.69E-07	2.27E-07	2.60E-07	2.26E-07	2.7176E-04
520007.6	4258438.34	14243.98891	0.29317	2.59818	0.31161	2.28841	2.71E-04	6.88E-07	5.33E-06	7.32E-07	4.50E-06	2.8201E-04
520027.77	4258308.01	14240.00197	0.18762	4.06165	0.19657	3.46285	2.71E-04	4.40E-07	8.33E-06	4.61E-07	6.82E-06	2.8673E-04
520744.89	4258675.26	14227.85486	0.10764	0.0993	0.10445	0.10199	2.70E-04	2.53E-07	2.04E-07	2.45E-07	2.01E-07	2.7135E-04
520705.58	4258551.78	14216.16103	0.11668	0.11535	0.11243	0.11947	2.70E-04	2.74E-07	2.37E-07	2.64E-07	2.35E-07	2.7123E-04
520038.43	4258273.65	14212.86357	0.17416	5.38672	0.18337	4.42712	2.70E-04	4.09E-07	1.10E-05	4.30E-07	8.71E-06	2.9076E-04
520700.84	4258511.46	14206.74688	0.1174	0.11785	0.11299	0.12244	2.70E-04	2.76E-07	2.42E-07	2.65E-07	2.41E-07	2.7107E-04
520732.6	4258290.22	14204.35118	0.10323	0.11227	0.10058	0.11718	2.70E-04	2.42E-07	2.30E-07	2.36E-07	2.31E-07	2.7094E-04
520021.66	4258330.5	14200.33809	0.19828	3.52608	0.20742	3.05073	2.70E-04	4.65E-07	7.23E-06	4.87E-07	6.01E-06	2.8411E-04
520100.17	4258142.38	14196.26664	0.14233	15.04492	0.1456	15.91239	2.70E-04	3.34E-07	3.09E-05	3.42E-07	3.13E-05	3.3270E-04
520753.95	4258710.86	14193.44198	0.10571	0.09495	0.10303	0.09754	2.70E-04	2.48E-07	1.95E-07	2.42E-07	1.92E-07	2.7067E-04
520082.94	4259375.31	14183.30432	15.65256	0.13212	17.01862	0.12685	2.70E-04	3.67E-05	2.71E-07	4.00E-05	2.50E-07	3.4682E-04
520727.46	4258354.35	14182.52505	0.10663	0.11307	0.10339	0.11744	2.70E-04	2.50E-07	2.32E-07	2.43E-07	2.31E-07	2.7054E-04
520701.18	4258502.33	14169.80421	0.11715	0.11796	0.11279	0.12265	2.69E-04	2.75E-07	2.42E-07	2.65E-07	2.41E-07	2.7037E-04
520701.53	4258493.19	14162.80034	0.1169	0.118	0.11261	0.1228	2.69E-04	2.74E-07	2.42E-07	2.64E-07	2.42E-07	2.7023E-04
520751.18	4258693.53	14126.86506	0.10616	0.09681	0.1033	0.09937	2.69E-04	2.49E-07	1.99E-07	2.43E-07	1.96E-07	2.6941E-04
520732.44	4258315.68	14117.04144	0.10417	0.11199	0.10116	0.11663	2.68E-04	2.45E-07	2.30E-07	2.37E-07	2.30E-07	2.6928E-04
520043.3	4259354.55	14106.81781	5.57877	0.13058	8.31975	0.12758	2.68E-04	1.31E-05	2.68E-07	1.95E-05	2.51E-07	3.0129E-04
519874.37	4258772.97	14082.80594	0.3123	0.40479	0.33127	0.39271	2.68E-04	7.33E-07	8.30E-07	7.78E-07	7.73E-07	2.7080E-04
519883.66	4258747.14	14075.29301	0.31674	0.44886	0.33762	0.43423	2.68E-04	7.44E-07	9.21E-07	7.93E-07	8.55E-07	2.7086E-04
520045.69	4258250.68	14075.2646	0.16614	6.78528	0.17518	5.35522	2.68E-04	3.90E-07	1.39E-05	4.11E-07	1.05E-05	2.9280E-04
520705.64	4258542.29	14069.38826	0.11648	0.11556	0.11217	0.11974	2.67E-04	2.73E-07	2.37E-07	2.63E-07	2.36E-07	2.6844E-04
519898.33	4258710.17	14061.21806	0.32564	0.52695	0.34881	0.50795	2.67E-04	7.64E-07	1.08E-06	8.19E-07	1.00E-06	2.7094E-04
520055.28	4258226.75	14044.48202	0.15957	10.04245	0.16802	7.15987	2.67E-04	3.75E-07	2.06E-05	3.94E-07	1.41E-05	3.0242E-04
520110.02	4258122.41	14042.49321	0.13785	10.44651	0.14005	12.04597	2.67E-04	3.24E-07	2.14E-05	3.29E-07	2.37E-05	3.1271E-04
519850.96	4258855.16	14040.68429	0.30668	0.30698	0.32205	0.29854	2.67E-04	7.20E-07	6.30E-07	7.56E-07	5.88E-07	2.6958E-04
520092.85	4259385.29	14036.80581	12.48859	0.13124	10.8918	0.12542	2.67E-04	2.93E-05	2.69E-07	2.56E-05	2.47E-07	3.2222E-04
520704.7	4258475.65	14035.27931	0.11568	0.11719	0.1116	0.12213	2.67E-04	2.72E-07	2.40E-07	2.62E-07	2.40E-07	2.6780E-04
519847.6	4258870.98	14027.11967	0.30735	0.29316	0.32225	0.2851	2.67E-04	7.22E-07	6.01E-07	7.57E-07	5.61E-07	2.6927E-04
520735.1	4258637.28	14026.46689	0.10968	0.10346	0.10607	0.10669	2.67E-04	2.57E-07	2.12E-07	2.49E-07	2.10E-07	2.6755E-04
520744.94	4258665.78	14019.30218	0.10742	0.09976	0.10414	0.10253	2.66E-04	2.52E-07	2.05E-07	2.44E-07	2.02E-07	2.6738E-04
520715.42	4258580.28	14008.34904	0.11427	0.1113	0.11036	0.11521	2.66E-04	2.68E-07	2.28E-07	2.59E-07	2.27E-07	2.6726E-04
520007.92	4258413.3	14005.02339	0.26059	2.63683	0.27533	2.32687	2.66E-04	6.12E-07	5.41E-06	6.46E-07	4.58E-06	2.7746E-04
520707.98	4258458.39	13996.83081	0.11445	0.11644	0.11059	0.12143	2.66E-04	2.69E-07	2.39E-07	2.60E-07	2.39E-07	2.6706E-04
520053.22	4259364.53	13990.65864	7.80478	0.12985	15.58313	0.12641	2.66E-04	1.83E-05	2.66E-07	3.66E-05	2.49E-07	3.2136E-04
519927.12	4258646.05	13987.66337	0.34887	0.72427	0.37905	0.69514	2.66E-04	8.19E-07	1.49E-06	8.90E-07	1.37E-06	2.7044E-04
519857.03	4258827.62	13986.3514	0.3052	0.33319	0.3213	0.3241	2.66E-04	7.17E-07	6.83E-07	7.54E-07	6.38E-07	2.6865E-04
520725.26	4258608.78	13983.95926	0.11195	0.10724	0.10819	0.11092	2.66E-04	2.63E-07	2.20E-07	2.54E-07	2.18E-07	2.6676E-04
520022.41	4258320.21	13976.28843	0.19144	3.58397	0.20017	3.09898	2.66E-04	4.49E-07	7.35E-06	4.70E-07	6.10E-06	2.8003E-04
520002.61	4258474.73	13975.19984	0.34126	2.3269	0.36748	2.05643	2.66E-04	8.01E-07	4.77E-06	8.63E-07	4.05E-06	2.7613E-04
520028.53	4258297.71	13972.60874	0.1814	4.13345	0.1901	3.52006	2.66E-04	4.26E-07	8.48E-06	4.46E-07	6.93E-06	2.8187E-04
519999.36	4258492.42	13956.3272	0.36589	2.16708	0.39833	1.925	2.65E-04	8.59E-07	4.44E-06	9.35E-07	3.79E-06	2.7531E-04
520705.69	4258532.81	13954.8524	0.11629	0.1158	0.11196	0.12006	2.65E-04	2.73E-07	2.37E-07	2.63E-07	2.36E-07	2.6627E-04
520732.39	4258341.42	13947.32997	0.105	0.11173	0.10184	0.11607	2.65E-04	2.47E-07	2.29E-07	2.39E-07	2.28E-07	2.6606E-04
520736.02	4258299.22	13943.90935	0.10277	0.11105	0.09996	0.1158	2.65E-04	2.41E-07	2.28E-07	2.35E-07	2.28E-07	2.6598E-04
519864.81	4258798.15	13913.61352	0.30542	0.36679	0.32278	0.35648	2.64E-04	7.17E-07	7.52E-07	7.58E-07	7.02E-07	2.6740E-04
520727.31	4258379.82	13891.82767	0.10743	0.11244	0.10418	0.11681	2.64E-04	2.52E-07	2.31E-07	2.45E-07	2.30E-07	2.6502E-04
520723.85	4258396.6	13891.76892	0.10879	0.113	0.10548	0.11751	2.64E-04	2.55E-07	2.32E-07	2.48E-07	2.31E-07	2.6502E-04
520038.91	4258263.47	13872.62353	0.16859	5.45238	0.17752	4.47766	2.64E-04	3.96E-07	1.12E-05	4.17E-07	8.81E-06	2.8450E-04
520705.75	4258523.33	13870.55887	0.11611	0.116	0.11176	0.12035	2.64E-04	2.73E-07	2.38E-07	2.62E-07	2.37E-07	2.6466E-04
520082.95	4259385.31	13858.71222	15.48663	0.12972	16.81339	0.12459	2.63E-04	3.64E-05	2.66E-07	3.95E-05	2.45E-07	3.3977E-04
520730.84	4258363.21	13851.8994	0.10607	0.11173	0.10284	0.11602	2.63E-04	2.49E-07	2.29E-07	2.41E-07	2.28E-07	2.6425E-04
520720.47	4258413.59	13836.62374	0.11007	0.11364	0.10673	0.11829	2.63E-04	2.58E-07	2.33E-07	2.51E-07	2.33E-07	2.6398E-04
520757.58	4258702.2	13827.65383	0.1045	0.09476	0.10179	0.09728	2.63E-04	2.45E-07	1.94E-07	2.39E-07	1.91E-07	2.6371E-04
519917.12	4258664.6	13819.87054	0.33674	0.65002	0.36318	0.62508	2.63E-04	7.91E-07	1.33E-06	8.53E-07	1.23E-06	2.6690E-04
520063.35	4258203.44	13815.54656	0.15269	16.2997	0.16013	9.53009	2.63E-04	3.58E-07	3.34E-05	3.76E-07	1.88E-05	3.1553E-04
519939.89	4258618.74	13803.07463	0.36035	0.84549	0.39661	0.80722	2.62E-04	8.46E-07	1.73E-06	9.31E-07	1.59E-06	2.6747E-04
520745	4258656.3	13795.85294	0.10721	0.10016	0.10386	0.10303	2.62E-04	2.52E-07	2.05E-07	2.44E-07	2.03E-07	2.6314E-04
520715.48	4258570.8	13792.36419	0.11406	0.11162	0.11012	0.11554	2.62E-04	2.68E-07	2.29E-07	2.59E-07	2.27E-07	2.6315E-04
520043.32	4259364.55	13789.4761	5.60916	0.12819	8.41254	0.12527	2.62E-04	1.32E-05	2.63E-07	1.97E-05	2.47E-07	2.9554E-04
519859.95	4258810.54	13782.80826	0.30142	0.34971	0.31789	0.34014	2.62E-04	7.08E-07	7.17E-07	7.46E-07	6.70E-07	2.6483E-04
520735.16	4258627.8	13768.39287	0.10946	0.1038	0.10585	0.10716	2.62E-04	2.57E-07	2.13E-07	2.49E-07	2.11E-07	2.6264E-04
520100.2	4258132.38	13753.08727	0.1383	15.06047	0.14136	15.96666	2.61E-04	3.25E-07	3.09E-05	3.32E-07	3.14E-05	3.2440E-04
519838.93	4258904.49	13728.54681	0.30381	0.26501	0.3175	0.25789	2.61E-04	7.13E-07	5.44E-07	7.45E-07	5.08E-07	2.6346E-04
520725.32	4258599.3	13727.08255	0.11173	0.1076	0.108	0.11134	2.61E-04	2.62E-07	2.21E-07	2.54E-07	2.19E-07	2.6188E-04
520754.83	4258684.8	13723.07729	0.10495	0.09646	0.10204	0.099	2.61E-04	2.46E-07	1.98E-07	2.40E-07	1.95E-07	2.6173E-04
520046.14	4258240.51	13716.28351	0.16099	6.87349	0.1697	5.41591	2.61E-04	3.78E-07	1.41E-05	3.98E-07	1.07E-05	2.8626E-04
520003.95	4258447.22	13712.29719	0.29869	2.41874	0.31788	2.14282	2.61E-04	7.01E-07	4.96E-06	7.46E-07	4.22E-06	2.7127E-04
519949.81	4258599.31	13702.88299	0.37093	0.96202	0.41211	0.91107	2.60E-04	8.71E-07	1.97E-06	9.68E-07	1.79E-06	2.6607E-04
520029.21	4258287.44	13696.16921	0.17552	4.1974	0.18397	3.57333	2.60E-04	4.12E-07	8.61E-06	4.32E-07	7.03E-06	2.7683E-04
520708.11	4258484.61	13695.27799	0.11482	0.11589	0.11069	0.12067	2.60E-04	2.70E-07	2.38E-07	2.60E-07	2.38E-07	2.6133E-04
519989.48	4258521.56	13687.6774	0.39084	1.78305	0.43265	1.61122	2.60E-04	9.18E-07	3.66E-06	1.02E-06	3.17E-06	2.6894E-04
520739.45	4258308.23	13683.22465	0.1023	0.10981	0.09936	0.11439	2.60E-04	2.40E-07	2.25E-07	2.33E-07	2.25E-07	2.6102E-04
520053.23	4259374.53	13674.85115	7.86009	0.12749	15.89956	0.12414	2.60E-04	1.85E-05	2.61E-07	3.73E-05	2.44E-07	3.1622E-04
520055.59	4258216.63	13657.86582	0.15471	10.1548	0.16279	7.22087	2.60E-04	3.63E-07	2.08E-05	3.82E-07	1.42E-05	2.9540E-04
520089.57	4259395.71	13651.26178	13.53983	0.12831	12.26189	0.12287	2.59E-04	3.18E-05	2.63E-07	2.88E-05	2.42E-07	3.2056E-04
519877.17	4258755.62	13646.34042	0.30591	0.42595	0.32498	0.41279	2.59E-04	7.18E-07	8.74E-07	7.63E-07	8.13E-07	2.6256E-04
520735.87	4258350.55	13639.32394	0.10448	0.11037	0.10128	0.11461	2.59E-04	2.45E-07	2.26E-07	2.38E-07	2.26E-07	2.6019E-04
519891.92	4258718.84	13629.47439	0.31393	0.49834	0.33639	0.48056	2.59E-04	7.37E-07	1.02E-06	7.90E-07	9.46E-07	2.6257E-04
520711.36	4258467.28	13618.06892	0.11362	0.11514	0.10971	0.12001	2.59E-04	2.67E-07	2.36E-07	2.58E-07	2.36E-07	2.5985E-04
519867.77	4258781.18	13612.63234	0.30089	0.38528	0.31835	0.37428	2.59E-04	7.06E-07	7.90E-07	7.47E-07	7.37E-07	2.6173E-04

519907.12	4258683.15	13607.63183	0.32501	0.58641	0.3489	0.56469	2.59E-04	7.63E-07	1.20E-06	8.19E-07	1.11E-06	2.6255E-04
520715.53	4258561.31	13601.37858	0.11386	0.11194	0.10987	0.11587	2.59E-04	2.67E-07	2.30E-07	2.58E-07	2.28E-07	2.5952E-04
520110.05	4258112.41	13599.35505	0.13402	10.45566	0.1361	12.00483	2.58E-04	3.15E-07	2.14E-05	3.20E-07	2.36E-05	3.0421E-04
520745.05	4258646.82	13561.76708	0.10701	0.10051	0.10361	0.10351	2.58E-04	2.51E-07	2.06E-07	2.43E-07	2.04E-07	2.5869E-04
519959.73	4258579.87	13552.97295	0.38017	1.10675	0.42426	1.03673	2.58E-04	8.93E-07	2.27E-06	9.96E-07	2.04E-06	2.6382E-04
520754.89	4258675.32	13536.2278	0.10477	0.09692	0.10174	0.09951	2.57E-04	2.46E-07	1.99E-07	2.39E-07	1.96E-07	2.5818E-04
520730.71	4258388.74	13525.76086	0.10682	0.11105	0.10359	0.11539	2.57E-04	2.51E-07	2.28E-07	2.43E-07	2.27E-07	2.5805E-04
520734.21	4258372.08	13518.45524	0.10551	0.11038	0.1023	0.11462	2.57E-04	2.48E-07	2.26E-07	2.40E-07	2.26E-07	2.5790E-04
520004.35	4258421.99	13517.61263	0.26525	2.46118	0.28045	2.18456	2.57E-04	6.23E-07	5.05E-06	6.58E-07	4.30E-06	2.6757E-04
520735.21	4258618.32	13511.02193	0.10925	0.10414	0.10567	0.10761	2.57E-04	2.56E-07	2.14E-07	2.48E-07	2.12E-07	2.5775E-04
519843.98	4258862.39	13499.85382	0.2938	0.29463	0.30775	0.2868	2.57E-04	6.90E-07	6.04E-07	7.22E-07	5.65E-07	2.5919E-04
520009.85	4258365.34	13497.86049	0.21431	2.75852	0.22462	2.44038	2.57E-04	5.03E-07	5.66E-06	5.27E-07	4.80E-06	2.6806E-04
520727.27	4258405.59	13496.58946	0.10813	0.11159	0.10484	0.11609	2.57E-04	2.54E-07	2.29E-07	2.46E-07	2.29E-07	2.5750E-04
520725.37	4258589.82	13484.7708	0.11153	0.10795	0.10781	0.11172	2.56E-04	2.62E-07	2.21E-07	2.53E-07	2.20E-07	2.5728E-04
520043.33	4259374.55	13482.18444	5.64531	0.12587	8.50373	0.12303	2.56E-04	1.33E-05	2.58E-07	2.00E-05	2.42E-07	2.8999E-04
520079.67	4259395.72	13475.5324	16.36914	0.12678	20.03811	0.12202	2.56E-04	3.84E-05	2.60E-07	4.70E-05	2.40E-07	3.4212E-04
519840.47	4258877.85	13467.65591	0.29389	0.28178	0.30734	0.27429	2.56E-04	6.90E-07	5.78E-07	7.22E-07	5.40E-07	2.5853E-04
519847.32	4258846.51	13466.4475	0.29273	0.30827	0.30715	0.30012	2.56E-04	6.87E-07	6.32E-07	7.21E-07	5.91E-07	2.5860E-04
520761.2	4258693.53	13453.67071	0.1033	0.09456	0.10058	0.09701	2.56E-04	2.43E-07	1.94E-07	2.36E-07	1.91E-07	2.5659E-04
520011.11	4258354.84	13444.74143	0.20688	2.82895	0.21655	2.49953	2.56E-04	4.86E-07	5.80E-06	5.08E-07	4.92E-06	2.6728E-04
520715.58	4258551.83	13437.49698	0.11368	0.11221	0.10963	0.11618	2.55E-04	2.67E-07	2.30E-07	2.57E-07	2.29E-07	2.5641E-04
520710.84	4258511.83	13428.18787	0.11441	0.11467	0.11018	0.11905	2.55E-04	2.69E-07	2.35E-07	2.59E-07	2.34E-07	2.5624E-04
520723.92	4258422.64	13424.76196	0.10936	0.11221	0.10601	0.11684	2.55E-04	2.57E-07	2.30E-07	2.49E-07	2.30E-07	2.5615E-04
519969.65	4258560.43	13421.42302	0.38686	1.28331	0.43075	1.18952	2.55E-04	9.08E-07	2.63E-06	1.01E-06	2.34E-06	2.6201E-04
520742.88	4258317.23	13421.42057	0.10182	0.1086	0.09878	0.11301	2.55E-04	2.39E-07	2.23E-07	2.32E-07	2.22E-07	2.5603E-04
520063.61	4258193.35	13420.95286	0.14816	16.52504	0.15526	9.59285	2.55E-04	3.48E-07	3.39E-05	3.65E-07	1.89E-05	3.0860E-04
520029.82	4258277.2	13412.34215	0.16993	4.25475	0.17816	3.6214	2.55E-04	3.99E-07	8.73E-06	4.18E-07	7.13E-06	2.7162E-04
519979.56	4258541	13408.81911	0.39036	1.50209	0.4337	1.37707	2.55E-04	9.16E-07	3.08E-06	1.02E-06	2.71E-06	2.6260E-04
520711.18	4258502.7	13393.6232	0.11417	0.11472	0.10999	0.1192	2.55E-04	2.68E-07	2.35E-07	2.58E-07	2.35E-07	2.5558E-04
520711.52	4258493.57	13390.83229	0.11395	0.11468	0.10981	0.11927	2.55E-04	2.68E-07	2.35E-07	2.58E-07	2.35E-07	2.5553E-04
520053.25	4259384.53	13368.84592	7.97432	0.12518	16.24682	0.12192	2.54E-04	1.87E-05	2.57E-07	3.81E-05	2.40E-07	3.1148E-04
520046.56	4258230.35	13366.11498	0.15611	6.9574	0.1645	5.4729	2.54E-04	3.66E-07	1.43E-05	3.86E-07	1.08E-05	2.7986E-04
520720.65	4258439.94	13354.27753	0.11059	0.11271	0.10705	0.11748	2.54E-04	2.60E-07	2.31E-07	2.51E-07	2.31E-07	2.5481E-04
520012.19	4258344.4	13345.65486	0.19975	2.89047	0.2088	2.55239	2.54E-04	4.69E-07	5.93E-06	4.90E-07	5.02E-06	2.6559E-04
520089.58	4259405.71	13344.56976	13.34105	0.12603	12.14676	0.12073	2.54E-04	3.13E-05	2.58E-07	2.85E-05	2.38E-07	3.1399E-04
520754.94	4258665.84	13335.03518	0.10458	0.09735	0.10147	0.10002	2.53E-04	2.46E-07	2.00E-07	2.38E-07	1.97E-07	2.5436E-04
520100.23	4258122.38	13330.49556	0.13446	15.07372	0.13734	15.96652	2.53E-04	3.16E-07	3.09E-05	3.22E-07	3.14E-05	3.1637E-04
520036.8	4258254.35	13323.21804	0.16218	5.11207	0.1706	4.24758	2.53E-04	3.81E-07	1.05E-05	4.01E-07	8.36E-06	2.7288E-04
520739.34	4258359.68	13321.77189	0.10393	0.10904	0.10074	0.11319	2.53E-04	2.44E-07	2.24E-07	2.37E-07	2.23E-07	2.5415E-04
520745.1	4258637.34	13319.69126	0.10682	0.10083	0.1034	0.10397	2.53E-04	2.51E-07	2.07E-07	2.43E-07	2.05E-07	2.5409E-04
519853.29	4258818.59	13310.46106	0.29019	0.33431	0.30536	0.32548	2.53E-04	6.81E-07	6.86E-07	7.17E-07	6.41E-07	2.5573E-04
519900.89	4258692.25	13308.08877	0.3156	0.55324	0.33769	0.53354	2.53E-04	7.41E-07	1.13E-06	7.93E-07	1.05E-06	2.5668E-04
520005.75	4258387.01	13301.95688	0.22922	2.54609	0.2408	2.26479	2.53E-04	5.38E-07	5.22E-06	5.65E-07	4.46E-06	2.6363E-04
520715.64	4258542.35	13301.06866	0.11349	0.11247	0.10939	0.11648	2.53E-04	2.66E-07	2.31E-07	2.57E-07	2.29E-07	2.5381E-04
520018.88	4258311.68	13295.22742	0.18259	3.31427	0.19059	2.89457	2.53E-04	4.29E-07	6.80E-06	4.47E-07	5.70E-06	2.6609E-04
520714.75	4258476.17	13271.79658	0.11279	0.11387	0.10883	0.11859	2.52E-04	2.65E-07	2.34E-07	2.55E-07	2.33E-07	2.5326E-04
519885.46	4258727.38	13262.50169	0.30418	0.47176	0.32444	0.45597	2.52E-04	7.14E-07	9.68E-07	7.62E-07	8.98E-07	2.5544E-04
520725.42	4258580.33	13260.00173	0.11133	0.1083	0.10761	0.11207	2.52E-04	2.61E-07	2.22E-07	2.53E-07	2.21E-07	2.5301E-04
520735.26	4258608.84	13258.15945	0.10905	0.10449	0.1055	0.10804	2.52E-04	2.56E-07	2.14E-07	2.48E-07	2.13E-07	2.5294E-04
519927.12	4258636.77	13252.63084	0.33805	0.73424	0.36787	0.7053	2.52E-04	7.94E-07	1.51E-06	8.64E-07	1.39E-06	2.5646E-04
520742.79	4258342.87	13252.30622	0.10261	0.10832	0.09948	0.11246	2.52E-04	2.41E-07	2.22E-07	2.34E-07	2.21E-07	2.5282E-04
520718.07	4258459.03	13236.63954	0.11161	0.11309	0.10786	0.11788	2.52E-04	2.62E-07	2.32E-07	2.53E-07	2.32E-07	2.5258E-04
519870.64	4258763.99	13226.05349	0.29537	0.40485	0.31286	0.39295	2.51E-04	6.93E-07	8.30E-07	7.34E-07	7.74E-07	2.5444E-04
520000.29	4258456.11	13220.66004	0.30412	2.25667	0.32419	2.00938	2.51E-04	7.14E-07	4.63E-06	7.61E-07	3.96E-06	2.6136E-04
520013.14	4258334.02	13212.90196	0.19294	2.94594	0.20147	2.59929	2.51E-04	4.53E-07	6.04E-06	4.73E-07	5.12E-06	2.6324E-04
520715.69	4258532.87	13194.53009	0.11332	0.11268	0.10918	0.11676	2.51E-04	2.66E-07	2.31E-07	2.56E-07	2.30E-07	2.5179E-04
520043.35	4259384.55	13184.91109	5.70134	0.12362	8.59936	0.12084	2.51E-04	1.34E-05	2.54E-07	2.02E-05	2.38E-07	2.8469E-04
520737.59	4258380.94	13182.42671	0.10495	0.10898	0.10175	0.11319	2.51E-04	2.46E-07	2.24E-07	2.39E-07	2.23E-07	2.5151E-04
520054.39	4258207.14	13180.8256	0.14956	9.54213	0.15734	6.92649	2.51E-04	3.51E-07	1.96E-05	3.69E-07	1.36E-05	2.8447E-04
520079.68	4259405.72	13176.50391	16.11421	0.12454	19.76931	0.1199	2.50E-04	3.78E-05	2.55E-07	4.64E-05	2.36E-07	3.3520E-04
519861.14	4258789.3	13161.34504	0.28995	0.36735	0.30611	0.35726	2.50E-04	6.81E-07	7.53E-07	7.19E-07	7.03E-07	2.5303E-04
520734.11	4258397.66	13151.86666	0.10618	0.10972	0.103	0.11402	2.50E-04	2.49E-07	2.25E-07	2.42E-07	2.24E-07	2.5093E-04
519917.12	4258655.32	13142.27325	0.3266	0.65889	0.35232	0.63455	2.50E-04	7.67E-07	1.35E-06	8.27E-07	1.25E-06	2.5401E-04
519989.44	4258511.86	13134.84945	0.37127	1.80311	0.40832	1.62855	2.50E-04	8.72E-07	3.70E-06	9.59E-07	3.21E-06	2.5840E-04
520030.38	4258266.99	13126.57486	0.16463	4.30797	0.17266	3.66458	2.50E-04	3.86E-07	8.84E-06	4.05E-07	7.21E-06	2.6635E-04
520754.99	4258656.36	13120.78441	0.1044	0.09773	0.10123	0.1005	2.49E-04	2.45E-07	2.00E-07	2.38E-07	1.98E-07	2.5028E-04
520715.74	4258523.39	13117.85351	0.11316	0.11289	0.109	0.11706	2.49E-04	2.66E-07	2.32E-07	2.56E-07	2.30E-07	2.5033E-04
519879.86	4258738	13104.46814	0.29827	0.44779	0.31745	0.43338	2.49E-04	7.00E-07	9.18E-07	7.45E-07	8.53E-07	2.5231E-04
520730.69	4258414.57	13102.65092	0.10745	0.11024	0.10418	0.11472	2.49E-04	2.52E-07	2.26E-07	2.45E-07	2.26E-07	2.5001E-04
520019.75	4258301.33	13093.38073	0.17672	3.37395	0.18442	2.94481	2.49E-04	4.15E-07	6.92E-06	4.33E-07	5.80E-06	2.6245E-04
520745.16	4258627.86	13073.38184	0.10662	0.10118	0.10321	0.10443	2.49E-04	2.50E-07	2.08E-07	2.42E-07	2.06E-07	2.4941E-04
520764.83	4258684.86	13072.78467	0.10215	0.0942	0.09939	0.09664	2.48E-04	2.40E-07	1.93E-07	2.33E-07	1.90E-07	2.4935E-04
520725.48	4258570.85	13055.78547	0.11114	0.10861	0.10739	0.1124	2.48E-04	2.61E-07	2.23E-07	2.52E-07	2.21E-07	2.4912E-04
519856.17	4258801.44	13054.30318	0.28609	0.35052	0.30153	0.34115	2.48E-04	6.72E-07	7.19E-07	7.08E-07	6.72E-07	2.5091E-04
520013.97	4258323.69	13051.66667	0.18646	2.99478	0.19453	2.64122	2.48E-04	4.38E-07	6.14E-06	4.57E-07	5.20E-06	2.6032E-04
520063.85	4258183.26	13050.78713	0.14389	16.70083	0.15062	9.66763	2.48E-04	3.38E-07	3.43E-05	3.54E-07	1.90E-05	3.0205E-04
520090.41	4258132.35	13044.06622	0.13471	25.66983	0.13843	17.09441	2.48E-04	3.16E-07	5.26E-05	3.25E-07	3.37E-05	3.3488E-04
520089.6	4259415.71	13043.89012	13.20119	0.1238	12.01849	0.11864	2.48E-04	3.10E-05	2.54E-07	2.82E-05	2.34E-07	3.0764E-04
520000.77	4258430.68	13029.4315	0.26983	2.30145	0.28548	2.05423	2.48E-04	6.33E-07	4.72E-06	6.70E-07	4.04E-06	2.5773E-04
520727.36	4258431.7	13024.77862	0.10863	0.11083	0.10525	0.11543	2.48E-04	2.55E-07	2.27E-07	2.47E-07	2.27E-07	2.4853E-04
520046.94	4258220.2	13023.90875	0.15146	7.03249	0.15954	5.52358	2.48E-04	3.56E-07	1.44E-05	3.75E-07	1.09E-05	2.7359E-04
520037.34	4258244.14	13015.14398	0.15728	5.18007	0.16547	4.29917	2.47E-04	3.69E-07	1.06E-05	3.88E-07	8.46E-06	2.6724E-04
520735.32	4258599.35	13013.94234	0.10885	0.10483	0.10533	0.10843	2.47E-04	2.56E-07	2.15E-07	2.47E-07	2.13E-07	2.4830E-04
520742.82	4258368.8	12996.81183	0.10336	0.10771	0.10021	0.1118	2.47E-04	2.43E-07	2.21E-07	2.35E-07	2.20E-07	2.4796E-04
520049.96	4259394.95	12996.74451	7.20017	0.12234	12.75539	0.11933	2.47E-04	1.69E-05	2.51E-07	2.99E-05	2.35E-07	2.9438E-04
519894.59	4258701.16	12989.56257	0.30608	0.52283	0.32671	0.50485	2.47E-04	7.19E-07	1.07E-06	7.67E-07	9.94E-07	2.5046E-04
519907.12	4258673.87	12987.38325	0.31558	0.59486	0.33841	0.57362	2.47E-04	7.41E-07	1.22E-06	7.94E-07	1.13E-06	2.5075E-04
519939.85	4258609.05	12966.42429	0.34797	0.8582	0.38328	0.81876	2.46E-04	8.17E-07	1.76E-06	9.00E-07	1.61E-06	2.5156E-04
519840.37	4258853.79	12962.90019	0.28086	0.29579	0.29398	0.28824	2.46E-04	6.59E-07	6.07E-07	6.90E-07	5.67E-07	2.4892E-04
520746.24	4258351.93	12960.62073	0.10209	0.10704	0.09896	0.11109	2.46E-04	2.40E-07	2.20E-07	2.32E-07	2.19E-07	2.4727E-04
520724.13	4258449.06	12960.36727	0.10981	0.11134	0.10622	0.11604	2.46E-04	2.58E-07	2.28E-07	2.49E-07	2.28E-07	2.4732E-04
519833.48	4258885.03	12960.27665	0.28179	0.27104	0.29393	0.26406	2.46E-04	6.62E-07	5.56E-07	6.90E-07	5.20E-07	2.4878E-04
520718.13	4258485.06	12959.24161	0.11195	0.11268	0.10797	0.11724	2.46E-04	2.63E-07	2.31E-07	2.53E-07	2.31E-07	2.4731E-04
519836.75	4258869	12955.94208	0.28087	0.28317	0.2935	0.27591	2.46E-04	6.59E-07	5.81E-07	6.89E-07	5.43E-07	2.4874E-04
520100.26	4258112.38	12933.32263	0.13082	15.08266	0.13351	16.12367	2.46E-04	3.07E-07	3.09E-05	3.13E-07	3.17E-05	3.0913E-04
520106.08	4258102.11	12910.53662	0.12906	11.99693	0.13124	13.56271	2.45E-04	3.03E-07	2.46E-05	3.08E-07	2.67E-05	2.9732E-04
520755.05	4258646.88	12895.54311	0.10422	0.09804	0.10101	0.10094	2.45E-04	2.45E-07	2.01E-07	2.37E-07	1.99E-07	2.4600E-04
520764.89	4258675.38	12891.79233	0.102	0.09462	0.09913	0.09712	2.45E-04	2.39E-07	1.94E-07	2.33E-07	1.91E-07	2.4591E-04
520079.7	4259415.72	12888.76323	15.85025	0.12237	19.49327	0.11785	2.45E-04	3.72E-05	2.51E-07	4.58E-05	2.32E-07	3.2845E-04
520721.43	4258467.85	12886.57406	0.11081	0.11189	0.10702	0.11655	2.45E-04	2.60E-07	2.29E-07	2.51E-07	2.29E-07	2.4592E-04
519843.68	4258837.86	12884.04621	0.27942	0.30926	0.29302	0.30139	2.45E-04	6.56E-07	6.34E-07	6.88E-07	5.93E-07	2.4747E-04
520020.53	4258291.03	12876.4942	0.17113	3.42831	0.1786	2.98985	2.45E-04	4.02E-07	7.03E-06	4.19E-07	5.89E-06	2.5850E-04
520725.53	4258561.37	12876.3508	0.11096	0.10896	0.10717	0.11275	2.45E-04	2.60E-07	2.23E-07	2.52E-07	2.22E-07	2.4571E-04
520000.91	4258406.07	12836.04019	0.24184	2.32534	0.25454	2.08075	2.44E-04	5.68E-07	4.77E-06	5.98E-07	4.10E-06	2.5402E-04
520054.73	4258197.01	12831.59383	0.14523	9.65938	0.15268	6.99027	2.44E-04	3.41E-07	1.98E-05	3.58E-07	1.38E-05	2.7818E-04
520740.97	4258389.81	12831.1545	0.10433	0.10773	0.10119	0.11191	2.44E-04	2.45E-07	2.21E-07	2.38E-07	2.20E-07	2.4482E-04
520745.21	4258618.37	12827.66543	0.10643	0.10152	0.10305	0.10487	2.44E-04	2.50E-07	2.08E-07	2.42E-07	2.06E-07	2.4474E-04
519949.77	4258589.61	12826.62717	0.35715	0.97771	0.39649	0.92395	2.44E-04	8.38E-07	2.01E-06	9.31E-07	1.82E-06	2.4940E-04
520040.06	4259394.96	12823.37819	5.21773	0.12085	7.47668	0.11828	2.44E-04	1.22E-05	2.48E-07	1.76E-05	2.33E-07	2.7403E-04
519864.08	4258772.27	12815.50683	0.28518	0.38545	0.30136	0.37461	2.44E-04	6.70E-07	7.91E-07	7.07E-07	7.37E-07	2.4650E-04
520735.37	4258589.87	12783.93522	0.10867	0.10514	0.10516	0.10878	2.43E-04	2.55E-07	2.16E-07	2.47E-07	2.14E-07	2.4393E-04
520737.5	4258406.59	12782.38221	0.10554	0.10838	0.10238	0.11267	2.43E-04	2.48E-07	2.22E-07	2.40E-07	2.22E-07	2.4390E-04
519996.63	4258465	12781.94091	0.30942	2.1098	0.33065	1.88733	2.43E-04	7.26E-07	4.33E-06	7.76E-07	3.72E-06	2.5251E-04
520089.62	4259425.71	12753.94116	13.03529	0.12163	11.8887	0.11661	2.42E-04	3.06E-05	2.49E-07	2.79E-05	2.30E-07	3.0142E-04
519873.42	4258746.56	12747.44398	0.28887	0.42517	0.30635	0.41225	2.42E-04	6.78E-07	8.72E-07	7.19E-07	8.12E-07	2.4539E-04
520725.58	4258551.89	12722.11779	0.11078	0.10925	0.10694	0.11306	2.42E-04	2.60E-07	2.24E-07	2.51E-07	2.23E-07	2.4278E-04
520734.11	4258423.56	12713.02113	0.10673	0.10894	0.10348	0.11339	2.42E-04	2.51E-07	2.23E-07	2.43E-07	2.23E-07	2.4259E-04
520049.98	4259404.95	12712.62167	7.31155	0.1202	12.97143	0.11727	2.42E-04	1.72E-05	2.47E-07	3.05E-05	2.31E-07	2.8974E-04
520720.83	4258512.21	12711.78671	0.11154	0.11153	0.10748	0.11573	2.42E-04	2.62E-07	2.29E-07	2.52E-07	2.28E-07	2.4260E-04
520037.84	4258233.95	12711.42201	0.15262	5.24363	0.1606	4.34703	2.42E-04	3.58E-07	1.08E-05	3.77E-07	8.56E-06	2.6167E-04
519979.52	4258531.3	12699.51655	0.37207	1.52051	0.41104	1.39331	2.41E-04	8.74E-07	3.12E-06	9.65E-07	2.74E-06	2.4909E-04
520764.94	4258665.9	12697.6504	0.10184	0.095	0.09889	0.09759	2.41E-04	2.39E-07	1.95E-07	2.32E-07	1.92E-07	2.4222E-04
519989.4	4258502.16	12692.8227	0.35279	1.82147	0.38543	1.64454	2.41E-04	8.28E-07	3.74E-06	9.05E-07	3.24E-06	2.4997E-04
520064.08	4258173.18	12690.69499	0.13982	16.86979	0.14622	9.72724	2.41E-04	3.28E-07	3.46E-05	3.43E-07	1.91E-05	2.9565E-04
519959.69	4258570.17	12683.05881	0.36479	1.12301	0.40466	1.05109	2.41E-04	8.56E-07	2.30E-06	9.50E-07	2.07E-06	2.4726E-04
520721.17	4258503.08	12681.36046	0.11132	0.11155	0.1073	0.11584	2.41E-04	2.61E-07	2.29E-07	2.52E-07	2.28E-07	2.4202E-04
520721.51	4258493.94	12678.48547	0.11111	0.11155	0.10713	0.11594	2.41E-04	2.61E-07	2.29E-07	2.52E-07	2.28E-07	2.4196E-04
520746.29	4258377.93	12664.02533	0.10277	0.10641	0.09967	0.11046	2.41E-04	2.41E-07	2.18E-07	2.34E-07	2.17E-07	2.4163E-04
520755.1	4258637.39	12663.80033	0.10405	0.09834	0.10082	0.10137	2.41E-04	2.44E-07	2.02E-07	2.37E-07	2.00E-07	2.4160E-04
520749.7	4258361	12661.82883	0.10156	0.10573	0.09845	0.10973	2.41E-04	2.38E-07	2.17E-07	2.31E-07	2.16E-07	2.4158E-04
520090.44	4258122.35	12661.29794	0.13104	25.70709	0.13455	17.29996	2.41E-04	3.08E-07	5.27E-05	3.16E-07	3.41E-05	3.2807E-04
520021.22	4258280.75	12646.67152	0.16581	3.47589	0.17307	3.0309	2.40E-04	3.89E-07	7.13E-06	4.06E-07	5.97E-06	2.5428E-04
520730.81	4258440.75	12638.73373	0.10788	0.10952	0.10447	0.11407	2.40E-04	2.53E-07	2.25E-07	2.45E-07	2.25E-07	2.4119E-04
519849.54	4258809.56	12630.97046	0.27591	0.33509	0.29021	0.32644	2.40E-04	6.48E-07	6.87E-07	6.81E-07	6.43E-07	2.4275E-04
519888.22	4258709.92	12628.90984	0.29574	0.49506	0.31596	0.47803	2.40E-04	6.94E-07	1.02E-06	7.42E-07	9.41E-07	2.4345E-04
520079.72	4259425.72	12617.15597	15.41232	0.1203	19.24512	0.11588	2.40E-04	3.62E-05	2.47E-07	4.52E-05	2.28E-07	3.2167E-04
519969.61	4258550.74	12607.01906	0.36988	1.2994	0.40935	1.20492	2.40E-04	8.68E-07	2.66E-06	9.61E-07	2.37E-06	2.4650E-04
520753.17	4258344.24	12604.90303	0.10028	0.10509	0.09722	0.10905	2.40E-04	2.35E-07	2.16E-07	2.28E-07	2.15E-07	2.4049E-04
520027.92	4258258.01	12601.08256	0.15829	4.04527	0.16581	3.47211	2.40E-04	3.72E-07	8.30E-06	3.89E-07	6.83E-06	2.5542E-04
520725.64	4258542.41	12594.2987	0.11061	0.1095	0.10672	0.11334	2.39E-04	2.60E-07	2.25E-07	2.51E-07	2.23E-07	2.4035E-04
520727.6	4258458.19	12591.43857	0.10901	0.11009	0.10538	0.11468	2.39E-04	2.56E-07	2.26E-07	2.47E-07	2.26E-07	2.4030E-04
520745.26	4258608.89	12587.01551	0.10625	0.10185	0.1029	0.10528	2.39E-04	2.49E-07	2.09E-07	2.42E-07	2.07E-07	2.4016E-04
520735.42	4258580.39	12570.67549	0.1085	0.10538	0.10496	0.10905	2.39E-04	2.55E-07	2.16E-07	2.46E-07	2.15E-07	2.3988E-04
520724.79	4258476.67	12567.99218	0.11	0.11072	0.10618	0.11523	2.39E-04	2.58E-07	2.27E-07	2.49E-07	2.27E-07	2.3986E-04
520045.43	4258210.84	12565.39333	0.14637	6.64334	0.15414	5.28473	2.39E-04	3.44E-07	1.36E-05	3.62E-07	1.04E-05	2.6358E-04
519997.2	4258439.37	12558.69888	0.27435	2.15685	0.29049	1.93475	2.39E-04	6.44E-07	4.42E-06	6.82E-07	3.81E-06	2.4828E-04
520040.08	4259404.96	12547.06365	5.27491	0.11875	7.55354	0.11625	2.38E-04	1.24E-05	2.44E-07	1.77E-05	2.29E-07	2.6909E-04
520106.11	4258092.11	12535.65858	0.12569	11.99699	0.1277	13.72723	2.38E-04	2.95E-07	2.46E-05	3.00E-07	2.70E-05	2.9050E-04
520725.69	4258532.92	12494.81597	0.11046	0.10971	0.10652	0.11362	2.38E-04	2.59E-07	2.25E-07	2.50E-07	2.24E-07	2.3846E-04
520055.04	4258186.9	12493.80626	0.14111	9.76226	0.14825	7.0465	2.37E-04	3.31E-07	2.00E-05	3.48E-07	1.39E-05	2.7206E-04
520764.99	4258656.41	12491.46104	0.10168	0.09534	0.09868	0.09803	2.37E-04	2.39E-07	1.96E-07	2.32E-07	1.93E-07	2.3830E-04
519917.12	4258646.05	12482.55802	0.31697	0.66742	0.34239	0.64349	2.37E-04	7.44E-07	1.37E-06	8.04E-07	1.27E-06	2.4145E-04
519826.48	4258892.21	12482.33989	0.2704	0.261	0.28142	0.25445	2.37E-04	6.35E-07	5.35E-07	6.61E-07	5.01E-07	2.3960E-04
519829.78	4258876.24	12480.46639	0.26965	0.27231	0.28112	0.26554	2.37E-04	6.33E-07	5.58E-07	6.60E-07	5.23E-07	2.3961E-04
520089.63	4259435.71	12479.48032	12.81139	0.11956	11.7699	0.11466	2.37E-04	3.01E-05	2.45E-07	2.76E-05	2.26E-07	2.9539E-04
520744.34	4258398.67	12477.96253	0.1037	0.10649	0.10062	0.11063	2.37E-04	2.43E-07	2.18E-07	2.36E-07	2.18E-07	2.3810E-04
520050	4259414.95	12438.2199	7.44017	0.11812	13.1941	0.11527	2.36E-04	1.75E-05	2.42E-07	3.10E-05	2.27E-07	2.8534E-04
519833.03	4258860.16	12433.81486	0.26843	0.28423	0.28035	0.27724	2.36E-04	6.30E-07	5.83E-07	6.58E-07	5.46E-07	2.3876E-04
520755.16	4258627.91	12428.7513	0.10388	0.09863	0.10066	0.10179	2.36E-04	2.44E-07	2.02E-07	2.36E-07	2.00E-07	2.3713E-04
520725.74	4258523.44	12423.58164	0.11031	0.10986	0.10635	0.11386	2.36E-04	2.59E-07	2.25E-07	2.50E-07	2.24E-07	2.3711E-04
519836.75	4258845.2	12417.08441	0.26846	0.29668	0.28089	0.2894	2.36E-04	6.30E-07	6.08E-07	6.59E-07	5.70E-07	2.3849E-04
519857.47	4258780.46	12416.82929	0.27533	0.36751	0.29032	0.35758	2.36E-04	6.46E-07	7.54E-07	6.82E-07	7.04E-07	2.3881E-04
520740.9	4258415.51	12416.75976	0.10488	0.10706	0.10173	0.11135	2.36E-04	2.46E-07	2.20E-07	2.39E-07	2.19E-07	2.3694E-04
520038.29	4258223.77	12411.14841	0.14818	5.30041	0.15593	4.38955	2.36E-04	3.48E-07	1.09E-05	3.66E-07	8.64E-06	2.5614E-04
520021.85	4258270.5	12409.75605	0.16076	3.51953	0.16782	3.06791	2.36E-04	3.77E-07	7.22E-06	3.94E-07	6.04E-06	2.4992E-04
519997.4	4258414.6	12408.36107	0.24571	2.18472	0.25878	1.96332	2.36E-04	5.77E-07	4.48E-06	6.08E-07	3.86E-06	2.4539E-04
519992.98	4258473.88	12402.62311	0.31458	1.97633	0.33747	1.77542	2.36E-04	7.39E-07	4.05E-06	7.92E-07	3.49E-06	2.4483E-04
520002.36	4258358.45	12399.47615	0.20082	2.40472	0.21	2.15826	2.36E-04	4.71E-07	4.93E-06	4.93E-07	4.25E-06	2.4584E-04
520000.96	4258369.01	12391.26646	0.20771	2.34375	0.21742	2.10594	2.36E-04	4.88E-07	4.81E-06	5.10E-07	4.15E-06	2.4549E-04
519866.92	4258755.01	12382.62754	0.27941	0.40444	0.29572	0.3926	2.35E-04	6.56E-07	8.29E-07	6.94E-07	7.73E-07	2.3832E-04
520735.48	4258570.91	12377.88746	0.10833	0.10575	0.10477	0.1094	2.35E-04	2.54E-07	2.17E-07	2.46E-07	2.15E-07	2.3621E-04
519907.12	4258664.6	12377.44379	0.30656	0.60266	0.32866	0.58204	2.35E-04	7.20E-07	1.24E-06	7.72E-07	1.15E-06	2.3915E-04
520003.56	4258347.96	12360.81621	0.19417	2.45839	0.20281	2.2047	2.35E-04	4.56E-07	5.04E-06	4.76E-07	4.34E-06	2.4527E-04
519989.36	4258492.47	12355.71407	0.33564	1.8381	0.36422	1.65909	2.35E-04	7.88E-07	3.77E-06	8.55E-07	3.27E-06	2.4354E-04
520745.32	4258599.41	12355.14581	0.10608	0.10215	0.10275	0.10563	2.35E-04	2.49E-07	2.10E-07	2.41E-07	2.08E-07	2.3576E-04
520753.15	4258370.06	12354.70027	0.10101	0.10445	0.09794	0.1084	2.35E-04	2.37E-07	2.14E-07	2.30E-07	2.13E-07	2.3574E-04
520079.73	4259435.72	12346.92365	13.75175	0.11828	19.00838	0.11397	2.35E-04	3.23E-05	2.43E-07	4.46E-05	2.24E-07	3.1207E-04
520028.55	4258247.77	12341.01187	0.15363	4.09988	0.161	3.51621	2.35E-04	3.61E-07	8.41E-06	3.78E-07	6.92E-06	2.5065E-04
520064.29	4258163.1	12337.24086	0.13589	17.07678	0.14204	9.77496	2.35E-04	3.19E-07	3.50E-05	3.33E-07	1.92E-05	2.8943E-04
520737.54	4258432.54	12335.66528	0.106	0.10768	0.10275	0.11208	2.34E-04	2.49E-07	2.21E-07	2.41E-07	2.21E-07	2.3541E-04
519852.4	4258792.34	12330.65655	0.27162	0.35092	0.28602	0.34171	2.34E-04	6.38E-07	7.20E-07	6.71E-07	6.73E-07	2.3709E-04
520756.6	4258353.25	12329.96836	0.09978	0.10385	0.09674	0.10774	2.34E-04	2.34E-07	2.13E-07	2.27E-07	2.12E-07	2.3526E-04
520749.77	4258387.05	12321.01975	0.10215	0.10516	0.09912	0.10916	2.34E-04	2.40E-07	2.16E-07	2.33E-07	2.15E-07	2.3510E-04
520107.26	4258084.19	12314.50712	0.12344	11.52707	0.12528	13.29827	2.34E-04	2.90E-07	2.36E-05	2.94E-07	2.62E-05	2.8448E-04
519881.79	4258718.53	12309.27503	0.28672	0.46918	0.30542	0.45375	2.34E-04	6.73E-07	9.62E-07	7.17E-07	8.93E-07	2.3722E-04
519840.04	4258829.2	12296.36403	0.26673	0.30996	0.27956	0.30234	2.34E-04	6.26E-07	6.36E-07	6.56E-07	5.95E-07	2.3625E-04
520090.47	4258112.35	12295.88407	0.12754	25.74522	0.13085	17.47521	2.34E-04	2.99E-07	5.28E-05	3.07E-07	3.44E-05	3.2153E-04
520096.29	4258102.08	12291.90353	0.12597	18.23749	0.12873	18.28798	2.34E-04	2.96E-07	3.74E-05	3.02E-07	3.60E-05	3.0765E-04
520004.61	4258337.54	12285.75709	0.18778	2.50638	0.19591	2.24628	2.34E-04	4.41E-07	5.14E-06	4.60E-07	4.42E-06	2.4399E-04
519929.89	4258618.79	12282.25945	0.32693	0.77206	0.3574	0.74068	2.33E-04	7.68E-07	1.58E-06	8.39E-07	1.46E-06	2.3811E-04

520728.15	4258485.5	12279.09501	0.10919	0.1096	0.10536	0.11396	2.33E-04	2.56E-07	2.25E-07	2.47E-07	2.24E-07	2.3436E-04
520040.1	4259414.96	12278.77625	5.34353	0.11672	7.63229	0.11427	2.33E-04	1.25E-05	2.39E-07	1.79E-05	2.25E-07	2.6432E-04
520765.05	4258646.93	12275.72801	0.10153	0.09564	0.09849	0.09845	2.33E-04	2.38E-07	1.96E-07	2.31E-07	1.94E-07	2.3420E-04
520734.26	4258449.8	12275.54506	0.10713	0.10825	0.10367	0.11274	2.33E-04	2.52E-07	2.22E-07	2.43E-07	2.22E-07	2.3427E-04
520010.97	4258304.96	12257.93404	0.17221	2.82106	0.17925	2.5077	2.33E-04	4.04E-07	5.79E-06	4.21E-07	4.94E-06	2.4455E-04
520045.84	4258200.68	12254.68573	0.14222	6.72003	0.14973	5.33613	2.33E-04	3.34E-07	1.38E-05	3.52E-07	1.05E-05	2.5791E-04
520731.07	4258467.32	12249.48212	0.10819	0.10894	0.10454	0.1134	2.33E-04	2.54E-07	2.23E-07	2.45E-07	2.23E-07	2.3379E-04
519998.56	4258379.99	12234.75779	0.21419	2.24553	0.22437	2.02286	2.33E-04	5.03E-07	4.61E-06	5.27E-07	3.98E-06	2.4218E-04
519897.12	4258683.15	12233.26188	0.29648	0.54693	0.3164	0.52863	2.33E-04	6.96E-07	1.12E-06	7.43E-07	1.04E-06	2.3613E-04
520089.65	4259445.71	12212.86549	12.59876	0.11754	11.63442	0.11276	2.32E-04	2.96E-05	2.41E-07	2.73E-05	2.22E-07	2.8950E-04
520735.53	4258561.43	12208.31623	0.10816	0.10609	0.10456	0.10974	2.32E-04	2.54E-07	2.18E-07	2.45E-07	2.16E-07	2.3299E-04
520755.21	4258618.43	12195.04043	0.10371	0.09896	0.10052	0.10221	2.32E-04	2.43E-07	2.03E-07	2.36E-07	2.01E-07	2.3269E-04
519876.07	4258728.86	12181.82002	0.28142	0.4457	0.29871	0.4318	2.32E-04	6.61E-07	9.14E-07	7.01E-07	8.50E-07	2.3468E-04
520005.53	4258327.18	12180.25534	0.18167	2.54908	0.18933	2.28334	2.32E-04	4.27E-07	5.23E-06	4.44E-07	4.49E-06	2.4212E-04
519939.81	4258599.35	12176.30281	0.33603	0.87106	0.37019	0.82992	2.31E-04	7.89E-07	1.79E-06	8.69E-07	1.63E-06	2.3653E-04
520050.01	4259424.95	12171.18381	7.58902	0.11611	13.41094	0.11332	2.31E-04	1.78E-05	2.38E-07	3.15E-05	2.23E-07	2.8111E-04
520055.34	4258176.79	12167.95247	0.1372	9.85915	0.14402	7.09809	2.31E-04	3.22E-07	2.02E-05	3.38E-07	1.40E-05	2.6614E-04
520745.37	4258589.93	12136.97217	0.10592	0.10243	0.1026	0.10595	2.31E-04	2.49E-07	2.10E-07	2.41E-07	2.09E-07	2.3161E-04
520747.72	4258407.54	12133.34008	0.10309	0.10518	0.10002	0.10933	2.31E-04	2.42E-07	2.16E-07	2.35E-07	2.15E-07	2.3154E-04
519979.48	4258521.6	12123.42309	0.35485	1.53755	0.38981	1.40854	2.30E-04	8.33E-07	3.15E-06	9.15E-07	2.77E-06	2.3812E-04
519993.62	4258448.05	12117.00303	0.2788	2.02518	0.29555	1.82435	2.30E-04	6.55E-07	4.15E-06	6.94E-07	3.59E-06	2.3942E-04
520011.84	4258294.61	12093.41459	0.16691	2.86681	0.17363	2.54735	2.30E-04	3.92E-07	5.88E-06	4.08E-07	5.01E-06	2.4157E-04
520079.75	4259445.72	12081.47121	15.79727	0.11632	18.72106	0.1121	2.30E-04	3.71E-05	2.39E-07	4.40E-05	2.21E-07	3.1114E-04
519989.32	4258482.77	12079.85437	0.31952	1.85285	0.34446	1.67211	2.30E-04	7.50E-07	3.80E-06	8.09E-07	3.29E-06	2.3827E-04
520029.12	4258237.55	12079.63051	0.14918	4.1485	0.15641	3.55536	2.30E-04	3.50E-07	8.51E-06	3.67E-07	7.00E-06	2.4584E-04
520735.58	4258551.94	12062.82494	0.10801	0.10632	0.10434	0.10999	2.29E-04	2.54E-07	2.18E-07	2.45E-07	2.17E-07	2.3023E-04
520744.3	4258424.43	12054.89005	0.1042	0.10582	0.10106	0.11008	2.29E-04	2.45E-07	2.17E-07	2.37E-07	2.17E-07	2.3006E-04
520765.1	4258637.45	12054.53176	0.10138	0.09593	0.09833	0.09887	2.29E-04	2.38E-07	1.97E-07	2.31E-07	1.95E-07	2.3000E-04
520730.82	4258512.58	12050.9731	0.10878	0.10846	0.10489	0.11248	2.29E-04	2.55E-07	2.22E-07	2.46E-07	2.21E-07	2.3001E-04
520760.02	4258362.25	12043.50338	0.09925	0.10265	0.09626	0.10649	2.29E-04	2.33E-07	2.11E-07	2.26E-07	2.10E-07	2.2980E-04
519949.73	4258579.91	12035.94659	0.34403	0.99217	0.38027	0.93661	2.29E-04	8.08E-07	2.03E-06	8.93E-07	1.84E-06	2.3436E-04
520756.6	4258379.12	12034.98197	0.10042	0.10327	0.09742	0.10718	2.29E-04	2.36E-07	2.12E-07	2.29E-07	2.11E-07	2.2965E-04
519860.38	4258763.36	12033.15617	0.2704	0.38503	0.2853	0.37436	2.29E-04	6.35E-07	7.90E-07	6.70E-07	7.37E-07	2.3156E-04
519822.8	4258883.48	12031.95823	0.25909	0.26212	0.26951	0.25579	2.29E-04	6.08E-07	5.38E-07	6.33E-07	5.04E-07	2.3099E-04
520731.16	4258503.45	12023.42572	0.10859	0.10845	0.10471	0.11257	2.29E-04	2.55E-07	2.22E-07	2.46E-07	2.22E-07	2.2949E-04
520731.51	4258494.32	12021.08317	0.10839	0.10848	0.10456	0.11269	2.28E-04	2.54E-07	2.22E-07	2.45E-07	2.22E-07	2.2944E-04
520040.11	4259424.96	12019.83999	5.41791	0.11475	7.71109	0.11235	2.28E-04	1.27E-05	2.35E-07	1.81E-05	2.21E-07	2.5975E-04
519826.08	4258867.46	11990.63807	0.25803	0.27332	0.26894	0.26678	2.28E-04	6.06E-07	5.61E-07	6.31E-07	5.25E-07	2.3024E-04
520753.24	4258396.18	11986.87575	0.10156	0.10382	0.09856	0.10784	2.28E-04	2.38E-07	2.13E-07	2.31E-07	2.12E-07	2.2874E-04
519890.86	4258692.16	11980.2727	0.28815	0.51762	0.30677	0.50077	2.28E-04	6.76E-07	1.06E-06	7.20E-07	9.86E-07	2.3117E-04
519993.89	4258423.14	11979.06136	0.24956	2.0554	0.26293	1.85559	2.28E-04	5.86E-07	4.22E-06	6.17E-07	3.65E-06	2.3677E-04
520740.96	4258441.53	11977.77258	0.10528	0.10645	0.102	0.1108	2.28E-04	2.47E-07	2.18E-07	2.39E-07	2.18E-07	2.2860E-04
520036.47	4258214.54	11970.51088	0.14315	5.01769	0.15057	4.1931	2.28E-04	3.36E-07	1.03E-05	3.53E-07	8.25E-06	2.4677E-04
520755.26	4258608.95	11965.70498	0.10355	0.09928	0.1004	0.1026	2.27E-04	2.43E-07	2.04E-07	2.36E-07	2.02E-07	2.2833E-04
519845.8	4258800.53	11955.20778	0.26243	0.33548	0.27579	0.32699	2.27E-04	6.16E-07	6.88E-07	6.47E-07	6.44E-07	2.2984E-04
520107.29	4258074.19	11954.78216	0.12027	11.53685	0.12202	13.28157	2.27E-04	2.82E-07	2.37E-05	2.86E-07	2.61E-05	2.7761E-04
520046.23	4258190.53	11953.07557	0.13827	6.79314	0.14553	5.38525	2.27E-04	3.25E-07	1.39E-05	3.42E-07	1.06E-05	2.5241E-04
520063.54	4258153.43	11946.84478	0.13191	16.02437	0.13786	9.43431	2.27E-04	3.10E-07	3.29E-05	3.24E-07	1.86E-05	2.7916E-04
520735.64	4258542.46	11942.77135	0.10785	0.10658	0.10414	0.11029	2.27E-04	2.53E-07	2.19E-07	2.44E-07	2.17E-07	2.2794E-04
520096.32	4258092.08	11940.37032	0.1227	18.25557	0.12531	18.34495	2.27E-04	2.88E-07	3.74E-05	2.94E-07	3.61E-05	3.0110E-04
520734.55	4258476.44	11938.22306	0.10737	0.10781	0.10371	0.11213	2.27E-04	2.52E-07	2.21E-07	2.43E-07	2.21E-07	2.2786E-04
520745.42	4258580.45	11935.09625	0.10577	0.10269	0.10243	0.10622	2.27E-04	2.48E-07	2.11E-07	2.40E-07	2.09E-07	2.2777E-04
520737.7	4258458.86	11934.55778	0.10636	0.10708	0.10287	0.11146	2.27E-04	2.50E-07	2.20E-07	2.42E-07	2.19E-07	2.2778E-04
520050.03	4259434.95	11918.96021	7.72817	0.11417	13.66492	0.11144	2.27E-04	1.81E-05	2.34E-07	3.21E-05	2.19E-07	2.7724E-04
520012.62	4258284.3	11913.96795	0.16185	2.90839	0.16831	2.58291	2.26E-04	3.80E-07	5.96E-06	3.95E-07	5.08E-06	2.3829E-04
519969.56	4258541.04	11908.73189	0.35359	1.31493	0.38941	1.21897	2.26E-04	8.30E-07	2.70E-06	9.14E-07	2.40E-06	2.3320E-04
520019.04	4258261.68	11906.96371	0.15451	3.3041	0.16106	2.9022	2.26E-04	3.63E-07	6.78E-06	3.78E-07	5.71E-06	2.3956E-04
519829.31	4258851.31	11903.54626	0.25654	0.28504	0.26784	0.2783	2.26E-04	6.02E-07	5.85E-07	6.29E-07	5.48E-07	2.2863E-04
520084.71	4259456.12	11881.74333	14.1073	0.11492	14.22784	0.11053	2.26E-04	3.31E-05	2.36E-07	3.34E-05	2.18E-07	2.9283E-04
519869.66	4258737.5	11873.47415	0.27288	0.42364	0.28903	0.41093	2.26E-04	6.41E-07	8.69E-07	6.79E-07	8.09E-07	2.2869E-04
519833.14	4258836.61	11867.27345	0.25664	0.29735	0.26844	0.29028	2.26E-04	6.03E-07	6.10E-07	6.30E-07	5.71E-07	2.2799E-04
519959.65	4258560.47	11864.04826	0.34905	1.13651	0.38439	1.06443	2.26E-04	8.19E-07	2.33E-06	9.02E-07	2.10E-06	2.3166E-04
520055.61	4258166.69	11852.96095	0.13345	9.9536	0.14	7.14562	2.25E-04	3.13E-07	2.04E-05	3.29E-07	1.41E-05	2.6043E-04
520735.69	4258532.98	11849.73804	0.10771	0.10679	0.10396	0.11054	2.25E-04	2.53E-07	2.19E-07	2.44E-07	2.18E-07	2.2618E-04
519917.12	4258636.77	11844.39598	0.30782	0.67588	0.33314	0.65201	2.25E-04	7.23E-07	1.39E-06	7.82E-07	1.28E-06	2.2931E-04
520765.16	4258627.97	11830.2323	0.10123	0.09621	0.0982	0.09926	2.25E-04	2.38E-07	1.97E-07	2.31E-07	1.95E-07	2.2573E-04
519993.89	4258398.88	11823.69401	0.22528	2.07028	0.23627	1.87393	2.25E-04	5.29E-07	4.25E-06	5.55E-07	3.69E-06	2.3377E-04
520029.64	4258227.34	11819.04909	0.14493	4.1947	0.15204	3.59212	2.25E-04	3.40E-07	8.60E-06	3.57E-07	7.07E-06	2.4103E-04
520751.09	4258416.4	11791.58106	0.10246	0.1039	0.09939	0.10805	2.24E-04	2.41E-07	2.13E-07	2.33E-07	2.13E-07	2.2504E-04
520735.74	4258523.5	11783.27108	0.10758	0.1069	0.10379	0.11073	2.24E-04	2.53E-07	2.19E-07	2.44E-07	2.18E-07	2.2491E-04
519907.12	4258655.32	11780.79762	0.29794	0.61008	0.31971	0.58999	2.24E-04	6.99E-07	1.25E-06	7.51E-07	1.16E-06	2.2779E-04
520040.13	4259434.96	11770.74179	5.49993	0.11284	7.79856	0.11049	2.24E-04	1.29E-05	2.31E-07	1.83E-05	2.17E-07	2.5541E-04
520745.48	4258570.96	11751.98623	0.10561	0.10299	0.10224	0.10652	2.23E-04	2.48E-07	2.11E-07	2.40E-07	2.10E-07	2.2429E-04
520763.45	4258371.26	11748.21916	0.0987	0.10147	0.09577	0.10526	2.23E-04	2.32E-07	2.08E-07	2.25E-07	2.07E-07	2.2418E-04
520074.81	4259456.13	11746.51704	14.42934	0.11358	25.77511	0.10977	2.23E-04	3.39E-05	2.33E-07	6.05E-05	2.16E-07	3.1812E-04
520755.32	4258599.47	11745.45988	0.1034	0.09957	0.10027	0.10294	2.23E-04	2.43E-07	2.04E-07	2.35E-07	2.03E-07	2.2414E-04
520097.47	4258084.16	11738.06705	0.12055	17.26476	0.12298	17.8146	2.23E-04	2.83E-07	3.54E-05	2.89E-07	3.51E-05	2.9417E-04
520013.32	4258274.02	11722.50018	0.15701	2.9455	0.16327	2.61488	2.23E-04	3.69E-07	6.04E-06	3.83E-07	5.15E-06	2.3476E-04
519990.05	4258456.74	11716.47688	0.28318	1.90516	0.30079	1.7227	2.23E-04	6.65E-07	3.91E-06	7.06E-07	3.39E-06	2.3138E-04
520760.05	4258388.18	11707.82395	0.0998	0.1021	0.0969	0.10596	2.23E-04	2.34E-07	2.09E-07	2.27E-07	2.09E-07	2.2342E-04
519836.4	4258820.55	11707.00572	0.25461	0.31049	0.26678	0.30301	2.23E-04	5.98E-07	6.37E-07	6.26E-07	5.96E-07	2.2499E-04
520747.7	4258433.35	11705.48582	0.1035	0.10462	0.10035	0.10884	2.23E-04	2.43E-07	2.15E-07	2.36E-07	2.14E-07	2.2341E-04
519884.52	4258701	11704.51647	0.27958	0.4906	0.29732	0.47487	2.22E-04	6.56E-07	1.01E-06	6.98E-07	9.35E-07	2.2578E-04
520036.96	4258204.35	11696.79983	0.1392	5.07521	0.14642	4.23562	2.22E-04	3.27E-07	1.04E-05	3.44E-07	8.34E-06	2.4175E-04
520019.75	4258251.4	11691.25483	0.15006	3.35222	0.15652	2.94191	2.22E-04	3.52E-07	6.88E-06	3.67E-07	5.79E-06	2.3562E-04
519853.81	4258771.61	11685.86542	0.26156	0.36724	0.27541	0.35745	2.22E-04	6.14E-07	7.53E-07	6.47E-07	7.04E-07	2.2484E-04
519897.12	4258673.87	11681.57349	0.28844	0.55387	0.30758	0.53619	2.22E-04	6.77E-07	1.14E-06	7.22E-07	1.06E-06	2.2564E-04
520050.05	4259444.95	11674.51042	7.86108	0.1123	13.94759	0.10964	2.22E-04	1.85E-05	2.30E-07	3.27E-05	2.16E-07	2.7356E-04
519979.44	4258511.9	11670.54364	0.33868	1.55357	0.37008	1.42282	2.22E-04	7.95E-07	3.19E-06	8.69E-07	2.80E-06	2.2949E-04
520738.02	4258485.57	11659.7419	0.10656	0.1067	0.10289	0.11086	2.22E-04	2.50E-07	2.19E-07	2.42E-07	2.18E-07	2.2256E-04
520046.59	4258180.4	11659.59405	0.13452	6.86117	0.14151	5.4277	2.22E-04	3.16E-07	1.41E-05	3.32E-07	1.07E-05	2.4703E-04
520756.72	4258405.31	11647.61068	0.10094	0.10253	0.09796	0.10655	2.21E-04	2.37E-07	2.10E-07	2.30E-07	2.10E-07	2.2229E-04
520744.38	4258450.51	11639.39312	0.10454	0.10529	0.10123	0.10956	2.21E-04	2.45E-07	2.16E-07	2.38E-07	2.16E-07	2.2216E-04
520063.76	4258143.35	11631.13195	0.1284	16.22394	0.13409	9.4817	2.21E-04	3.01E-07	3.33E-05	3.15E-07	1.87E-05	2.7364E-04
520084.73	4259466.12	11630.84794	13.77693	0.11304	13.98689	0.10876	2.21E-04	3.23E-05	2.32E-07	3.28E-05	2.14E-07	2.8671E-04
520741.15	4258467.91	11617.89946	0.10556	0.10599	0.10206	0.11023	2.21E-04	2.48E-07	2.17E-07	2.40E-07	2.17E-07	2.2176E-04
519848.63	4258783.24	11616.02611	0.25798	0.35085	0.27128	0.34179	2.21E-04	6.06E-07	7.20E-07	6.37E-07	6.73E-07	2.2343E-04
520107.32	4258064.19	11614.82128	0.11726	11.54345	0.1189	13.28956	2.21E-04	2.75E-07	2.37E-05	2.79E-07	2.62E-05	2.7117E-04
520765.21	4258618.49	11607.65013	0.10109	0.0965	0.09808	0.09965	2.21E-04	2.37E-07	1.98E-07	2.30E-07	1.96E-07	2.2150E-04
520745.53	4258561.48	11591.58988	0.10546	0.1033	0.10205	0.10682	2.20E-04	2.48E-07	2.12E-07	2.40E-07	2.10E-07	2.2124E-04
519819.13	4258874.75	11572.79623	0.24826	0.263	0.25817	0.25691	2.20E-04	5.83E-07	5.39E-07	6.06E-07	5.06E-07	2.2221E-04
519929.85	4258609.09	11571.9195	0.31649	0.78265	0.34614	0.75038	2.20E-04	7.43E-07	1.61E-06	8.13E-07	1.48E-06	2.2460E-04
519863.19	4258746.03	11564.74219	0.26447	0.40319	0.27958	0.39154	2.20E-04	6.21E-07	8.27E-07	6.56E-07	7.71E-07	2.2270E-04
520001.12	4258319.01	11561.47168	0.17311	2.35762	0.18013	2.12849	2.20E-04	4.06E-07	4.84E-06	4.23E-07	4.19E-06	2.2962E-04
519990.38	4258431.67	11559.43407	0.25332	1.93677	0.26699	1.75597	2.20E-04	5.95E-07	3.97E-06	6.27E-07	3.46E-06	2.2837E-04
520755.37	4258589.98	11538.22886	0.10326	0.09985	0.10013	0.10325	2.19E-04	2.42E-07	2.05E-07	2.35E-07	2.03E-07	2.2021E-04
520040.15	4259444.96	11529.83938	5.58981	0.11098	7.89275	0.10869	2.19E-04	1.31E-05	2.28E-07	1.85E-05	2.14E-07	2.5126E-04
520074.83	4259466.13	11500.63861	14.3175	0.11173	25.2064	0.10801	2.19E-04	3.36E-05	2.29E-07	5.92E-05	2.13E-07	3.1184E-04
519822.39	4258858.67	11494.11395	0.24695	0.27402	0.2573	0.26774	2.18E-04	5.80E-07	5.62E-07	6.04E-07	5.27E-07	2.2076E-04
520054.59	4258157.12	11474.88823	0.1295	9.45464	0.13587	6.8905	2.18E-04	3.04E-07	1.94E-05	3.19E-07	1.36E-05	2.5169E-04
520020.39	4258241.14	11469.35438	0.14581	3.38971	0.15216	2.9737	2.18E-04	3.42E-07	6.95E-06	3.57E-07	5.85E-06	2.3152E-04
520002.19	4258308.58	11466.04232	0.16786	2.40161	0.1745	2.16658	2.18E-04	3.94E-07	4.93E-06	4.10E-07	4.26E-06	2.2794E-04
520745.58	4258552	11454.28654	0.10533	0.10354	0.10185	0.10707	2.18E-04	2.47E-07	2.12E-07	2.39E-07	2.11E-07	2.1863E-04
520754.47	4258425.27	11452.73628	0.10179	0.10273	0.09873	0.10686	2.18E-04	2.39E-07	2.11E-07	2.32E-07	2.10E-07	2.1859E-04
519994.93	4258351.52	11446.81165	0.18874	2.12186	0.19687	1.92717	2.18E-04	4.43E-07	4.35E-06	4.62E-07	3.79E-06	2.2663E-04
519939.77	4258589.65	11446.76697	0.32451	0.88393	0.35707	0.84077	2.18E-04	7.62E-07	1.81E-06	8.38E-07	1.66E-06	2.2265E-04
520766.88	4258380.26	11443.98906	0.09812	0.10033	0.09527	0.10407	2.18E-04	2.30E-07	2.06E-07	2.24E-07	2.05E-07	2.1839E-04
520740.81	4258512.96	11439.92732	0.10613	0.10549	0.1024	0.10936	2.17E-04	2.49E-07	2.16E-07	2.40E-07	2.15E-07	2.1837E-04
519993.61	4258362.05	11436.14783	0.19491	2.07488	0.20347	1.88569	2.17E-04	4.58E-07	4.26E-06	4.78E-07	3.71E-06	2.2628E-04
520037.42	4258194.17	11428.96272	0.13541	5.13176	0.14247	4.27669	2.17E-04	3.18E-07	1.05E-05	3.34E-07	8.42E-06	2.3684E-04
520050.06	4259454.95	11427.61853	8.09177	0.11042	14.20794	0.10783	2.17E-04	1.90E-05	2.26E-07	3.34E-05	2.12E-07	2.7001E-04
519996.08	4258341.06	11419.63228	0.18276	2.16383	0.19048	1.96419	2.17E-04	4.29E-07	4.44E-06	4.47E-07	3.87E-06	2.2625E-04
520741.16	4258503.83	11413.85342	0.10594	0.10552	0.10223	0.10946	2.17E-04	2.49E-07	2.16E-07	2.40E-07	2.15E-07	2.1788E-04
519878.13	4258709.69	11413.29674	0.27083	0.46558	0.28794	0.45079	2.17E-04	6.36E-07	9.55E-07	6.76E-07	8.87E-07	2.2010E-04
520741.5	4258494.69	11412.88106	0.10576	0.10558	0.10209	0.1096	2.17E-04	2.48E-07	2.17E-07	2.40E-07	2.16E-07	2.1786E-04
520097.5	4258074.16	11409.83044	0.11752	17.28431	0.11981	17.82044	2.17E-04	2.76E-07	3.54E-05	2.81E-07	3.51E-05	2.8797E-04
520027.51	4258218.24	11395.77086	0.13996	3.97313	0.14671	3.42692	2.17E-04	3.29E-07	8.15E-06	3.44E-07	6.75E-06	2.3218E-04
520763.5	4258397.25	11392.10153	0.09923	0.10085	0.09635	0.10472	2.17E-04	2.33E-07	2.07E-07	2.26E-07	2.06E-07	2.1742E-04
520765.26	4258609	11389.44132	0.10095	0.0968	0.09798	0.10002	2.16E-04	2.37E-07	1.99E-07	2.30E-07	1.97E-07	2.1736E-04
520084.75	4259476.12	11387.90235	13.65237	0.11118	13.6865	0.10701	2.16E-04	3.21E-05	2.28E-07	3.21E-05	2.11E-07	2.8108E-04
519992.08	4258372.67	11380.50649	0.20126	2.02181	0.21023	1.83931	2.16E-04	4.72E-07	4.15E-06	4.94E-07	3.62E-06	2.2506E-04
520046.92	4258170.27	11374.12586	0.13091	6.92348	0.13767	5.46662	2.16E-04	3.07E-07	1.42E-05	3.23E-07	1.08E-05	2.4179E-04
520751.09	4258442.28	11373.04022	0.1028	0.10346	0.09962	0.10764	2.16E-04	2.41E-07	2.12E-07	2.34E-07	2.12E-07	2.1708E-04
519825.58	4258842.46	11367.70512	0.24516	0.28564	0.25591	0.27909	2.16E-04	5.76E-07	5.86E-07	6.01E-07	5.49E-07	2.1839E-04
519986.47	4258465.43	11361.43497	0.28741	1.79455	0.3063	1.62836	2.16E-04	6.75E-07	3.68E-06	7.19E-07	3.21E-06	2.2424E-04
519997.09	4258330.66	11361.22735	0.17701	2.2015	0.18432	1.99732	2.16E-04	4.16E-07	4.52E-06	4.33E-07	3.93E-06	2.2525E-04
520003.15	4258298.19	11348.32202	0.16283	2.4407	0.1691	2.20078	2.16E-04	3.82E-07	5.01E-06	3.97E-07	4.33E-06	2.2583E-04
520755.42	4258580.5	11346.70541	0.10313	0.10011	0.09998	0.10351	2.16E-04	2.42E-07	2.05E-07	2.35E-07	2.04E-07	2.1657E-04
520745.64	4258542.52	11340.92501	0.10519	0.10376	0.10166	0.10733	2.16E-04	2.47E-07	2.13E-07	2.39E-07	2.11E-07	2.1648E-04
520744.6	4258476.96	11331.1041	0.10477	0.10492	0.10126	0.10902	2.15E-04	2.46E-07	2.15E-07	2.38E-07	2.15E-07	2.1630E-04
520063.98	4258133.27	11330.64887	0.12505	16.43267	0.13048	9.54957	2.15E-04	2.94E-07	3.37E-05	3.06E-07	1.88E-05	2.6848E-04
520747.8	4258459.5	11327.87989	0.10381	0.10414	0.10045	0.10833	2.15E-04	2.44E-07	2.14E-07	2.36E-07	2.13E-07	2.1623E-04
519969.52	4258531.34	11324.73535	0.33839	1.32981	0.37092	1.23227	2.15E-04	7.94E-07	2.73E-06	8.71E-07	2.43E-06	2.2208E-04
519829.52	4258828.01	11314.48529	0.24533	0.29782	0.25654	0.29088	2.15E-04	5.76E-07	6.11E-07	6.02E-07	5.73E-07	2.1743E-04
520760.19	4258414.43	11308.97063	0.1003	0.1013	0.09734	0.10531	2.15E-04	2.35E-07	2.08E-07	2.29E-07	2.07E-07	2.1584E-04
519979.4	4258502.21	11307.06942	0.32335	1.56857	0.35147	1.43612	2.15E-04	7.59E-07	3.22E-06	8.25E-07	2.83E-06	2.2256E-04
519872.28	4258719.71	11301.42977	0.26583	0.44272	0.28146	0.42944	2.15E-04	6.24E-07	9.08E-07	6.61E-07	8.45E-07	2.1786E-04
520040.16	4259454.96	11293.96818	5.68902	0.10917	7.99091	0.10693	2.15E-04	1.34E-05	2.24E-07	1.88E-05	2.10E-07	2.4723E-04
519842.05	4258791.5	11285.32075	0.24965	0.3355	0.26207	0.32711	2.15E-04	5.86E-07	6.88E-07	6.15E-07	6.44E-07	2.1705E-04
519856.69	4258754.44	11265.21833	0.25641	0.38419	0.27037	0.37358	2.14E-04	6.02E-07	7.88E-07	6.35E-07	7.35E-07	2.1689E-04
520074.85	4259476.13	11262.50929	16.26559	0.10991	24.47647	0.10628	2.14E-04	3.82E-05	2.25E-07	5.75E-05	2.09E-07	3.1016E-04
520745.69	4258533.04	11253.45094	0.10506	0.10396	0.10149	0.10757	2.14E-04	2.47E-07	2.13E-07	2.38E-07	2.12E-07	2.1482E-04
520020.99	4258230.91	11246.76693	0.14175	3.42655	0.14802	3.00374	2.14E-04	3.33E-07	7.03E-06	3.48E-07	5.91E-06	2.2740E-04
520106.57	4258053.98	11245.37638	0.11412	11.87464	0.1157	13.63537	2.14E-04	2.68E-07	2.44E-05	2.72E-07	2.68E-05	2.6549E-04
520010.16	4258265.34	11242.19437	0.15086	2.76812	0.15665	2.4733	2.14E-04	3.54E-07	5.68E-06	3.68E-07	4.87E-06	2.2496E-04
519959.61	4258550.78	11227.98053	0.33546	1.15048	0.3679	1.07708	2.13E-04	7.88E-07	2.36E-06	8.64E-07	2.12E-06	2.1955E-04
520004.02	4258287.85	11213.43607	0.158	2.47515	0.16396	2.23093	2.13E-04	3.71E-07	5.08E-06	3.85E-07	4.39E-06	2.2337E-04
519949.69	4258570.21	11204.95883	0.32834	1.00353	0.35999	0.94758	2.13E-04	7.71E-07	2.06E-06	8.45E-07	1.87E-06	2.1853E-04
519907.12	4258646.05	11203.77788	0.28974	0.61734	0.31148	0.59752	2.13E-04	6.80E-07	1.27E-06	7.31E-07	1.18E-06	2.1682E-04
520745.74	4258523.56	11191.34786	0.10495	0.10407	0.10133	0.10775	2.13E-04	2.46E-07	2.13E-07	2.38E-07	2.12E-07	2.1364E-04
520054.88	4258147.02	11187.97148	0.12612	9.5546	0.13224	6.93828	2.13E-04	2.96E-07	1.96E-05	3.10E-07	1.37E-05	2.4652E-04
520765.32	4258599.52	11179.78712	0.10081	0.09707	0.09787	0.10034	2.13E-04	2.37E-07	1.99E-07	2.30E-07	1.98E-07	2.1337E-04
520755.48	4258571.02	11173.40605	0.10299	0.10038	0.09981	0.10378	2.12E-04	2.42E-07	2.06E-07	2.34E-07	2.04E-07	2.1327E-04
520037.84	4258184.01	11166.20338	0.13179	5.18194	0.13868	4.31285	2.12E-04	3.09E-07	1.06E-05	3.26E-07	8.49E-06	2.3200E-04
519986.87	4258440.2	11161.51388	0.25701	1.8281	0.27109	1.66355	2.12E-04	6.03E-07	3.75E-06	6.36E-07	3.27E-06	2.2042E-04
520028.08	4258208.01	11157.04798	0.13618	4.02	0.14283	3.46318	2.12E-04	3.20E-07	8.24E-06	3.35E-07	6.82E-06	2.2779E-04
520084.76	4259486.12	11152.60518	13.26241	0.1094	13.34248	0.10533	2.12E-04	3.11E-05	2.24E-07	3.13E-05	2.07E-07	2.7488E-04
519897.12	4258664.6	11142.53322	0.28074	0.56036	0.29945	0.5433	2.12E-04	6.59E-07	1.15E-06	7.03E-07	1.07E-06	2.1538E-04
520770.31	4258389.26	11138.8966	0.09754	0.09918	0.09476	0.1029	2.12E-04	2.29E-07	2.03E-07	2.22E-07	2.03E-07	2.1259E-04
520757.84	4258434.14	11123.29574	0.1011	0.10166	0.09805	0.10573	2.11E-04	2.37E-07	2.08E-07	2.30E-07	2.08E-07	2.1232E-04
519832.76	4258811.9	11117.62642	0.24305	0.31078	0.2546	0.30336	2.11E-04	5.71E-07	6.37E-07	5.98E-07	5.97E-07	2.1373E-04
519815.46	4258866.02	11106.23991	0.23791	0.2636	0.2473	0.25776	2.11E-04	5.59E-07	5.41E-07	5.81E-07	5.07E-07	2.1330E-04
520045.13	4259466.18	11104.74966	6.8697	0.10784	10.48169	0.10548	2.11E-04	1.61E-05	2.21E-07	2.46E-05	2.08E-07	2.5225E-04
520097.53	4258064.16	11095.06439	0.11461	17.30617	0.11679	17.78716	2.11E-04	2.69E-07	3.55E-05	2.74E-07	3.50E-05	2.8195E-04
520748.05	4258486.01	11075.012	0.10399	0.10386	0.10048	0.10782	2.11E-04	2.44E-07	2.13E-07	2.36E-07	2.12E-07	2.1142E-04
520766.95	4258406.31	11072.93479	0.09863	0.09962	0.09577	0.1035	2.10E-04	2.32E-07	2.04E-07	2.25E-07	2.04E-07	2.1134E-04
520010.95	4258255.03	11066.25063	0.14662	2.80633	0.15226	2.50599	2.10E-04	3.44E-07	5.76E-06	3.57E-07	4.93E-06	2.2174E-04
520004.8	4258277.54	11064.40339	0.1534	2.5081	0.15909	2.25965	2.10E-04	3.60E-07	5.14E-06	3.73E-07	4.45E-06	2.2064E-04
519986.98	4258415.68	11064.18011	0.23181	1.849	0.24324	1.68584	2.10E-04	5.44E-07	3.79E-06	5.71E-07	3.32E-06	2.1854E-04
520754.49	4258451.2	11060.9247	0.10209	0.10233	0.09888	0.10644	2.10E-04	2.40E-07	2.10E-07	2.32E-07	2.10E-07	2.1114E-04
519982.9	4258474.12	11056.06162	0.2915	1.69232	0.31206	1.54092	2.10E-04	6.84E-07	3.47E-06	7.33E-07	3.03E-06	2.1808E-04
519887.12	4258683.15	11046.09996	0.27195	0.51119	0.28874	0.49584	2.10E-04	6.38E-07	1.05E-06	6.78E-07	9.76E-07	2.1331E-04
520064.18	4258123.2	11040.33094	0.12185	16.62208	0.12704	9.59777	2.10E-04	2.86E-07	3.41E-05	2.98E-07	1.89E-05	2.6342E-04
519865.9	4258728.44	11040.09877	0.25811	0.42122	0.27293	0.40891	2.10E-04	6.06E-07	8.64E-07	6.41E-07	8.05E-07	2.1277E-04
520751.22	4258468.49	11037.42749	0.10305	0.10309	0.09968	0.10715	2.10E-04	2.42E-07	2.11E-07	2.34E-07	2.11E-07	2.1070E-04
520074.86	4259486.13	11031.69951	15.94607	0.10816	23.43619	0.10461	2.10E-04	3.74E-05	2.22E-07	5.50E-05	2.06E-07	3.0258E-04
519979.36	4258492.51	11022.02567	0.3089	1.58261	0.33394	1.44847	2.10E-04	7.25E-07	3.25E-06	7.84E-07	2.85E-06	2.1712E-04
520755.53	4258561.54	11021.30182	0.10286	0.10066	0.09963	0.10405	2.09E-04	2.41E-07	2.06E-07	2.34E-07	2.05E-07	2.1038E-04
520045.64	4258160.82	11015.99486	0.12702	6.5996	0.13358	5.26288	2.09E-04	2.98E-07	1.35E-05	3.14E-07	1.04E-05	2.3390E-04
519919.89	4258618.83	11009.96033	0.29854	0.70827	0.3243	0.68249	2.09E-04	7.01E-07	1.45E-06	7.61E-07	1.34E-06	2.1354E-04

519818.69	4258849.89	10991.9581	0.23633	0.27455	0.24619	0.26845	2.09E-04	5.55E-07	5.63E-07	5.78E-07	5.28E-07	2.1116E-04
520765.37	4258590.04	10982.86187	0.10069	0.09736	0.09775	0.10064	2.09E-04	2.36E-07	2.00E-07	2.29E-07	1.98E-07	2.0963E-04
520763.67	4258423.56	10976.73472	0.09963	0.10016	0.09668	0.10414	2.09E-04	2.34E-07	2.05E-07	2.27E-07	2.05E-07	2.0952E-04
519850.14	4258762.77	10972.44601	0.24861	0.36636	0.26133	0.35678	2.09E-04	5.84E-07	7.51E-07	6.14E-07	7.02E-07	2.1122E-04
520035.22	4259466.2	10971.5653	4.9616	0.10665	6.60344	0.10459	2.09E-04	1.16E-05	2.19E-07	1.55E-05	2.06E-07	2.3613E-04
519986.86	4258391.7	10939.36884	0.21056	1.85797	0.22008	1.69827	2.08E-04	4.94E-07	3.81E-06	5.17E-07	3.34E-06	2.1610E-04
520106.6	4258043.98	10933.64853	0.11136	11.88598	0.11285	13.52951	2.08E-04	2.61E-07	2.44E-05	2.65E-07	2.66E-05	2.5937E-04
520084.78	4259496.12	10925.16323	12.91227	0.10767	12.93859	0.10368	2.08E-04	3.03E-05	2.21E-07	3.04E-05	2.04E-07	2.6878E-04
520028.61	4258197.81	10921.1159	0.13257	4.06418	0.13911	3.49663	2.08E-04	3.11E-07	8.34E-06	3.27E-07	6.88E-06	2.2345E-04
519844.85	4258774.14	10914.81807	0.2451	0.35033	0.25735	0.34141	2.07E-04	5.75E-07	7.18E-07	6.04E-07	6.72E-07	2.1004E-04
520055.16	4258136.91	10910.03442	0.12288	9.65391	0.12877	6.98286	2.07E-04	2.88E-07	1.98E-05	3.02E-07	1.37E-05	2.4152E-04
520038.24	4258173.86	10909.75408	0.12835	5.2302	0.13504	4.34501	2.07E-04	3.01E-07	1.07E-05	3.17E-07	8.55E-06	2.2727E-04
519929.81	4258599.39	10907.35103	0.30641	0.79332	0.33505	0.75982	2.07E-04	7.19E-07	1.63E-06	7.87E-07	1.50E-06	2.1196E-04
520755.58	4258552.06	10891.38907	0.10274	0.10089	0.09945	0.10429	2.07E-04	2.41E-07	2.07E-07	2.33E-07	2.05E-07	2.0791E-04
520011.67	4258244.74	10882.57233	0.14255	2.84	0.14808	2.53522	2.07E-04	3.35E-07	5.82E-06	3.48E-07	4.99E-06	2.1836E-04
520045.14	4259476.18	10881.7947	6.88458	0.10619	10.69573	0.10386	2.07E-04	1.62E-05	2.18E-07	2.51E-05	2.04E-07	2.4854E-04
520750.81	4258513.33	10873.8756	0.10356	0.10271	0.1	0.10641	2.07E-04	2.43E-07	2.11E-07	2.35E-07	2.09E-07	2.0759E-04
519969.48	4258521.64	10859.61698	0.32418	1.34376	0.3537	1.24481	2.06E-04	7.61E-07	2.76E-06	8.30E-07	2.45E-06	2.1322E-04
520751.15	4258504.2	10849.85966	0.10339	0.10273	0.09984	0.1065	2.06E-04	2.43E-07	2.11E-07	2.34E-07	2.10E-07	2.0713E-04
520751.49	4258495.07	10848.92829	0.10322	0.10279	0.09971	0.10662	2.06E-04	2.42E-07	2.11E-07	2.34E-07	2.10E-07	2.0712E-04
520018.55	4258221.93	10840.01517	0.13683	3.24406	0.14273	2.85985	2.06E-04	3.21E-07	6.65E-06	3.35E-07	5.63E-06	2.1899E-04
520773.74	4258398.27	10838.64	0.09698	0.098	0.09423	0.10174	2.06E-04	2.28E-07	2.01E-07	2.21E-07	2.00E-07	2.0687E-04
519821.86	4258833.61	10830.06899	0.2343	0.28607	0.24455	0.27962	2.06E-04	5.50E-07	5.87E-07	5.74E-07	5.50E-07	2.0812E-04
519880.82	4258692.07	10826.97524	0.26444	0.48514	0.28031	0.47075	2.06E-04	6.21E-07	9.95E-07	6.58E-07	9.27E-07	2.0900E-04
520761.22	4258443	10810.47096	0.1004	0.1006	0.09734	0.10461	2.05E-04	2.36E-07	2.06E-07	2.29E-07	2.06E-07	2.0636E-04
520074.88	4259496.13	10808.20329	15.68911	0.10645	22.17807	0.10298	2.05E-04	3.68E-05	2.18E-07	5.21E-05	2.03E-07	2.9477E-04
520765.42	4258580.56	10800.78768	0.10056	0.09766	0.09762	0.10094	2.05E-04	2.36E-07	2.00E-07	2.29E-07	1.99E-07	2.0617E-04
519979.32	4258482.81	10795.64776	0.29536	1.59577	0.31754	1.45977	2.05E-04	6.93E-07	3.27E-06	7.45E-07	2.87E-06	2.1279E-04
519983.36	4258448.73	10794.27214	0.26067	1.72826	0.2754	1.57766	2.05E-04	6.12E-07	3.54E-06	6.47E-07	3.11E-06	2.1309E-04
519859.47	4258737.04	10786.78924	0.25076	0.40115	0.26451	0.3899	2.05E-04	5.89E-07	8.23E-07	6.21E-07	7.68E-07	2.0784E-04
520755.64	4258542.58	10784.31248	0.10261	0.10111	0.09927	0.10453	2.05E-04	2.41E-07	2.07E-07	2.33E-07	2.06E-07	2.0588E-04
519939.73	4258579.95	10772.59679	0.31305	0.89514	0.3427	0.85118	2.05E-04	7.35E-07	1.84E-06	8.05E-07	1.68E-06	2.0982E-04
520754.64	4258477.47	10772.49718	0.10229	0.10208	0.09891	0.10601	2.05E-04	2.40E-07	2.09E-07	2.32E-07	2.09E-07	2.0566E-04
519992.24	4258322.68	10771.63474	0.16858	2.03556	0.17524	1.85996	2.05E-04	3.96E-07	4.17E-06	4.11E-07	3.66E-06	2.1339E-04
520757.89	4258460.12	10768.89645	0.10138	0.10122	0.09813	0.10523	2.05E-04	2.38E-07	2.08E-07	2.30E-07	2.07E-07	2.0558E-04
519825.91	4258819.42	10761.01318	0.23451	0.29814	0.24524	0.29122	2.05E-04	5.51E-07	6.11E-07	5.76E-07	5.73E-07	2.0686E-04
520770.4	4258415.37	10753.70131	0.09799	0.09849	0.09516	0.10235	2.04E-04	2.30E-07	2.02E-07	2.23E-07	2.01E-07	2.0527E-04
520035.24	4259476.2	10753.56069	5.00497	0.10501	6.70911	0.10299	2.04E-04	1.18E-05	2.15E-07	1.58E-05	2.03E-07	2.3232E-04
520046	4258150.68	10750.72962	0.12375	6.66743	0.13012	5.30283	2.04E-04	2.91E-07	1.37E-05	3.05E-07	1.04E-05	2.2906E-04
520096.78	4258053.95	10750.35762	0.11157	18.01865	0.11367	18.14535	2.04E-04	2.62E-07	3.70E-05	2.67E-07	3.57E-05	2.7755E-04
519993.42	4258312.2	10719.6628	0.16365	2.07438	0.16998	1.89404	2.04E-04	3.84E-07	4.25E-06	3.99E-07	3.73E-06	2.1253E-04
520755.69	4258533.09	10701.34579	0.1025	0.10128	0.09911	0.10474	2.03E-04	2.41E-07	2.08E-07	2.33E-07	2.06E-07	2.0430E-04
520061.5	4258116.61	10697.18628	0.11884	13.65703	0.12402	8.64626	2.03E-04	2.79E-07	2.80E-05	2.91E-07	1.70E-05	2.4893E-04
520012.34	4258234.48	10694.52747	0.13866	2.86959	0.1441	2.5603	2.03E-04	3.26E-07	5.89E-06	3.38E-07	5.04E-06	2.1487E-04
519983.52	4258424.08	10688.57444	0.23499	1.75046	0.24662	1.60169	2.03E-04	5.52E-07	3.59E-06	5.79E-07	3.15E-06	2.1104E-04
520029.1	4258187.62	10688.22207	0.1291	4.10761	0.13555	3.52922	2.03E-04	3.03E-07	8.42E-06	3.18E-07	6.95E-06	2.1916E-04
520045.16	4259486.18	10665.26858	7.02856	0.10452	11.02098	0.10225	2.03E-04	1.65E-05	2.14E-07	2.59E-05	2.01E-07	2.4552E-04
520082.08	4259506.95	10656.25792	13.40689	0.10552	14.06741	0.10178	2.03E-04	3.15E-05	2.16E-07	3.30E-05	2.00E-07	2.6747E-04
520767.14	4258432.68	10654.39551	0.09893	0.09911	0.096	0.10304	2.03E-04	2.32E-07	2.03E-07	2.25E-07	2.03E-07	2.0338E-04
519907.12	4258636.77	10652.02122	0.28198	0.62453	0.30367	0.60476	2.02E-04	6.62E-07	1.28E-06	7.13E-07	1.19E-06	2.0632E-04
519994.47	4258301.78	10643.77811	0.15889	2.10997	0.16491	1.92504	2.02E-04	3.73E-07	4.33E-06	3.87E-07	3.79E-06	2.1120E-04
520755.74	4258523.61	10643.00193	0.10241	0.10135	0.09897	0.10488	2.02E-04	2.40E-07	2.08E-07	2.32E-07	2.06E-07	2.0319E-04
520106.64	4258033.98	10640.27187	0.10872	11.88694	0.11013	13.52701	2.02E-04	2.55E-07	2.44E-05	2.59E-07	2.66E-05	2.5377E-04
520055.42	4258126.82	10640.112	0.11978	9.74745	0.12545	7.01866	2.02E-04	2.81E-07	2.00E-05	2.95E-07	1.38E-05	2.3663E-04
520765.48	4258571.08	10636.57503	0.10045	0.09792	0.09747	0.10119	2.02E-04	2.36E-07	2.01E-07	2.29E-07	1.99E-07	2.0305E-04
520019.2	4258211.68	10635.23792	0.13323	3.28858	0.13909	2.89728	2.02E-04	3.13E-07	6.74E-06	3.27E-07	5.70E-06	2.1524E-04
519811.79	4258857.29	10635.08246	0.22796	0.26414	0.23698	0.25845	2.02E-04	5.35E-07	5.42E-07	5.56E-07	5.09E-07	2.0430E-04
519959.56	4258541.08	10634.53003	0.32166	1.16311	0.35129	1.08859	2.02E-04	7.55E-07	2.39E-06	8.25E-07	2.14E-06	2.0825E-04
519838.31	4258782.47	10628.09417	0.23761	0.33507	0.24905	0.32682	2.02E-04	5.58E-07	6.87E-07	5.85E-07	6.43E-07	2.0449E-04
519897.12	4258655.32	10616.61773	0.27333	0.56668	0.29202	0.55002	2.02E-04	6.42E-07	1.16E-06	6.86E-07	1.08E-06	2.0537E-04
519987.55	4258344.58	10613.32298	0.17786	1.89087	0.18501	1.73451	2.02E-04	4.18E-07	3.88E-06	4.34E-07	3.41E-06	2.0988E-04
520001.27	4258269.01	10603.63537	0.14734	2.35602	0.15261	2.13509	2.02E-04	3.46E-07	4.83E-06	3.58E-07	4.20E-06	2.1130E-04
519986.31	4258355.08	10601.84911	0.18343	1.85405	0.1909	1.70155	2.02E-04	4.31E-07	3.80E-06	4.48E-07	3.35E-06	2.0955E-04
519983.45	4258400	10601.2884	0.21338	1.76232	0.22303	1.61602	2.02E-04	5.01E-07	3.61E-06	5.24E-07	3.18E-06	2.0933E-04
519988.65	4258334.14	10594.41997	0.17247	1.92421	0.17931	1.76432	2.01E-04	4.05E-07	3.95E-06	4.21E-07	3.47E-06	2.0963E-04
519874.46	4258700.84	10575.77307	0.25635	0.46102	0.27196	0.44715	2.01E-04	6.02E-07	9.46E-07	6.38E-07	8.80E-07	2.0409E-04
520036.69	4258164.51	10563.71496	0.1245	4.99211	0.13097	4.17592	2.01E-04	2.92E-07	1.02E-05	3.07E-07	8.22E-06	2.1986E-04
519887.12	4258673.87	10555.25032	0.26503	0.51696	0.28131	0.50225	2.01E-04	6.22E-07	1.06E-06	6.60E-07	9.89E-07	2.0397E-04
519984.87	4258365.66	10551.81349	0.18914	1.81234	0.19695	1.66432	2.01E-04	4.44E-07	3.72E-06	4.62E-07	3.28E-06	2.0847E-04
519995.42	4258291.4	10547.68496	0.15431	2.14017	0.16	1.9521	2.00E-04	3.62E-07	4.39E-06	3.76E-07	3.84E-06	2.0946E-04
520072.18	4259506.97	10542.71872	14.75712	0.1043	25.19065	0.10106	2.00E-04	3.46E-05	2.14E-07	5.91E-05	1.99E-07	2.9460E-04
520035.26	4259486.2	10541.93905	5.07758	0.10338	6.82972	0.10139	2.00E-04	1.19E-05	2.12E-07	1.60E-05	2.00E-07	2.2875E-04
519949.65	4258560.52	10539.86989	0.3147	1.01372	0.34318	0.95744	2.00E-04	7.39E-07	2.08E-06	8.06E-07	1.88E-06	2.0585E-04
520777.17	4258407.27	10536.71452	0.09639	0.09686	0.09366	0.1006	2.00E-04	2.26E-07	1.99E-07	2.20E-07	1.98E-07	2.0113E-04
520758.06	4258486.46	10535.17352	0.10153	0.10109	0.09816	0.10489	2.00E-04	2.38E-07	2.07E-07	2.30E-07	2.06E-07	2.0114E-04
520062	4258109.76	10534.94741	0.11695	14.08256	0.12197	8.78526	2.00E-04	2.75E-07	2.89E-05	2.86E-07	1.73E-05	2.4699E-04
519829.12	4258803.25	10534.87652	0.2321	0.31072	0.24293	0.30336	2.00E-04	5.45E-07	6.37E-07	5.70E-07	5.97E-07	2.0260E-04
519852.99	4258745.53	10525.48493	0.24335	0.38257	0.25633	0.37215	2.00E-04	5.71E-07	7.85E-07	6.02E-07	7.33E-07	2.0276E-04
520764.59	4258451.87	10519.03891	0.09971	0.09955	0.09662	0.10348	2.00E-04	2.34E-07	2.04E-07	2.27E-07	2.04E-07	2.0082E-04
520761.29	4258469.05	10498.70058	0.10064	0.10026	0.09738	0.10415	2.00E-04	2.36E-07	2.06E-07	2.29E-07	2.05E-07	2.0044E-04
520046.34	4258140.55	10497.27864	0.12064	6.73129	0.1268	5.33984	2.00E-04	2.83E-07	1.38E-05	2.98E-07	1.05E-05	2.2443E-04
520765.53	4258561.6	10492.73178	0.10034	0.09815	0.0973	0.10141	1.99E-04	2.36E-07	2.01E-07	2.28E-07	2.00E-07	2.0031E-04
519814.99	4258841.1	10486.96361	0.22617	0.27495	0.23559	0.26894	1.99E-04	5.31E-07	5.64E-07	5.53E-07	5.29E-07	2.0152E-04
519969.44	4258511.95	10479.55788	0.31066	1.35671	0.33741	1.25662	1.99E-04	7.29E-07	2.78E-06	7.92E-07	2.47E-06	2.0598E-04
520002.15	4258258.66	10465.7646	0.14329	2.39178	0.14837	2.16553	1.99E-04	3.36E-07	4.91E-06	3.48E-07	4.26E-06	2.0879E-04
519979.85	4258457.26	10464.44738	0.26423	1.63585	0.27996	1.49764	1.99E-04	6.20E-07	3.36E-06	6.57E-07	2.95E-06	2.0649E-04
520096.82	4258043.95	10464.23976	0.10891	18.03618	0.11091	17.95999	1.99E-04	2.56E-07	3.70E-05	2.60E-07	3.54E-05	2.7177E-04
519868.49	4258710.57	10461.93637	0.25126	0.43893	0.26568	0.42624	1.99E-04	5.90E-07	9.00E-07	6.24E-07	8.39E-07	2.0182E-04
520029.55	4258177.44	10458.05669	0.12578	4.14291	0.13211	3.55467	1.99E-04	2.95E-07	8.50E-06	3.10E-07	7.00E-06	2.1489E-04
520045.18	4259496.18	10455.25736	7.16622	0.1029	11.48355	0.10067	1.99E-04	1.68E-05	2.11E-07	2.70E-05	1.98E-07	2.4293E-04
520082.1	4259516.95	10444.02112	13.05274	0.10388	13.52034	0.10022	1.99E-04	3.06E-05	2.13E-07	3.17E-05	1.97E-07	2.6132E-04
520773.85	4258424.44	10439.01492	0.09733	0.09746	0.09452	0.10128	1.98E-04	2.28E-07	2.00E-07	2.22E-07	1.99E-07	1.9928E-04
519996.27	4258281.06	10435.60227	0.14992	2.16925	0.15531	1.97764	1.98E-04	3.52E-07	4.45E-06	3.65E-07	3.89E-06	2.0742E-04
520019.8	4258201.44	10424.14289	0.12973	3.31428	0.13554	2.91303	1.98E-04	3.05E-07	6.80E-06	3.18E-07	5.73E-06	2.1130E-04
519919.85	4258609.13	10408.39853	0.28969	0.7171	0.31466	0.69075	1.98E-04	6.80E-07	1.47E-06	7.39E-07	1.36E-06	2.0209E-04
520781.19	4258599.97	10370.77127	0.0969	0.09327	0.09421	0.09637	1.97E-04	2.27E-07	1.91E-07	2.21E-07	1.90E-07	1.9796E-04
520765.58	4258552.11	10369.38629	0.10023	0.09836	0.09713	0.10162	1.97E-04	2.35E-07	2.02E-07	2.28E-07	2.00E-07	1.9797E-04
520106.67	4258023.98	10356.90929	0.10619	11.89394	0.10752	13.4786	1.97E-04	2.49E-07	2.44E-05	2.52E-07	2.65E-05	2.4829E-04
520760.8	4258513.71	10349.3448	0.10108	0.10006	0.09769	0.1036	1.97E-04	2.37E-07	2.05E-07	2.29E-07	2.04E-07	1.9760E-04
520770.62	4258441.81	10346.09765	0.09822	0.09809	0.09529	0.10195	1.97E-04	2.31E-07	2.01E-07	2.24E-07	2.01E-07	1.9752E-04
520035.28	4259496.2	10336.33645	5.16322	0.10178	6.98422	0.09984	1.96E-04	1.21E-05	2.09E-07	1.64E-05	1.97E-07	2.2540E-04
520072.2	4259516.97	10334.70885	14.37437	0.1027	23.54454	0.09953	1.96E-04	3.37E-05	2.11E-07	5.53E-05	1.96E-07	2.8587E-04
520037.12	4258154.35	10329.10641	0.12137	5.04232	0.1277	4.21132	1.96E-04	2.85E-07	1.03E-05	3.00E-07	8.29E-06	2.1555E-04
519980.06	4258432.48	10327.91799	0.23809	1.65945	0.25	1.5232	1.96E-04	5.59E-07	3.40E-06	5.87E-07	3.00E-06	2.0386E-04
520761.14	4258504.58	10326.32292	0.10093	0.10006	0.09755	0.10366	1.96E-04	2.37E-07	2.05E-07	2.29E-07	2.04E-07	1.9716E-04
520761.49	4258495.44	10324.6985	0.10077	0.10008	0.09742	0.10375	1.96E-04	2.37E-07	2.05E-07	2.29E-07	2.04E-07	1.9713E-04
520002.95	4258248.34	10317.26396	0.13941	2.4217	0.14432	2.19158	1.96E-04	3.27E-07	4.97E-06	3.39E-07	4.31E-06	2.0606E-04
520009.59	4258225.63	10303.97238	0.13381	2.71691	0.13889	2.43628	1.96E-04	3.14E-07	5.57E-06	3.26E-07	4.80E-06	2.0687E-04
519929.77	4258589.69	10299.41785	0.2967	0.80389	0.32387	0.76903	1.96E-04	6.97E-07	1.65E-06	7.60E-07	1.51E-06	2.0039E-04
519818.14	4258824.77	10292.5285	0.22395	0.28628	0.2337	0.27986	1.96E-04	5.26E-07	5.87E-07	5.49E-07	5.51E-07	1.9785E-04
519846.47	4258753.92	10272.66861	0.23627	0.36519	0.24831	0.35564	1.95E-04	5.55E-07	7.49E-07	5.83E-07	7.00E-07	1.9785E-04
520765.64	4258542.63	10267.75417	0.10013	0.09854	0.09697	0.10182	1.95E-04	2.35E-07	2.02E-07	2.28E-07	2.00E-07	1.9604E-04
519862.15	4258719.38	10258.22028	0.24466	0.41795	0.25808	0.4063	1.95E-04	5.74E-07	8.57E-07	6.06E-07	8.00E-07	1.9783E-04
520764.68	4258477.97	10251.97358	0.09988	0.09938	0.09665	0.10313	1.95E-04	2.34E-07	2.04E-07	2.27E-07	2.03E-07	1.9574E-04
520046.65	4258130.44	10250.01371	0.11765	6.78975	0.12362	5.37168	1.95E-04	2.76E-07	1.39E-05	2.90E-07	1.06E-05	2.1990E-04
520767.97	4258460.73	10246.91772	0.09901	0.09856	0.0959	0.10239	1.95E-04	2.32E-07	2.02E-07	2.25E-07	2.02E-07	1.9564E-04
520082.12	4259526.95	10237.74045	12.93918	0.10227	12.98519	0.0987	1.95E-04	3.04E-05	2.10E-07	3.05E-05	1.94E-07	2.5587E-04
519841.08	4258765.04	10233.92164	0.23305	0.34921	0.24424	0.34053	1.95E-04	5.47E-07	7.16E-07	5.73E-07	6.70E-07	1.9704E-04
520780.59	4258416.28	10233.32037	0.09575	0.09583	0.09307	0.09954	1.95E-04	2.25E-07	1.97E-07	2.18E-07	1.96E-07	1.9535E-04
520020.35	4258191.23	10223.83649	0.12644	3.35863	0.13221	2.95208	1.94E-04	2.97E-07	6.89E-06	3.10E-07	5.81E-06	2.0764E-04
519822.29	4258810.82	10212.61565	0.22424	0.2981	0.23433	0.29123	1.94E-04	5.26E-07	6.11E-07	5.50E-07	5.73E-07	1.9638E-04
520042.48	4259507.02	10203.14337	6.67455	0.10088	10.25519	0.09879	1.94E-04	1.57E-05	2.07E-07	2.41E-05	1.94E-07	2.3409E-04
520778.28	4258583.39	10203.08164	0.09743	0.09447	0.09472	0.0976	1.94E-04	2.29E-07	1.94E-07	2.22E-07	1.92E-07	1.9478E-04
520096.85	4258033.95	10194.0866	0.10638	18.05343	0.10826	18.0902	1.94E-04	2.50E-07	3.70E-05	2.54E-07	3.56E-05	2.6691E-04
520765.69	4258533.15	10189.31154	0.10004	0.09868	0.09682	0.102	1.94E-04	2.35E-07	2.02E-07	2.27E-07	2.01E-07	1.9455E-04
519959.52	4258531.38	10177.30844	0.30932	1.17559	0.33664	1.0997	1.93E-04	7.26E-07	2.41E-06	7.90E-07	2.16E-06	1.9954E-04
520059.08	4258101.95	10176.29182	0.11372	11.71354	0.11872	7.89602	1.93E-04	2.67E-07	2.40E-05	2.79E-07	1.55E-05	2.3355E-04
519976.34	4258465.79	10175.01483	0.26766	1.54944	0.2847	1.42297	1.93E-04	6.28E-07	3.18E-06	6.68E-07	2.80E-06	2.0068E-04
519969.4	4258502.25	10174.482	0.29781	1.36903	0.32207	1.26774	1.93E-04	6.99E-07	2.81E-06	7.56E-07	2.50E-06	2.0016E-04
520051.71	4258116.57	10164.12809	0.11537	8.22773	0.12097	6.20541	1.93E-04	2.71E-07	1.69E-05	2.84E-07	1.22E-05	2.2285E-04
520003.69	4258238.05	10161.88672	0.13568	2.44963	0.14047	2.21563	1.93E-04	3.19E-07	5.02E-06	3.30E-07	4.36E-06	2.0319E-04
519808.11	4258848.56	10160.47539	0.21843	0.26449	0.22707	0.2589	1.93E-04	5.13E-07	5.42E-07	5.33E-07	5.10E-07	1.9523E-04
519979.54	4258385.23	10135.8031	0.19762	1.67173	0.20584	1.54142	1.93E-04	4.64E-07	3.43E-06	4.83E-07	3.03E-06	2.0007E-04
520777.3	4258433.5	10135.73052	0.09665	0.09646	0.09386	0.10022	1.93E-04	2.27E-07	1.98E-07	2.20E-07	1.97E-07	1.9350E-04
520765.74	4258523.67	10133.90903	0.09995	0.09878	0.09669	0.10216	1.93E-04	2.35E-07	2.03E-07	2.27E-07	2.01E-07	1.9349E-04
520072.22	4259526.97	10133.05515	13.88786	0.10114	22.06855	0.09804	1.93E-04	3.26E-05	2.07E-07	5.18E-05	1.93E-07	2.7743E-04
520010.31	4258215.34	10129.31854	0.13035	2.75175	0.1354	2.46564	1.93E-04	3.06E-07	5.64E-06	3.18E-07	4.85E-06	2.0366E-04
520027.74	4258168.2	10124.38825	0.12198	3.95364	0.12807	3.40939	1.92E-04	2.86E-07	8.11E-06	3.01E-07	6.71E-06	2.0785E-04
519897.12	4258646.05	10113.0582	0.2663	0.5729	0.28508	0.55643	1.92E-04	6.25E-07	1.17E-06	6.69E-07	1.10E-06	1.9580E-04
520037.52	4258144.2	10095.20871	0.11836	5.0891	0.12456	4.24224	1.92E-04	2.78E-07	1.04E-05	2.92E-07	8.35E-06	2.1125E-04
519949.61	4258550.82	10093.60485	0.30621	1.02802	0.33318	0.96999	1.92E-04	7.19E-07	2.11E-06	7.82E-07	1.91E-06	1.9738E-04
520106.7	4258013.98	10089.12547	0.10377	11.89491	0.10501	13.54855	1.92E-04	2.44E-07	2.44E-05	2.47E-07	2.67E-05	2.4333E-04
519939.69	4258570.26	10089.12041	0.30001	0.90522	0.32637	0.86026	1.92E-04	7.04E-07	1.86E-06	7.66E-07	1.69E-06	1.9680E-04
520032.58	4259507.04	10088.69869	4.85894	0.09981	6.44808	0.09797	1.92E-04	1.14E-05	2.05E-07	1.51E-05	1.93E-07	2.1871E-04
519887.12	4258664.6	10078.4998	0.25839	0.52245	0.27449	0.5083	1.92E-04	6.07E-07	1.07E-06	6.44E-07	1.00E-06	1.9490E-04
520774.09	4258450.94	10058.92857	0.09752	0.0971	0.09458	0.10087	1.91E-04	2.29E-07	1.99E-07	2.22E-07	1.99E-07	1.9205E-04
519855.74	4258728.06	10042.19271	0.23794	0.39842	0.25057	0.38761	1.91E-04	5.59E-07	8.17E-07	5.88E-07	7.63E-07	1.9361E-04
520768.08	4258486.89	10033.0629	0.09915	0.09842	0.09592	0.10205	1.91E-04	2.33E-07	2.02E-07	2.25E-07	2.01E-07	1.9157E-04
520775.96	4258565.45	10033.04954	0.09785	0.09545	0.09501	0.0986	1.91E-04	2.30E-07	1.96E-07	2.23E-07	1.94E-07	1.9155E-04
519983.35	4258326.34	10031.90073	0.16415	1.77835	0.17031	1.64112	1.91E-04	3.85E-07	3.65E-06	4.00E-07	3.23E-06	1.9835E-04
520020.87	4258181.03	10020.27596	0.12326	3.38716	0.12898	2.97338	1.90E-04	2.89E-07	6.95E-06	3.03E-07	5.85E-06	2.0386E-04
520052.22	4258109.73	10018.80533	0.11359	8.39058	0.11904	6.29267	1.90E-04	2.67E-07	1.72E-05	2.79E-07	1.24E-05	2.2058E-04
519984.64	4258315.82	10017.04248	0.15953	1.81298	0.16547	1.67193	1.90E-04	3.75E-07	3.72E-06	3.88E-07	3.29E-06	1.9818E-04
519877.12	4258683.15	10009.35538	0.25051	0.47891	0.26507	0.46586	1.90E-04	5.88E-07	9.82E-07	6.22E-07	9.17E-07	1.9337E-04
520042.5	4259517.02	10006.70586	6.84583	0.09935	10.7863	0.0973	1.90E-04	1.61E-05	2.04E-07	2.53E-05	1.92E-07	2.3200E-04
519992.39	4258272.68	9994.83025	0.14395	2.03695	0.14895	1.86679	1.90E-04	3.38E-07	4.18E-06	3.50E-07	3.67E-06	1.9852E-04
520771.34	4258469.6	9994.017	0.09828	0.09769	0.09518	0.10139	1.90E-04	2.31E-07	2.00E-07	2.23E-07	2.00E-07	1.9082E-04
519976.61	4258440.89	9991.89084	0.24116	1.57546	0.25356	1.45005	1.90E-04	5.66E-07	3.23E-06	5.95E-07	2.85E-06	1.9717E-04
519834.56	4258773.44	9983.49861	0.2262	0.33428	0.23684	0.32613	1.90E-04	5.31E-07	6.86E-07	5.56E-07	6.42E-07	1.9218E-04
519811.3	4258832.31	9983.23171	0.2165	0.27511	0.22542	0.26917	1.90E-04	5.08E-07	5.64E-07	5.29E-07	5.30E-07	1.9189E-04
519985.78	4258305.36	9976.12458	0.15504	1.84378	0.16074	1.69941	1.90E-04	3.64E-07	3.78E-06	3.77E-07	3.35E-06	1.9750E-04
520078.01	4259538.19	9971.70159	14.22257	0.10006	14.94506	0.09678	1.90E-04	3.34E-05	2.05E-07	3.51E-05	1.91E-07	2.5842E-04
519825.48	4258794.6	9965.48379	0.22181	0.31015	0.2317	0.30298	1.89E-04	5.21E-07	6.36E-07	5.44E-07	5.96E-07	1.9172E-04
520010.98	4258205.08	9951.99143	0.12702	2.77954	0.13204	2.48754	1.89E-04	2.98E-07	5.70E-06	3.10E-07	4.90E-06	2.0037E-04
520784.02	4258425.28	9942.41132	0.09513	0.09479	0.09244	0.09847	1.89E-04	2.23E-07	1.94E-07	2.17E-07	1.94E-07	1.8982E-04
519909.89	4258618.87	9940.68631	0.27423	0.65229	0.29599	0.63125	1.89E-04	6.44E-07	1.34E-06	6.95E-07	1.24E-06	1.9287E-04
520096.88	4258023.95	9934.04371	0.10395	18.0718	0.10572	18.1656	1.89E-04	2.44E-07	3.71E-05	2.48E-07	3.58E-05	2.6214E-04
519972.83	4258474.32	9926.4727	0.2709	1.46845	0.2894	1.3531	1.89E-04	6.36E-07	3.01E-06	6.79E-07	2.66E-06	1.9567E-04
520059.11	4258091.95	9925.04438	0.11097	11.69128	0.11579	7.87756	1.89E-04	2.61E-07	2.40E-05	2.72E-07	1.55E-05	2.2867E-04
519976.62	4258416.58	9922.5313	0.21884	1.5909	0.22876	1.4674	1.89E-04	5.14E-07	3.26E-06	5.37E-07	2.89E-06	1.9581E-04
519969.36	4258492.55	9921.36641	0.28555	1.38068	0.30747	1.27815	1.89E-04	6.70E-07	2.83E-06	7.22E-07	2.52E-06	1.9533E-04
519986.81	4258294.95	9914.61432	0.1507	1.87096	0.15614	1.72373	1.88E-04	3.54E-07	3.84E-06	3.67E-07	3.39E-06	1.9641E-04
520028.23	4258158.01	9913.54666	0.11898	3.99708	0.12499	3.44306	1.88E-04	2.79E-07	8.20E-06	2.93E-07	6.78E-06	2.0399E-04
520032.6	4259517.04	9896.32076	4.95994	0.0983	6.63476	0.0965	1.88E-04	1.16E-05	2.02E-07	1.56E-05	1.90E-07	2.1572E-04
519993.35	4258262.29	9888.76579	0.14007	2.06373	0.14482	1.89033	1.88E-04	3.29E-07	4.23E-06	3.40E-07	3.72E-06	1.9659E-04
519980.21	4258337.62	9878.65998	0.168	1.69896	0.17426	1.57146	1.88E-04	3.94E-07	3.48E-06	4.09E-07	3.09E-06	1.9516E-04
520068.11	4259538.21	9870.62395	14.21053	0.09896	27.75039	0.09611	1.88E-04	3.34E-05	2.03E-07	6.51E-05	1.89E-07	2.8653E-04
520037.89	4258134.05	9869.63373	0.11549	5.1323	0.12153	4.26959	1.88E-04	2.71E-07	1.05E-05	2.85E-07	8.40E-06	2.0709E-04
519979.03	4258348.1	9865.72732	0.17304	1.66956	0.17955	1.54474	1.88E-04	4.06E-07	3.42E-06	4.22E-07	3.04E-06	1.9482E-04
520770.79	4258514.08	9861.72157	0.09868	0.09758	0.09547	0.10095	1.87E-04	2.32E-07	2.00E-07	2.24E-07	1.99E-07	1.8831E-04
520780.75	4258442.56	9852.89672	0.09598	0.09545	0.09317	0.09915	1.87E-04	2.25E-07	1.96E-07	2.19E-07	1.95E-07	1.8812E-04
519919.81	4258599.43	9843.87008	0.28104	0.72617	0.30522	0.69875	1.87E-04	6.60E-07	1.49E-06	7.17E-07	1.38E-06	1.9136E-04
520771.14	4258504.95	9839.16681	0.09855	0.09753	0.09533	0.10097	1.87E-04	2.31E-07	2.00E-07	2.24E-07	1.99E-07	1.8788E-04
520771.48	4258495.82	9837.53114	0.09841	0.09748	0.09521	0.10099	1.87E-04	2.31E-07	2.00E-07	2.24E-07	1.99E-07	1.8785E-04
519987.74	4258284.58	9835.6641	0.14653	1.89605	0.1517	1.74604	1.87E-04	3.44E-07	3.89E-06	3.56E-07	3.44E-06	1.9498E-04
520106.73	4258003.98	9834.53072	0.10146	11.89223	0.1026	13.68468	1.87E-04	2.38E-07	2.44E-05	2.41E-07	2.69E-05	2.3874E-04
519849.29	4258736.62	9822.04362	0.23127	0.38024	0.24322	0.37018	1.87E-04	5.43E-07	7.80E-07	5.71E-07	7.29E-07	1.8932E-04
519977.68	4258358.64	9821.03607	0.17821	1.63632	0.18497	1.5147	1.87E-04	4.18E-07	3.36E-06	4.34E-07	2.98E-06	1.9387E-04
519870.79	4258692	9816.54117	0.24364	0.4556	0.25757	0.44315	1.87E-04	5.72E-07	9.34E-07	6.05E-07	8.72E-07	1.8958E-04
520042.51	4259527.02	9815.9378	7.01281	0.09786	11.38372	0.09585	1.87E-04	1.65E-05	2.01E-07	2.67E-05	1.89E-07	2.3016E-04

519975.88	4258394.11	9805.55861	0.20022	1.58521	0.20852	1.46598	1.86E-04	4.70E-07	3.25E-06	4.90E-07	2.89E-06	1.9348E-04
519959.48	4258521.68	9800.85386	0.29761	1.1874	0.32273	1.11019	1.86E-04	6.99E-07	2.44E-06	7.58E-07	2.19E-06	1.9237E-04
520777.57	4258460.06	9792.3888	0.0968	0.09616	0.09385	0.09982	1.86E-04	2.27E-07	1.97E-07	2.20E-07	1.96E-07	1.8698E-04
520000.63	4258229.33	9786.83834	0.13091	2.31813	0.13535	2.10655	1.86E-04	3.07E-07	4.75E-06	3.18E-07	4.15E-06	1.9556E-04
520060.26	4258084.04	9783.85703	0.10921	12.47338	0.11384	8.17456	1.86E-04	2.56E-07	2.56E-05	2.67E-07	1.61E-05	2.2817E-04
520078.02	4259548.19	9780.24726	13.67845	0.09856	14.27527	0.09535	1.86E-04	3.21E-05	2.02E-07	3.35E-05	1.88E-07	2.5192E-04
520011.61	4258194.84	9774.10277	0.12385	2.8111	0.12885	2.51358	1.86E-04	2.91E-07	5.77E-06	3.02E-07	4.95E-06	1.9709E-04
520774.72	4258478.46	9768.6547	0.09757	0.09675	0.09447	0.10034	1.86E-04	2.29E-07	1.98E-07	2.22E-07	1.98E-07	1.8653E-04
519994.23	4258251.94	9765.24516	0.13633	2.08716	0.14086	1.91061	1.86E-04	3.20E-07	4.28E-06	3.31E-07	3.76E-06	1.9431E-04
519814.42	4258815.92	9761.40448	0.21414	0.28615	0.22325	0.2798	1.86E-04	5.03E-07	5.87E-07	5.24E-07	5.51E-07	1.8771E-04
519929.73	4258580	9737.53833	0.28716	0.81393	0.31238	0.77783	1.85E-04	6.74E-07	1.67E-06	7.33E-07	1.53E-06	1.8970E-04
520788.42	4258583.44	9733.13381	0.09504	0.0921	0.09249	0.09513	1.85E-04	2.23E-07	1.89E-07	2.17E-07	1.87E-07	1.8583E-04
520776.55	4258540.86	9730.70751	0.09752	0.09579	0.09451	0.09895	1.85E-04	2.29E-07	1.96E-07	2.22E-07	1.95E-07	1.8581E-04
519969.32	4258482.85	9716.63933	0.2739	1.39181	0.2936	1.28781	1.85E-04	6.43E-07	2.85E-06	6.89E-07	2.54E-06	1.9142E-04
520032.61	4259527.04	9709.45867	5.0545	0.09684	6.84375	0.09507	1.85E-04	1.19E-05	1.99E-07	1.61E-05	1.87E-07	2.1288E-04
520028.69	4258147.84	9706.57336	0.11609	4.03433	0.12203	3.47004	1.85E-04	2.73E-07	8.27E-06	2.86E-07	6.83E-06	2.0017E-04
520018.79	4258171.9	9697.86576	0.11949	3.22835	0.12496	2.84429	1.84E-04	2.81E-07	6.62E-06	2.93E-07	5.60E-06	1.9713E-04
519804.44	4258839.83	9686.40759	0.20935	0.26463	0.21754	0.2591	1.84E-04	4.91E-07	5.43E-07	5.11E-07	5.10E-07	1.8618E-04
520096.91	4258013.95	9683.71756	0.10161	18.0904	0.10328	18.227	1.84E-04	2.39E-07	3.71E-05	2.42E-07	3.59E-05	2.5753E-04
520049.29	4258101.92	9682.97867	0.11046	7.43598	0.11587	5.7418	1.84E-04	2.59E-07	1.53E-05	2.72E-07	1.13E-05	2.1114E-04
520068.12	4259548.21	9682.44278	16.11111	0.09748	25.7271	0.0947	1.84E-04	3.78E-05	2.00E-07	6.04E-05	1.86E-07	2.8265E-04
519818.67	4258802.23	9675.87551	0.21457	0.29765	0.22384	0.29091	1.84E-04	5.04E-07	6.10E-07	5.26E-07	5.73E-07	1.8613E-04
519864.7	4258701.43	9670.97579	0.23769	0.43422	0.25119	0.42223	1.84E-04	5.58E-07	8.91E-07	5.90E-07	8.31E-07	1.8670E-04
520787.45	4258434.29	9662.25981	0.09449	0.09378	0.09179	0.09742	1.84E-04	2.22E-07	1.92E-07	2.15E-07	1.92E-07	1.8448E-04
519995.03	4258241.62	9647.27085	0.1328	2.11694	0.13716	1.93654	1.83E-04	3.12E-07	4.34E-06	3.22E-07	3.81E-06	1.9216E-04
520001.43	4258219.01	9640.99006	0.12758	2.34414	0.13194	2.12809	1.83E-04	3.00E-07	4.81E-06	3.10E-07	4.19E-06	1.9286E-04
519897.12	4258636.77	9635.59389	0.25966	0.57906	0.27838	0.56262	1.83E-04	6.10E-07	1.19E-06	6.54E-07	1.11E-06	1.8671E-04
519887.12	4258655.32	9615.97693	0.25199	0.52789	0.26823	0.51403	1.83E-04	5.92E-07	1.08E-06	6.30E-07	1.01E-06	1.8610E-04
519949.56	4258541.12	9613.25704	0.29479	1.03852	0.31968	0.97966	1.83E-04	6.92E-07	2.13E-06	7.51E-07	1.93E-06	1.8823E-04
520785.55	4258566.75	9610.21114	0.0956	0.09314	0.09292	0.09618	1.83E-04	2.24E-07	1.91E-07	2.18E-07	1.89E-07	1.8350E-04
519842.8	4258745.07	9606.34751	0.22485	0.36324	0.23601	0.35395	1.83E-04	5.28E-07	7.45E-07	5.54E-07	6.97E-07	1.8512E-04
519939.65	4258560.56	9599.20249	0.29083	0.91612	0.31523	0.87023	1.82E-04	6.83E-07	1.88E-06	7.40E-07	1.71E-06	1.8748E-04
520012.18	4258184.61	9594.70575	0.12078	2.84047	0.12577	2.53661	1.82E-04	2.84E-07	5.83E-06	2.95E-07	4.99E-06	1.9378E-04
520078.04	4259558.19	9594.27016	13.29701	0.0971	13.63606	0.09396	1.82E-04	3.12E-05	1.99E-07	3.20E-05	1.85E-07	2.4598E-04
520784.2	4258451.63	9586.0977	0.0953	0.09451	0.09247	0.09812	1.82E-04	2.24E-07	1.94E-07	2.17E-07	1.93E-07	1.8304E-04
520106.76	4257993.98	9584.91434	0.09922	11.8949	0.10029	13.68228	1.82E-04	2.33E-07	2.44E-05	2.35E-07	2.69E-05	2.3399E-04
519877.12	4258673.87	9573.60401	0.24453	0.48377	0.25879	0.47135	1.82E-04	5.74E-07	9.92E-07	6.08E-07	9.28E-07	1.8508E-04
519837.31	4258755.94	9568.23654	0.22156	0.34788	0.23219	0.33923	1.82E-04	5.20E-07	7.13E-07	5.45E-07	6.68E-07	1.8432E-04
520038.4	4259538.26	9565.66084	6.23596	0.09581	9.40905	0.09395	1.82E-04	1.46E-05	1.96E-07	2.21E-05	1.85E-07	2.1894E-04
520778.1	4258487.33	9564.37232	0.09686	0.09581	0.09376	0.09929	1.82E-04	2.27E-07	1.96E-07	2.20E-07	1.95E-07	1.8264E-04
520781.04	4258469.19	9550.27142	0.09609	0.09523	0.09313	0.09878	1.82E-04	2.26E-07	1.95E-07	2.19E-07	1.94E-07	1.8237E-04
520060.29	4258074.04	9546.30997	0.10664	12.44701	0.11111	8.15151	1.81E-04	2.50E-07	2.55E-05	2.61E-07	1.60E-05	2.2354E-04
519858.39	4258710.33	9522.97999	0.23224	0.41387	0.24444	0.40304	1.81E-04	5.45E-07	8.49E-07	5.74E-07	7.93E-07	1.8378E-04
520783.03	4258549.27	9515.25567	0.09607	0.09404	0.09322	0.09711	1.81E-04	2.26E-07	1.93E-07	2.19E-07	1.91E-07	1.8170E-04
520780.1	4258532.72	9511.41173	0.09663	0.09509	0.09364	0.09822	1.81E-04	2.27E-07	1.95E-07	2.20E-07	1.93E-07	1.8163E-04
520019.35	4258161.68	9510.49903	0.11662	3.26852	0.12207	2.87756	1.81E-04	2.74E-07	6.70E-06	2.87E-07	5.66E-06	1.9371E-04
520068.14	4259558.21	9499.75991	15.78501	0.09604	23.91989	0.09332	1.81E-04	3.71E-05	1.97E-07	5.62E-05	1.84E-07	2.7417E-04
520029.13	4258137.67	9499.72082	0.11332	4.06927	0.11917	3.49439	1.81E-04	2.66E-07	8.35E-06	2.80E-07	6.88E-06	1.9634E-04
520002.17	4258208.72	9491.05378	0.1244	2.37366	0.12871	2.15308	1.80E-04	2.92E-07	4.87E-06	3.02E-07	4.24E-06	1.9011E-04
519807.6	4258823.53	9483.97154	0.2073	0.27496	0.21561	0.2691	1.80E-04	4.87E-07	5.64E-07	5.06E-07	5.30E-07	1.8236E-04
519959.44	4258511.99	9474.3596	0.28613	1.19796	0.30903	1.12	1.80E-04	6.72E-07	2.46E-06	7.26E-07	2.20E-06	1.8615E-04
519972.23	4258403	9473.71837	0.20279	1.50523	0.21117	1.39581	1.80E-04	4.76E-07	3.09E-06	4.96E-07	2.75E-06	1.8688E-04
520028.5	4259538.27	9463.30576	4.55887	0.09485	6.01299	0.09318	1.80E-04	1.07E-05	1.95E-07	1.41E-05	1.83E-07	2.0508E-04
520049.32	4258091.92	9453.36662	0.10785	7.42415	0.11308	5.7286	1.80E-04	2.53E-07	1.52E-05	2.65E-07	1.13E-05	2.0671E-04
519972.52	4258378.02	9450.30447	0.18572	1.51985	0.1928	1.41171	1.80E-04	4.36E-07	3.12E-06	4.53E-07	2.78E-06	1.8642E-04
520780.44	4258523.59	9448.97268	0.09649	0.09513	0.09347	0.09829	1.80E-04	2.27E-07	1.95E-07	2.19E-07	1.93E-07	1.8044E-04
520096.94	4258003.95	9444.07918	0.09937	18.1056	0.10094	18.34843	1.80E-04	2.33E-07	3.71E-05	2.37E-07	3.61E-05	2.5324E-04
519909.85	4258609.17	9426.16712	0.26659	0.65977	0.28772	0.63827	1.79E-04	6.26E-07	1.35E-06	6.75E-07	1.26E-06	1.8309E-04
520108.08	4257984.88	9417.26912	0.09751	11.35439	0.09847	13.21272	1.79E-04	2.29E-07	2.33E-05	2.31E-07	2.60E-05	2.2876E-04
519983.51	4258276.34	9414.48667	0.14066	1.78113	0.14545	1.6478	1.79E-04	3.30E-07	3.65E-06	3.41E-07	3.24E-06	1.8652E-04
520078.06	4259568.19	9413.69793	12.92113	0.09567	13.03476	0.0926	1.79E-04	3.03E-05	1.96E-07	3.06E-05	1.82E-07	2.4025E-04
519969.69	4258457.69	9411.29972	0.24709	1.42358	0.26139	1.31703	1.79E-04	5.80E-07	2.92E-06	6.14E-07	2.59E-06	1.8560E-04
520780.79	4258514.46	9407.48737	0.09637	0.09509	0.09332	0.09832	1.79E-04	2.26E-07	1.95E-07	2.19E-07	1.94E-07	1.7965E-04
519821.84	4258785.95	9404.81432	0.212	0.30938	0.22115	0.30232	1.79E-04	4.98E-07	6.35E-07	5.19E-07	5.95E-07	1.8102E-04
520790.88	4258443.29	9394.91741	0.09382	0.09287	0.09112	0.09643	1.79E-04	2.20E-07	1.90E-07	2.14E-07	1.90E-07	1.7939E-04
520038.42	4259548.26	9387.78631	6.40719	0.09441	9.86949	0.09258	1.78E-04	1.50E-05	1.94E-07	2.32E-05	1.82E-07	2.1703E-04
520781.13	4258505.32	9385.85562	0.09625	0.09502	0.09318	0.0983	1.78E-04	2.26E-07	1.95E-07	2.19E-07	1.94E-07	1.7924E-04
520781.47	4258496.19	9383.73054	0.09614	0.09493	0.09307	0.09829	1.78E-04	2.26E-07	1.95E-07	2.18E-07	1.93E-07	1.7920E-04
519830.82	4258764.41	9360.18907	0.21549	0.33297	0.22538	0.32498	1.78E-04	5.06E-07	6.83E-07	5.29E-07	6.40E-07	1.8028E-04
519975.86	4258319.45	9358.35243	0.15549	1.60027	0.16088	1.48798	1.78E-04	3.65E-07	3.28E-06	3.78E-07	2.93E-06	1.8484E-04
519977.1	4258308.95	9348.50648	0.15129	1.62839	0.15653	1.5133	1.78E-04	3.55E-07	3.34E-06	3.67E-07	2.98E-06	1.8474E-04
520789.18	4258558.43	9346.82036	0.09472	0.09246	0.09204	0.09545	1.78E-04	2.22E-07	1.90E-07	2.16E-07	1.88E-07	1.7848E-04
519974.47	4258330.01	9343.13279	0.1598	1.56974	0.16535	1.46035	1.78E-04	3.75E-07	3.22E-06	3.88E-07	2.87E-06	1.8445E-04
519852.02	4258719.08	9338.94971	0.22606	0.395	0.23772	0.38475	1.78E-04	5.31E-07	8.10E-07	5.58E-07	7.57E-07	1.8017E-04
519984.56	4258265.92	9338.34752	0.13697	1.80536	0.14153	1.66929	1.78E-04	3.22E-07	3.70E-06	3.32E-07	3.29E-06	1.8515E-04
520787.65	4258460.69	9337.84691	0.0946	0.09363	0.09177	0.09714	1.77E-04	2.22E-07	1.92E-07	2.15E-07	1.91E-07	1.7832E-04
520002.86	4258198.45	9335.21178	0.12132	2.3922	0.12558	2.16703	1.77E-04	2.85E-07	4.91E-06	2.95E-07	4.27E-06	1.8720E-04
520784.51	4258478.31	9331.38379	0.09538	0.09429	0.09241	0.09773	1.77E-04	2.24E-07	1.93E-07	2.17E-07	1.92E-07	1.7820E-04
520050.47	4258084.01	9330.49645	0.1062	7.74807	0.11126	5.91875	1.77E-04	2.49E-07	1.59E-05	2.61E-07	1.17E-05	2.0541E-04
519919.77	4258589.73	9325.94472	0.27263	0.73527	0.29571	0.70653	1.77E-04	6.40E-07	1.51E-06	6.94E-07	1.39E-06	1.8150E-04
520019.87	4258151.48	9324.93641	0.11385	3.30234	0.11927	2.90367	1.77E-04	2.67E-07	6.77E-06	2.80E-07	5.72E-06	1.9029E-04
520068.16	4259568.21	9322.18872	15.5962	0.09463	22.34603	0.09198	1.77E-04	3.66E-05	1.94E-07	5.25E-05	1.81E-07	2.6665E-04
520060.32	4258064.04	9316.86843	0.10417	12.42092	0.10848	8.11523	1.77E-04	2.45E-07	2.55E-05	2.55E-07	1.60E-05	2.1905E-04
519978.21	4258298.5	9316.75908	0.1472	1.65378	0.15228	1.53609	1.77E-04	3.46E-07	3.39E-06	3.58E-07	3.02E-06	1.8421E-04
520786.56	4258541.19	9289.57364	0.09521	0.09337	0.09237	0.09641	1.77E-04	2.24E-07	1.91E-07	2.17E-07	1.90E-07	1.7740E-04
520028.52	4259548.27	9288.97956	4.65018	0.09347	6.19428	0.09183	1.77E-04	1.09E-05	1.92E-07	1.45E-05	1.81E-07	2.0240E-04
519991.67	4258233.03	9288.29264	0.12811	2.00629	0.13216	1.8425	1.77E-04	3.01E-07	4.11E-06	3.10E-07	3.63E-06	1.8491E-04
519969.8	4258433.17	9286.65983	0.22411	1.44246	0.23461	1.33715	1.77E-04	5.26E-07	2.96E-06	5.51E-07	2.63E-06	1.8319E-04
520009.85	4258175.59	9284.92134	0.11707	2.71117	0.1218	2.43023	1.76E-04	2.75E-07	5.56E-06	2.86E-07	4.78E-06	1.8739E-04
519979.21	4258288.1	9266.24954	0.14324	1.67597	0.14813	1.55614	1.76E-04	3.36E-07	3.44E-06	3.48E-07	3.06E-06	1.8332E-04
519985.51	4258255.54	9242.89527	0.13339	1.82578	0.13772	1.68731	1.76E-04	3.13E-07	3.74E-06	3.23E-07	3.32E-06	1.8339E-04
519810.69	4258807.07	9239.13126	0.20486	0.28565	0.21321	0.27942	1.76E-04	4.81E-07	5.86E-07	5.01E-07	5.50E-07	1.7774E-04
519929.69	4258570.3	9230.2262	0.27779	0.82342	0.30089	0.78623	1.75E-04	6.52E-07	1.69E-06	7.06E-07	1.55E-06	1.8004E-04
519949.52	4258531.42	9226.61256	0.28431	1.04888	0.30744	0.98896	1.75E-04	6.67E-07	2.15E-06	7.22E-07	1.95E-06	1.8087E-04
519800.77	4258831.1	9215.91684	0.20072	0.2645	0.20835	0.25904	1.75E-04	4.71E-07	5.42E-07	4.89E-07	5.10E-07	1.7719E-04
520038.44	4259558.26	9214.92422	6.59381	0.09304	10.38266	0.09125	1.75E-04	1.55E-05	1.91E-07	2.44E-05	1.80E-07	2.1538E-04
519971.77	4258341.11	9212.19228	0.16361	1.51317	0.16924	1.40975	1.75E-04	3.84E-07	3.10E-06	3.97E-07	2.78E-06	1.8177E-04
520096.97	4257993.95	9211.90676	0.0972	18.12302	0.09869	18.37007	1.75E-04	2.28E-07	3.72E-05	2.32E-07	3.62E-05	2.4889E-04
519959.4	4258502.29	9196.64156	0.27507	1.20778	0.29593	1.12923	1.75E-04	6.46E-07	2.48E-06	6.95E-07	2.22E-06	1.8085E-04
520108.11	4257974.88	9191.18774	0.09545	11.34093	0.09632	13.25142	1.75E-04	2.24E-07	2.33E-05	2.26E-07	2.61E-05	2.2450E-04
520003.5	4258188.2	9182.01906	0.11839	2.42265	0.12264	2.19267	1.75E-04	2.78E-07	4.97E-06	2.88E-07	4.32E-06	1.8438E-04
520795.64	4258566.91	9179.07729	0.0933	0.09085	0.09079	0.09378	1.74E-04	2.19E-07	1.86E-07	2.13E-07	1.85E-07	1.7528E-04
520073.53	4259579.43	9176.91376	14.01962	0.09365	15.29984	0.09085	1.74E-04	3.29E-05	1.92E-07	3.59E-05	1.79E-07	2.4364E-04
519887.12	4258646.05	9174.82797	0.24589	0.53331	0.26231	0.51949	1.74E-04	5.77E-07	1.09E-06	6.16E-07	1.02E-06	1.7771E-04
519966.23	4258466.09	9173.17028	0.24986	1.35425	0.26537	1.25654	1.74E-04	5.87E-07	2.78E-06	6.23E-07	2.47E-06	1.8083E-04
519970.5	4258351.62	9172.05425	0.16829	1.48644	0.17415	1.38533	1.74E-04	3.95E-07	3.05E-06	4.09E-07	2.73E-06	1.8092E-04
519939.61	4258550.86	9170.87981	0.28145	0.9259	0.3042	0.87931	1.74E-04	6.61E-07	1.90E-06	7.14E-07	1.73E-06	1.7933E-04
519992.55	4258222.68	9169.81687	0.12493	2.03179	0.12884	1.86413	1.74E-04	2.93E-07	4.17E-06	3.02E-07	3.67E-06	1.8273E-04
519845.6	4258727.71	9156.44241	0.22008	0.3773	0.23109	0.36772	1.74E-04	5.17E-07	7.74E-07	5.43E-07	7.24E-07	1.7660E-04
519968.92	4258386.77	9154.02493	0.18797	1.44673	0.19508	1.34722	1.74E-04	4.41E-07	2.97E-06	4.58E-07	2.65E-06	1.8052E-04
519877.12	4258664.6	9152.52742	0.23879	0.48847	0.25301	0.47652	1.74E-04	5.61E-07	1.00E-06	5.94E-07	9.38E-07	1.7707E-04
519815.06	4258793.63	9150.26747	0.20541	0.29685	0.21388	0.29029	1.74E-04	4.82E-07	6.09E-07	5.02E-07	5.71E-07	1.7609E-04
519986.38	4258245.19	9149.26541	0.13	1.84963	0.13412	1.70791	1.74E-04	3.05E-07	3.79E-06	3.15E-07	3.36E-06	1.8169E-04
519968.57	4258411.89	9144.65833	0.20531	1.43072	0.21379	1.33004	1.74E-04	4.82E-07	2.93E-06	5.02E-07	2.62E-06	1.8036E-04
520794.31	4258452.29	9144.34753	0.09315	0.09201	0.09044	0.09548	1.74E-04	2.19E-07	1.89E-07	2.12E-07	1.88E-07	1.7463E-04
520020.36	4258141.29	9140.88848	0.11118	3.3309	0.11658	2.92466	1.74E-04	2.61E-07	6.83E-06	2.74E-07	5.76E-06	1.8688E-04
520787.99	4258487.44	9134.14999	0.09466	0.09339	0.0917	0.09671	1.74E-04	2.22E-07	1.92E-07	2.15E-07	1.90E-07	1.7444E-04
520028.53	4259558.27	9119.36458	4.75639	0.09212	6.38938	0.09052	1.73E-04	1.12E-05	1.89E-07	1.50E-05	1.78E-07	1.9988E-04
520010.47	4258165.34	9118.70179	0.1143	2.73877	0.11904	2.45173	1.73E-04	2.68E-07	5.62E-06	2.79E-07	4.83E-06	1.8432E-04
520050.5	4258074.01	9115.86746	0.10377	7.73284	0.10865	5.90757	1.73E-04	2.44E-07	1.59E-05	2.55E-07	1.16E-05	2.0126E-04
520791.1	4258469.75	9112.84737	0.09391	0.09274	0.09107	0.09614	1.73E-04	2.20E-07	1.90E-07	2.14E-07	1.89E-07	1.7403E-04
519867.12	4258683.15	9105.61893	0.23174	0.44955	0.24455	0.43844	1.73E-04	5.44E-07	9.22E-07	5.74E-07	8.63E-07	1.7598E-04
520063.63	4259579.45	9088.08683	14.7088	0.09262	29.17623	0.09021	1.73E-04	3.45E-05	1.90E-07	6.85E-05	1.78E-07	2.7614E-04
520098.29	4257984.85	9057.52745	0.09557	16.98966	0.09692	17.78398	1.72E-04	2.24E-07	3.48E-05	2.28E-07	3.50E-05	2.4247E-04
520059.57	4258053.82	9052.75742	0.10151	11.8343	0.10573	7.79413	1.72E-04	2.38E-07	2.43E-05	2.48E-07	1.53E-05	2.1218E-04
520038.45	4259568.26	9046.83487	6.78536	0.09171	10.95257	0.08995	1.72E-04	1.59E-05	1.88E-07	2.57E-05	1.77E-07	2.1397E-04
519993.36	4258212.35	9044.7432	0.12186	2.05745	0.12567	1.88502	1.72E-04	2.86E-07	4.22E-06	2.95E-07	3.71E-06	1.8044E-04
519899.89	4258618.91	9025.0365	0.25304	0.60311	0.2717	0.58573	1.72E-04	5.94E-07	1.24E-06	6.38E-07	1.15E-06	1.7517E-04
520790.44	4258523.96	9024.35512	0.09424	0.09274	0.09138	0.09577	1.72E-04	2.21E-07	1.90E-07	2.15E-07	1.89E-07	1.7235E-04
520073.55	4259589.43	9008.68365	13.47585	0.09231	14.54239	0.08957	1.71E-04	3.16E-05	1.89E-07	3.41E-05	1.76E-07	2.3738E-04
519966.38	4258441.47	9000.30575	0.22666	1.37529	0.23782	1.27769	1.71E-04	5.32E-07	2.82E-06	5.58E-07	2.52E-06	1.7751E-04
519803.9	4258814.74	8989.96271	0.19854	0.27457	0.20624	0.26877	1.71E-04	4.66E-07	5.63E-07	4.84E-07	5.29E-07	1.7293E-04
520790.78	4258514.83	8984.51318	0.09414	0.0927	0.09124	0.09578	1.71E-04	2.21E-07	1.90E-07	2.14E-07	1.89E-07	1.7159E-04
519959.36	4258492.59	8982.68706	0.26474	1.21761	0.28385	1.13808	1.71E-04	6.22E-07	2.50E-06	6.66E-07	2.24E-06	1.7677E-04
519839.13	4258736.23	8976.09505	0.21431	0.36067	0.22456	0.35181	1.71E-04	5.03E-07	7.40E-07	5.27E-07	6.93E-07	1.7308E-04
519962.78	4258474.49	8970.95114	0.25243	1.28892	0.26905	1.19979	1.71E-04	5.93E-07	2.64E-06	6.32E-07	2.36E-06	1.7675E-04
520108.14	4257964.88	8964.35861	0.09342	11.34151	0.09424	13.27536	1.70E-04	2.19E-07	2.33E-05	2.21E-07	2.61E-05	2.2023E-04
520791.12	4258505.7	8963.18617	0.09403	0.09262	0.09111	0.09576	1.70E-04	2.21E-07	1.90E-07	2.14E-07	1.89E-07	1.7119E-04
519860.91	4258692.29	8960.72871	0.22586	0.42876	0.23823	0.41796	1.70E-04	5.30E-07	8.79E-07	5.59E-07	8.23E-07	1.7312E-04
520791.46	4258496.57	8960.48903	0.09393	0.09255	0.09101	0.09575	1.70E-04	2.21E-07	1.90E-07	2.14E-07	1.88E-07	1.7114E-04
520028.55	4259568.27	8954.55006	4.86811	0.09081	6.60112	0.08924	1.70E-04	1.14E-05	1.86E-07	1.55E-05	1.76E-07	1.9750E-04
520011.05	4258155.12	8953.39691	0.11164	2.76509	0.11639	2.47229	1.70E-04	2.62E-07	5.67E-06	2.73E-07	4.87E-06	1.8126E-04
519909.81	4258599.47	8944.34895	0.25907	0.6676	0.27963	0.64511	1.70E-04	6.08E-07	1.37E-06	6.56E-07	1.27E-06	1.7392E-04
519833.53	4258746.84	8940.22306	0.21103	0.3457	0.22077	0.3374	1.70E-04	4.95E-07	7.09E-07	5.18E-07	6.64E-07	1.7232E-04
520063.65	4259589.45	8922.5916	14.4781	0.0913	26.94141	0.08894	1.70E-04	3.40E-05	1.87E-07	6.32E-05	1.75E-07	2.6720E-04
519994.11	4258202.06	8914.47694	0.11891	2.07672	0.12263	1.90169	1.69E-04	2.79E-07	4.26E-06	2.88E-07	3.74E-06	1.7802E-04
520797.74	4258461.3	8911.78299	0.09246	0.09122	0.08975	0.09457	1.69E-04	2.17E-07	1.87E-07	2.11E-07	1.86E-07	1.7020E-04
520794.56	4258478.82	8907.95756	0.0932	0.09189	0.09037	0.09517	1.69E-04	2.19E-07	1.88E-07	2.12E-07	1.87E-07	1.7013E-04
520050.53	4258064.01	8902.56692	0.10141	7.72122	0.10615	5.88472	1.69E-04	2.38E-07	1.58E-05	2.49E-07	1.16E-05	1.9713E-04
519949.48	4258521.73	8900.89283	0.27425	1.05857	0.29563	0.99771	1.69E-04	6.44E-07	2.17E-06	6.94E-07	1.96E-06	1.7466E-04
520796.45	4258541.79	8885.13853	0.09301	0.09106	0.09032	0.09397	1.69E-04	2.18E-07	1.87E-07	2.12E-07	1.85E-07	1.6969E-04
519974.63	4258280.01	8863.91661	0.13745	1.57454	0.14195	1.4677	1.68E-04	3.23E-07	3.23E-06	3.33E-07	2.89E-06	1.7526E-04
519818.2	4258777.3	8860.20399	0.20274	0.3082	0.21119	0.30131	1.68E-04	4.76E-07	6.32E-07	4.96E-07	5.93E-07	1.7061E-04
519965.32	4258395.52	8855.13286	0.19021	1.37884	0.19736	1.28693	1.68E-04	4.47E-07	2.83E-06	4.63E-07	2.53E-06	1.7459E-04
519919.73	4258580.04	8853.01449	0.26442	0.74371	0.28585	0.71401	1.68E-04	6.21E-07	1.53E-06	6.71E-07	1.41E-06	1.7250E-04
520073.56	4259599.43	8845.02578	13.07194	0.091	13.84045	0.08832	1.68E-04	3.07E-05	1.87E-07	3.25E-05	1.74E-07	2.3167E-04
520059.61	4258043.82	8843.50032	0.09925	11.81149	0.10333	7.76919	1.68E-04	2.33E-07	2.42E-05	2.43E-07	1.53E-05	2.0809E-04
520098.32	4257974.85	8843.1843	0.09356	16.98425	0.09482	17.83434	1.68E-04	2.20E-07	3.48E-05	2.23E-07	3.51E-05	2.3848E-04
519965.5	4258370.84	8831.42814	0.17497	1.38821	0.18107	1.29801	1.68E-04	4.11E-07	2.85E-06	4.25E-07	2.56E-06	1.7411E-04
519964.92	4258420.77	8827.45443	0.20778	1.36154	0.2165	1.26858	1.68E-04	4.88E-07	2.79E-06	5.08E-07	2.50E-06	1.7408E-04
519854.63	4258701.27	8825.564	0.22049	0.4092	0.23204	0.39907	1.68E-04	5.18E-07	8.39E-07	5.45E-07	7.86E-07	1.7045E-04
520033.93	4259579.5	8822.99983	5.95768	0.08984	8.87668	0.08821	1.68E-04	1.40E-05	1.84E-07	2.08E-05	1.74E-07	2.0289E-04
519975.76	4258269.55	8815.39873	0.13396	1.59552	0.13829	1.4868	1.68E-04	3.14E-07	3.27E-06	3.25E-07	2.93E-06	1.7440E-04
519982.71	4258236.72	8808.59411	0.1254	1.75547	0.12925	1.6264	1.67E-04	2.94E-07	3.60E-06	3.03E-07	3.20E-06	1.7484E-04
519959.32	4258482.89	8801.03942	0.25473	1.22719	0.2722	1.1463	1.67E-04	5.98E-07	2.52E-06	6.39E-07	2.26E-06	1.7330E-04
520011.6	4258144.9	8789.42364	0.10908	2.79117	0.11384	2.49159	1.67E-04	2.56E-07	5.72E-06	2.67E-07	4.90E-06	1.7822E-04
519994.81	4258191.78	8780.81851	0.11607	2.09722	0.11973	1.91837	1.67E-04	2.72E-07	4.30E-06	2.81E-07	3.78E-06	1.7554E-04
519929.65	4258560.6	8778.5465	0.26869	0.83179	0.28974	0.79415	1.67E-04	6.31E-07	1.71E-06	6.80E-07	1.56E-06	1.7144E-04
519827.08	4258755.38	8765.42683	0.20555	0.3311	0.21461	0.32341	1.67E-04	4.83E-07	6.79E-07	5.04E-07	6.37E-07	1.6892E-04
520063.66	4259599.45	8761.68017	14.19236	0.09002	24.9672	0.0877	1.67E-04	3.33E-05	1.85E-07	5.86E-05	1.73E-07	2.5884E-04
519887.12	4258636.77	8759.89005	0.24012	0.53865	0.2565	0.52481	1.67E-04	5.64E-07	1.10E-06	6.02E-07	1.03E-06	1.6981E-04
519968.41	4258312.53	8757.96979	0.14757	1.44984	0.15225	1.35662	1.66E-04	3.46E-07	2.97E-06	3.57E-07	2.67E-06	1.7282E-04
519939.57	4258541.16	8756.39624	0.27158	0.9346	0.29264	0.88749	1.66E-04	6.38E-07	1.92E-06	6.87E-07	1.75E-06	1.7143E-04
519969.61	4258302.05	8752.73214	0.14375	1.4742	0.14834	1.37828	1.66E-04	3.37E-07	3.02E-06	3.48E-07	2.71E-06	1.7280E-04
519797.1	4258822.37	8750.09706	0.19248	0.26416	0.19956	0.25876	1.66E-04	4.52E-07	5.42E-07	4.69E-07	5.09E-07	1.6830E-04
519877.12	4258655.32	8748.40032	0.23328	0.49313	0.24762	0.48145	1.66E-04	5.48E-07	1.01E-06	5.81E-07	9.48E-07	1.6938E-04
520108.17	4257954.88	8748.21794	0.09148	11.33367	0.09224	13.29763	1.66E-04	2.15E-07	2.32E-05	2.17E-07	2.62E-05	2.1614E-04
519976.79	4258259.14	8744.64003	0.13055	1.61333	0.13469	1.50286	1.66E-04	3.06E-07	3.31E-06	3.16E-07	2.96E-06	1.7311E-04
519967.08	4258323.07	8742.57837	0.1515	1.42495	0.1563	1.33387	1.66E-04	3.56E-07	2.92E-06	3.67E-07	2.63E-06	1.7245E-04
520001.59	4258169.01	8737.8633	0.11206	2.3344	0.11607	2.11718	1.66E-04	2.63E-07	4.79E-06	2.72E-07	4.17E-06	1.7558E-04
520024.03	4259579.51	8733.98286	4.34388	0.08899	5.70676	0.08751	1.66E-04	1.02E-05	1.83E-07	1.34E-05	1.72E-07	1.8997E-04
519806.97	4258798.23	8728.61323	0.19608	0.2848	0.2037	0.27874	1.66E-04	4.60E-07	5.84E-07	4.78E-07	5.49E-07	1.6799E-04
519970.69	4258291.62	8727.98354	0.14001	1.4953	0.1445	1.39727	1.66E-04	3.29E-07	3.07E-06	3.39E-07	2.75E-06	1.7239E-04
520798.01	4258487.88	8725.62464	0.0925	0.09105	0.08968	0.09422	1.66E-04	2.17E-07	1.87E-07	2.11E-07	1.85E-07	1.6666E-04
519867.12	4258673.87	8720.07195	0.22658	0.45368	0.2392	0.44317	1.66E-04	5.32E-07	9.30E-07	5.62E-07	8.72E-07	1.6865E-04
519983.67	4258226.34	8715.09671	0.12236	1.77951	0.12603	1.64661	1.66E-04	2.87E-07	3.65E-06	2.96E-07	3.24E-06	1.7313E-04
520802.86	4258550.38	8706.58068	0.09164	0.08952	0.08912	0.09235	1.65E-04	2.15E-07	1.84E-07	2.09E-07	1.82E-07	1.6629E-04
520801.16	4258470.3	8702.653	0.09178	0.09039	0.08907	0.09364	1.65E-04	2.15E-07	1.85E-07	2.09E-07	1.84E-07	1.6622E-04
519965.59	4258333.67	8702.088	0.15549	1.39713	0.16042	1.30851	1.65E-04	3.65E-07	2.87E-06	3.77E-07	2.58E-06	1.7159E-04
520073.58	4259609.43	8686.03294	12.69509	0.08972	13.16367	0.0871	1.65E-04	2.98E-05	1.84E-07	3.09E-05	1.71E-07	2.2617E-04

520800.09	4258533.47	8685.76217	0.09218	0.09037	0.0895	0.09325	1.65E-04	2.16E-07	1.85E-07	2.10E-07	1.84E-07	1.6590E-04
519848.29	4258710.1	8675.83386	0.21495	0.3909	0.22589	0.38128	1.65E-04	5.05E-07	8.02E-07	5.30E-07	7.51E-07	1.6750E-04
519977.73	4258248.76	8674.66154	0.12731	1.63443	0.13127	1.52116	1.65E-04	2.99E-07	3.35E-06	3.08E-07	2.99E-06	1.7184E-04
520033.94	4259589.5	8665.97333	6.10968	0.08858	9.29212	0.08698	1.65E-04	1.43E-05	1.82E-07	2.18E-05	1.71E-07	2.0124E-04
520049.79	4258053.79	8659.7136	0.09886	7.48118	0.10351	5.70835	1.65E-04	2.32E-07	1.53E-05	2.43E-07	1.12E-05	1.9166E-04
520059.64	4258033.82	8643.83059	0.09709	11.78613	0.10102	7.76828	1.64E-04	2.28E-07	2.42E-05	2.37E-07	1.53E-05	2.0423E-04
519811.44	4258785.04	8635.90186	0.1967	0.29577	0.20449	0.28938	1.64E-04	4.62E-07	6.07E-07	4.80E-07	5.70E-07	1.6627E-04
520098.35	4257964.85	8630.39604	0.09159	17.00253	0.0928	17.84891	1.64E-04	2.15E-07	3.49E-05	2.18E-07	3.51E-05	2.3449E-04
520800.43	4258524.34	8628.65184	0.09207	0.09043	0.08935	0.09333	1.64E-04	2.16E-07	1.85E-07	2.10E-07	1.84E-07	1.6481E-04
519984.55	4258215.99	8613.38912	0.11942	1.80161	0.12294	1.66492	1.64E-04	2.80E-07	3.69E-06	2.89E-07	3.28E-06	1.7127E-04
519949.44	4258512.03	8612.49906	0.26443	1.06738	0.28406	1.00591	1.64E-04	6.21E-07	2.19E-06	6.67E-07	1.98E-06	1.6916E-04
520063.68	4259609.45	8605.38064	13.80921	0.08876	23.1832	0.0865	1.64E-04	3.24E-05	1.82E-07	5.44E-05	1.70E-07	2.5077E-04
519963.34	4258344.59	8593.14387	0.15927	1.35759	0.16433	1.27261	1.63E-04	3.74E-07	2.78E-06	3.86E-07	2.51E-06	1.6939E-04
520002.23	4258158.76	8591.90534	0.1095	2.35647	0.11352	2.13449	1.63E-04	2.57E-07	4.83E-06	2.67E-07	4.20E-06	1.7287E-04
520800.77	4258515.21	8589.32955	0.09197	0.09041	0.08922	0.09336	1.63E-04	2.16E-07	1.85E-07	2.09E-07	1.84E-07	1.6406E-04
519899.85	4258609.21	8582.40452	0.24638	0.6095	0.26454	0.59174	1.63E-04	5.78E-07	1.25E-06	6.21E-07	1.16E-06	1.6675E-04
520024.04	4259589.51	8579.86585	4.41989	0.08775	5.86682	0.0863	1.63E-04	1.04E-05	1.80E-07	1.38E-05	1.70E-07	1.8759E-04
520801.11	4258506.07	8568.50003	0.09188	0.09034	0.08911	0.09334	1.63E-04	2.16E-07	1.85E-07	2.09E-07	1.84E-07	1.6367E-04
520801.46	4258496.94	8564.78883	0.09179	0.09026	0.08901	0.09331	1.63E-04	2.15E-07	1.85E-07	2.09E-07	1.84E-07	1.6359E-04
519961.94	4258379.47	8562.15274	0.1769	1.32553	0.18298	1.24218	1.63E-04	4.15E-07	2.72E-06	4.30E-07	2.45E-06	1.6876E-04
519961.72	4258404.27	8557.80579	0.19238	1.31535	0.1996	1.23018	1.63E-04	4.52E-07	2.70E-06	4.69E-07	2.42E-06	1.6871E-04
520108.2	4257944.88	8540.73115	0.0896	11.32107	0.09032	13.32047	1.62E-04	2.10E-07	2.32E-05	2.12E-07	2.62E-05	2.1221E-04
520073.6	4259619.43	8531.6094	12.22302	0.08848	12.508	0.08591	1.62E-04	2.87E-05	1.81E-07	2.94E-05	1.69E-07	2.2058E-04
519841.9	4258718.8	8529.83704	0.20969	0.37372	0.21988	0.36474	1.62E-04	4.92E-07	7.66E-07	5.16E-07	7.18E-07	1.6463E-04
519961.26	4258429.66	8527.47625	0.21018	1.2967	0.21936	1.21071	1.62E-04	4.93E-07	2.66E-06	5.15E-07	2.38E-06	1.6814E-04
519959.56	4258458.05	8515.8988	0.23155	1.25234	0.24464	1.16925	1.62E-04	5.44E-07	2.57E-06	5.74E-07	2.30E-06	1.6786E-04
520033.96	4259599.5	8513.27595	6.27546	0.08736	9.75832	0.08579	1.62E-04	1.47E-05	1.79E-07	2.29E-05	1.69E-07	1.9981E-04
520804.59	4258479.31	8513.18824	0.0911	0.08958	0.0884	0.09272	1.62E-04	2.14E-07	1.84E-07	2.08E-07	1.83E-07	1.6261E-04
519800.21	4258805.95	8506.61892	0.19026	0.27384	0.19731	0.26817	1.62E-04	4.47E-07	5.62E-07	4.63E-07	5.28E-07	1.6369E-04
519985.37	4258205.66	8505.2372	0.11658	1.82032	0.11996	1.68085	1.62E-04	2.74E-07	3.73E-06	2.82E-07	3.31E-06	1.6927E-04
520806.47	4258542.11	8500.1315	0.09084	0.08878	0.0883	0.09157	1.62E-04	2.13E-07	1.82E-07	2.07E-07	1.80E-07	1.6236E-04
519909.77	4258589.78	8498.54102	0.25168	0.67561	0.27152	0.65171	1.62E-04	5.91E-07	1.39E-06	6.37E-07	1.28E-06	1.6544E-04
519991.95	4258182.97	8492.74386	0.11246	2.00103	0.11588	1.83563	1.61E-04	2.64E-07	4.10E-06	2.72E-07	3.61E-06	1.6969E-04
520049.82	4258043.79	8466.39703	0.0967	7.46664	0.10121	5.69014	1.61E-04	2.27E-07	1.53E-05	2.38E-07	1.12E-05	1.8791E-04
520063.7	4259619.45	8453.44406	15.30187	0.08754	21.59285	0.08532	1.61E-04	3.59E-05	1.80E-07	5.07E-05	1.68E-07	2.4765E-04
520059.67	4258023.82	8453.28413	0.09503	11.7595	0.09879	7.78925	1.61E-04	2.23E-07	2.41E-05	2.32E-07	1.53E-05	2.0059E-04
520002.83	4258148.52	8445.72991	0.10702	2.37794	0.11107	2.15133	1.61E-04	2.51E-07	4.88E-06	2.61E-07	4.23E-06	1.7016E-04
520024.06	4259599.51	8429.9877	4.50212	0.08655	6.03702	0.08512	1.60E-04	1.06E-05	1.78E-07	1.42E-05	1.68E-07	1.8533E-04
520098.38	4257954.85	8429.70678	0.08972	16.99525	0.09085	17.89593	1.60E-04	2.11E-07	3.49E-05	2.13E-07	3.52E-05	2.3074E-04
519919.69	4258570.34	8423.22993	0.25631	0.75176	0.27599	0.72115	1.60E-04	6.02E-07	1.54E-06	6.48E-07	1.42E-06	1.6432E-04
519939.52	4258531.47	8413.37607	0.26239	0.94297	0.28203	0.89516	1.60E-04	6.16E-07	1.93E-06	6.62E-07	1.76E-06	1.6490E-04
519986.13	4258195.36	8391.78156	0.11384	1.83219	0.11709	1.69148	1.60E-04	2.67E-07	3.76E-06	2.75E-07	3.33E-06	1.6714E-04
519929.61	4258550.9	8380.75071	0.25984	0.8394	0.27918	0.80155	1.59E-04	6.10E-07	1.72E-06	6.55E-07	1.58E-06	1.6387E-04
519835.46	4258727.38	8379.70208	0.20448	0.35756	0.21394	0.34922	1.59E-04	4.80E-07	7.33E-07	5.02E-07	6.87E-07	1.6169E-04
519949.4	4258502.33	8372.37702	0.25504	1.07563	0.27306	1.01368	1.59E-04	5.99E-07	2.21E-06	6.41E-07	2.00E-06	1.6459E-04
519992.7	4258172.68	8367.20354	0.1099	2.01927	0.11328	1.85054	1.59E-04	2.58E-07	4.14E-06	2.66E-07	3.64E-06	1.6735E-04
519877.12	4258646.05	8364.76888	0.228	0.4978	0.24248	0.48617	1.59E-04	5.35E-07	1.02E-06	5.69E-07	9.57E-07	1.6208E-04
520033.98	4259609.5	8364.72698	6.42369	0.08616	10.26254	0.08462	1.59E-04	1.51E-05	1.77E-07	2.41E-05	1.67E-07	1.9852E-04
520070.31	4259629.84	8350.57319	12.64934	0.08693	13.73692	0.08452	1.59E-04	2.97E-05	1.78E-07	3.22E-05	1.66E-07	2.2102E-04
519867.12	4258664.6	8348.60193	0.22158	0.45773	0.23426	0.44762	1.59E-04	5.20E-07	9.39E-07	5.50E-07	8.81E-07	1.6158E-04
519973.75	4258240.42	8348.25058	0.12277	1.54942	0.12646	1.4464	1.59E-04	2.88E-07	3.18E-06	2.97E-07	2.85E-06	1.6530E-04
519829.76	4258737.74	8345.33736	0.20125	0.343	0.21017	0.33515	1.59E-04	4.72E-07	7.03E-07	4.93E-07	6.60E-07	1.6096E-04
520808.02	4258488.31	8343.84675	0.09041	0.08877	0.08773	0.0918	1.59E-04	2.12E-07	1.82E-07	2.06E-07	1.81E-07	1.5938E-04
519965.74	4258283.67	8341.81323	0.13429	1.4027	0.13834	1.31575	1.59E-04	3.15E-07	2.88E-06	3.25E-07	2.59E-06	1.6467E-04
520108.23	4257934.88	8341.03208	0.0878	11.30504	0.08846	13.32766	1.59E-04	2.06E-07	2.32E-05	2.08E-07	2.62E-05	2.0838E-04
519814.56	4258768.65	8336.43542	0.19406	0.30658	0.2018	0.29994	1.58E-04	4.56E-07	6.29E-07	4.74E-07	5.90E-07	1.6061E-04
519966.96	4258273.18	8317.23167	0.13101	1.42308	0.13498	1.33445	1.58E-04	3.08E-07	2.92E-06	3.17E-07	2.63E-06	1.6427E-04
519857.12	4258683.15	8313.33045	0.21515	0.42278	0.22661	0.41327	1.58E-04	5.05E-07	8.67E-07	5.32E-07	8.14E-07	1.6074E-04
519958.39	4258388.1	8301.57092	0.1789	1.26814	0.18499	1.19031	1.58E-04	4.20E-07	2.60E-06	4.34E-07	2.34E-06	1.6360E-04
519958.46	4258363.67	8293.29343	0.16532	1.27523	0.17057	1.19846	1.58E-04	3.88E-07	2.62E-06	4.00E-07	2.36E-06	1.6340E-04
519793.42	4258813.64	8291.55989	0.18463	0.26353	0.19115	0.25822	1.58E-04	4.33E-07	5.40E-07	4.49E-07	5.08E-07	1.5954E-04
520024.08	4259609.51	8284.14679	4.57352	0.08537	6.21031	0.08397	1.57E-04	1.07E-05	1.75E-07	1.46E-05	1.65E-07	1.8312E-04
520049.85	4258033.79	8280.59908	0.09463	7.45115	0.099	5.67487	1.57E-04	2.22E-07	1.53E-05	2.32E-07	1.12E-05	1.8431E-04
519968.07	4258262.74	8277.73503	0.12781	1.44114	0.13167	1.35084	1.57E-04	3.00E-07	2.96E-06	3.09E-07	2.66E-06	1.6357E-04
519974.78	4258230.01	8277.19192	0.11987	1.57246	0.1234	1.46573	1.57E-04	2.81E-07	3.22E-06	2.90E-07	2.89E-06	1.6402E-04
520060.41	4259629.86	8274.43994	14.2798	0.086	25.60142	0.08393	1.57E-04	3.35E-05	1.76E-07	6.01E-05	1.65E-07	2.5125E-04
519958.12	4258413.02	8267.84038	0.1945	1.25572	0.2019	1.17667	1.57E-04	4.57E-07	2.58E-06	4.74E-07	2.32E-06	1.6298E-04
520059.7	4258013.82	8262.04532	0.093	11.73031	0.09665	7.73232	1.57E-04	2.18E-07	2.41E-05	2.27E-07	1.52E-05	1.9677E-04
520810.42	4258524.71	8257.98298	0.08997	0.0881	0.08738	0.09089	1.57E-04	2.11E-07	1.81E-07	2.05E-07	1.79E-07	1.5775E-04
519957.6	4258438.55	8252.09557	0.21251	1.23575	0.22243	1.15629	1.57E-04	4.99E-07	2.53E-06	5.22E-07	2.28E-06	1.6269E-04
519993.41	4258162.4	8239.99635	0.10742	2.03771	0.1108	1.86525	1.57E-04	2.52E-07	4.18E-06	2.60E-07	3.67E-06	1.6499E-04
519889.89	4258618.95	8235.40739	0.23443	0.5597	0.25066	0.54512	1.57E-04	5.50E-07	1.15E-06	5.88E-07	1.07E-06	1.5990E-04
520098.41	4257944.85	8234.79901	0.0879	16.98183	0.08897	17.9227	1.57E-04	2.06E-07	3.48E-05	2.09E-07	3.53E-05	2.2705E-04
519803.25	4258789.38	8230.10061	0.18775	0.28367	0.19473	0.27778	1.56E-04	4.41E-07	5.82E-07	4.57E-07	5.47E-07	1.5847E-04
519969.08	4258252.33	8225.20857	0.1247	1.45875	0.12845	1.36647	1.56E-04	2.93E-07	2.99E-06	3.02E-07	2.69E-06	1.6262E-04
519961.01	4258305.6	8221.48515	0.14033	1.32253	0.14438	1.24371	1.56E-04	3.29E-07	2.71E-06	3.39E-07	2.45E-06	1.6210E-04
520033.99	4259619.5	8220.1895	6.4907	0.085	10.75897	0.08349	1.56E-04	1.52E-05	1.74E-07	2.53E-05	1.64E-07	1.9709E-04
520810.77	4258515.58	8219.78912	0.08988	0.08813	0.08726	0.09095	1.56E-04	2.11E-07	1.81E-07	2.05E-07	1.79E-07	1.5702E-04
519962.16	4258295.14	8218.2439	0.13682	1.34204	0.1408	1.26124	1.56E-04	3.21E-07	2.75E-06	3.31E-07	2.48E-06	1.6210E-04
519959.73	4258316.12	8205.40008	0.14391	1.30057	0.14803	1.22383	1.56E-04	3.38E-07	2.67E-06	3.48E-07	2.41E-06	1.6173E-04
520070.33	4259639.84	8204.8411	12.85691	0.08573	13.08477	0.08338	1.56E-04	3.02E-05	1.76E-07	3.07E-05	1.64E-07	2.1720E-04
520811.11	4258506.45	8198.90697	0.0898	0.08809	0.08716	0.09096	1.56E-04	2.11E-07	1.81E-07	2.05E-07	1.79E-07	1.5662E-04
519823.33	4258746.35	8198.42087	0.19626	0.32873	0.20456	0.32142	1.56E-04	4.61E-07	6.74E-07	4.80E-07	6.33E-07	1.5809E-04
519975.74	4258219.63	8197.1414	0.11705	1.59166	0.12042	1.48204	1.56E-04	2.75E-07	3.26E-06	2.83E-07	2.92E-06	1.6255E-04
520811.45	4258497.32	8194.78395	0.08972	0.08801	0.08708	0.09093	1.56E-04	2.11E-07	1.81E-07	2.04E-07	1.79E-07	1.5654E-04
519850.88	4258692.21	8181.65504	0.20967	0.40393	0.22076	0.39458	1.56E-04	4.92E-07	8.28E-07	5.18E-07	7.77E-07	1.5813E-04
519949.36	4258492.63	8180.97518	0.2462	1.08384	0.26284	1.02119	1.56E-04	5.78E-07	2.22E-06	6.17E-07	2.01E-06	1.6093E-04
519899.81	4258599.52	8172.26441	0.23984	0.61622	0.25753	0.59761	1.55E-04	5.63E-07	1.26E-06	6.05E-07	1.18E-06	1.5895E-04
519958.3	4258326.69	8167.12555	0.14755	1.27765	0.15179	1.20282	1.55E-04	3.46E-07	2.62E-06	3.56E-07	2.37E-06	1.6093E-04
519952.73	4258474.64	8153.56106	0.23579	1.1422	0.25062	1.07252	1.55E-04	5.54E-07	2.34E-06	5.88E-07	2.11E-06	1.6058E-04
520108.26	4257924.88	8149.80056	0.08606	11.28447	0.08667	13.35796	1.55E-04	2.02E-07	2.31E-05	2.03E-07	2.63E-05	2.0476E-04
520024.09	4259619.51	8142.1185	4.62133	0.08423	6.37637	0.08284	1.55E-04	1.08E-05	1.73E-07	1.50E-05	1.63E-07	1.8092E-04
519807.83	4258776.44	8138.62067	0.18849	0.29434	0.19566	0.28816	1.55E-04	4.43E-07	6.04E-07	4.59E-07	5.67E-07	1.5677E-04
519939.48	4258521.77	8134.10583	0.25381	0.9512	0.27213	0.90258	1.55E-04	5.96E-07	1.95E-06	6.39E-07	1.78E-06	1.5958E-04
520060.43	4259639.86	8131.62282	13.87968	0.08485	23.71832	0.08282	1.55E-04	3.26E-05	1.74E-07	5.57E-05	1.63E-07	2.4317E-04
519983	4258186.67	8113.86371	0.11027	1.74587	0.1133	1.61567	1.54E-04	2.59E-07	3.58E-06	2.66E-07	3.18E-06	1.6152E-04
519994.07	4258152.14	8111.30278	0.10504	2.05493	0.10842	1.87871	1.54E-04	2.47E-07	4.21E-06	2.55E-07	3.70E-06	1.6260E-04
519976.62	4258209.27	8109.26556	0.11432	1.60981	0.11753	1.49711	1.54E-04	2.68E-07	3.30E-06	2.76E-07	2.95E-06	1.6094E-04
519956.71	4258337.34	8106.90069	0.15126	1.25289	0.15565	1.18009	1.54E-04	3.55E-07	2.57E-06	3.65E-07	2.32E-06	1.5971E-04
520049.88	4258023.79	8100.21619	0.09263	7.43587	0.09686	5.65535	1.54E-04	2.17E-07	1.53E-05	2.27E-07	1.11E-05	1.8080E-04
519909.73	4258580.08	8098.02581	0.24457	0.68274	0.26295	0.6581	1.54E-04	5.74E-07	1.40E-06	6.17E-07	1.30E-06	1.5782E-04
520059.73	4258003.82	8083.33495	0.09108	11.7036	0.09459	7.74149	1.54E-04	2.14E-07	2.40E-05	2.22E-07	1.52E-05	1.9333E-04
519844.57	4258701.11	8064.82291	0.20482	0.38622	0.21513	0.37741	1.53E-04	4.81E-07	7.92E-07	5.05E-07	7.43E-07	1.5582E-04
520070.34	4259649.84	8063.69044	12.27416	0.08458	12.35062	0.08228	1.53E-04	2.88E-05	1.73E-07	2.90E-05	1.62E-07	2.1142E-04
520030.71	4259629.91	8048.6814	5.86285	0.08356	9.18232	0.08212	1.53E-04	1.38E-05	1.71E-07	2.16E-05	1.62E-07	1.8865E-04
520098.45	4257934.85	8048.01104	0.08615	16.94831	0.08716	17.92595	1.53E-04	2.02E-07	3.48E-05	2.05E-07	3.53E-05	2.2343E-04
519954.95	4258372.2	8045.71418	0.167	1.22088	0.17221	1.14975	1.53E-04	3.92E-07	2.50E-06	4.04E-07	2.26E-06	1.5850E-04
519919.65	4258560.64	8038.41786	0.24843	0.75874	0.26635	0.72786	1.53E-04	5.83E-07	1.56E-06	6.25E-07	1.43E-06	1.5699E-04
519796.51	4258797.17	8034.27281	0.18239	0.27282	0.18885	0.2673	1.53E-04	4.28E-07	5.60E-07	4.43E-07	5.26E-07	1.5467E-04
519954.84	4258396.74	8031.60228	0.18081	1.21359	0.18695	1.14104	1.53E-04	4.24E-07	2.49E-06	4.39E-07	2.25E-06	1.5826E-04
519929.57	4258541.21	8023.32854	0.25123	0.84654	0.26917	0.80842	1.53E-04	5.90E-07	1.74E-06	6.32E-07	1.59E-06	1.5706E-04
519949.32	4258482.94	8016.58202	0.23757	1.09177	0.25292	1.02821	1.52E-04	5.58E-07	2.24E-06	5.94E-07	2.02E-06	1.5780E-04
519977.44	4258198.95	8015.20808	0.11169	1.62338	0.11474	1.50909	1.52E-04	2.62E-07	3.33E-06	2.69E-07	2.97E-06	1.5919E-04
519983.82	4258176.34	8007.46689	0.10781	1.76759	0.11077	1.63371	1.52E-04	2.53E-07	3.63E-06	2.60E-07	3.22E-06	1.5956E-04
519953.95	4258447.43	8006.95622	0.21481	1.17847	0.22567	1.1053	1.52E-04	5.04E-07	2.42E-06	5.30E-07	2.18E-06	1.5782E-04
519877.12	4258636.77	8003.58857	0.22294	0.50246	0.23739	0.49075	1.52E-04	5.23E-07	1.03E-06	5.57E-07	9.66E-07	1.5521E-04
519867.12	4258655.32	7994.92981	0.21679	0.46177	0.22959	0.45188	1.52E-04	5.09E-07	9.47E-07	5.39E-07	8.90E-07	1.5485E-04
520060.44	4259649.86	7992.87876	13.05629	0.08373	21.94417	0.08174	1.52E-04	3.07E-05	1.72E-07	5.15E-05	1.61E-07	2.3443E-04
519954.52	4258421.77	7991.54412	0.19657	1.19975	0.20437	1.12622	1.52E-04	4.61E-07	2.46E-06	4.80E-07	2.22E-06	1.5752E-04
519857.12	4258673.87	7973.62767	0.21071	0.42632	0.22204	0.41739	1.52E-04	4.95E-07	8.74E-07	5.21E-07	8.22E-07	1.5428E-04
520020.81	4259629.93	7972.99576	4.24324	0.08281	5.71165	0.08149	1.52E-04	9.96E-06	1.70E-07	1.34E-05	1.60E-07	1.7525E-04
520108.3	4257914.88	7968.49903	0.08439	11.25308	0.08494	13.39592	1.51E-04	1.98E-07	2.31E-05	1.99E-07	2.64E-05	2.0131E-04
519838.21	4258709.89	7946.3763	0.2001	0.3696	0.20963	0.36135	1.51E-04	4.70E-07	7.58E-07	4.92E-07	7.11E-07	1.5348E-04
520049.91	4258013.79	7927.9075	0.09071	7.41896	0.09481	5.64438	1.51E-04	2.13E-07	1.52E-05	2.23E-07	1.11E-05	1.7746E-04
520070.36	4259659.84	7926.21375	11.86413	0.08345	11.62687	0.08121	1.51E-04	2.79E-05	1.71E-07	2.73E-05	1.60E-07	2.0614E-04
520059.76	4257993.82	7912.71333	0.08923	11.66949	0.09261	7.75046	1.50E-04	2.09E-07	2.39E-05	2.17E-07	1.53E-05	1.9002E-04
520030.72	4259639.91	7912.45533	5.9885	0.08245	9.58054	0.08104	1.50E-04	1.41E-05	1.69E-07	2.25E-05	1.60E-07	1.8728E-04
519964.79	4258244.12	7906.64665	0.1202	1.37871	0.12364	1.29528	1.50E-04	2.82E-07	2.83E-06	2.90E-07	2.55E-06	1.5624E-04
519984.59	4258166.04	7897.80866	0.10543	1.78349	0.10832	1.64656	1.50E-04	2.48E-07	3.66E-06	2.54E-07	3.24E-06	1.5752E-04
519939.44	4258512.07	7883.60014	0.24539	0.95867	0.26234	0.90951	1.50E-04	5.76E-07	1.97E-06	6.16E-07	1.79E-06	1.5480E-04
520098.48	4257924.85	7867.78037	0.08447	16.91475	0.08541	17.93534	1.50E-04	1.98E-07	3.47E-05	2.01E-07	3.53E-05	2.1995E-04
520060.46	4259659.86	7857.18692	13.14081	0.08261	20.70183	0.08066	1.49E-04	3.09E-05	1.69E-07	4.86E-05	1.59E-07	2.2913E-04
519965.9	4258233.67	7857.09264	0.11744	1.39963	0.12079	1.31331	1.49E-04	2.76E-07	2.87E-06	2.84E-07	2.59E-06	1.5536E-04
519889.85	4258609.26	7856.80545	0.2286	0.56521	0.24442	0.5503	1.49E-04	5.37E-07	1.16E-06	5.74E-07	1.08E-06	1.5270E-04
519956.86	4258287.34	7849.49494	0.13118	1.25864	0.1347	1.18681	1.49E-04	3.08E-07	2.58E-06	3.16E-07	2.34E-06	1.5475E-04
519958.16	4258276.81	7844.80856	0.12809	1.27695	0.13157	1.20384	1.49E-04	3.01E-07	2.62E-06	3.09E-07	2.37E-06	1.5471E-04
519789.75	4258804.91	7843.97199	0.1772	0.26261	0.18317	0.25743	1.49E-04	4.16E-07	5.39E-07	4.30E-07	5.07E-07	1.5099E-04
520020.82	4259639.93	7839.19433	4.29381	0.08172	5.83053	0.08042	1.49E-04	1.01E-05	1.68E-07	1.37E-05	1.58E-07	1.7310E-04
519810.93	4258760	7833.77852	0.18588	0.30467	0.19304	0.29829	1.49E-04	4.36E-07	6.25E-07	4.53E-07	5.87E-07	1.5101E-04
519959.35	4258266.34	7825.49647	0.12507	1.29399	0.12852	1.21943	1.49E-04	2.94E-07	2.65E-06	3.02E-07	2.40E-06	1.5440E-04
519831.79	4258718.53	7819.44011	0.19532	0.35394	0.20415	0.34619	1.49E-04	4.59E-07	7.26E-07	4.79E-07	6.81E-07	1.5098E-04
519951.44	4258380.73	7803.98326	0.16871	1.17077	0.1739	1.10426	1.48E-04	3.96E-07	2.40E-06	4.08E-07	2.17E-06	1.5372E-04
519951.42	4258356.51	7801.20926	0.1565	1.17549	0.16101	1.10988	1.48E-04	3.67E-07	2.41E-06	3.78E-07	2.18E-06	1.5363E-04
520061.08	4257984.72	7796.95998	0.08786	12.57583	0.09107	8.08682	1.48E-04	2.06E-07	2.58E-05	2.14E-07	1.59E-05	1.9034E-04
519966.93	4258223.26	7796.65888	0.11475	1.41792	0.11798	1.32869	1.48E-04	2.69E-07	2.91E-06	2.77E-07	2.62E-06	1.5427E-04
519899.77	4258589.82	7793.46269	0.23338	0.62311	0.25044	0.60332	1.48E-04	5.48E-07	1.28E-06	5.88E-07	1.19E-06	1.5174E-04
520070.38	4259669.84	7792.58681	11.1891	0.08236	10.84525	0.08016	1.48E-04	2.63E-05	1.69E-07	2.55E-05	1.58E-07	2.0018E-04
519960.43	4258255.9	7792.53952	0.12213	1.31109	0.12553	1.23445	1.48E-04	2.87E-07	2.69E-06	2.95E-07	2.43E-06	1.5382E-04
519950.29	4258456.32	7792.36118	0.21693	1.12379	0.22869	1.05701	1.48E-04	5.09E-07	2.30E-06	5.37E-07	2.08E-06	1.5355E-04
519825.99	4258728.64	7787.3185	0.1922	0.33975	0.20035	0.33249	1.48E-04	4.51E-07	6.97E-07	4.70E-07	6.55E-07	1.5030E-04
519985.31	4258155.76	7785.7848	0.10312	1.80024	0.10599	1.65983	1.48E-04	2.42E-07	3.69E-06	2.49E-07	3.27E-06	1.5544E-04
520108.33	4257904.88	7783.40837	0.08273	11.23977	0.08327	13.25046	1.48E-04	1.94E-07	2.31E-05	1.95E-07	2.61E-05	1.9747E-04
520030.74	4259649.91	7780.00179	6.03792	0.08137	9.934	0.07998	1.48E-04	1.42E-05	1.67E-07	2.33E-05	1.57E-07	1.8571E-04
519951.29	4258405.37	7766.60492	0.18267	1.16219	0.18898	1.09438	1.48E-04	4.29E-07	2.38E-06	4.44E-07	2.15E-06	1.5304E-04
520049.94	4258003.79	7761.59397	0.08887	7.40107	0.09284	5.63382	1.48E-04	2.09E-07	1.52E-05	2.18E-07	1.11E-05	1.7423E-04
519799.53	4258780.53	7748.2589	0.17989	0.28224	0.18631	0.27654	1.47E-04	4.22E-07	5.79E-07	4.37E-07	5.44E-07	1.4926E-04
519953.63	4258298.66	7737.57791	0.13366	1.21182	0.13712	1.14443	1.47E-04	3.14E-07	2.49E-06	3.22E-07	2.25E-06	1.5245E-04
519950.92	4258430.52	7734.64818	0.1986	1.14697	0.20704	1.07866	1.47E-04	4.66E-07	2.35E-06	4.86E-07	2.12E-06	1.5245E-04
519909.69	4258570.38	7731.21979	0.23749	0.68968	0.25443	0.66422	1.47E-04	5.58E-07	1.41E-06	5.97E-07	1.31E-06	1.5083E-04
519967.88	4258212.88	7727.58763	0.11213	1.43406	0.11522	1.3423	1.47E-04	2.63E-07	2.94E-06	2.70E-07	2.64E-06	1.5300E-04
520060.48	4259669.86	7725.79757	12.12741	0.08154	19.12624	0.07963	1.47E-04	2.85E-05	1.67E-07	4.49E-05	1.57E-07	2.2055E-04
519974.05	4258190.36	7722.25991	0.108	1.52912	0.11082	1.42444	1.47E-04	2.54E-07	3.14E-06	2.60E-07	2.80E-06	1.5324E-04
519952.4	4258309.15	7721.77481	0.13694	1.19316	0.14047	1.12766	1.47E-04	3.21E-07	2.45E-06	3.30E-07	2.22E-06	1.5210E-04
519929.52	4258531.51	7719.39321	0.24316	0.85345	0.25995	0.81488	1.47E-04	5.71E-07	1.75E-06	6.10E-07	1.60E-06	1.5127E-04
520020.84	4259649.93	7708.9769	4.31628	0.08065	5.93093	0.07937	1.47E-04	1.01E-05	1.65E-07	1.39E-05	1.56E-07	1.7091E-04
519919.61	4258550.94	7697.40646	0.24077	0.7652	0.25729	0.73418	1.46E-04	5.65E-07	1.57E-06	6.04E-07	1.45E-06	1.5050E-04
520098.51	4257914.85	7693.83434	0.08284	16.87668	0.08372	17.95734	1.46E-04	1.94E-07	3.46E-05	1.97E-07	3.53E-05	2.1660E-04
519951.04	4258319.7	7684.04633	0.14026	1.17342	0.1439	1.10967	1.46E-04	3.29E-07	2.41E-06	3.38E-07	2.18E-06	1.5132E-04
519939.4	4258502.37	7668.27757	0.23729	0.9656	0.25292	0.91605	1.46E-04	5.57E-07	1.98E-06	5.94E-07	1.80E-06	1.5069E-04
519819.59	4258737.33	7662.52603	0.18759	0.32592	0.19525	0.31905	1.46E-04	4.40E-07	6.68E-07	4.58E-07	6.28E-07	1.4785E-04
520070.39	4259679.84	7662.32317	10.52234	0.08129	10.00378	0.07913	1.46E-04	2.47E-05	1.67E-07	2.35E-05	1.56E-07	1.9416E-04
519867.12	4258646.05	7661.28698	0.2122	0.46582	0.22506	0.45598	1.46E-04	4.98E-07	9.55E-07	5.28E-07	8.98E-07	1.4851E-04
519804.21	4258767.85	7660.49919	0.18075	0.29259	0.18736	0.28665	1.46E-04	4.24E-07	6.00E-07	4.40E-07	5.64E-07	1.4764E-04
519974.94	4258180.01	7658.5557	0.1058	1.56121	0.10852	1.45342	1.46E-04	2.48E-07	3.20E-06	2.55E-07	2.86E-06	1.5214E-04
519968.76	4258202.53	7651.31122	0.1096	1.4482	0.11255	1.35428	1.45E-04	2.57E-07	2.97E-06	2.64E-07	2.67E-06	1.5160E-04
520030.76	4259659.91	7651.00781	6.06363	0.08031	10.24065	0.07895	1.45E-04	1.42E-05	1.65E-07	2.40E-05	1.55E-07	1.8403E-04
519857.12	4258664.6	7646.8962	0.20636	0.42983	0.21776	0.42125	1.45E-04	4.84E-07	8.82E-07	5.11E-07	8.29E-07	1.4806E-04
520061.11	4257974.72	7631.2623	0.08611	12.54583	0.0892	8.05195	1.45E-04	2.02E-07	2.57E-05	2.09E-07	1.59E-05	1.8705E-04
519949.53	4258330.31	7627.02844	0.14364	1.15244	0.14741	1.0905	1.45E-04	3.37E-07	2.36E-06	3.46E-07	2.15E-06	1.5017E-04
519847.12	4258683.15	7620.73307	0.20052	0.39828	0.21079	0.39019	1.45E-04	4.71E-07	8.17E-07	4.95E-07	7.68E-07	1.4741E-04
519946.63	4258465.21	7610.14057	0.2189	1.07228	0.23141	1.01154	1.45E-04	5.14E-07	2.20E-06	5.43E-07	1.99E-06	1.4990E-04
520108.36	4257894.88	7608.95571	0.08115	11.22094	0.08165	13.16284	1.45E-04	1.91E-07	2.30E-05	1.92E-07	2.59E-05	1.9394E-04
520049.97	4257993.79	7602.31309	0.0871	7.382	0.09093	5.62298	1.45E-04	2.04E-07	1.51E-05	2.13E-07	1.11E-05	1.7113E-04
520060.49	4259679.86	7597.18093	11.82832	0.08047	17.78204	0.0786	1.44E-04	2.78E-05	1.65E-07	4.17E-05	1.55E-07	2.1424E-04
520020.86	4259659.93	7582.09208	4.32531	0.07961	6.0043	0.07836	1.44E-04	1.02E-05	1.63E-07	1.41E-05	1.54E-07	1.6869E-04
519792.81	4258788.38	7576.41436	0.17495	0.27149	0.18087	0.26616	1.44E-04	4.11E-07	5.57E-07	4.25E-07	5.24E-07	1.4593E-04
519947.95	4258364.96	7575.64737	0.15798	1.12808	0.16243	1.0671	1.44E-04	3.71E-07	2.31E-06	3.81E-07	2.10E-06	1.4917E-04
519975.77	4258169.68	7565.19276	0.1035	1.57506	0.10611	1.4647	1.44E-04	2.43E-07	3.23E-06	2.49E-07	2.88E-06	1.5041E-04
519947.93	4258389.26	7557.3393	0.17037	1.12329	0.1756	1.06103	1.44E-04	4.00E-07	2.30E-06	4.12E-07	2.09E-06	1.4886E-04
519879.89	4258618.99	7547.71766	0.21791	0.52116	0.23232	0.50866	1.43E-04	5.12E-07	1.07E-06	5.45E-07	1.00E-06	1.4660E-04

520070.41	4259689.84	7535.60043	9.66126	0.08024	9.07552	0.07812	1.43E-04	2.27E-05	1.65E-07	2.13E-05	1.54E-07	1.8754E-04
520030.77	4259669.91	7525.25702	6.06188	0.07928	10.48165	0.07794	1.43E-04	1.42E-05	1.63E-07	2.46E-05	1.53E-07	1.8220E-04
520098.54	4257904.85	7523.51768	0.08125	16.84107	0.08209	17.7278	1.43E-04	1.91E-07	3.45E-05	1.93E-07	3.49E-05	2.1283E-04
519947.74	4258414	7506.52562	0.18441	1.11297	0.19106	1.04985	1.43E-04	4.33E-07	2.28E-06	4.49E-07	2.07E-06	1.4792E-04
519889.81	4258599.56	7504.24501	0.22283	0.57104	0.23829	0.55536	1.43E-04	5.23E-07	1.17E-06	5.59E-07	1.09E-06	1.4599E-04
520051.29	4257984.69	7500.62366	0.08581	7.75292	0.08947	5.82602	1.43E-04	2.01E-07	1.59E-05	2.10E-07	1.15E-05	1.7035E-04
519840.84	4258692.13	7500.25121	0.19542	0.38111	0.20537	0.37308	1.43E-04	4.59E-07	7.82E-07	4.82E-07	7.34E-07	1.4502E-04
519947.32	4258439.27	7498.61926	0.20054	1.09675	0.20978	1.03369	1.43E-04	4.71E-07	2.25E-06	4.92E-07	2.03E-06	1.4778E-04
519939.36	4258492.68	7490.50484	0.22961	0.97239	0.24409	0.92238	1.42E-04	5.39E-07	1.99E-06	5.73E-07	1.82E-06	1.4730E-04
519955.83	4258247.82	7488.45771	0.11769	1.23952	0.12078	1.17013	1.42E-04	2.76E-07	2.54E-06	2.84E-07	2.30E-06	1.4775E-04
520060.51	4259689.86	7472.35959	12.35362	0.07944	15.97227	0.07761	1.42E-04	2.90E-05	1.63E-07	3.75E-05	1.53E-07	2.0885E-04
519929.48	4258521.81	7472.04466	0.23573	0.86039	0.25149	0.82117	1.42E-04	5.53E-07	1.76E-06	5.90E-07	1.62E-06	1.4655E-04
519976.54	4258159.37	7468.49598	0.10127	1.59187	0.1038	1.47802	1.42E-04	2.38E-07	3.26E-06	2.44E-07	2.91E-06	1.4862E-04
520061.14	4257964.73	7465.92086	0.08439	12.53169	0.0874	7.96796	1.42E-04	1.98E-07	2.57E-05	2.05E-07	1.57E-05	1.8370E-04
519942.98	4258474.09	7460.44872	0.22066	1.02424	0.23374	0.96883	1.42E-04	5.18E-07	2.10E-06	5.49E-07	1.91E-06	1.4688E-04
520020.87	4259669.93	7458.42197	4.30148	0.0786	6.02906	0.07736	1.42E-04	1.01E-05	1.61E-07	1.42E-05	1.52E-07	1.6634E-04
519957.02	4258237.34	7455.10803	0.11505	1.25354	0.11809	1.18289	1.42E-04	2.70E-07	2.57E-06	2.77E-07	2.33E-06	1.4715E-04
520108.39	4257884.88	7452.15466	0.07968	11.1791	0.0801	13.45922	1.42E-04	1.87E-07	2.29E-05	1.88E-07	2.65E-05	1.9145E-04
519899.73	4258580.12	7447.23844	0.2271	0.62933	0.243	0.60876	1.42E-04	5.33E-07	1.29E-06	5.70E-07	1.20E-06	1.4515E-04
519958.12	4258226.9	7412.3993	0.11249	1.2724	0.11549	1.19867	1.41E-04	2.64E-07	2.61E-06	2.71E-07	2.36E-06	1.4640E-04
520070.43	4259699.84	7412.1206	8.76311	0.07921	8.11911	0.07714	1.41E-04	2.06E-05	1.62E-07	1.91E-05	1.52E-07	1.8084E-04
519786.08	4258796.19	7409.45156	0.17016	0.26143	0.17565	0.2564	1.41E-04	3.99E-07	5.36E-07	4.12E-07	5.05E-07	1.4269E-04
519834.51	4258700.97	7405.26362	0.1912	0.36503	0.20028	0.35754	1.41E-04	4.49E-07	7.49E-07	4.70E-07	7.04E-07	1.4313E-04
520030.79	4259679.91	7402.81775	6.02065	0.07827	10.63062	0.07696	1.41E-04	1.41E-05	1.61E-07	2.50E-05	1.51E-07	1.8012E-04
519909.65	4258560.68	7400.9787	0.23062	0.69562	0.24607	0.66997	1.41E-04	5.41E-07	1.43E-06	5.78E-07	1.32E-06	1.4454E-04
519949.36	4258280.45	7398.30495	0.1252	1.15315	0.12818	1.09189	1.41E-04	2.94E-07	2.37E-06	3.01E-07	2.15E-06	1.4574E-04
519919.57	4258541.25	7397.17552	0.2334	0.7713	0.24881	0.74008	1.41E-04	5.48E-07	1.58E-06	5.84E-07	1.46E-06	1.4478E-04
519950.63	4258269.94	7396.27518	0.12236	1.16845	0.12531	1.10609	1.41E-04	2.87E-07	2.40E-06	2.94E-07	2.18E-06	1.4574E-04
519965.1	4258194.05	7392.99394	0.10614	1.37479	0.10887	1.28937	1.41E-04	2.49E-07	2.82E-06	2.56E-07	2.54E-06	1.4639E-04
519947.98	4258291	7385.58057	0.12809	1.13611	0.13112	1.07611	1.40E-04	3.01E-07	2.33E-06	3.08E-07	2.12E-06	1.4544E-04
519951.78	4258259.47	7380.21868	0.11957	1.1828	0.12251	1.11917	1.40E-04	2.81E-07	2.43E-06	2.88E-07	2.20E-06	1.4548E-04
520098.57	4257894.85	7360.38047	0.07972	16.80408	0.08051	17.65778	1.40E-04	1.87E-07	3.45E-05	1.89E-07	3.48E-05	2.0951E-04
519959.13	4258216.49	7359.86411	0.10999	1.28683	0.11291	1.21096	1.40E-04	2.58E-07	2.64E-06	2.65E-07	2.38E-06	1.4544E-04
519944.48	4258373.4	7355.07039	0.1595	1.08467	0.16392	1.02734	1.40E-04	3.74E-07	2.22E-06	3.85E-07	2.02E-06	1.4481E-04
519807.29	4258751.35	7354.38277	0.1782	0.30238	0.18484	0.29631	1.40E-04	4.18E-07	6.20E-07	4.34E-07	5.83E-07	1.4185E-04
520060.53	4259699.86	7350.70615	11.03371	0.07844	13.78763	0.07663	1.40E-04	2.59E-05	1.61E-07	3.24E-05	1.51E-07	1.9831E-04
519867.12	4258636.77	7348.19059	0.20777	0.46984	0.22054	0.45997	1.40E-04	4.88E-07	9.64E-07	5.18E-07	9.05E-07	1.4255E-04
520051.32	4257974.69	7341.8536	0.08411	7.74161	0.08768	5.7963	1.40E-04	1.97E-07	1.59E-05	2.06E-07	1.14E-05	1.6725E-04
519944.17	4258349.89	7341.14922	0.14851	1.08414	0.15236	1.02808	1.40E-04	3.49E-07	2.22E-06	3.58E-07	2.02E-06	1.4450E-04
519939.32	4258482.98	7339.40504	0.22212	0.97896	0.23557	0.92837	1.40E-04	5.21E-07	2.01E-06	5.53E-07	1.83E-06	1.4442E-04
520020.89	4259679.93	7337.93586	4.26608	0.07761	6.00125	0.07639	1.39E-04	1.00E-05	1.59E-07	1.41E-05	1.50E-07	1.6389E-04
519857.12	4258655.32	7337.49849	0.20217	0.43335	0.21366	0.42495	1.39E-04	4.75E-07	8.89E-07	5.02E-07	8.37E-07	1.4217E-04
519966.06	4258183.67	7320.35955	0.10385	1.38871	0.10644	1.30093	1.39E-04	2.44E-07	2.85E-06	2.50E-07	2.56E-06	1.4505E-04
519847.12	4258673.87	7319.09416	0.19661	0.40136	0.20686	0.39375	1.39E-04	4.62E-07	8.23E-07	4.86E-07	7.75E-07	1.4167E-04
519944.42	4258397.79	7313.99113	0.17201	1.07845	0.17738	1.02	1.39E-04	4.04E-07	2.21E-06	4.16E-07	2.01E-06	1.4407E-04
520061.17	4257954.73	7310.8214	0.08276	12.51636	0.08567	7.92699	1.39E-04	1.94E-07	2.57E-05	2.01E-07	1.56E-05	1.8064E-04
519828.13	4258709.69	7300.58246	0.18686	0.34987	0.19522	0.34282	1.39E-04	4.39E-07	7.18E-07	4.58E-07	6.75E-07	1.4106E-04
519960.07	4258206.12	7299.85257	0.10757	1.29919	0.11038	1.22165	1.39E-04	2.53E-07	2.66E-06	2.59E-07	2.40E-06	1.4434E-04
519943.72	4258448.02	7295.5875	0.20244	1.04922	0.21248	0.99127	1.39E-04	4.75E-07	2.15E-06	4.99E-07	1.95E-06	1.4375E-04
520108.42	4257874.88	7294.95778	0.07823	11.14128	0.07859	13.46663	1.39E-04	1.84E-07	2.28E-05	1.85E-07	2.65E-05	1.8839E-04
520070.44	4259709.84	7291.81665	7.8666	0.07821	7.16082	0.07618	1.39E-04	1.85E-05	1.60E-07	1.68E-05	1.50E-07	1.7419E-04
519795.81	4258771.68	7286.06244	0.1725	0.28047	0.1784	0.275	1.38E-04	4.05E-07	5.75E-07	4.19E-07	5.41E-07	1.4044E-04
519945.11	4258302.18	7285.52685	0.13054	1.0999	0.13356	1.04325	1.38E-04	3.06E-07	2.26E-06	3.14E-07	2.05E-06	1.4341E-04
520030.81	4259689.91	7283.4377	5.95256	0.07728	10.62462	0.07599	1.38E-04	1.40E-05	1.58E-07	2.49E-05	1.50E-07	1.7767E-04
519944.18	4258422.63	7265.33986	0.18617	1.06677	0.19338	1.0079	1.38E-04	4.37E-07	2.19E-06	4.54E-07	1.98E-06	1.4316E-04
519822.21	4258719.55	7263.2403	0.18372	0.33605	0.19137	0.32941	1.38E-04	4.31E-07	6.89E-07	4.49E-07	6.48E-07	1.4028E-04
519929.44	4258512.11	7250.41231	0.22846	0.86679	0.24314	0.82706	1.38E-04	5.36E-07	1.78E-06	5.71E-07	1.63E-06	1.4233E-04
519943.8	4258312.7	7245.5484	0.13354	1.08136	0.13665	1.02675	1.38E-04	3.14E-07	2.22E-06	3.21E-07	2.02E-06	1.4260E-04
519966.95	4258173.32	7242.70025	0.10164	1.40442	0.10411	1.31378	1.38E-04	2.39E-07	2.88E-06	2.44E-07	2.59E-06	1.4362E-04
520060.54	4259709.86	7232.0975	9.57358	0.07745	11.39704	0.07568	1.37E-04	2.25E-05	1.59E-07	2.68E-05	1.49E-07	1.8701E-04
519879.85	4258609.3	7223.1348	0.21279	0.52594	0.22682	0.51317	1.37E-04	5.00E-07	1.08E-06	5.33E-07	1.01E-06	1.4042E-04
520020.91	4259689.93	7220.32485	4.23336	0.07662	5.89534	0.07543	1.37E-04	9.94E-06	1.57E-07	1.38E-05	1.48E-07	1.6133E-04
520098.6	4257884.85	7205.4782	0.07825	16.76329	0.07899	17.90194	1.37E-04	1.84E-07	3.44E-05	1.85E-07	3.52E-05	2.0695E-04
519800.59	4258759.26	7203.83546	0.17346	0.29053	0.17957	0.28486	1.37E-04	4.07E-07	5.96E-07	4.22E-07	5.61E-07	1.3892E-04
519942.36	4258323.29	7193.9934	0.13665	1.06376	0.13987	1.01069	1.37E-04	3.21E-07	2.18E-06	3.28E-07	1.99E-06	1.4157E-04
520051.35	4257964.69	7188.96235	0.08247	7.73221	0.08594	5.754	1.37E-04	1.94E-07	1.59E-05	2.02E-07	1.13E-05	1.6423E-04
519889.77	4258589.86	7179.15401	0.21716	0.57694	0.23205	0.56028	1.36E-04	5.10E-07	1.18E-06	5.45E-07	1.10E-06	1.3980E-04
520070.46	4259719.84	7174.61957	7.01039	0.07723	6.10521	0.07524	1.36E-04	1.65E-05	1.58E-07	1.43E-05	1.48E-07	1.6747E-04
520030.82	4259699.91	7167.03323	5.803	0.07632	10.28282	0.07505	1.36E-04	1.36E-05	1.57E-07	2.41E-05	1.48E-07	1.7430E-04
520061.2	4257944.73	7161.83804	0.08119	12.50865	0.08399	7.89996	1.36E-04	1.91E-07	2.57E-05	1.97E-07	1.56E-05	1.7773E-04
519967.78	4258162.99	7160.47962	0.09949	1.41739	0.10184	1.32414	1.36E-04	2.34E-07	2.91E-06	2.39E-07	2.61E-06	1.4209E-04
519815.84	4258728.3	7158.04355	0.17948	0.32266	0.18665	0.3163	1.36E-04	4.21E-07	6.62E-07	4.38E-07	6.23E-07	1.3821E-04
520108.45	4257864.88	7139.47084	0.0768	11.12303	0.07713	13.48321	1.36E-04	1.80E-07	2.28E-05	1.81E-07	2.65E-05	1.8542E-04
519789.12	4258779.6	7136.56743	0.16794	0.26993	0.1734	0.26478	1.36E-04	3.94E-07	5.54E-07	4.07E-07	5.21E-07	1.3753E-04
519899.69	4258570.42	7132.0117	0.2209	0.63516	0.2355	0.61399	1.36E-04	5.19E-07	1.30E-06	5.53E-07	1.21E-06	1.3915E-04
519941	4258381.84	7128.48	0.16095	1.04298	0.1654	0.98911	1.35E-04	3.78E-07	2.14E-06	3.88E-07	1.95E-06	1.4035E-04
519919.52	4258531.55	7128.30961	0.22634	0.77709	0.24082	0.74557	1.35E-04	5.31E-07	1.59E-06	5.65E-07	1.47E-06	1.3965E-04
519940.51	4258358.78	7126.60966	0.14992	1.04099	0.15371	0.98862	1.35E-04	3.52E-07	2.13E-06	3.61E-07	1.95E-06	1.4026E-04
519940.12	4258456.77	7117.77234	0.20417	1.00401	0.21488	0.95107	1.35E-04	4.79E-07	2.06E-06	5.04E-07	1.87E-06	1.4021E-04
520060.56	4259719.86	7116.51655	9.41125	0.07647	8.79644	0.07474	1.35E-04	2.21E-05	1.57E-07	2.07E-05	1.47E-07	1.7832E-04
519909.61	4258550.99	7106.01266	0.22393	0.70103	0.23817	0.67534	1.35E-04	5.26E-07	1.44E-06	5.59E-07	1.33E-06	1.3892E-04
520020.92	4259699.93	7105.73378	4.13191	0.07567	5.67516	0.07449	1.35E-04	9.70E-06	1.55E-07	1.33E-05	1.47E-07	1.5839E-04
519946.87	4258251.51	7089.2089	0.11519	1.11977	0.11782	1.06127	1.35E-04	2.70E-07	2.30E-06	2.77E-07	2.09E-06	1.3969E-04
519940.91	4258406.32	7078.23637	0.17362	1.03602	0.17933	0.98108	1.35E-04	4.08E-07	2.12E-06	4.21E-07	1.93E-06	1.3943E-04
519948.14	4258241	7071.80097	0.1127	1.13203	0.11533	1.07291	1.34E-04	2.65E-07	2.32E-06	2.71E-07	2.11E-06	1.3939E-04
520070.48	4259729.84	7060.3235	6.05315	0.07624	5.06903	0.0743	1.34E-04	1.42E-05	1.56E-07	1.19E-05	1.46E-07	1.6062E-04
519929.4	4258502.42	7057.31073	0.22143	0.87268	0.23503	0.8326	1.34E-04	5.20E-07	1.79E-06	5.52E-07	1.64E-06	1.3865E-04
520030.84	4259709.91	7053.6341	5.5637	0.07537	9.42302	0.07413	1.34E-04	1.31E-05	1.55E-07	2.21E-05	1.46E-07	1.6956E-04
520098.63	4257874.85	7052.88558	0.07682	16.73272	0.07751	17.80573	1.34E-04	1.80E-07	3.43E-05	1.82E-07	3.51E-05	2.0379E-04
519956.16	4258197.75	7052.29513	0.10416	1.23749	0.10677	1.16579	1.34E-04	2.45E-07	2.54E-06	2.51E-07	2.29E-06	1.3938E-04
519940.63	4258431.27	7049.6439	0.18794	1.02314	0.19587	0.96837	1.34E-04	4.41E-07	2.10E-06	4.60E-07	1.91E-06	1.3891E-04
519857.12	4258646.05	7047.08079	0.19814	0.43687	0.20964	0.42852	1.34E-04	4.65E-07	8.96E-07	4.92E-07	8.44E-07	1.3665E-04
520051.38	4257954.69	7044.25264	0.0809	7.72073	0.08427	5.72403	1.34E-04	1.90E-07	1.58E-05	1.98E-07	1.13E-05	1.6139E-04
519949.3	4258230.54	7043.99405	0.11027	1.14736	0.11291	1.08615	1.34E-04	2.59E-07	2.35E-06	2.65E-07	2.14E-06	1.3891E-04
519847.12	4258664.6	7031.70107	0.1928	0.40443	0.20313	0.39711	1.34E-04	4.53E-07	8.29E-07	4.77E-07	7.82E-07	1.3620E-04
520061.23	4257934.73	7022.27566	0.07969	12.49498	0.08238	7.88064	1.33E-04	1.87E-07	2.56E-05	1.93E-07	1.55E-05	1.7500E-04
519837.12	4258683.15	7011.43725	0.18749	0.37582	0.19676	0.36895	1.33E-04	4.40E-07	7.71E-07	4.62E-07	7.26E-07	1.3567E-04
519950.38	4258220.1	7007.04133	0.10788	1.16161	0.11052	1.09815	1.33E-04	2.53E-07	2.38E-06	2.59E-07	2.16E-06	1.3825E-04
520060.58	4259729.86	7003.96195	7.60776	0.07552	6.63057	0.07382	1.33E-04	1.79E-05	1.55E-07	1.56E-05	1.45E-07	1.6686E-04
520020.94	4259709.93	6994.13656	3.97908	0.07474	5.34059	0.07358	1.33E-04	9.34E-06	1.53E-07	1.25E-05	1.45E-07	1.5512E-04
519957.17	4258187.34	6993.89141	0.10196	1.24977	0.10446	1.17621	1.33E-04	2.39E-07	2.56E-06	2.45E-07	2.32E-06	1.3830E-04
519782.41	4258787.46	6989.80186	0.1635	0.25999	0.16855	0.25514	1.33E-04	3.84E-07	5.33E-07	3.96E-07	5.02E-07	1.3468E-04
519941.9	4258273.54	6989.53392	0.11966	1.06072	0.12216	1.00792	1.33E-04	2.81E-07	2.18E-06	2.87E-07	1.98E-06	1.3759E-04
519943.13	4258263.04	6988.77989	0.11703	1.07344	0.11951	1.01965	1.33E-04	2.75E-07	2.20E-06	2.81E-07	2.01E-06	1.3761E-04
520108.48	4257854.88	6988.40894	0.07542	11.11171	0.07571	13.5012	1.33E-04	1.77E-07	2.28E-05	1.78E-07	2.66E-05	1.8256E-04
519940.57	4258284.08	6977.16028	0.12234	1.04669	0.12489	0.9949	1.33E-04	2.87E-07	2.15E-06	2.93E-07	1.96E-06	1.3731E-04
519936.52	4258465.52	6968.46208	0.2057	0.96133	0.2169	0.91301	1.32E-04	4.83E-07	1.97E-06	5.09E-07	1.80E-06	1.3722E-04
519951.39	4258209.7	6962.04122	0.10556	1.17329	0.10816	1.10827	1.32E-04	2.48E-07	2.41E-06	2.54E-07	2.18E-06	1.3743E-04
519869.89	4258619.04	6955.69117	0.20335	0.48636	0.21606	0.47583	1.32E-04	4.77E-07	9.97E-07	5.07E-07	9.37E-07	1.3513E-04
519939.1	4258294.67	6949.12788	0.12504	1.03102	0.12766	0.98038	1.32E-04	2.94E-07	2.11E-06	3.00E-07	1.93E-06	1.3673E-04
520030.86	4259719.91	6943.07596	5.23477	0.07445	7.69295	0.07323	1.32E-04	1.23E-05	1.53E-07	1.81E-05	1.44E-07	1.6262E-04
519937.14	4258342.72	6933.04035	0.14107	1.00503	0.14433	0.9568	1.32E-04	3.31E-07	2.06E-06	3.39E-07	1.88E-06	1.3640E-04
519958.12	4258176.96	6930.01766	0.09983	1.26058	0.10221	1.18524	1.32E-04	2.34E-07	2.59E-06	2.40E-07	2.33E-06	1.3712E-04
519879.81	4258599.6	6920.93133	0.20772	0.53092	0.2214	0.51755	1.32E-04	4.88E-07	1.09E-06	5.20E-07	1.02E-06	1.3467E-04
519936.85	4258367.66	6908.22123	0.15133	1.00057	0.15508	0.95139	1.31E-04	3.55E-07	2.05E-06	3.64E-07	1.87E-06	1.3596E-04
520098.66	4257864.85	6906.06529	0.07543	16.70805	0.07608	17.80475	1.31E-04	1.77E-07	3.43E-05	1.79E-07	3.50E-05	2.0094E-04
520051.41	4257944.69	6904.34889	0.07938	7.71012	0.08265	5.69441	1.31E-04	1.86E-07	1.58E-05	1.94E-07	1.12E-05	1.5864E-04
519830.82	4258692.06	6903.48021	0.18282	0.36017	0.19176	0.35332	1.31E-04	4.29E-07	7.39E-07	4.50E-07	6.96E-07	1.3354E-04
519803.65	4258742.7	6902.42292	0.17102	0.2997	0.17717	0.29403	1.31E-04	4.02E-07	6.15E-07	4.16E-07	5.79E-07	1.3321E-04
519919.48	4258521.85	6896.436	0.21965	0.78275	0.23327	0.75082	1.31E-04	5.16E-07	1.61E-06	5.48E-07	1.48E-06	1.3524E-04
519929.36	4258492.72	6891.26245	0.21466	0.87826	0.22728	0.83788	1.31E-04	5.04E-07	1.80E-06	5.34E-07	1.65E-06	1.3548E-04
520020.96	4259719.93	6885.35314	3.77202	0.07384	4.8716	0.0727	1.31E-04	8.86E-06	1.51E-07	1.14E-05	1.43E-07	1.5147E-04
519889.73	4258580.16	6881.70142	0.21162	0.58216	0.22546	0.56492	1.31E-04	4.97E-07	1.19E-06	5.29E-07	1.11E-06	1.3414E-04
520061.27	4257924.73	6876.5578	0.07819	12.51659	0.08081	7.82316	1.31E-04	1.84E-07	2.57E-05	1.90E-07	1.54E-05	1.7215E-04
520109.07	4257845.4	6862.65779	0.07422	10.8825	0.07447	13.27905	1.30E-04	1.74E-07	2.23E-05	1.75E-07	2.61E-05	1.7925E-04
519959.01	4258166.61	6861.37852	0.09775	1.27097	0.10002	1.1937	1.30E-04	2.29E-07	2.61E-06	2.35E-07	2.35E-06	1.3584E-04
519936.58	4258305.7	6859.64722	0.12743	1.00253	0.13008	0.95456	1.30E-04	2.99E-07	2.06E-06	3.05E-07	1.88E-06	1.3493E-04
519937.4	4258414.86	6854.10334	0.17518	0.99536	0.1814	0.94396	1.30E-04	4.11E-07	2.04E-06	4.26E-07	1.86E-06	1.3502E-04
519937.08	4258439.9	6853.01603	0.18961	0.98139	0.19827	0.93084	1.30E-04	4.45E-07	2.01E-06	4.65E-07	1.83E-06	1.3502E-04
519932.92	4258474.27	6847.08039	0.20707	0.92151	0.21862	0.87712	1.30E-04	4.86E-07	1.89E-06	5.13E-07	1.73E-06	1.3477E-04
519899.65	4258560.73	6846.78683	0.21483	0.64028	0.22819	0.61891	1.30E-04	5.04E-07	1.31E-06	5.36E-07	1.22E-06	1.3372E-04
519792.08	4258762.84	6845.44117	0.16556	0.27833	0.17096	0.27316	1.30E-04	3.89E-07	5.71E-07	4.01E-07	5.38E-07	1.3202E-04
519909.57	4258541.29	6841.76415	0.21742	0.70612	0.23071	0.68036	1.30E-04	5.10E-07	1.45E-06	5.42E-07	1.34E-06	1.3389E-04
520030.87	4259729.91	6835.18141	4.69454	0.07355	5.81229	0.07234	1.30E-04	1.10E-05	1.51E-07	1.36E-05	1.42E-07	1.5488E-04
519824.46	4258700.84	6821.15903	0.17901	0.34547	0.18708	0.33912	1.30E-04	4.20E-07	7.09E-07	4.39E-07	6.68E-07	1.3189E-04
519935.2	4258316.25	6803.31048	0.13022	0.98557	0.13296	0.9395	1.29E-04	3.06E-07	2.02E-06	3.12E-07	1.85E-06	1.3381E-04
520020.97	4259729.93	6779.0976	3.50959	0.07296	4.24388	0.07183	1.29E-04	8.24E-06	1.50E-07	9.96E-06	1.41E-07	1.4735E-04
519818.44	4258710.45	6775.0508	0.17577	0.33203	0.18319	0.32595	1.29E-04	4.13E-07	6.81E-07	4.30E-07	6.42E-07	1.3095E-04
519857.12	4258636.77	6774.93955	0.19423	0.44035	0.2056	0.43199	1.29E-04	4.56E-07	9.03E-07	4.83E-07	8.50E-07	1.3147E-04
520051.45	4257934.69	6772.9714	0.07794	7.70002	0.08109	5.6744	1.29E-04	1.83E-07	1.58E-05	1.90E-07	1.12E-05	1.5608E-04
519796.98	4258750.66	6770.78106	0.16663	0.28816	0.1723	0.28281	1.29E-04	3.91E-07	5.91E-07	4.05E-07	5.57E-07	1.3064E-04
520098.69	4257854.85	6764.69323	0.0741	16.6903	0.0747	17.90184	1.29E-04	1.74E-07	3.42E-05	1.75E-07	3.52E-05	1.9840E-04
519847.12	4258655.32	6760.62979	0.18911	0.40751	0.19951	0.40034	1.29E-04	4.44E-07	8.36E-07	4.68E-07	7.88E-07	1.3104E-04
519929.32	4258483.02	6750.74658	0.20816	0.8837	0.21992	0.84298	1.28E-04	4.89E-07	1.81E-06	5.16E-07	1.66E-06	1.3280E-04
520061.3	4257914.73	6747.90029	0.0768	12.48265	0.07929	7.78197	1.28E-04	1.80E-07	2.56E-05	1.86E-07	1.53E-05	1.6955E-04
519837.12	4258673.87	6743.65715	0.18403	0.37851	0.19334	0.37204	1.28E-04	4.32E-07	7.76E-07	4.54E-07	7.32E-07	1.3058E-04
519933.52	4258351.5	6737.12968	0.14232	0.96742	0.14552	0.92209	1.28E-04	3.34E-07	1.98E-06	3.42E-07	1.82E-06	1.3254E-04
519947.21	4258201.44	6723.43418	0.1022	1.11549	0.10457	1.05584	1.28E-04	2.40E-07	2.29E-06	2.45E-07	2.08E-06	1.3265E-04
520109.1	4257835.4	6721.4025	0.07292	10.87196	0.07314	13.28876	1.28E-04	1.71E-07	2.23E-05	1.72E-07	2.62E-05	1.7656E-04
519785.42	4258770.81	6715.25508	0.16132	0.26806	0.16635	0.26314	1.28E-04	3.79E-07	5.50E-07	3.91E-07	5.18E-07	1.2948E-04
519937.91	4258255.21	6709.98283	0.11272	1.01511	0.11488	0.96592	1.28E-04	2.65E-07	2.08E-06	2.70E-07	1.90E-06	1.3206E-04
519939.25	4258244.67	6706.96273	0.11037	1.02959	0.11256	0.97872	1.27E-04	2.59E-07	2.11E-06	2.64E-07	1.93E-06	1.3205E-04
519919.44	4258512.15	6693.21181	0.21324	0.7881	0.22598	0.75577	1.27E-04	5.01E-07	1.62E-06	5.31E-07	1.49E-06	1.3136E-04
519940.49	4258234.17	6692.66358	0.10806	1.03976	0.11026	0.98841	1.27E-04	2.54E-07	2.13E-06	2.59E-07	1.95E-06	1.3181E-04
519812.1	4258719.27	6688.95029	0.17194	0.31902	0.17877	0.31322	1.27E-04	4.04E-07	6.54E-07	4.20E-07	6.17E-07	1.2924E-04
519933.2	4258376.55	6687.75553	0.15271	0.96224	0.15652	0.91596	1.27E-04	3.59E-07	1.97E-06	3.67E-07	1.80E-06	1.3162E-04
519934.06	4258398.72	6686.42221	0.16381	0.96627	0.16872	0.91838	1.27E-04	3.85E-07	1.98E-06	3.96E-07	1.81E-06	1.3167E-04
519933.53	4258448.53	6680.16481	0.19116	0.94164	0.20043	0.8952	1.27E-04	4.49E-07	1.93E-06	4.71E-07	1.76E-06	1.3159E-04
519948.29	4258191	6678.914	0.1001	1.12772	0.10243	1.06613	1.27E-04	2.35E-07	2.31E-06	2.40E-07	2.10E-06	1.3184E-04
519869.85	4258609.34	6674.73418	0.19879	0.49053	0.2112	0.47974	1.27E-04	4.67E-07	1.01E-06	4.96E-07	9.44E-07	1.2979E-04
519941.64	4258223.71	6669.51613	0.10581	1.05323	0.10804	0.99992	1.27E-04	2.48E-07	2.16E-06	2.54E-07	1.97E-06	1.3141E-04
520099.28	4257845.37	6646.00528	0.07294	16.23426	0.07348	17.62373	1.26E-04	1.71E-07	3.33E-05	1.73E-07	3.47E-05	1.9466E-04
519933.89	4258423.39	6645.81783	0.17671	0.95671	0.18356	0.90878	1.26E-04	4.15E-07	1.96E-06	4.31E-07	1.79E-06	1.3092E-04
519879.77	4258589.9	6642.26969	0.20271	0.53598	0.21586	0.52181	1.26E-04	4.76E-07	1.10E-06	5.07E-07	1.03E-06	1.2937E-04
519942.7	4258213.29	6637.47578	0.10359	1.06442	0.10585	1.00952	1.26E-04	2.43E-07	2.18E-06	2.49E-07	1.99E-06	1.3083E-04
520051.48	4257924.69	6636.62113	0.07649	7.69478	0.07957	5.62806	1.26E-04	1.80E-07	1.58E-05	1.87E-07	1.11E-05	1.5338E-04
519949.3	4258180.6	6628.14285	0.09805	1.13783	0.10031	1.07465	1.26E-04	2.30E-07	2.33E-06	2.35E-07	2.12E-06	1.3090E-04
519934.48	4258266.61	6617.77871	0.11452	0.97931	0.1166	0.93326	1.26E-04	2.69E-07	2.01E-06	2.74E-07	1.84E-06	1.3018E-04
519889.69	4258570.47	6609.55894	0.20615	0.58729	0.21891	0.56945	1.26E-04	4.84E-07	1.20E-06	5.14E-07	1.12E-06	1.2896E-04
519933.18	4258277.14	6605.23075	0.11699	0.96715	0.11912	0.9221	1.26E-04	2.75E-07	1.98E-06	2.80E-07	1.82E-06	1.2991E-04
519909.52	4258531.59	6602.4969	0.2112	0.71096	0.22372	0.68503	1.26E-04	4.96E-07	1.46E-06	5.25E-07	1.35E-06	1.2933E-04
520061.33	4257904.73	6601.00667	0.07534	12.51625	0.07781	7.62588	1.25E-04	1.77E-07	2.57E-05	1.83E-07	1.50E-05	1.6651E-04
519899.61	4258551.03	6589.06176	0.20886	0.64488	0.22116	0.62349	1.25E-04	4.90E-07	1.32E-06	5.19E-07	1.23E-06	1.2881E-04
519778.73	4258778.73	6586.79177	0.1572	0.2583	0.16186	0.25364	1.25E-04	3.69E-07	5.30E-07	3.80E-07	4.99E-07	1.2698E-04
520109.13	4257825.4	6582.3607	0.07164	10.87252	0.07184	13.30118	1.25E-04	1.68E-07	2.23E-05	1.69E-07	2.62E-05	1.7394E-04
519931.77	4258287.71	6579.66495	0.1195	0.95479	0.12171	0.91051	1.25E-04	2.81E-07	1.96E-06	2.86E-07	1.79E-06	1.2938E-04
519950.25	4258170.22	6572.20171	0.09606	1.14748	0.09824	1.08257	1.25E-04	2.26E-07	2.35E-06	2.31E-07	2.13E-06	1.2987E-04
519930.1	4258335.56	6563.31487	0.13424	0.93438	0.13699	0.89244	1.25E-04	3.15E-07	1.92E-06	3.22E-07	1.76E-06	1.2907E-04
519929.91	4258360.28	6540.61697	0.14359	0.93222	0.14676	0.88935	1.24E-04	3.37E-07	1.91E-06	3.45E-07	1.75E-06	1.2867E-04
519930.21	4258298.34	6538.21575	0.12202	0.93992	0.12431	0.89688	1.24E-04	2.86E-07	1.93E-06	2.92E-07	1.77E-06	1.2855E-04
519929.98	4258457.16	6532.58888	0.19252	0.90368	0.20221	0.86121	1.24E-04	4.52E-07	1.85E-06	4.75E-07	1.70E-06	1.2865E-04
519919.4	4258502.46	6514.75323	0.20706	0.79307	0.21892	0.76044	1.24E-04	4.86E-07	1.63E-06	5.14E-07	1.50E-06	1.2796E-04
520099.31	4257835.37	6513.06941	0.07168	16.2281	0.07218	17.73974	1.24E-04	1.68E-07	3.33E-05	1.69E-07	3.49E-05	1.9234E-04
520051.51	4257914.69	6512.71472	0.07514	7.68083	0.07811	5.60226	1.24E-04	1.76E-07	1.58E-05	1.83E-07	1.10E-05	1.5094E-04
519847.12	4258646.05	6506.27876	0.18553	0.4106	0.19592	0.40345	1.24E-04	4.36E-07	8.42E-07	4.60E-07	7.94E-07	1.2620E-04
519837.12	4258664.6	6489.78995	0.18065	0.38121	0.19006	0.37496	1.23E-04	4.24E-07	7.82E-07	4.46E-07	7.38E-07	1.2575E-04
519800.01	4258734.05	6477.41583	0.16428	0.2967	0.17009	0.29147	1.23E-04	3.86E-07	6.09E-07	3.99E-07	5.74E-07	1.2509E-04
519930.58	4258407.17	6476.73182	0.1652	0.93048	0.17058	0.88542	1.23E-04	3.88E-07	1.91E-06	4.00E-07	1.74E-06	1.2755E-04
519827.12	4258683.15	6472.73074	0.17581	0.35518	0.18421	0.34934	1.23E-04	4.13E-07	7.28E-07	4.32E-07	6.88E-07	1.2530E-04
520061.36	4257894.73	6468.81887	0.07398	12.4928	0.07638	7.51336	1.23E-04	1.74E-07	2.56E-05	1.79E-07	1.48E-05	1.6373E-04

519929.54	4258385.44	6468.69579	0.15406	0.92588	0.15807	0.88219	1.23E-04	3.62E-07	1.90E-06	3.71E-07	1.74E-06	1.2733E-04
519930.38	4258431.92	6456.49702	0.17815	0.91976	0.18567	0.87532	1.23E-04	4.18E-07	1.89E-06	4.36E-07	1.72E-06	1.2719E-04
519928.05	4258309.22	6456.39314	0.12435	0.91778	0.12669	0.8769	1.23E-04	2.92E-07	1.88E-06	2.97E-07	1.73E-06	1.2692E-04
520109.16	4257815.4	6446.81247	0.0704	10.87249	0.07059	13.21919	1.23E-04	1.65E-07	2.23E-05	1.66E-07	2.60E-05	1.7119E-04
519859.89	4258619.08	6437.83788	0.19035	0.45497	0.20162	0.4461	1.22E-04	4.47E-07	9.33E-07	4.73E-07	8.78E-07	1.2510E-04
519788.36	4258753.99	6427.32647	0.15901	0.27602	0.16407	0.27112	1.22E-04	3.73E-07	5.66E-07	3.85E-07	5.34E-07	1.2403E-04
519869.81	4258599.64	6413.80519	0.19428	0.49488	0.2064	0.48354	1.22E-04	4.56E-07	1.01E-06	4.85E-07	9.52E-07	1.2482E-04
519926.43	4258465.8	6410.55874	0.19373	0.86818	0.20373	0.82908	1.22E-04	4.55E-07	1.78E-06	4.78E-07	1.63E-06	1.2620E-04
519938.26	4258205.13	6408.20397	0.10027	1.01237	0.10229	0.96167	1.22E-04	2.35E-07	2.08E-06	2.40E-07	1.89E-06	1.2625E-04
519909.48	4258521.89	6392.2602	0.20527	0.7157	0.21709	0.68947	1.22E-04	4.82E-07	1.47E-06	5.10E-07	1.36E-06	1.2532E-04
519879.73	4258580.2	6386.59745	0.19782	0.54049	0.21004	0.52583	1.21E-04	4.64E-07	1.11E-06	4.93E-07	1.04E-06	1.2450E-04
519926.52	4258344.25	6385.20361	0.13537	0.90165	0.13807	0.86201	1.21E-04	3.18E-07	1.85E-06	3.24E-07	1.70E-06	1.2556E-04
520099.34	4257825.37	6383.98464	0.07045	16.22589	0.07092	17.80294	1.21E-04	1.65E-07	3.33E-05	1.66E-07	3.50E-05	1.9000E-04
519939.41	4258194.67	6376.04332	0.09827	1.02282	0.10031	0.97068	1.21E-04	2.31E-07	2.10E-06	2.35E-07	1.91E-06	1.2567E-04
520051.54	4257904.69	6375.94371	0.07374	7.67788	0.07667	5.49728	1.21E-04	1.73E-07	1.57E-05	1.80E-07	1.08E-05	1.4812E-04
519820.79	4258692	6374.99961	0.17151	0.34085	0.17958	0.33502	1.21E-04	4.03E-07	6.99E-07	4.22E-07	6.59E-07	1.2336E-04
519793.36	4258742.07	6363.03174	0.16022	0.28543	0.16552	0.28048	1.21E-04	3.76E-07	5.85E-07	3.89E-07	5.52E-07	1.2285E-04
519889.65	4258560.77	6360.81428	0.20075	0.59164	0.21241	0.57366	1.21E-04	4.71E-07	1.21E-06	4.99E-07	1.13E-06	1.2422E-04
519930.37	4258248.34	6360.26945	0.10806	0.93836	0.10984	0.8949	1.21E-04	2.54E-07	1.92E-06	2.58E-07	1.76E-06	1.2509E-04
519919.36	4258492.76	6359.25106	0.20109	0.79771	0.21211	0.76486	1.21E-04	4.72E-07	1.64E-06	4.98E-07	1.51E-06	1.2499E-04
519931.68	4258237.81	6358.54552	0.10588	0.95027	0.10767	0.90553	1.21E-04	2.49E-07	1.95E-06	2.53E-07	1.78E-06	1.2510E-04
519899.57	4258541.33	6351.19955	0.20312	0.64921	0.21464	0.6278	1.21E-04	4.77E-07	1.33E-06	5.04E-07	1.24E-06	1.2427E-04
519928.95	4258258.91	6350.60933	0.11025	0.92431	0.11204	0.88245	1.21E-04	2.59E-07	1.90E-06	2.63E-07	1.74E-06	1.2487E-04
520061.39	4257884.73	6348.45699	0.0727	12.51728	0.07501	7.53349	1.21E-04	1.71E-07	2.57E-05	1.76E-07	1.48E-05	1.6152E-04
519932.89	4258227.32	6346.47612	0.10373	0.95786	0.10553	0.91287	1.21E-04	2.44E-07	1.96E-06	2.48E-07	1.80E-06	1.2489E-04
519926.3	4258369.06	6339.5932	0.14481	0.89843	0.14803	0.8579	1.21E-04	3.40E-07	1.84E-06	3.48E-07	1.69E-06	1.2472E-04
519940.48	4258184.24	6337.14972	0.09631	1.03207	0.09834	0.97858	1.20E-04	2.26E-07	2.12E-06	2.31E-07	1.93E-06	1.2496E-04
519814.67	4258701.35	6331.80584	0.16853	0.32768	0.17574	0.32228	1.20E-04	3.96E-07	6.72E-07	4.13E-07	6.34E-07	1.2247E-04
519934.02	4258216.87	6326.86661	0.10164	0.96971	0.10349	0.92301	1.20E-04	2.39E-07	1.99E-06	2.43E-07	1.82E-06	1.2455E-04
520109.19	4257805.4	6320.84576	0.06922	10.86594	0.06937	13.30176	1.20E-04	1.63E-07	2.23E-05	1.63E-07	2.62E-05	1.6894E-04
519781.72	4258762.02	6314.98047	0.1551	0.26589	0.15975	0.26125	1.20E-04	3.64E-07	5.45E-07	3.75E-07	5.14E-07	1.2184E-04
519922.87	4258474.43	6312.0087	0.19472	0.83441	0.2049	0.79841	1.20E-04	4.57E-07	1.71E-06	4.81E-07	1.57E-06	1.2420E-04
519941.48	4258173.84	6292.4766	0.0944	1.04121	0.0964	0.98606	1.20E-04	2.22E-07	2.14E-06	2.26E-07	1.94E-06	1.2413E-04
519926.87	4258440.45	6288.57288	0.1795	0.88439	0.18757	0.84342	1.20E-04	4.21E-07	1.81E-06	4.40E-07	1.66E-06	1.2387E-04
519927.11	4258415.61	6280.25352	0.16654	0.89631	0.17251	0.85409	1.19E-04	3.91E-07	1.84E-06	4.05E-07	1.68E-06	1.2369E-04
519847.12	4258636.77	6268.8978	0.18204	0.41364	0.1923	0.40647	1.19E-04	4.27E-07	8.48E-07	4.51E-07	8.00E-07	1.2169E-04
519925.83	4258270.19	6259.78338	0.11198	0.895	0.11375	0.85575	1.19E-04	2.63E-07	1.84E-06	2.67E-07	1.68E-06	1.2304E-04
520099.37	4257815.37	6258.72695	0.06926	16.22535	0.06969	17.83727	1.19E-04	1.63E-07	3.33E-05	1.64E-07	3.51E-05	1.8768E-04
520051.57	4257894.69	6258.52668	0.07246	7.66659	0.0753	5.4807	1.19E-04	1.70E-07	1.57E-05	1.77E-07	1.08E-05	1.4582E-04
519808.35	4258710.24	6257.58902	0.16497	0.31504	0.17156	0.30987	1.19E-04	3.87E-07	6.46E-07	4.03E-07	6.10E-07	1.2099E-04
519925.89	4258394.32	6255.64156	0.15539	0.89121	0.15976	0.85005	1.19E-04	3.65E-07	1.83E-06	3.75E-07	1.67E-06	1.2315E-04
519837.12	4258655.32	6251.64521	0.17737	0.38393	0.18683	0.37777	1.19E-04	4.16E-07	7.87E-07	4.39E-07	7.44E-07	1.2122E-04
519924.46	4258280.74	6240.46558	0.11433	0.88497	0.11617	0.84639	1.19E-04	2.68E-07	1.82E-06	2.73E-07	1.67E-06	1.2264E-04
519827.12	4258673.87	6234.44855	0.17272	0.35755	0.18121	0.35202	1.19E-04	4.05E-07	7.33E-07	4.25E-07	6.93E-07	1.2076E-04
519923.06	4258328.41	6232.51941	0.12801	0.87227	0.13033	0.83513	1.18E-04	3.01E-07	1.79E-06	3.06E-07	1.64E-06	1.2251E-04
519919.32	4258483.06	6231.77005	0.19541	0.8023	0.2057	0.76917	1.18E-04	4.59E-07	1.65E-06	4.83E-07	1.51E-06	1.2256E-04
520061.42	4257874.73	6228.35784	0.07145	12.50541	0.07368	7.49474	1.18E-04	1.68E-07	2.56E-05	1.73E-07	1.48E-05	1.5913E-04
519909.44	4258512.2	6206.4964	0.19961	0.72021	0.21073	0.69366	1.18E-04	4.69E-07	1.48E-06	4.95E-07	1.37E-06	1.2178E-04
519922.97	4258291.34	6204.98188	0.11669	0.87439	0.11863	0.83638	1.18E-04	2.74E-07	1.79E-06	2.79E-07	1.65E-06	1.2194E-04
519775.06	4258770	6203.85644	0.15129	0.25632	0.15556	0.25191	1.18E-04	3.55E-07	5.26E-07	3.65E-07	4.96E-07	1.1967E-04
520109.23	4257795.4	6201.34808	0.0681	10.84914	0.0682	13.2989	1.18E-04	1.60E-07	2.23E-05	1.60E-07	2.62E-05	1.6663E-04
519922.95	4258352.94	6200.02403	0.13647	0.86999	0.13913	0.83257	1.18E-04	3.20E-07	1.78E-06	3.27E-07	1.64E-06	1.2192E-04
519859.85	4258609.38	6193.48644	0.18626	0.45865	0.19732	0.4495	1.18E-04	4.37E-07	9.41E-07	4.63E-07	8.85E-07	1.2045E-04
519802.96	4258717.25	6182.07643	0.16184	0.30497	0.16795	0.3	1.18E-04	3.80E-07	6.25E-07	3.94E-07	5.91E-07	1.1950E-04
519869.77	4258589.94	6172.34012	0.18982	0.4993	0.20148	0.48723	1.17E-04	4.46E-07	1.02E-06	4.73E-07	9.59E-07	1.2023E-04
519921.33	4258302	6152.27984	0.11904	0.86026	0.12103	0.82356	1.17E-04	2.79E-07	1.76E-06	2.84E-07	1.62E-06	1.2089E-04
519879.69	4258570.51	6149.92484	0.19295	0.54498	0.20426	0.52977	1.17E-04	4.53E-07	1.12E-06	4.80E-07	1.04E-06	1.1999E-04
519923.36	4258448.98	6143.09017	0.18072	0.85066	0.18919	0.81302	1.17E-04	4.24E-07	1.74E-06	4.44E-07	1.60E-06	1.2098E-04
520051.6	4257884.69	6140.59962	0.07121	7.65046	0.07397	5.4346	1.17E-04	1.67E-07	1.57E-05	1.74E-07	1.07E-05	1.4345E-04
519899.52	4258531.63	6140.45795	0.19765	0.65335	0.20856	0.63182	1.17E-04	4.64E-07	1.34E-06	4.90E-07	1.24E-06	1.2026E-04
520099.41	4257805.37	6137.702	0.06811	16.21707	0.0685	17.88632	1.17E-04	1.60E-07	3.33E-05	1.61E-07	3.52E-05	1.8546E-04
519922.68	4258377.85	6137.28598	0.14604	0.86655	0.14946	0.82809	1.17E-04	3.43E-07	1.78E-06	3.51E-07	1.63E-06	1.2076E-04
519889.61	4258551.07	6125.11874	0.19531	0.59543	0.20601	0.57751	1.16E-04	4.59E-07	1.22E-06	4.84E-07	1.14E-06	1.1973E-04
520061.45	4257864.73	6111.72111	0.07023	12.47987	0.07239	7.45351	1.16E-04	1.65E-07	2.56E-05	1.70E-07	1.47E-05	1.5677E-04
519929.31	4258208.83	6106.07691	0.09835	0.91936	0.09995	0.87662	1.16E-04	2.31E-07	1.89E-06	2.35E-07	1.73E-06	1.2014E-04
519923.64	4258424.05	6099.46161	0.16782	0.86341	0.17438	0.82414	1.16E-04	3.94E-07	1.77E-06	4.09E-07	1.62E-06	1.2014E-04
519930.53	4258198.34	6082.58285	0.09644	0.92771	0.09808	0.88392	1.16E-04	2.26E-07	1.90E-06	2.30E-07	1.74E-06	1.1972E-04
519796.37	4258725.4	6082.51532	0.15801	0.29338	0.16355	0.28867	1.16E-04	3.71E-07	6.02E-07	3.84E-07	5.68E-07	1.1754E-04
520109.26	4257785.4	6077.96375	0.06696	10.87062	0.06705	13.30878	1.16E-04	1.57E-07	2.23E-05	1.57E-07	2.62E-05	1.6434E-04
519919.52	4258337.01	6066.22065	0.12901	0.84283	0.13127	0.80772	1.15E-04	3.03E-07	1.73E-06	3.08E-07	1.59E-06	1.1924E-04
519931.66	4258187.88	6056.91333	0.09458	0.93733	0.09627	0.89218	1.15E-04	2.22E-07	1.92E-06	2.26E-07	1.76E-06	1.1926E-04
519922.23	4258403.21	6051.37079	0.15668	0.85799	0.16157	0.81936	1.15E-04	3.68E-07	1.76E-06	3.79E-07	1.61E-06	1.1915E-04
519922.87	4258241.44	6040.50316	0.1037	0.87068	0.10516	0.8317	1.15E-04	2.43E-07	1.79E-06	2.47E-07	1.64E-06	1.1873E-04
519924.15	4258230.93	6039.33421	0.10168	0.87755	0.10311	0.83848	1.15E-04	2.39E-07	1.80E-06	2.42E-07	1.65E-06	1.1873E-04
519909.4	4258502.5	6039.26254	0.1941	0.72435	0.20447	0.69756	1.15E-04	4.56E-07	1.49E-06	4.80E-07	1.37E-06	1.1859E-04
519784.64	4258745.14	6036.21288	0.15292	0.27329	0.15761	0.2688	1.15E-04	3.59E-07	5.60E-07	3.70E-07	5.29E-07	1.1656E-04
519921.49	4258252	6030.97077	0.10575	0.85773	0.10721	0.82055	1.15E-04	2.48E-07	1.76E-06	2.52E-07	1.62E-06	1.1851E-04
519925.33	4258220.45	6029.43099	0.09969	0.88582	0.10113	0.84588	1.15E-04	2.34E-07	1.82E-06	2.37E-07	1.67E-06	1.1856E-04
519837.12	4258646.05	6029.2572	0.17418	0.38664	0.18361	0.38049	1.15E-04	4.09E-07	7.93E-07	4.31E-07	7.49E-07	1.1699E-04
520051.63	4257874.69	6026.30812	0.06999	7.62966	0.07267	5.38786	1.15E-04	1.64E-07	1.56E-05	1.71E-07	1.06E-05	1.4114E-04
519919.85	4258457.51	6020.80372	0.18179	0.81863	0.19051	0.78405	1.14E-04	4.27E-07	1.68E-06	4.47E-07	1.54E-06	1.1854E-04
520099.44	4257795.37	6019.5978	0.06699	16.21919	0.06735	17.85708	1.14E-04	1.57E-07	3.33E-05	1.58E-07	3.52E-05	1.8315E-04
519932.72	4258177.46	6019.34744	0.09274	0.94332	0.09444	0.89709	1.14E-04	2.18E-07	1.93E-06	2.22E-07	1.77E-06	1.1856E-04
519919.37	4258361.63	6012.27523	0.13754	0.83982	0.14026	0.8044	1.14E-04	3.23E-07	1.72E-06	3.29E-07	1.58E-06	1.1824E-04
520172.84	4257692.52	6011.40844	0.06294	3.36277	0.06206	2.90458	1.14E-04	1.48E-07	6.90E-06	1.46E-07	5.72E-06	1.2717E-04
519827.12	4258664.6	6010.33995	0.1697	0.35994	0.1783	0.35456	1.14E-04	3.98E-07	7.38E-07	4.19E-07	6.98E-07	1.1650E-04
519919.99	4258262.61	5999.32658	0.10773	0.84301	0.10923	0.8075	1.14E-04	2.53E-07	1.73E-06	2.56E-07	1.59E-06	1.1786E-04
520061.48	4257854.73	5998.70329	0.06905	12.44024	0.07114	7.41443	1.14E-04	1.62E-07	2.55E-05	1.67E-07	1.46E-05	1.5446E-04
519817.12	4258683.15	5994.48074	0.16528	0.33617	0.17291	0.3312	1.14E-04	3.88E-07	6.89E-07	4.06E-07	6.52E-07	1.1608E-04
519789.75	4258733.47	5982.55073	0.15424	0.28242	0.15926	0.27794	1.14E-04	3.62E-07	5.79E-07	3.74E-07	5.47E-07	1.1558E-04
519849.89	4258619.12	5980.35301	0.17863	0.42661	0.18874	0.41908	1.14E-04	4.19E-07	8.75E-07	4.43E-07	8.25E-07	1.1624E-04
519859.81	4258599.68	5968.33217	0.18224	0.4624	0.19301	0.4528	1.13E-04	4.28E-07	9.48E-07	4.53E-07	8.91E-07	1.1617E-04
520109.29	4257775.4	5954.35152	0.06583	10.902	0.06592	12.95111	1.13E-04	1.55E-07	2.24E-05	1.55E-07	2.55E-05	1.6134E-04
519899.48	4258521.94	5950.21669	0.19241	0.65734	0.20274	0.63562	1.13E-04	4.52E-07	1.35E-06	4.76E-07	1.25E-06	1.1663E-04
519869.73	4258580.25	5950.03427	0.18542	0.50348	0.19638	0.49078	1.13E-04	4.35E-07	1.03E-06	4.61E-07	9.66E-07	1.1599E-04
519919.07	4258386.63	5938.90916	0.14722	0.83548	0.15097	0.79925	1.13E-04	3.46E-07	1.71E-06	3.54E-07	1.57E-06	1.1687E-04
519778.03	4258753.24	5938.20466	0.14928	0.26345	0.15359	0.25914	1.13E-04	3.50E-07	5.40E-07	3.61E-07	5.10E-07	1.1464E-04
519920.16	4258432.49	5936.40918	0.16902	0.8316	0.17605	0.79543	1.13E-04	3.97E-07	1.71E-06	4.13E-07	1.57E-06	1.1692E-04
519879.65	4258560.81	5932.04483	0.18818	0.5489	0.19858	0.53349	1.13E-04	4.42E-07	1.13E-06	4.66E-07	1.05E-06	1.1584E-04
519916.01	4258321.27	5926.95631	0.12223	0.81568	0.12418	0.78263	1.13E-04	2.87E-07	1.67E-06	2.92E-07	1.54E-06	1.1645E-04
519916.34	4258466.04	5921.05148	0.18271	0.78843	0.19159	0.7565	1.13E-04	4.29E-07	1.62E-06	4.50E-07	1.49E-06	1.1653E-04
520051.66	4257864.69	5918.74349	0.06883	7.60149	0.07143	5.36554	1.13E-04	1.62E-07	1.56E-05	1.68E-07	1.06E-05	1.3899E-04
519917.18	4258273.76	5917.48786	0.10942	0.8203	0.11094	0.7866	1.12E-04	2.57E-07	1.68E-06	2.60E-07	1.55E-06	1.1623E-04
519810.89	4258692.25	5916.15397	0.16147	0.32317	0.16882	0.31814	1.12E-04	3.79E-07	6.63E-07	3.96E-07	6.26E-07	1.1452E-04
519889.57	4258541.37	5913.69721	0.19017	0.59905	0.20018	0.58117	1.12E-04	4.46E-07	1.23E-06	4.70E-07	1.14E-06	1.1570E-04
520099.47	4257785.37	5904.31568	0.06589	16.22502	0.06622	17.71991	1.12E-04	1.55E-07	3.33E-05	1.55E-07	3.49E-05	1.8070E-04
519915.74	4258284.33	5898.93965	0.11172	0.81392	0.11333	0.78049	1.12E-04	2.62E-07	1.67E-06	2.66E-07	1.54E-06	1.1586E-04
519909.36	4258492.8	5894.34839	0.18884	0.72826	0.1985	0.70127	1.12E-04	4.43E-07	1.49E-06	4.66E-07	1.38E-06	1.1582E-04
519915.98	4258345.62	5892.75822	0.12996	0.81424	0.1322	0.78113	1.12E-04	3.05E-07	1.67E-06	3.10E-07	1.54E-06	1.1583E-04
520172.87	4257682.52	5888.27556	0.06192	3.40753	0.06109	2.736	1.12E-04	1.45E-07	6.99E-06	1.43E-07	5.39E-06	1.2459E-04
520060.13	4257845.25	5868.54183	0.06778	11.39669	0.06986	7.00797	1.12E-04	1.59E-07	2.34E-05	1.64E-07	1.38E-05	1.4904E-04
520163.05	4257692.49	5864.90075	0.06218	4.37655	0.06146	3.63197	1.11E-04	1.46E-07	8.98E-06	1.44E-07	7.15E-06	1.2790E-04
519804.61	4258701.21	5862.46581	0.15848	0.31091	0.165	0.30629	1.11E-04	3.72E-07	6.38E-07	3.87E-07	6.03E-07	1.1343E-04
519918.57	4258412.1	5859.73106	0.15793	0.82556	0.16334	0.78985	1.11E-04	3.71E-07	1.69E-06	3.83E-07	1.55E-06	1.1539E-04
519914.17	4258294.97	5851.67177	0.11392	0.80369	0.1156	0.77087	1.11E-04	2.67E-07	1.65E-06	2.71E-07	1.52E-06	1.1493E-04
520109.32	4257765.4	5846.53238	0.0648	10.93101	0.06485	13.28524	1.11E-04	1.52E-07	2.24E-05	1.52E-07	2.62E-05	1.6001E-04
519912.83	4258474.57	5841.56923	0.18339	0.75952	0.19234	0.73007	1.11E-04	4.31E-07	1.56E-06	4.52E-07	1.44E-06	1.1491E-04
519771.39	4258761.27	5841.19614	0.14573	0.25408	0.14966	0.24997	1.11E-04	3.42E-07	5.21E-07	3.51E-07	4.92E-07	1.1274E-04
519915.8	4258370.31	5826.47261	0.13862	0.8113	0.14152	0.77764	1.11E-04	3.25E-07	1.66E-06	3.32E-07	1.53E-06	1.1460E-04
519837.12	4258636.77	5822.66797	0.17106	0.38929	0.18035	0.38314	1.11E-04	4.02E-07	7.98E-07	4.23E-07	7.54E-07	1.1306E-04
519920.36	4258212.52	5816.32834	0.09644	0.8411	0.09766	0.80397	1.11E-04	2.26E-07	1.73E-06	2.29E-07	1.58E-06	1.1432E-04
520051.7	4257854.7	5813.08554	0.0677	7.57142	0.07021	5.33075	1.10E-04	1.59E-07	1.55E-05	1.65E-07	1.05E-05	1.3684E-04
519799.29	4258708.54	5806.0431	0.15573	0.30112	0.16171	0.29671	1.10E-04	3.66E-07	6.18E-07	3.80E-07	5.84E-07	1.1231E-04
519921.64	4258202	5804.22899	0.09463	0.84922	0.09589	0.81114	1.10E-04	2.22E-07	1.74E-06	2.25E-07	1.60E-06	1.1411E-04
519827.12	4258655.32	5801.31106	0.16677	0.36234	0.17541	0.35702	1.10E-04	3.92E-07	7.43E-07	4.12E-07	7.03E-07	1.1252E-04
519916.69	4258440.94	5793.48501	0.17013	0.80112	0.17749	0.768	1.10E-04	3.99E-07	1.64E-06	4.17E-07	1.51E-06	1.1409E-04
520099.5	4257775.37	5792.23342	0.06483	16.23586	0.06513	17.52899	1.10E-04	1.52E-07	3.33E-05	1.53E-07	3.45E-05	1.7821E-04
519922.84	4258191.52	5784.94191	0.09285	0.85652	0.09415	0.81746	1.10E-04	2.18E-07	1.76E-06	2.21E-07	1.61E-06	1.1377E-04
519817.12	4258673.87	5782.55004	0.16249	0.33827	0.17026	0.33353	1.10E-04	3.81E-07	6.94E-07	4.00E-07	6.57E-07	1.1205E-04
519899.44	4258512.24	5779.73895	0.18738	0.66117	0.19715	0.63919	1.10E-04	4.40E-07	1.36E-06	4.63E-07	1.26E-06	1.1338E-04
519909.32	4258483.1	5776.0431	0.18388	0.73229	0.19294	0.70502	1.10E-04	4.32E-07	1.50E-06	4.53E-07	1.39E-06	1.1357E-04
519912.5	4258329.8	5771.00602	0.12311	0.78905	0.125	0.75784	1.10E-04	2.89E-07	1.62E-06	2.93E-07	1.49E-06	1.1339E-04
519849.85	4258609.42	5769.93113	0.17499	0.42972	0.18487	0.42202	1.10E-04	4.11E-07	8.81E-07	4.34E-07	8.31E-07	1.1223E-04
519923.96	4258181.07	5763.12141	0.09112	0.86451	0.09248	0.82426	1.10E-04	2.14E-07	1.77E-06	2.17E-07	1.62E-06	1.1337E-04
520060.16	4257835.25	5762.08946	0.06667	11.34629	0.06868	6.9518	1.10E-04	1.57E-07	2.33E-05	1.61E-07	1.37E-05	1.4680E-04
519859.77	4258589.99	5758.54202	0.17824	0.46623	0.18863	0.456	1.09E-04	4.18E-07	9.56E-07	4.43E-07	8.98E-07	1.1217E-04
519915.46	4258395.41	5747.79105	0.14837	0.80575	0.15257	0.77174	1.09E-04	3.48E-07	1.65E-06	3.58E-07	1.52E-06	1.1313E-04
520163.08	4257682.49	5746.96348	0.06118	4.6188	0.0605	3.41863	1.09E-04	1.44E-07	9.47E-06	1.42E-07	6.73E-06	1.2573E-04
519915.4	4258234.54	5746.74097	0.09964	0.80835	0.1008	0.77367	1.09E-04	2.34E-07	1.66E-06	2.37E-07	1.52E-06	1.1289E-04
519916.65	4258224.04	5746.31655	0.09776	0.81421	0.09888	0.77919	1.09E-04	2.30E-07	1.67E-06	2.32E-07	1.53E-06	1.1289E-04
520109.35	4257755.4	5743.41427	0.06381	10.96995	0.06381	13.33335	1.09E-04	1.50E-07	2.25E-05	1.50E-07	2.62E-05	1.5822E-04
519869.69	4258570.55	5742.85232	0.18107	0.50732	0.19119	0.49418	1.09E-04	4.25E-07	1.04E-06	4.49E-07	9.73E-07	1.1205E-04
519914.06	4258245.08	5737.96596	0.10155	0.79924	0.10275	0.76557	1.09E-04	2.38E-07	1.64E-06	2.41E-07	1.51E-06	1.1269E-04
519879.61	4258551.11	5731.71636	0.18354	0.55239	0.19319	0.53697	1.09E-04	4.31E-07	1.13E-06	4.54E-07	1.06E-06	1.1202E-04
519889.52	4258531.68	5725.39543	0.18533	0.60255	0.19484	0.58462	1.09E-04	4.35E-07	1.24E-06	4.57E-07	1.15E-06	1.1211E-04
519912.44	4258354.23	5721.54258	0.13095	0.78775	0.13326	0.75618	1.09E-04	3.07E-07	1.62E-06	3.13E-07	1.49E-06	1.1248E-04
519792.73	4258716.75	5716.97495	0.15213	0.28986	0.15755	0.28564	1.09E-04	3.57E-07	5.94E-07	3.70E-07	5.62E-07	1.1055E-04
519912.61	4258255.67	5712.31185	0.10342	0.78621	0.10466	0.75424	1.09E-04	2.43E-07	1.61E-06	2.46E-07	1.48E-06	1.1217E-04
520150.97	4257693.59	5702.29378	0.06136	6.40139	0.06079	5.10373	1.08E-04	1.44E-07	1.31E-05	1.43E-07	1.00E-05	1.3185E-04
520050.34	4257845.22	5688.75422	0.06645	7.12149	0.06896	5.05945	1.08E-04	1.56E-07	1.46E-05	1.62E-07	9.96E-06	1.3302E-04
520099.53	4257765.37	5684.99866	0.0638	16.25375	0.06407	17.59112	1.08E-04	1.50E-07	3.33E-05	1.50E-07	3.46E-05	1.7632E-04
519914.92	4258420.98	5678.67584	0.15901	0.79413	0.16489	0.76147	1.08E-04	3.73E-07	1.63E-06	3.87E-07	1.50E-06	1.1183E-04
519913.22	4258449.38	5671.7849	0.17108	0.77236	0.17867	0.74187	1.08E-04	4.02E-07	1.58E-06	4.19E-07	1.46E-06	1.1168E-04
519780.92	4258736.29	5671.47397	0.14722	0.27029	0.15167	0.26626	1.08E-04	3.46E-07	5.54E-07	3.56E-07	5.24E-07	1.0958E-04
519911.03	4258266.31	5667.28984	0.10517	0.77174	0.10646	0.74111	1.08E-04	2.47E-07	1.58E-06	2.50E-07	1.46E-06	1.1126E-04
520060.19	4257825.25	5658.83994	0.06559	11.29114	0.06754	6.88869	1.08E-04	1.54E-07	2.32E-05	1.59E-07	1.36E-05	1.4459E-04
519908.79	4258314.55	5639.43114	0.11692	0.76318	0.11854	0.73364	1.07E-04	2.74E-07	1.57E-06	2.78E-07	1.44E-06	1.1076E-04
520109.38	4257745.4	5636.76328	0.06281	11.08177	0.06279	13.39505	1.07E-04	1.47E-07	2.27E-05	1.47E-07	2.64E-05	1.5654E-04
519912.22	4258379	5633.89166	0.13957	0.78259	0.14276	0.75108	1.07E-04	3.28E-07	1.61E-06	3.35E-07	1.48E-06	1.1084E-04
519786.13	4258724.88	5628.41917	0.14861	0.27919	0.15349	0.27516	1.07E-04	3.49E-07	5.73E-07	3.60E-07	5.42E-07	1.0881E-04
519899.4	4258502.54	5624.42767	0.18249	0.66468	0.19164	0.64247	1.07E-04	4.28E-07	1.36E-06	4.50E-07	1.26E-06	1.1042E-04
519908.99	4258338.33	5608.75925	0.12395	0.7632	0.12582	0.73375	1.07E-04	2.91E-07	1.57E-06	2.95E-07	1.44E-06	1.1021E-04
519827.12	4258646.05	5607.05421	0.16392	0.3647	0.1725	0.35941	1.07E-04	3.85E-07	7.48E-07	4.05E-07	7.07E-07	1.0883E-04
519908.53	4258277.33	5603.05568	0.10698	0.7568	0.1083	0.72747	1.07E-04	2.51E-07	1.55E-06	2.54E-07	1.43E-06	1.0999E-04
520151	4257683.59	5588.13825	0.06037	7.61393	0.05984	4.84238	1.06E-04	1.42E-07	1.56E-05	1.40E-07	9.53E-06	1.3165E-04
520050.37	4257835.22	5588.0365	0.06538	7.08363	0.06782	5.00782	1.06E-04	1.53E-07	1.45E-05	1.59E-07	9.86E-06	1.3092E-04
519774.33	4258744.45	5586.16736	0.14383	0.26068	0.14785	0.2568	1.06E-04	3.38E-07	5.35E-07	3.47E-07	5.06E-07	1.0791E-04
519817.12	4258664.6	5584.90083	0.1598	0.34039	0.16766	0.33575	1.06E-04	3.75E-07	6.98E-07	3.94E-07	6.61E-07	1.0829E-04
520099.56	4257755.37	5581.44768	0.0628	16.28456	0.06304	17.74561	1.06E-04	1.47E-07	3.34E-05	1.48E-07	3.49E-05	1.7472E-04
519839.89	4258619.16	5575.02784	0.16805	0.40085	0.17717	0.39443	1.06E-04	3.95E-07	8.22E-07	4.16E-07	7.76E-07	1.0838E-04
519907.02	4258287.93	5574.88912	0.10916	0.75171	0.11055	0.7224	1.06E-04	2.56E-07	1.54E-06	2.60E-07	1.42E-06	1.0945E-04
519849.81	4258599.73	5572.6712	0.17137	0.43301	0.18103	0.42488	1.06E-04	4.02E-07	8.88E-07	4.25E-07	8.36E-07	1.0848E-04
519909.74	4258457.82	5570.68945	0.17191	0.7452	0.17965	0.71697	1.06E-04	4.04E-07	1.53E-06	4.22E-07	1.41E-06	1.0965E-04
519807.12	4258683.15	5567.22548	0.15569	0.31864	0.16269	0.31437	1.06E-04	3.66E-07	6.54E-07	3.82E-07	6.19E-07	1.0784E-04
519859.73	4258580.29	5562.72329	0.1743	0.46976	0.18402	0.45902	1.06E-04	4.09E-07	9.63E-07	4.32E-07	9.04E-07	1.0845E-04
519889.48	4258521.98	5561.2212	0.18087	0.60621	0.19	0.58805	1.06E-04	4.25E-07	1.24E-06	4.46E-07	1.16E-06	1.0898E-04
520141.18	4257693.56	5560.61506	0.06057	8.72218	0.06012	7.15562	1.06E-04	1.42E-07	1.79E-05	1.41E-07	1.41E-05	1.3795E-04
520060.22	4257815.25	5557.80161	0.06454	11.23243	0.06643	6.81382	1.06E-04	1.52E-07	2.30E-05	1.56E-07	1.34E-05	1.4240E-04
519869.65	4258560.85	5550.2249	0.1768	0.51073	0.18613	0.4974	1.05E-04	4.15E-07	1.05E-06	4.37E-07	9.79E-07	1.0838E-04
519908.89	4258362.83	5550.11267	0.13193	0.76234	0.13442	0.73221	1.05E-04	3.10E-07	1.56E-06	3.16E-07	1.44E-06	1.0913E-04
519911.84	4258404.19	5548.20442	0.14921	0.77484	0.15384	0.74381	1.05E-04	3.50E-07	1.59E-06	3.61E-07	1.46E-06	1.0923E-04
519879.57	4258541.41	5547.00402	0.17906	0.55553	0.18811	0.54018	1.05E-04	4.20E-07	1.14E-06	4.42E-07	1.06E-06	1.0850E-04
519911.41	4258216.21	5541.49149	0.09454	0.77289	0.09547	0.74023	1.05E-04	2.22E-07	1.59E-06	2.24E-07	1.46E-06	1.0882E-04
519912.76	4258205.67	5538.22425	0.09283	0.78033	0.09376	0.7468	1.05E-04	2.18E-07	1.60E-06	2.20E-07	1.47E-06	1.0878E-04
520109.41	4257735.4	5532.5567	0.06183	11.26847	0.0618	13.5215	1.05E-04	1.45E-07	2.31E-05	1.45E-07	2.66E-05	1.5518E-04
519914.02	4258195.16	5527.28621	0.09114	0.78691	0.09209	0.75254	1.05E-04	2.14E-07	1.61E-06	2.16E-07	1.48E-06	1.0859E-04
519911.26	4258429.87	5523.32958	0.1601	0.76488	0.16639	0.73485	1.05E-04	3.76E-07	1.57E-06	3.91E-07	1.45E-06	1.0877E-04
519915.19	4258184.69	5511.52927	0.08949	0.79339	0.09048	0.75806	1.05E-04	2.10E-07	1.63E-06	2.12E-07	1.49E-06	1.0831E-04
519767.72	4258752.54	5500.15061	0.14049	0.25162	0.14418	0.24784	1.05E-04	3.30E-07	5.16E-07	3.38E-07	4.88E-07	1.0622E-04
519800.86	4258692.18	5493.30072	0.15213	0.30664	0.15884	0.30231	1.04E-04	3.57E-07	6.29E-07	3.73E-07	5.95E-07	1.0637E-04

520050.4	4257825.22	5490.44184	0.06434	7.04157	0.06671	4.95263	1.04E-04	1.51E-07	1.44E-05	1.57E-07	9.75E-06	1.2886E-04
519899.36	4258492.84	5488.95467	0.17782	0.66805	0.18639	0.64563	1.04E-04	4.17E-07	1.37E-06	4.38E-07	1.27E-06	1.0783E-04
519905.14	4258323.44	5486.45789	0.11775	0.73813	0.11932	0.71024	1.04E-04	2.76E-07	1.51E-06	2.80E-07	1.40E-06	1.0776E-04
520099.59	4257745.37	5479.06295	0.06182	16.34475	0.06204	17.56877	1.04E-04	1.45E-07	3.35E-05	1.46E-07	3.46E-05	1.7254E-04
519907.96	4258227.62	5476.53414	0.09583	0.75369	0.09676	0.72207	1.04E-04	2.25E-07	1.55E-06	2.27E-07	1.42E-06	1.0752E-04
519906.65	4258238.15	5467.9205	0.09761	0.74568	0.09859	0.71509	1.04E-04	2.29E-07	1.53E-06	2.31E-07	1.41E-06	1.0733E-04
519908.65	4258387.69	5460.97686	0.14068	0.75698	0.1443	0.72712	1.04E-04	3.30E-07	1.55E-06	3.39E-07	1.43E-06	1.0746E-04
520060.25	4257805.25	5459.3937	0.06352	11.16845	0.06534	6.73218	1.04E-04	1.49E-07	2.29E-05	1.53E-07	1.33E-05	1.4023E-04
519795.63	4258699.83	5459.23628	0.14995	0.29719	0.15596	0.2932	1.04E-04	3.52E-07	6.10E-07	3.66E-07	5.77E-07	1.0568E-04
520170.95	4257642.88	5453.89353	0.05827	2.89536	0.0575	2.31914	1.04E-04	1.37E-07	5.94E-06	1.35E-07	4.57E-06	1.1444E-04
520141.21	4257683.56	5452.50819	0.05962	11.84626	0.05918	6.82771	1.04E-04	1.40E-07	2.43E-05	1.39E-07	1.34E-05	1.4166E-04
519905.25	4258248.72	5448.6237	0.09939	0.73499	0.1004	0.70589	1.04E-04	2.33E-07	1.51E-06	2.36E-07	1.39E-06	1.0693E-04
519905.48	4258346.86	5444.62937	0.12478	0.73862	0.12671	0.71069	1.03E-04	2.93E-07	1.51E-06	2.97E-07	1.40E-06	1.0700E-04
520131.41	4257694.33	5431.5384	0.05987	10.61099	0.0595	10.11863	1.03E-04	1.41E-07	2.18E-05	1.40E-07	1.99E-05	1.4520E-04
520109.44	4257725.4	5430.28869	0.06087	11.5751	0.06083	13.75119	1.03E-04	1.43E-07	2.37E-05	1.43E-07	2.71E-05	1.5431E-04
519902.8	4258474.7	5428.78609	0.17317	0.6952	0.18115	0.67071	1.03E-04	4.07E-07	1.43E-06	4.25E-07	1.32E-06	1.0677E-04
519827.12	4258636.77	5427.08861	0.16113	0.36701	0.16955	0.36173	1.03E-04	3.78E-07	7.53E-07	3.98E-07	7.12E-07	1.0540E-04
519903.72	4258259.33	5407.32299	0.10106	0.72252	0.10212	0.69482	1.03E-04	2.37E-07	1.48E-06	2.40E-07	1.37E-06	1.0611E-04
519889.44	4258512.28	5406.55235	0.17644	0.60957	0.18513	0.59116	1.03E-04	4.14E-07	1.25E-06	4.35E-07	1.16E-06	1.0603E-04
519817.12	4258655.32	5401.68744	0.15719	0.34249	0.16506	0.33791	1.03E-04	3.69E-07	7.02E-07	3.88E-07	6.65E-07	1.0480E-04
520050.43	4257815.22	5394.57826	0.06332	6.99578	0.06563	4.88816	1.03E-04	1.49E-07	1.43E-05	1.54E-07	9.62E-06	1.2681E-04
519907.6	4258438.76	5393.22521	0.16112	0.73734	0.16772	0.70963	1.03E-04	3.78E-07	1.51E-06	3.94E-07	1.40E-06	1.0620E-04
519839.85	4258609.46	5391.60087	0.16478	0.40352	0.17369	0.39697	1.02E-04	3.87E-07	8.28E-07	4.08E-07	7.81E-07	1.0489E-04
519908.23	4258412.97	5389.24585	0.15039	0.74848	0.15552	0.71958	1.02E-04	3.53E-07	1.54E-06	3.65E-07	1.42E-06	1.0611E-04
519849.77	4258590.03	5388.73294	0.16776	0.43642	0.17709	0.42767	1.02E-04	3.94E-07	8.95E-07	4.16E-07	8.42E-07	1.0498E-04
519789.09	4258708.1	5382.79455	0.14668	0.28618	0.15204	0.28245	1.02E-04	3.44E-07	5.87E-07	3.57E-07	5.56E-07	1.0416E-04
520099.62	4257735.37	5381.43297	0.06088	16.44561	0.06107	17.75572	1.02E-04	1.43E-07	3.37E-05	1.43E-07	3.50E-05	1.7126E-04
519899.32	4258483.15	5380.60232	0.17351	0.6717	0.18158	0.64894	1.02E-04	4.07E-07	1.38E-06	4.26E-07	1.28E-06	1.0576E-04
519859.69	4258570.59	5380.39528	0.17038	0.47323	0.17942	0.46202	1.02E-04	4.00E-07	9.71E-07	4.21E-07	9.09E-07	1.0497E-04
519807.12	4258673.87	5380.0187	0.15322	0.32049	0.16032	0.31641	1.02E-04	3.60E-07	6.57E-07	3.76E-07	6.23E-07	1.0428E-04
519901.75	4258307.4	5379.89848	0.11194	0.71632	0.11327	0.6897	1.02E-04	2.63E-07	1.47E-06	2.66E-07	1.36E-06	1.0562E-04
519879.52	4258531.72	5376.33212	0.17473	0.55848	0.18332	0.54315	1.02E-04	4.10E-07	1.15E-06	4.30E-07	1.07E-06	1.0525E-04
519905.35	4258371.44	5376.26146	0.13286	0.73739	0.13564	0.70891	1.02E-04	3.12E-07	1.51E-06	3.18E-07	1.40E-06	1.0573E-04
519869.61	4258551.15	5372.27507	0.17265	0.51372	0.18131	0.50042	1.02E-04	4.05E-07	1.05E-06	4.26E-07	9.85E-07	1.0499E-04
520060.28	4257795.25	5364.17896	0.06253	11.09676	0.06429	6.64288	1.02E-04	1.47E-07	2.28E-05	1.51E-07	1.31E-05	1.3810E-04
519902.07	4258270	5357.1414	0.10269	0.7099	0.10377	0.68331	1.02E-04	2.41E-07	1.46E-06	2.44E-07	1.35E-06	1.0512E-04
520170.99	4257632.88	5354.13037	0.05741	2.76676	0.05666	2.19976	1.02E-04	1.35E-07	5.67E-06	1.33E-07	4.33E-06	1.1204E-04
519777.19	4258727.45	5333.2605	0.14186	0.26709	0.1462	0.2635	1.01E-04	3.33E-07	5.48E-07	3.43E-07	5.19E-07	1.0312E-04
520109.48	4257715.4	5328.55012	0.05992	12.08479	0.05987	13.99482	1.01E-04	1.41E-07	2.48E-05	1.41E-07	2.75E-05	1.5390E-04
520161.17	4257642.85	5327.99353	0.0576	3.98627	0.05694	2.83425	1.01E-04	1.35E-07	8.18E-06	1.34E-07	5.58E-06	1.1530E-04
520131.44	4257684.33	5327.58768	0.05893	14.70756	0.05858	10.42492	1.01E-04	1.38E-07	3.02E-05	1.38E-07	2.05E-05	1.5223E-04
519901.48	4258332.33	5325.45035	0.11852	0.71344	0.12008	0.68723	1.01E-04	2.78E-07	1.46E-06	2.82E-07	1.35E-06	1.0460E-04
519899.88	4258280.9	5316.40564	0.10469	0.70308	0.10582	0.67693	1.01E-04	2.46E-07	1.44E-06	2.48E-07	1.33E-06	1.0432E-04
519782.52	4258716.28	5302.61057	0.14336	0.2758	0.14819	0.27222	1.01E-04	3.37E-07	5.66E-07	3.48E-07	5.36E-07	1.0258E-04
520050.46	4257805.22	5300.87792	0.06233	6.94488	0.06457	4.81615	1.01E-04	1.46E-07	1.42E-05	1.52E-07	9.48E-06	1.2478E-04
520121.62	4257694.29	5295.39672	0.05906	12.38549	0.0588	13.06101	1.01E-04	1.39E-07	2.54E-05	1.38E-07	2.57E-05	1.5204E-04
519903.88	4258209.33	5287.07896	0.09106	0.72035	0.09176	0.69047	1.00E-04	2.14E-07	1.48E-06	2.15E-07	1.36E-06	1.0376E-04
519905.07	4258396.38	5286.99712	0.14164	0.73102	0.1457	0.70323	1.00E-04	3.33E-07	1.50E-06	3.42E-07	1.38E-06	1.0405E-04
520099.66	4257725.37	5285.43556	0.05995	16.61795	0.06012	17.73963	1.00E-04	1.41E-07	3.41E-05	1.41E-07	3.49E-05	1.6975E-04
519905.2	4258198.8	5282.65749	0.08945	0.72597	0.09013	0.69535	1.00E-04	2.10E-07	1.49E-06	2.12E-07	1.37E-06	1.0369E-04
519902.47	4258219.9	5281.51115	0.09268	0.71386	0.09342	0.68476	1.00E-04	2.18E-07	1.46E-06	2.19E-07	1.35E-06	1.0364E-04
519901.97	4258355.39	5281.40031	0.12562	0.71535	0.12772	0.68878	1.00E-04	2.95E-07	1.47E-06	3.00E-07	1.36E-06	1.0381E-04
519903.95	4258447.64	5279.8542	0.16198	0.71106	0.16875	0.68549	1.00E-04	3.80E-07	1.46E-06	3.96E-07	1.35E-06	1.0394E-04
519906.43	4258188.31	5272.35569	0.08787	0.73118	0.08856	0.6998	1.00E-04	2.06E-07	1.50E-06	2.08E-07	1.38E-06	1.0351E-04
520060.31	4257785.25	5271.55166	0.06156	11.01676	0.06327	6.54327	1.00E-04	1.45E-07	2.26E-05	1.49E-07	1.29E-05	1.3597E-04
519770.63	4258735.67	5258.43585	0.13871	0.25774	0.14259	0.25427	1.00E-04	3.26E-07	5.29E-07	3.35E-07	5.01E-07	1.0164E-04
519889.4	4258502.58	5257.38938	0.17198	0.6124	0.18014	0.59384	9.99E-05	4.04E-07	1.26E-06	4.23E-07	1.17E-06	1.0319E-04
519904.62	4258421.76	5247.38309	0.15149	0.723	0.15703	0.69608	9.97E-05	3.56E-07	1.48E-06	3.69E-07	1.37E-06	1.0332E-04
519898.13	4258316.2	5237.35146	0.11268	0.69375	0.11398	0.66857	9.96E-05	2.65E-07	1.42E-06	2.68E-07	1.32E-06	1.0282E-04
520109.51	4257705.4	5236.34251	0.05904	12.97293	0.05896	14.90548	9.95E-05	1.39E-07	2.66E-05	1.38E-07	2.93E-05	1.5576E-04
520161.2	4257632.85	5231.76963	0.05676	3.6372	0.05611	2.63495	9.94E-05	1.33E-07	7.46E-06	1.32E-07	5.19E-06	1.1236E-04
519817.12	4258646.05	5231.69251	0.15462	0.34456	0.16242	0.34	9.94E-05	3.63E-07	7.07E-07	3.81E-07	6.69E-07	1.0157E-04
519839.81	4258599.77	5219.38762	0.1615	0.40646	0.17025	0.39947	9.92E-05	3.79E-07	8.34E-07	4.00E-07	7.86E-07	1.0161E-04
519899.28	4258231.21	5219.25772	0.09392	0.69757	0.09472	0.6694	9.92E-05	2.20E-07	1.43E-06	2.22E-07	1.32E-06	1.0240E-04
519879.48	4258522.02	5218.84974	0.17053	0.56125	0.1787	0.54587	9.92E-05	4.00E-07	1.15E-06	4.20E-07	1.07E-06	1.0225E-04
519849.73	4258580.33	5216.80181	0.1642	0.43963	0.17298	0.43035	9.92E-05	3.85E-07	9.02E-07	4.06E-07	8.47E-07	1.0170E-04
519829.89	4258619.2	5214.18465	0.15845	0.37735	0.16672	0.37187	9.91E-05	3.72E-07	7.74E-07	3.91E-07	7.32E-07	1.0138E-04
520050.49	4257795.22	5210.6365	0.06137	6.8861	0.06355	4.73976	9.90E-05	1.44E-07	1.41E-05	1.49E-07	9.33E-06	1.2279E-04
519859.65	4258560.89	5209.82374	0.16655	0.47617	0.17487	0.46482	9.90E-05	3.91E-07	9.77E-07	4.11E-07	9.15E-07	1.0172E-04
519901.81	4258380.04	5206.66578	0.13377	0.71334	0.13692	0.68657	9.90E-05	3.14E-07	1.46E-06	3.21E-07	1.35E-06	1.0242E-04
519869.57	4258541.46	5206.19266	0.16864	0.51643	0.17679	0.50322	9.90E-05	3.96E-07	1.06E-06	4.15E-07	9.91E-07	1.0182E-04
519807.12	4258664.6	5205.83624	0.1508	0.32236	0.15799	0.31836	9.90E-05	3.54E-07	6.61E-07	3.71E-07	6.27E-07	1.0097E-04
519897.91	4258241.76	5202.42018	0.09559	0.68793	0.09642	0.66132	9.89E-05	2.24E-07	1.41E-06	2.26E-07	1.30E-06	1.0205E-04
520121.65	4257684.29	5196.98659	0.05816	16.62935	0.0579	13.67336	9.88E-05	1.37E-07	3.41E-05	1.36E-07	2.69E-05	1.6008E-04
520099.69	4257715.37	5192.78668	0.05906	16.93762	0.0592	17.94943	9.87E-05	1.39E-07	3.47E-05	1.39E-07	3.53E-05	1.6905E-04
520149.08	4257643.96	5186.7296	0.05686	6.74462	0.05631	3.82387	9.86E-05	1.33E-07	1.38E-05	1.32E-07	7.53E-06	1.2022E-04
519900.29	4258456.53	5186.21635	0.16266	0.68597	0.16953	0.66231	9.86E-05	3.82E-07	1.41E-06	3.98E-07	1.30E-06	1.0207E-04
519797.12	4258683.15	5185.51777	0.14698	0.30242	0.15338	0.29873	9.86E-05	3.45E-07	6.20E-07	3.60E-07	5.88E-07	1.0048E-04
519764.04	4258743.81	5183.19988	0.1356	0.24886	0.13908	0.2455	9.85E-05	3.18E-07	5.10E-07	3.27E-07	4.83E-07	1.0016E-04
520060.34	4257775.25	5181.43474	0.06062	10.92579	0.06228	6.43071	9.85E-05	1.42E-07	2.24E-05	1.46E-07	1.27E-05	1.3384E-04
519896.43	4258252.35	5172.4779	0.09725	0.67911	0.09812	0.65358	9.83E-05	2.28E-07	1.39E-06	2.30E-07	1.29E-06	1.0146E-04
519897.82	4258341.21	5163.5989	0.11928	0.69013	0.12093	0.66526	9.82E-05	2.80E-07	1.42E-06	2.84E-07	1.31E-06	1.0144E-04
520109.54	4257695.4	5143.64936	0.05816	14.65391	0.05807	15.99828	9.78E-05	1.37E-07	3.01E-05	1.36E-07	3.15E-05	1.5959E-04
519894.71	4258300.26	5141.5642	0.10732	0.67375	0.10841	0.64951	9.77E-05	2.52E-07	1.38E-06	2.55E-07	1.28E-06	1.0090E-04
519901.5	4258405.07	5132.13555	0.14265	0.70694	0.14716	0.68099	9.76E-05	3.35E-07	1.45E-06	3.45E-07	1.34E-06	1.0102E-04
519898.46	4258363.92	5131.93006	0.12661	0.69488	0.12901	0.66924	9.75E-05	2.97E-07	1.43E-06	3.03E-07	1.32E-06	1.0089E-04
519889.36	4258492.89	5126.46323	0.16774	0.61509	0.17537	0.59637	9.74E-05	3.94E-07	1.26E-06	4.12E-07	1.17E-06	1.0069E-04
519894.84	4258263	5124.80306	0.0988	0.66776	0.09969	0.64342	9.74E-05	2.32E-07	1.37E-06	2.34E-07	1.27E-06	1.0052E-04
520050.52	4257785.22	5123.30913	0.06044	6.81865	0.06256	4.65281	9.74E-05	1.42E-07	1.40E-05	1.47E-07	9.16E-06	1.2082E-04
519896.63	4258465.41	5116.01031	0.16327	0.66249	0.17027	0.64043	9.72E-05	3.83E-07	1.36E-06	4.00E-07	1.26E-06	1.0065E-04
519901	4258430.54	5112.65063	0.15235	0.69778	0.15815	0.67303	9.72E-05	3.58E-07	1.43E-06	3.71E-07	1.32E-06	1.0067E-04
520099.72	4257705.37	5101.71724	0.05818	17.5361	0.0583	18.04929	9.70E-05	1.37E-07	3.60E-05	1.37E-07	3.55E-05	1.6874E-04
520149.12	4257633.96	5095.83945	0.05604	5.26393	0.05549	3.38387	9.69E-05	1.32E-07	1.08E-05	1.30E-07	6.66E-06	1.1458E-04
520060.38	4257765.25	5093.01715	0.05971	10.83271	0.06131	6.30497	9.68E-05	1.40E-07	2.22E-05	1.44E-07	1.24E-05	1.3172E-04
519894.51	4258325.01	5090.75504	0.11341	0.67209	0.11472	0.64824	9.68E-05	2.66E-07	1.38E-06	2.69E-07	1.28E-06	9.9956E-05
519893.11	4258273.7	5082.02602	0.10055	0.65994	0.10145	0.63634	9.66E-05	2.36E-07	1.35E-06	2.38E-07	1.25E-06	9.9680E-05
519785.45	4258699.45	5075.2046	0.14149	0.28247	0.14693	0.27908	9.65E-05	3.32E-07	5.79E-07	3.45E-07	5.49E-07	9.8276E-05
519817.12	4258636.77	5073.6588	0.15208	0.34659	0.15976	0.34203	9.64E-05	3.57E-07	7.11E-07	3.75E-07	6.73E-07	9.8557E-05
519879.44	4258512.32	5073.0554	0.16648	0.56398	0.17427	0.54845	9.64E-05	3.91E-07	1.16E-06	4.09E-07	1.08E-06	9.9466E-05
520139.3	4257643.93	5066.13413	0.05617	9.17068	0.05569	4.83437	9.63E-05	1.32E-07	1.88E-05	1.31E-07	9.52E-06	1.2489E-04
519892.98	4258474.3	5061.46595	0.16365	0.63985	0.17074	0.61936	9.62E-05	3.84E-07	1.31E-06	4.01E-07	1.22E-06	9.9526E-05
519839.77	4258590.07	5058.01824	0.15824	0.40943	0.16669	0.4019	9.61E-05	3.71E-07	8.40E-07	3.91E-07	7.91E-07	9.8537E-05
519849.69	4258570.63	5055.58624	0.16067	0.44254	0.1688	0.43291	9.61E-05	3.77E-07	9.08E-07	3.96E-07	8.52E-07	9.8631E-05
519829.85	4258609.51	5053.87735	0.15548	0.37972	0.1636	0.37409	9.61E-05	3.65E-07	7.79E-07	3.84E-07	7.36E-07	9.8329E-05
520109.57	4257685.4	5051.24348	0.05729	18.11687	0.05719	16.14073	9.60E-05	1.34E-07	3.72E-05	1.34E-07	3.18E-05	1.6521E-04
519869.53	4258531.76	5050.98463	0.16477	0.51894	0.1725	0.5058	9.60E-05	3.87E-07	1.06E-06	4.05E-07	9.96E-07	9.8862E-05
519859.61	4258551.2	5050.06105	0.16282	0.47876	0.17055	0.46742	9.60E-05	3.82E-07	9.82E-07	4.00E-07	9.20E-07	9.8677E-05
519896.37	4258202.44	5046.52187	0.08775	0.67106	0.08826	0.64371	9.59E-05	2.06E-07	1.38E-06	2.07E-07	1.27E-06	9.8982E-05
519898.27	4258388.65	5045.23844	0.13467	0.69031	0.13824	0.66525	9.59E-05	3.16E-07	1.42E-06	3.25E-07	1.31E-06	9.9267E-05
519807.12	4258655.32	5045.12689	0.14845	0.32421	0.15563	0.32026	9.59E-05	3.49E-07	6.65E-07	3.65E-07	6.30E-07	9.7908E-05
519895	4258213	5044.96186	0.08929	0.66667	0.08985	0.63993	9.59E-05	2.10E-07	1.37E-06	2.11E-07	1.26E-06	9.8943E-05
519897.66	4258191.92	5041.85514	0.08623	0.67543	0.08671	0.64737	9.58E-05	2.02E-07	1.39E-06	2.04E-07	1.27E-06	9.8902E-05
520050.56	4257775.22	5038.20556	0.05953	6.7432	0.06159	4.55385	9.58E-05	1.40E-07	1.38E-05	1.45E-07	8.96E-06	1.1885E-04
519893.52	4258223.6	5032.12637	0.0908	0.66181	0.09144	0.63541	9.57E-05	2.13E-07	1.36E-06	2.15E-07	1.25E-06	9.8688E-05
519773.47	4258718.6	5023.96459	0.13689	0.26374	0.14118	0.26059	9.55E-05	3.21E-07	5.41E-07	3.31E-07	5.13E-07	9.7203E-05
519797.12	4258673.87	5020.42155	0.14477	0.30406	0.15126	0.30053	9.54E-05	3.40E-07	6.24E-07	3.55E-07	5.92E-07	9.7339E-05
519889.32	4258483.19	5015.82869	0.16376	0.6179	0.17093	0.599	9.53E-05	3.84E-07	1.27E-06	4.01E-07	1.18E-06	9.8574E-05
520099.75	4257695.37	5013.91724	0.05733	18.73064	0.05742	18.30026	9.53E-05	1.35E-07	3.84E-05	1.35E-07	3.60E-05	1.7001E-04
520060.41	4257755.25	5006.5467	0.05881	10.7165	0.06037	6.15462	9.52E-05	1.38E-07	2.20E-05	1.42E-07	1.21E-05	1.2954E-04
519778.9	4258707.69	5005.64155	0.13847	0.2723	0.14328	0.26914	9.51E-05	3.25E-07	5.58E-07	3.36E-07	5.30E-07	9.6898E-05
519891.12	4258308.98	5004.655	0.10795	0.65265	0.10901	0.62985	9.51E-05	2.53E-07	1.34E-06	2.56E-07	1.24E-06	9.8217E-05
519897.39	4258439.32	4999.58673	0.15313	0.67401	0.1591	0.65114	9.50E-05	3.60E-07	1.38E-06	3.74E-07	1.28E-06	9.8430E-05
519894.17	4258350.1	4998.92315	0.11998	0.66736	0.12181	0.64382	9.50E-05	2.82E-07	1.37E-06	2.86E-07	1.27E-06	9.8224E-05
519897.92	4258413.76	4989.16585	0.14357	0.68352	0.14845	0.65945	9.48E-05	3.37E-07	1.40E-06	3.49E-07	1.30E-06	9.8221E-05
520139.33	4257633.93	4978.67429	0.05537	6.42921	0.05489	4.0221	9.46E-05	1.30E-07	1.32E-05	1.29E-07	7.92E-06	1.1600E-04
519890.59	4258234.79	4973.43861	0.09203	0.646	0.09271	0.6212	9.45E-05	2.16E-07	1.32E-06	2.18E-07	1.22E-06	9.7518E-05
519894.95	4258372.45	4963.07302	0.1273	0.67179	0.13002	0.64796	9.43E-05	2.99E-07	1.38E-06	3.05E-07	1.28E-06	9.7596E-05
519766.94	4258726.88	4956.53647	0.13393	0.25464	0.13775	0.25159	9.42E-05	3.14E-07	5.22E-07	3.23E-07	4.95E-07	9.5870E-05
520129.53	4257644.69	4954.94196	0.05554	10.86743	0.05513	5.82343	9.42E-05	1.30E-07	2.23E-05	1.29E-07	1.15E-05	1.2820E-04
520050.59	4257765.22	4954.64642	0.05865	6.65111	0.06065	4.43773	9.42E-05	1.38E-07	1.36E-05	1.42E-07	8.74E-06	1.1684E-04
519889.16	4258245.37	4949.56427	0.0936	0.638	0.09431	0.61434	9.41E-05	2.20E-07	1.31E-06	2.21E-07	1.21E-06	9.7041E-05
519890.89	4258333.81	4939.75483	0.1141	0.651	0.1155	0.6284	9.39E-05	2.68E-07	1.34E-06	2.71E-07	1.24E-06	9.7007E-05
519879.4	4258502.62	4934.56208	0.16252	0.56645	0.16989	0.55077	9.38E-05	3.82E-07	1.16E-06	3.99E-07	1.08E-06	9.6823E-05
520099.78	4257685.37	4927.36788	0.05649	21.40745	0.05656	17.37709	9.37E-05	1.33E-07	4.39E-05	1.33E-07	3.42E-05	1.7204E-04
520060.44	4257745.25	4922.76009	0.05794	10.57235	0.05945	5.97246	9.36E-05	1.36E-07	2.17E-05	1.40E-07	1.18E-05	1.2729E-04
519887.66	4258293.12	4918.49098	0.103	0.63567	0.10391	0.61312	9.35E-05	2.42E-07	1.30E-06	2.44E-07	1.21E-06	9.6488E-05
519887.62	4258255.99	4909.9268	0.09513	0.62925	0.09586	0.60669	9.33E-05	2.23E-07	1.29E-06	2.25E-07	1.19E-06	9.6262E-05
519839.73	4258580.37	4906.36282	0.15502	0.41215	0.16294	0.40417	9.33E-05	3.64E-07	8.45E-07	3.83E-07	7.96E-07	9.5648E-05
519869.48	4258522.06	4905.52177	0.16099	0.52104	0.16832	0.50801	9.32E-05	3.78E-07	1.07E-06	3.95E-07	1.00E-06	9.6087E-05
519849.65	4258560.94	4903.46845	0.15722	0.44501	0.16469	0.43528	9.32E-05	3.69E-07	9.13E-07	3.87E-07	8.57E-07	9.5731E-05
519829.81	4258599.81	4902.88962	0.15252	0.38229	0.16048	0.37626	9.32E-05	3.58E-07	7.84E-07	3.77E-07	7.41E-07	9.5455E-05
519893.78	4258448.1	4900.70855	0.15371	0.65113	0.15978	0.63002	9.32E-05	3.61E-07	1.34E-06	3.75E-07	1.24E-06	9.6465E-05
519859.57	4258541.5	4899.50746	0.1592	0.4811	0.16648	0.46984	9.31E-05	3.74E-07	9.87E-07	3.91E-07	9.25E-07	9.5807E-05
519807.12	4258646.05	4896.2286	0.14614	0.32603	0.15323	0.32209	9.31E-05	3.43E-07	6.69E-07	3.60E-07	6.34E-07	9.5074E-05
519819.89	4258619.25	4891.11679	0.14969	0.35589	0.15724	0.35117	9.30E-05	3.51E-07	7.30E-07	3.69E-07	6.91E-07	9.5113E-05
519894.73	4258397.25	4889.82136	0.13548	0.66768	0.13944	0.64452	9.29E-05	3.18E-07	1.37E-06	3.27E-07	1.27E-06	9.6230E-05
519760.37	4258735.08	4888.82848	0.131	0.246	0.1344	0.24302	9.29E-05	3.08E-07	5.05E-07	3.16E-07	4.78E-07	9.4534E-05
520050.62	4257755.22	4872.35194	0.05778	6.53993	0.05973	4.30174	9.26E-05	1.36E-07	1.34E-05	1.40E-07	8.47E-06	1.1477E-04
520129.56	4257634.69	4870.14298	0.05475	7.36893	0.05434	4.6029	9.26E-05	1.29E-07	1.51E-05	1.28E-07	9.06E-06	1.1700E-04
519887.53	4258317.71	4867.63233	0.1086	0.63304	0.10968	0.61138	9.25E-05	2.55E-07	1.30E-06	2.57E-07	1.20E-06	9.5539E-05
519797.12	4258664.6	4867.08882	0.14259	0.30571	0.14915	0.30224	9.25E-05	3.35E-07	6.27E-07	3.50E-07	5.95E-07	9.4421E-05
519885.96	4258266.67	4863.96653	0.09668	0.62087	0.09741	0.59913	9.25E-05	2.27E-07	1.27E-06	2.29E-07	1.18E-06	9.5364E-05
519894.35	4258422.45	4854.41331	0.14431	0.66049	0.14943	0.63845	9.23E-05	3.39E-07	1.35E-06	3.51E-07	1.26E-06	9.5575E-05
519890.51	4258358.99	4850.08206	0.12094	0.64819	0.12309	0.62575	9.22E-05	2.84E-07	1.33E-06	2.89E-07	1.23E-06	9.5325E-05
520060.47	4257735.25	4838.22676	0.05707	10.40157	0.05855	5.73766	9.20E-05	1.34E-07	2.13E-05	1.37E-07	1.13E-05	1.2486E-04
520119.74	4257644.66	4837.318	0.05483	11.73883	0.0545	6.34923	9.19E-05	1.29E-07	2.41E-05	1.28E-07	1.25E-05	1.2878E-04
519890.16	4258456.88	4828.21624	0.15427	0.62981	0.16044	0.61008	9.18E-05	3.62E-07	1.29E-06	3.77E-07	1.20E-06	9.5007E-05
519888.9	4258195.54	4826.07505	0.08465	0.62701	0.08501	0.60165	9.17E-05	1.99E-07	1.29E-06	2.00E-07	1.18E-06	9.4604E-05
519887.55	4258206.08	4822.09345	0.08607	0.62231	0.08649	0.59771	9.17E-05	2.02E-07	1.28E-06	2.03E-07	1.18E-06	9.4517E-05
519891.44	4258380.98	4817.50796	0.12821	0.65203	0.13135	0.62951	9.16E-05	3.01E-07	1.34E-06	3.08E-07	1.24E-06	9.4758E-05
519886.11	4258216.67	4813.75052	0.08751	0.61989	0.08802	0.59545	9.15E-05	2.05E-07	1.27E-06	2.07E-07	1.17E-06	9.4356E-05
519879.36	4258492.93	4809.35629	0.15869	0.56872	0.16561	0.55291	9.14E-05	3.73E-07	1.17E-06	3.89E-07	1.09E-06	9.4433E-05
519781.81	4258690.8	4796.12534	0.13662	0.27872	0.14214	0.27557	9.12E-05	3.21E-07	5.72E-07	3.34E-07	5.42E-07	9.2934E-05
519884.57	4258227.29	4794.05464	0.08894	0.61325	0.0895	0.58974	9.11E-05	2.09E-07	1.26E-06	2.10E-07	1.16E-06	9.3964E-05
520050.65	4257745.22	4792.34865	0.05694	6.40236	0.05884	4.1387	9.11E-05	1.34E-07	1.31E-05	1.38E-07	8.15E-06	1.1264E-04
519884.1	4258301.78	4791.67599	0.10357	0.61544	0.10444	0.59445	9.11E-05	2.43E-07	1.26E-06	2.45E-07	1.17E-06	9.4002E-05
519887.27	4258342.61	4788.12954	0.11478	0.63082	0.11636	0.60933	9.10E-05	2.69E-07	1.29E-06	2.73E-07	1.20E-06	9.4050E-05
519869.44	4258512.36	4770.58189	0.15737	0.5234	0.1644	0.51024	9.07E-05	3.69E-07	1.07E-06	3.86E-07	1.00E-06	9.3513E-05
519886.55	4258465.67	4769.32688	0.15464	0.60926	0.16089	0.59089	9.07E-05	3.63E-07	1.25E-06	3.78E-07	1.16E-06	9.3810E-05
519839.69	4258570.67	4763.0889	0.15183	0.41483	0.1592	0.40647	9.05E-05	3.56E-07	8.51E-07	3.74E-07	8.00E-07	9.2919E-05
519829.77	4258590.11	4760.97176	0.14956	0.38493	0.15726	0.37839	9.05E-05	3.51E-07	7.89E-07	3.69E-07	7.45E-07	9.2752E-05
519849.61	4258551.24	4759.38889	0.15385	0.44722	0.16078	0.43752	9.05E-05	3.61E-07	9.17E-07	3.77E-07	8.61E-07	9.2984E-05
520060.5	4257725.25	4758.89458	0.05625	10.16386	0.05768	5.45139	9.05E-05	1.32E-07	2.08E-05	1.35E-07	1.07E-05	1.2230E-04
519807.12	4258636.77	4757.7101	0.14383	0.32781	0.15082	0.32387	9.04E-05	3.38E-07	6.72E-07	3.54E-07	6.38E-07	9.2437E-05
519859.53	4258531.8	4757.49235	0.1557	0.48323	0.16263	0.47204	9.04E-05	3.66E-07	9.91E-07	3.82E-07	9.29E-07	9.3099E-05
519891.19	4258405.86	4756.87477	0.13638	0.64709	0.14071	0.6254	9.04E-05	3.20E-07	1.33E-06	3.30E-07	1.23E-06	9.3628E-05
520119.77	4257634.66	4756.32202	0.05406	7.8718	0.05373	4.83563	9.04E-05	1.27E-07	1.61E-05	1.26E-07	9.52E-06	1.1633E-04
519819.85	4258609.55	4750.92249	0.14701	0.3579	0.1544	0.35307	9.03E-05	3.45E-07	7.34E-07	3.62E-07	6.95E-07	9.2443E-05
519769.75	4258709.75	4740.32326	0.1322	0.26034	0.13654	0.25753	9.01E-05	3.10E-07	5.34E-07	3.21E-07	5.07E-07	9.1777E-05
519890.77	4258431.14	4739.37474	0.14498	0.63875	0.15025	0.61843	9.01E-05	3.40E-07	1.31E-06	3.53E-07	1.22E-06	9.3307E-05
519881.91	4258238.38	4739.11882	0.09016	0.60043	0.09074	0.57827	9.01E-05	2.12E-07	1.23E-06	2.13E-07	1.14E-06	9.2877E-05
519775.28	4258699.1	4733.27977	0.13382	0.26878	0.13871	0.26591	9.00E-05	3.14E-07	5.51E-07	3.26E-07	5.23E-07	9.1686E-05
519883.94	4258326.43	4728.14673	0.10924	0.61421	0.11041	0.59356	8.99E-05	2.56E-07	1.26E-06	2.59E-07	1.17E-06	9.2817E-05
519882.94	4258474.45	4725.57925	0.15486	0.58956	0.1612	0.57247	8.98E-05	3.64E-07	1.21E-06	3.78E-07	1.13E-06	9.2903E-05
519797.12	4258655.32	4725.30273	0.14046	0.30735	0.147	0.3039	8.98E-05	3.30E-07	6.30E-07	3.45E-07	5.98E-07	9.1723E-05
520050.68	4257735.22	4713.08409	0.0561	6.23067	0.05796	3.94142	8.96E-05	1.32E-07	1.28E-05	1.36E-07	7.76E-06	1.1039E-04
519880.42	4258248.98	4707.72097	0.09163	0.59311	0.09222	0.57191	8.95E-05	2.15E-07	1.22E-06	2.17E-07	1.13E-06	9.2259E-05
519880.46	4258286.36	4706.08036	0.09898	0.59826	0.0997	0.57757	8.95E-05	2.32E-07	1.23E-06	2.34E-07	1.14E-06	9.2284E-05
520107.66	4257645.77	4704.74759	0.05401	13.21639	0.05385	6.53769	8.94E-05	1.27E-07	2.71E-05	1.26E-07	1.29E-05	1.2966E-04
519886.85	4258367.87	4704.42742	0.12184	0.6293	0.12438	0.60787	8.94E-05	2.86E-07	1.29E-06	2.92E-07	1.20E-06	9.2488E-05

519879.32	4258483.23	4700.47527	0.15505	0.57095	0.16153	0.555	8.93E-05	3.64E-07	1.17E-06	3.79E-07	1.09E-06	9.2354E-05
520060.53	4257715.25	4681.49453	0.05544	9.83815	0.05683	5.07588	8.90E-05	1.30E-07	2.02E-05	1.33E-07	9.99E-06	1.1942E-04
519763.24	4258718.09	4680.8441	0.12947	0.25142	0.13326	0.24877	8.90E-05	3.04E-07	5.16E-07	3.13E-07	4.90E-07	9.0597E-05
519887.93	4258389.51	4674.44912	0.12901	0.63214	0.13253	0.61108	8.89E-05	3.03E-07	1.30E-06	3.11E-07	1.20E-06	9.1966E-05
519880.54	4258310.43	4663.87262	0.10417	0.59771	0.10506	0.57773	8.87E-05	2.45E-07	1.23E-06	2.47E-07	1.14E-06	9.1506E-05
519878.81	4258259.63	4661.41098	0.09306	0.585	0.09364	0.56476	8.86E-05	2.18E-07	1.20E-06	2.20E-07	1.11E-06	9.1355E-05
519887.2	4258439.83	4647.24839	0.14564	0.61857	0.15103	0.59958	8.83E-05	3.42E-07	1.27E-06	3.55E-07	1.18E-06	9.1481E-05
519869.4	4258502.67	4645.89149	0.15392	0.52577	0.16065	0.51239	8.83E-05	3.61E-07	1.08E-06	3.77E-07	1.01E-06	9.1135E-05
520050.71	4257725.22	4637.13174	0.0553	6.00652	0.05711	3.69932	8.81E-05	1.30E-07	1.23E-05	1.34E-07	7.28E-06	1.0801E-04
519883.65	4258351.41	4634.06165	0.11536	0.61074	0.11722	0.59048	8.81E-05	2.71E-07	1.25E-06	2.75E-07	1.16E-06	9.1046E-05
519887.65	4258414.47	4630.07672	0.13712	0.62657	0.14169	0.60654	8.80E-05	3.22E-07	1.29E-06	3.33E-07	1.19E-06	9.1143E-05
520107.69	4257635.77	4628.28664	0.05327	8.4976	0.05309	4.77496	8.80E-05	1.25E-07	1.74E-05	1.25E-07	9.40E-06	1.1505E-04
519839.65	4258560.98	4626.83009	0.1487	0.41698	0.15548	0.40853	8.79E-05	3.49E-07	8.55E-07	3.65E-07	8.04E-07	9.0321E-05
519829.73	4258580.41	4626.54466	0.14664	0.38739	0.15388	0.3804	8.79E-05	3.44E-07	7.95E-07	3.61E-07	7.49E-07	9.0191E-05
519859.48	4258522.1	4623.23369	0.15231	0.48519	0.15894	0.47403	8.79E-05	3.58E-07	9.95E-07	3.73E-07	9.33E-07	9.0538E-05
519849.57	4258541.54	4622.45572	0.15057	0.44926	0.15711	0.43962	8.79E-05	3.53E-07	9.21E-07	3.69E-07	8.65E-07	9.0374E-05
519880.14	4258199.16	4622.21412	0.08309	0.58416	0.0834	0.56104	8.79E-05	1.95E-07	1.20E-06	1.96E-07	1.10E-06	9.0553E-05
519784.63	4258673.69	4620.12954	0.13519	0.28526	0.14098	0.28229	8.78E-05	3.17E-07	5.85E-07	3.31E-07	5.56E-07	8.9609E-05
519756.7	4258726.35	4618.30897	0.12668	0.24302	0.13009	0.2404	8.78E-05	2.97E-07	4.98E-07	3.05E-07	4.73E-07	8.9360E-05
519819.81	4258599.85	4618.19252	0.14431	0.3602	0.15158	0.35498	8.78E-05	3.39E-07	7.39E-07	3.56E-07	6.99E-07	8.9916E-05
519878.73	4258209.72	4610.99204	0.08443	0.58003	0.0848	0.55762	8.76E-05	1.98E-07	1.19E-06	1.99E-07	1.10E-06	9.0331E-05
520060.56	4257705.25	4606.37598	0.05466	9.36872	0.05601	4.59109	8.76E-05	1.28E-07	1.92E-05	1.31E-07	9.04E-06	1.1607E-04
519809.89	4258619.29	4600.10303	0.14167	0.33622	0.14859	0.33212	8.74E-05	3.33E-07	6.90E-07	3.49E-07	6.54E-07	8.9464E-05
519797.12	4258646.05	4594.75738	0.13836	0.30895	0.14482	0.30551	8.73E-05	3.25E-07	6.34E-07	3.40E-07	6.01E-07	8.9238E-05
519877.23	4258220.33	4590.66411	0.08574	0.57676	0.08621	0.55457	8.73E-05	2.01E-07	1.18E-06	2.02E-07	1.09E-06	8.9938E-05
520097.87	4257645.74	4589.17209	0.05325	13.38336	0.05328	5.66338	8.72E-05	1.25E-07	2.74E-05	1.25E-07	1.11E-05	1.2608E-04
519880.35	4258335.16	4589.13129	0.1099	0.59645	0.11126	0.57675	8.72E-05	2.58E-07	1.22E-06	2.61E-07	1.14E-06	9.0109E-05
519876.77	4258295.33	4587.11759	0.09958	0.5811	0.1003	0.56139	8.72E-05	2.34E-07	1.19E-06	2.35E-07	1.11E-06	8.9959E-05
519883.62	4258448.52	4571.37316	0.14615	0.59916	0.15164	0.58139	8.69E-05	3.43E-07	1.23E-06	3.56E-07	1.14E-06	8.9966E-05
519875.62	4258230.98	4566.52265	0.08711	0.56853	0.08757	0.54773	8.68E-05	2.05E-07	1.17E-06	2.06E-07	1.08E-06	8.9456E-05
520050.74	4257715.22	4563.54471	0.05452	5.70967	0.05628	3.40611	8.67E-05	1.28E-07	1.17E-05	1.32E-07	6.70E-06	1.0542E-04
519883.2	4258376.76	4556.71447	0.12262	0.60989	0.12555	0.58984	8.66E-05	2.88E-07	1.25E-06	2.95E-07	1.16E-06	8.9609E-05
519778.17	4258682.15	4554.94664	0.13235	0.27498	0.13769	0.27221	8.66E-05	3.11E-07	5.64E-07	3.23E-07	5.36E-07	8.8315E-05
520107.72	4257625.77	4552.71353	0.05254	5.96601	0.05234	3.61165	8.65E-05	1.23E-07	1.22E-05	1.23E-07	7.11E-06	1.0613E-04
519884.42	4258398.05	4538.06693	0.12973	0.6126	0.13356	0.59314	8.63E-05	3.05E-07	1.26E-06	3.14E-07	1.17E-06	8.9303E-05
519876.98	4258319.08	4532.69976	0.10474	0.58049	0.10573	0.56144	8.62E-05	2.46E-07	1.19E-06	2.48E-07	1.11E-06	8.8948E-05
520060.59	4257695.25	4532.40613	0.05389	8.67277	0.0552	3.99918	8.62E-05	1.27E-07	1.78E-05	1.30E-07	7.87E-06	1.1207E-04
519869.36	4258492.97	4529.30533	0.15048	0.52773	0.15683	0.5142	8.61E-05	3.53E-07	1.08E-06	3.68E-07	1.01E-06	8.8910E-05
519884.11	4258423.07	4515.20061	0.13773	0.60676	0.14246	0.58827	8.58E-05	3.23E-07	1.24E-06	3.34E-07	1.16E-06	8.8886E-05
519873.22	4258241.96	4514.93519	0.08831	0.55911	0.08877	0.5392	8.58E-05	2.07E-07	1.15E-06	2.08E-07	1.06E-06	8.8445E-05
520097.9	4257635.74	4514.80896	0.05251	8.15428	0.05253	4.11655	8.58E-05	1.23E-07	1.67E-05	1.23E-07	8.10E-06	1.1089E-04
519873.42	4258279.22	4512.69717	0.09517	0.5637	0.09573	0.54466	8.58E-05	2.23E-07	1.16E-06	2.25E-07	1.07E-06	8.8455E-05
519880.05	4258457.2	4512.1099	0.14655	0.58064	0.15213	0.56399	8.58E-05	3.44E-07	1.19E-06	3.57E-07	1.11E-06	8.8769E-05
519880.02	4258360.21	4501.27199	0.11631	0.59477	0.11853	0.57546	8.56E-05	2.73E-07	1.22E-06	2.78E-07	1.13E-06	8.8465E-05
519829.69	4258570.72	4498.74189	0.14374	0.38968	0.15047	0.38237	8.55E-05	3.37E-07	7.99E-07	3.53E-07	7.53E-07	8.7756E-05
519859.44	4258512.41	4497.46069	0.14904	0.48715	0.15543	0.47592	8.55E-05	3.50E-07	9.99E-07	3.65E-07	9.37E-07	8.8139E-05
519839.61	4258551.28	4496.30002	0.14564	0.41886	0.15193	0.41045	8.55E-05	3.42E-07	8.59E-07	3.57E-07	8.08E-07	8.7832E-05
519819.77	4258590.15	4492.7195	0.14163	0.36249	0.14864	0.35681	8.54E-05	3.33E-07	7.43E-07	3.49E-07	7.02E-07	8.7526E-05
519849.53	4258531.84	4492.01431	0.1474	0.45115	0.15366	0.44155	8.54E-05	3.46E-07	9.25E-07	3.61E-07	8.69E-07	8.7886E-05
520050.77	4257705.22	4490.79654	0.05376	5.31856	0.05547	3.06676	8.54E-05	1.26E-07	1.09E-05	1.30E-07	6.04E-06	1.0256E-04
519771.67	4258690.5	4487.7496	0.12948	0.26527	0.13442	0.26262	8.53E-05	3.04E-07	5.44E-07	3.16E-07	5.17E-07	8.6985E-05
519809.85	4258609.59	4477.82481	0.13923	0.33805	0.14603	0.33381	8.51E-05	3.27E-07	6.93E-07	3.43E-07	6.57E-07	8.7135E-05
519766.03	4258700.91	4476.51688	0.12758	0.25692	0.13216	0.25423	8.51E-05	3.00E-07	5.27E-07	3.10E-07	5.00E-07	8.6728E-05
519871.67	4258252.59	4475.38355	0.08969	0.5525	0.09014	0.53337	8.51E-05	2.11E-07	1.13E-06	2.12E-07	1.05E-06	8.7674E-05
519797.12	4258636.77	4473.7978	0.13627	0.3105	0.14263	0.30707	8.50E-05	3.20E-07	6.37E-07	3.35E-07	6.04E-07	8.6935E-05
519876.47	4258465.89	4464.86384	0.14677	0.56265	0.15244	0.54713	8.49E-05	3.45E-07	1.15E-06	3.58E-07	1.08E-06	8.7802E-05
519873.09	4258304.29	4459.83184	0.10011	0.56327	0.10087	0.54473	8.48E-05	2.35E-07	1.16E-06	2.37E-07	1.07E-06	8.7473E-05
520060.63	4257685.25	4459.24021	0.05314	7.6374	0.05441	3.37605	8.48E-05	1.25E-07	1.57E-05	1.28E-07	6.65E-06	1.0732E-04
519787.36	4258656.36	4457.9352	0.13352	0.29196	0.13949	0.28891	8.47E-05	3.13E-07	5.99E-07	3.27E-07	5.69E-07	8.6546E-05
519876.76	4258343.88	4448.17379	0.11051	0.5789	0.11214	0.56021	8.46E-05	2.59E-07	1.19E-06	2.63E-07	1.10E-06	8.7364E-05
520097.93	4257625.74	4442.50073	0.0518	5.53467	0.0518	3.12906	8.44E-05	1.22E-07	1.14E-05	1.22E-07	6.16E-06	1.0220E-04
519872.9	4258474.58	4435.41964	0.14696	0.54565	0.15276	0.53112	8.43E-05	3.45E-07	1.12E-06	3.59E-07	1.05E-06	8.7178E-05
519759.55	4258709.31	4426.40771	0.12517	0.24824	0.12912	0.2458	8.41E-05	2.94E-07	5.09E-07	3.03E-07	4.84E-07	8.5728E-05
519871.37	4258202.78	4422.60091	0.08152	0.5447	0.0818	0.52368	8.41E-05	1.91E-07	1.12E-06	1.92E-07	1.03E-06	8.6597E-05
519869.32	4258483.27	4420.58663	0.14711	0.52945	0.15306	0.51583	8.40E-05	3.45E-07	1.09E-06	3.59E-07	1.02E-06	8.6833E-05
520050.81	4257695.22	4420.5163	0.05301	4.81166	0.05468	2.70871	8.40E-05	1.24E-07	9.87E-06	1.28E-07	5.33E-06	9.9479E-05
519880.57	4258431.68	4420.07131	0.1383	0.58817	0.14314	0.57095	8.40E-05	3.25E-07	1.21E-06	3.36E-07	1.12E-06	8.7008E-05
519880.91	4258406.58	4420.04466	0.13047	0.59461	0.13457	0.57642	8.40E-05	3.06E-07	1.22E-06	3.16E-07	1.13E-06	8.6993E-05
519879.54	4258385.65	4416.96941	0.12338	0.59131	0.12668	0.57265	8.40E-05	2.90E-07	1.21E-06	2.97E-07	1.13E-06	8.6886E-05
519869.91	4258213.37	4405.85927	0.08277	0.54202	0.08312	0.52132	8.37E-05	1.94E-07	1.11E-06	1.95E-07	1.03E-06	8.6275E-05
519873.42	4258327.74	4402.23871	0.10533	0.56431	0.10651	0.54611	8.37E-05	2.47E-07	1.16E-06	2.50E-07	1.08E-06	8.6408E-05
519869.76	4258288.1	4402.16979	0.09573	0.54947	0.09632	0.53099	8.37E-05	2.25E-07	1.13E-06	2.26E-07	1.05E-06	8.6300E-05
519780.97	4258664.98	4395.85791	0.13084	0.28134	0.13647	0.27853	8.36E-05	3.07E-07	5.77E-07	3.20E-07	5.48E-07	8.5310E-05
519868.35	4258224	4381.77522	0.08404	0.53669	0.08441	0.51678	8.33E-05	1.97E-07	1.10E-06	1.98E-07	1.02E-06	8.5803E-05
519859.4	4258502.71	4379.62971	0.14586	0.48898	0.15197	0.47762	8.32E-05	3.42E-07	1.00E-06	3.57E-07	9.40E-07	8.5891E-05
519829.65	4258561.02	4375.67471	0.1409	0.39145	0.14706	0.3841	8.32E-05	3.31E-07	8.03E-07	3.45E-07	7.56E-07	8.5409E-05
519819.73	4258580.46	4373.37667	0.13896	0.36472	0.14559	0.35859	8.31E-05	3.26E-07	7.48E-07	3.42E-07	7.06E-07	8.5252E-05
519753.03	4258717.62	4372.10832	0.12265	0.23995	0.12608	0.23767	8.31E-05	2.88E-07	4.92E-07	2.96E-07	4.68E-07	8.4650E-05
519839.57	4258541.58	4371.23129	0.14266	0.42059	0.1486	0.41223	8.31E-05	3.35E-07	8.63E-07	3.49E-07	8.11E-07	8.5447E-05
519849.48	4258522.15	4367.81373	0.14433	0.4529	0.15036	0.4433	8.30E-05	3.39E-07	9.29E-07	3.53E-07	8.73E-07	8.5518E-05
519876.4	4258369.02	4366.61948	0.11709	0.57792	0.11969	0.55963	8.30E-05	2.75E-07	1.19E-06	2.81E-07	1.10E-06	8.5844E-05
519809.81	4258599.89	4360.87578	0.13678	0.34007	0.14346	0.33547	8.29E-05	3.21E-07	6.97E-07	3.37E-07	6.60E-07	8.4908E-05
520050.84	4257685.22	4349.84048	0.05227	4.20248	0.05391	2.36895	8.27E-05	1.23E-07	8.62E-06	1.27E-07	4.66E-06	9.6214E-05
519866.67	4258234.68	4349.36172	0.08531	0.52975	0.08567	0.51086	8.27E-05	2.00E-07	1.09E-06	2.01E-07	1.01E-06	8.5167E-05
519877.03	4258440.28	4339.01346	0.13874	0.57027	0.14365	0.55422	8.25E-05	3.26E-07	1.17E-06	3.37E-07	1.09E-06	8.5400E-05
519799.89	4258619.33	4337.55388	0.13431	0.31813	0.14066	0.31453	8.24E-05	3.15E-07	6.52E-07	3.30E-07	6.19E-07	8.4366E-05
519774.53	4258673.49	4333.35922	0.12817	0.27128	0.13341	0.26869	8.24E-05	3.01E-07	5.56E-07	3.13E-07	5.29E-07	8.4069E-05
519869.4	4258313.25	4330.59221	0.10065	0.54689	0.10153	0.52929	8.23E-05	2.36E-07	1.12E-06	2.38E-07	1.04E-06	8.4955E-05
519866.37	4258272.08	4327.69683	0.09158	0.53172	0.092	0.51401	8.23E-05	2.15E-07	1.09E-06	2.16E-07	1.01E-06	8.4795E-05
519873.17	4258352.61	4310.33549	0.11113	0.56216	0.11308	0.54454	8.19E-05	2.61E-07	1.15E-06	2.65E-07	1.07E-06	8.4683E-05
519877.4	4258415.11	4309.45263	0.13108	0.57689	0.13535	0.55999	8.19E-05	3.08E-07	1.18E-06	3.18E-07	1.10E-06	8.4826E-05
519864.54	4258245.55	4299.24466	0.08649	0.52182	0.08683	0.5037	8.17E-05	2.03E-07	1.07E-06	2.04E-07	9.92E-07	8.4190E-05
519866.11	4258296.99	4287.76717	0.09628	0.53466	0.09693	0.51695	8.15E-05	2.26E-07	1.10E-06	2.28E-07	1.02E-06	8.4070E-05
519875.89	4258394.53	4285.18656	0.12404	0.57291	0.12761	0.55571	8.15E-05	2.91E-07	1.17E-06	3.00E-07	1.09E-06	8.4313E-05
519873.49	4258448.89	4273.04409	0.13905	0.55309	0.14403	0.53811	8.12E-05	3.26E-07	1.13E-06	3.38E-07	1.06E-06	8.4081E-05
519869.86	4258336.39	4272.47501	0.10594	0.54882	0.10737	0.5315	8.12E-05	2.49E-07	1.13E-06	2.52E-07	1.05E-06	8.3885E-05
519768.05	4258681.91	4270.88926	0.12551	0.26176	0.13036	0.25934	8.12E-05	2.95E-07	5.37E-07	3.06E-07	5.11E-07	8.2830E-05
519859.36	4258493.01	4265.19398	0.1427	0.49053	0.14849	0.47906	8.11E-05	3.35E-07	1.01E-06	3.49E-07	9.43E-07	8.3706E-05
519819.69	4258570.76	4258.494	0.13632	0.36675	0.14248	0.36031	8.09E-05	3.20E-07	7.52E-07	3.34E-07	7.09E-07	8.3062E-05
519829.61	4258551.32	4257.12037	0.13811	0.39315	0.14385	0.38579	8.09E-05	3.24E-07	8.06E-07	3.38E-07	7.59E-07	8.3148E-05
519783.67	4258647.59	4253.65179	0.1292	0.28776	0.1349	0.28486	8.09E-05	3.03E-07	5.90E-07	3.17E-07	5.61E-07	8.2625E-05
519762.31	4258692.06	4252.44885	0.12366	0.25348	0.12814	0.25112	8.08E-05	2.90E-07	5.20E-07	3.01E-07	4.94E-07	8.2437E-05
519839.53	4258531.88	4250.95863	0.13978	0.42221	0.14547	0.41389	8.08E-05	3.28E-07	8.66E-07	3.42E-07	8.15E-07	8.3153E-05
519849.44	4258512.45	4249.97586	0.14137	0.45458	0.1472	0.44492	8.08E-05	3.32E-07	9.32E-07	3.46E-07	8.76E-07	8.3270E-05
519809.77	4258590.2	4249.80862	0.13433	0.34211	0.14079	0.33707	8.08E-05	3.15E-07	7.02E-07	3.31E-07	6.64E-07	8.2792E-05
519872.78	4258377.82	4232.6129	0.11776	0.5608	0.12069	0.5438	8.05E-05	2.76E-07	1.15E-06	2.83E-07	1.07E-06	8.3235E-05
519862.61	4258206.39	4231.48306	0.07995	0.51019	0.08022	0.49069	8.04E-05	1.88E-07	1.05E-06	1.88E-07	9.66E-07	8.2821E-05
519799.85	4258609.63	4229.7244	0.13208	0.3198	0.13834	0.31603	8.04E-05	3.10E-07	6.56E-07	3.25E-07	6.22E-07	8.2312E-05
519862.75	4258280.89	4229.12653	0.09212	0.51891	0.09258	0.50173	8.04E-05	2.16E-07	1.06E-06	2.17E-07	9.88E-07	8.2874E-05
519869.94	4258457.5	4226.96904	0.13935	0.53696	0.14443	0.52284	8.03E-05	3.27E-07	1.10E-06	3.39E-07	1.03E-06	8.3144E-05
519873.89	4258423.64	4213.08971	0.13157	0.55964	0.13594	0.54395	8.01E-05	3.09E-07	1.15E-06	3.19E-07	1.07E-06	8.2930E-05
519861.09	4258217.01	4209.08557	0.08114	0.50604	0.08143	0.48719	8.00E-05	1.90E-07	1.04E-06	1.91E-07	9.59E-07	8.2386E-05
519865.71	4258322.22	4204.03236	0.10124	0.53186	0.10233	0.51505	7.99E-05	2.38E-07	1.09E-06	2.40E-07	1.01E-06	8.2494E-05
519789.93	4258629.07	4201.72767	0.1296	0.30002	0.13547	0.29691	7.99E-05	3.04E-07	6.15E-07	3.18E-07	5.84E-07	8.1689E-05
519777.3	4258656.27	4194.4603	0.12671	0.27741	0.13211	0.27473	7.97E-05	2.97E-07	5.69E-07	3.10E-07	5.41E-07	8.1446E-05
519866.4	4258466.1	4192.84573	0.13952	0.52133	0.14471	0.50811	7.97E-05	3.28E-07	1.07E-06	3.40E-07	1.00E-06	8.2435E-05
519755.85	4258700.52	4192.53086	0.12102	0.245	0.12517	0.24264	7.97E-05	2.84E-07	5.02E-07	2.94E-07	4.78E-07	8.1251E-05
519869.58	4258361.33	4185.12565	0.11191	0.54745	0.11421	0.53081	7.96E-05	2.63E-07	1.12E-06	2.68E-07	1.04E-06	8.2250E-05
519859.47	4258227.66	4179.35828	0.08234	0.50015	0.08262	0.4822	7.94E-05	1.93E-07	1.03E-06	1.94E-07	9.49E-07	8.1804E-05
519862.86	4258474.71	4172.75118	0.13964	0.50641	0.14497	0.49401	7.93E-05	3.28E-07	1.04E-06	3.40E-07	9.72E-07	8.1996E-05
519862.45	4258305.88	4170.11171	0.09681	0.51964	0.09758	0.50283	7.93E-05	2.27E-07	1.07E-06	2.29E-07	9.90E-07	8.1778E-05
520058.71	4257645.62	4167.69053	0.05016	2.92811	0.05137	1.74632	7.92E-05	1.18E-07	6.01E-06	1.21E-07	3.44E-06	8.8902E-05
519872.23	4258403.42	4165.24308	0.12465	0.55552	0.12843	0.53963	7.92E-05	2.93E-07	1.14E-06	3.02E-07	1.06E-06	8.1969E-05
519859.32	4258483.31	4162.74439	0.13967	0.49201	0.14512	0.48042	7.91E-05	3.28E-07	1.01E-06	3.41E-07	9.46E-07	8.1750E-05
519859.32	4258264.95	4156.97802	0.08821	0.50238	0.08853	0.48569	7.90E-05	2.07E-07	1.03E-06	2.08E-07	9.56E-07	8.1418E-05
519819.65	4258561.06	4147.169	0.13373	0.36836	0.13939	0.36184	7.88E-05	3.14E-07	7.55E-07	3.27E-07	7.12E-07	8.0939E-05
519749.35	4258708.89	4144.56978	0.11874	0.23692	0.12233	0.23479	7.88E-05	2.79E-07	4.86E-07	2.87E-07	4.62E-07	8.0295E-05
519866.3	4258345.05	4143.27527	0.10653	0.53369	0.10827	0.51733	7.88E-05	2.50E-07	1.09E-06	2.54E-07	1.02E-06	8.1373E-05
519809.73	4258580.5	4142.8893	0.1319	0.34406	0.138	0.33862	7.87E-05	3.10E-07	7.06E-07	3.24E-07	6.67E-07	8.0755E-05
519857.72	4258238.37	4141.53687	0.08353	0.49453	0.08379	0.47723	7.87E-05	1.96E-07	1.01E-06	1.97E-07	9.39E-07	8.1070E-05
519849.4	4258502.75	4138.78267	0.1385	0.45616	0.14412	0.44639	7.87E-05	3.25E-07	9.36E-07	3.38E-07	8.79E-07	8.1149E-05
519829.57	4258541.62	4136.67272	0.13523	0.3943	0.14058	0.38708	7.86E-05	3.17E-07	8.09E-07	3.30E-07	7.62E-07	8.0849E-05
519839.48	4258522.19	4135.42047	0.13699	0.4237	0.14249	0.41539	7.86E-05	3.22E-07	8.69E-07	3.35E-07	8.18E-07	8.0950E-05
519770.89	4258664.84	4134.97597	0.12421	0.2676	0.12929	0.26512	7.86E-05	2.92E-07	5.49E-07	3.04E-07	5.22E-07	8.0264E-05
519870.38	4258432.17	4130.97221	0.13198	0.54322	0.13642	0.52858	7.85E-05	3.10E-07	1.11E-06	3.20E-07	1.04E-06	8.1307E-05
519799.81	4258599.93	4127.00352	0.12984	0.32158	0.136	0.31748	7.84E-05	3.05E-07	6.60E-07	3.19E-07	6.25E-07	8.0355E-05
519859.12	4258289.71	4121.93993	0.09263	0.50647	0.09318	0.48976	7.84E-05	2.17E-07	1.04E-06	2.19E-07	9.64E-07	8.0790E-05
519869.16	4258386.62	4107.64485	0.1184	0.54456	0.12163	0.52876	7.81E-05	2.78E-07	1.12E-06	2.86E-07	1.04E-06	8.0800E-05
520058.74	4257635.62	4104.91196	0.0495	2.4012	0.05067	1.52317	7.80E-05	1.16E-07	4.92E-06	1.19E-07	3.00E-06	8.6185E-05
519789.89	4258619.37	4100.41114	0.12755	0.30143	0.13335	0.29826	7.79E-05	2.99E-07	6.18E-07	3.13E-07	5.87E-07	7.9759E-05
519862.02	4258331.18	4074.81257	0.10179	0.51689	0.10314	0.50095	7.75E-05	2.39E-07	1.06E-06	2.42E-07	9.86E-07	7.9982E-05
519764.44	4258673.31	4074.7917	0.12171	0.2583	0.12646	0.256	7.75E-05	2.86E-07	5.30E-07	2.97E-07	5.04E-07	7.9071E-05
520048.92	4257645.58	4070.74567	0.04937	2.12672	0.05093	1.39333	7.74E-05	1.16E-07	4.36E-06	1.20E-07	2.74E-06	8.4717E-05
519779.97	4258638.81	4070.21172	0.12509	0.28353	0.13049	0.28079	7.74E-05	2.94E-07	5.81E-07	3.06E-07	5.53E-07	7.9102E-05
519866.87	4258440.7	4063.36958	0.1323	0.52755	0.13681	0.51384	7.72E-05	3.11E-07	1.08E-06	3.21E-07	1.01E-06	7.9963E-05
519865.99	4258370.06	4060.51281	0.11256	0.53234	0.1152	0.51674	7.72E-05	2.64E-07	1.09E-06	2.70E-07	1.02E-06	7.9827E-05
519855.72	4258273.7	4059.13764	0.08866	0.48982	0.08901	0.47377	7.72E-05	2.08E-07	1.00E-06	2.09E-07	9.33E-07	7.9511E-05
519868.57	4258412.31	4058.66696	0.12517	0.53875	0.12909	0.52404	7.71E-05	2.94E-07	1.10E-06	3.03E-07	1.03E-06	7.9881E-05
519758.58	4258683.21	4047.56971	0.11984	0.25006	0.12426	0.24786	7.69E-05	2.81E-07	5.13E-07	2.92E-07	4.88E-07	7.8511E-05
519858.79	4258314.76	4044.36817	0.09727	0.50463	0.09822	0.48881	7.69E-05	2.28E-07	1.03E-06	2.31E-07	9.62E-07	7.9332E-05
519853.84	4258210.01	4044.09141	0.07838	0.47786	0.07863	0.4598	7.69E-05	1.84E-07	9.80E-07	1.85E-07	9.05E-07	7.9125E-05
520058.78	4257625.62	4043.93085	0.04886	1.99942	0.05	1.33716	7.69E-05	1.15E-07	4.10E-06	1.17E-07	2.63E-06	8.3833E-05
519809.69	4258570.8	4039.39043	0.12949	0.3458	0.13515	0.34008	7.68E-05	3.04E-07	7.09E-07	3.17E-07	6.69E-07	7.8781E-05
519819.61	4258551.36	4038.94735	0.13119	0.36981	0.13646	0.36329	7.68E-05	3.08E-07	7.58E-07	3.20E-07	7.15E-07	7.8875E-05
519849.36	4258493.05	4035.05445	0.13571	0.45764	0.14109	0.44771	7.67E-05	3.19E-07	9.39E-07	3.31E-07	8.81E-07	7.9169E-05
519829.53	4258531.93	4031.16769	0.13276	0.39597	0.13796	0.38871	7.66E-05	3.12E-07	8.12E-07	3.24E-07	7.65E-07	7.8838E-05
519799.77	4258590.24	4028.17992	0.1276	0.32341	0.13356	0.31889	7.66E-05	3.00E-07	6.63E-07	3.14E-07	6.28E-07	7.8473E-05
519839.44	4258512.49	4024.93863	0.1343	0.42518	0.13965	0.41681	7.65E-05	3.15E-07	8.72E-07	3.28E-07	8.20E-07	7.8842E-05
519852.27	4258220.65	4020.19017	0.07954	0.47282	0.07976	0.45565	7.64E-05	1.87E-07	9.70E-07	1.87E-07	8.97E-07	7.8657E-05
519862.74	4258353.7	4017.37248	0.10711	0.5191	0.10916	0.50374	7.64E-05	2.51E-07	1.06E-06	2.56E-07	9.92E-07	7.8927E-05
519773.64	4258647.56	4014.06255	0.12277	0.27349	0.12792	0.27092	7.63E-05	2.88E-07	5.61E-07	3.00E-07	5.33E-07	7.7983E-05
519855.49	4258298.53	4011.79595	0.09312	0.49361	0.09381	0.47753	7.63E-05	2.19E-07	1.01E-06	2.20E-07	9.40E-07	7.8648E-05
519863.36	4258449.23	4010.32567	0.13252	0.51253	0.13711	0.49967	7.62E-05	3.11E-07	1.05E-06	3.22E-07	9.84E-07	7.8897E-05
520048.96	4257635.58	4010.23818	0.04873	1.8269	0.05025	1.24384	7.62E-05	1.14E-07	3.75E-06	1.18E-07	2.45E-06	8.2655E-05
519789.85	4258609.67	4005.19333	0.12551	0.30291	0.13124	0.29957	7.61E-05	2.95E-07	6.21E-07	3.08E-07	5.90E-07	7.7945E-05
519852.28	4258257.82	3994.80436	0.08499	0.47449	0.08523	0.45865	7.59E-05	2.00E-07	9.73E-07	2.00E-07	9.03E-07	7.8210E-05
519752.15	4258691.73	3993.62169	0.11745	0.24175	0.12151	0.23966	7.59E-05	2.76E-07	4.96E-07	2.85E-07	4.72E-07	7.7440E-05
519865.54	4258395.42	3990.59922	0.11894	0.52837	0.12235	0.51381	7.59E-05	2.79E-07	1.08E-06	2.87E-07	1.01E-06	7.8516E-05
519850.58	4258231.33	3984.27299	0.08066	0.46723	0.08085	0.4508	7.57E-05	1.89E-07	9.58E-07	1.90E-07	8.87E-07	7.7959E-05
519779.93	4258629.11	3974.28089	0.1232	0.28474	0.12853	0.282	7.55E-05	2.89E-07	5.84E-07	3.02E-07	5.55E-07	7.7274E-05
519859.85	4258457.76	3974.11909	0.13272	0.49832	0.13742	0.4862	7.55E-05	3.12E-07	1.02E-06	3.23E-07	9.57E-07	7.8154E-05
519864.92	4258421.19	3965.35485	0.12559	0.52264	0.12959	0.50898	7.54E-05	2.95E-07	1.07E-06	3.04E-07	1.00E-06	7.8047E-05
519852.12	4258282.45	3962.84296	0.08917	0.47859	0.0896	0.46302	7.53E-05	2.09E-07	9.82E-07	2.10E-07	9.11E-07	7.7639E-05
519767.25	4258656.19	3956.80263	0.12044	0.26392	0.12531	0.26153	7.52E-05	2.83E-07	5.41E-07	2.94E-07	5.15E-07	7.6845E-05
520048.99	4257625.58	3951.69879	0.04811	1.57968	0.04959	1.11508	7.51E-05	1.13E-07	3.24E-06	1.16E-07	2.20E-06	8.0779E-05
519856.34	4258466.29	3946.86408	0.13277	0.48439	0.13757	0.47305	7.50E-05	3.12E-07	9.93E-07	3.23E-07	9.31E-07	7.7582E-05
519858.33	4258340.14	3945.93776	0.10231	0.50222	0.10396	0.48723	7.50E-05	2.40E-07	1.03E-06	2.44E-07	9.59E-07	7.7479E-05
519862.4	4258378.78	3942.90861	0.11317	0.51772	0.11609	0.50315	7.49E-05	2.66E-07	1.06E-06	2.73E-07	9.90E-07	7.7538E-05
519809.65	4258561.1	3938.37828	0.12712	0.34726	0.13234	0.34143	7.49E-05	2.98E-07	7.12E-07	3.11E-07	6.72E-07	7.6855E-05
519745.68	4258700.16	3937.86506	0.11501	0.23388	0.11876	0.2318	7.49E-05	2.70E-07	4.80E-07	2.79E-07	4.56E-07	7.6336E-05
519849.32	4258483.36	3935.90557	0.13294	0.45881	0.13802	0.44877	7.48E-05	3.12E-07	9.41E-07	3.24E-07	8.83E-07	7.7275E-05
519852.83	4258474.82	3934.20221	0.13282	0.47121	0.13775	0.46057	7.48E-05	3.12E-07	9.66E-07	3.23E-07	9.07E-07	7.7290E-05
519799.73	4258580.54	3932.62656	0.12538	0.32511	0.131	0.32021	7.48E-05	2.94E-07	6.67E-07	3.08E-07	6.30E-07	7.6651E-05
519819.57	4258541.67	3931.90811	0.12864	0.37085	0.13358	0.36443	7.47E-05	3.02E-07	7.61E-07	3.14E-07	7.17E-07	7.6832E-05
519829.48	4258522.23	3923.37976	0.13024	0.39736	0.13529	0.39007	7.46E-05	3.06E-07	8.15E-07	3.18E-07	7.68E-07	7.6783E-05
519855.14	4258323.65	3923.01739	0.09778	0.49099	0.09899	0.47599	7.46E-05	2.30E-07	1.01E-06	2.32E-07	9.37E-07	7.6975E-05
519839.4	4258502.79	3919.92276	0.1317	0.42658	0.13689	0.41809	7.45E-05	3.09E-07	8.75E-07	3.21E-07	8.23E-07	7.6839E-05
519789.81	4258599.98	3914.20615	0.12346	0.30449	0.1291	0.30083	7.44E-05	2.90E-07	6.24E-07	3.03E-07	5.92E-07	7.6212E-05
519851.86	4258307.34	3899.53159	0.09362	0.48046	0.09449	0.46522	7.41E-05	2.20E-07	9.85E-07	2.22E-07	9.16E-07	7.6466E-05
519760.82	4258664.72	3899.1662	0.1181	0.25484	0.12268	0.25262	7.41E-05	2.77E-07	5.23E-07	2.88E-07	4.97E-07	7.5701E-05

519859.18	4258362.36	3898.80145	0.10772	0.50542	0.11009	0.49105	7.41E-05	2.53E-07	1.04E-06	2.58E-07	9.67E-07	7.6624E-05
519848.7	4258266.51	3890.18915	0.08516	0.46024	0.08542	0.44511	7.39E-05	2.00E-07	9.44E-07	2.01E-07	8.76E-07	7.6166E-05
519861.26	4258430.08	3889.53006	0.12596	0.50749	0.13004	0.49469	7.39E-05	2.96E-07	1.04E-06	3.05E-07	9.74E-07	7.6549E-05
519779.89	4258619.41	3884.80268	0.12132	0.28599	0.1266	0.28318	7.38E-05	2.85E-07	5.87E-07	2.97E-07	5.57E-07	7.5569E-05
519861.92	4258404.22	3881.35452	0.11937	0.51269	0.1229	0.4993	7.38E-05	2.80E-07	1.05E-06	2.89E-07	9.83E-07	7.6381E-05
519845.08	4258213.63	3871.03495	0.07689	0.44749	0.07706	0.43102	7.36E-05	1.81E-07	9.18E-07	1.81E-07	8.48E-07	7.5709E-05
519754.86	4258674.36	3864.59018	0.11622	0.24668	0.12054	0.24458	7.35E-05	2.73E-07	5.06E-07	2.83E-07	4.81E-07	7.5002E-05
519848.52	4258291.2	3862.82987	0.08966	0.46781	0.09025	0.45269	7.34E-05	2.10E-07	9.59E-07	2.12E-07	8.91E-07	7.5698E-05
519845.09	4258251.01	3852.12449	0.08216	0.45081	0.08235	0.43556	7.32E-05	1.93E-07	9.25E-07	1.93E-07	8.57E-07	7.5390E-05
519769.97	4258638.85	3851.2079	0.119	0.26954	0.1239	0.26708	7.32E-05	2.79E-07	5.53E-07	2.91E-07	5.26E-07	7.4853E-05
519809.61	4258551.41	3839.34812	0.1248	0.34855	0.12966	0.34269	7.30E-05	2.93E-07	7.15E-07	3.04E-07	6.75E-07	7.4966E-05
519799.69	4258570.84	3838.98827	0.12318	0.32661	0.12838	0.32147	7.30E-05	2.89E-07	6.70E-07	3.01E-07	6.33E-07	7.4865E-05
519843.45	4258224.29	3838.50622	0.07796	0.44222	0.0781	0.42652	7.30E-05	1.83E-07	9.07E-07	1.83E-07	8.40E-07	7.5076E-05
519819.53	4258531.97	3830.04031	0.12632	0.37224	0.1311	0.36581	7.28E-05	2.97E-07	7.63E-07	3.08E-07	7.20E-07	7.4890E-05
519858.81	4258387.51	3829.87012	0.11368	0.50306	0.11679	0.48958	7.28E-05	2.67E-07	1.03E-06	2.74E-07	9.64E-07	7.5335E-05
519857.6	4258438.96	3827.62517	0.12622	0.49288	0.13038	0.48089	7.28E-05	2.96E-07	1.01E-06	3.06E-07	9.47E-07	7.5316E-05
519789.77	4258590.28	3825.58183	0.1214	0.30613	0.12687	0.30205	7.27E-05	2.85E-07	6.28E-07	2.98E-07	5.95E-07	7.4523E-05
519854.64	4258349.11	3824.37037	0.1029	0.48877	0.10487	0.47473	7.27E-05	2.42E-07	1.00E-06	2.46E-07	9.35E-07	7.5119E-05
519839.36	4258493.09	3821.08391	0.12917	0.4278	0.13416	0.41918	7.26E-05	3.03E-07	8.77E-07	3.15E-07	8.25E-07	7.4953E-05
519829.44	4258512.53	3819.53858	0.12778	0.39855	0.1327	0.39123	7.26E-05	3.00E-07	8.17E-07	3.12E-07	7.70E-07	7.4802E-05
519748.46	4258682.95	3811.68278	0.11396	0.23856	0.11798	0.23657	7.25E-05	2.68E-07	4.89E-07	2.77E-07	4.66E-07	7.3953E-05
519845.12	4258275.2	3806.93919	0.0858	0.45191	0.08615	0.43724	7.24E-05	2.01E-07	9.27E-07	2.02E-07	8.61E-07	7.4554E-05
519851.48	4258332.54	3806.91152	0.09834	0.47848	0.09985	0.46424	7.24E-05	2.31E-07	9.81E-07	2.34E-07	9.14E-07	7.4723E-05
519779.85	4258609.72	3801.37457	0.11945	0.28726	0.12468	0.2843	7.23E-05	2.80E-07	5.89E-07	2.93E-07	5.60E-07	7.3979E-05
519763.61	4258647.54	3796.03309	0.11682	0.26024	0.12148	0.25792	7.22E-05	2.74E-07	5.34E-07	2.85E-07	5.08E-07	7.3757E-05
519858.29	4258413.02	3794.19963	0.11984	0.49854	0.12349	0.48594	7.21E-05	2.81E-07	1.02E-06	2.90E-07	9.57E-07	7.4671E-05
519855.61	4258371.01	3789.78736	0.10834	0.49268	0.11099	0.47911	7.20E-05	2.54E-07	1.01E-06	2.61E-07	9.43E-07	7.4505E-05
519848.24	4258316.16	3786.64588	0.0941	0.46777	0.09521	0.45333	7.20E-05	2.21E-07	9.59E-07	2.24E-07	8.92E-07	7.4273E-05
519853.95	4258447.85	3779.39162	0.12638	0.47881	0.13062	0.46759	7.18E-05	2.97E-07	9.82E-07	3.07E-07	9.20E-07	7.4345E-05
519769.93	4258629.15	3766.65337	0.11727	0.27061	0.12212	0.26814	7.16E-05	2.75E-07	5.55E-07	2.87E-07	5.28E-07	7.3242E-05
519841.41	4258259.97	3763.11288	0.08257	0.44022	0.08281	0.42551	7.15E-05	1.94E-07	9.03E-07	1.94E-07	8.38E-07	7.3659E-05
519742.01	4258691.44	3761.35006	0.11177	0.23081	0.11542	0.22895	7.15E-05	2.62E-07	4.73E-07	2.71E-07	4.51E-07	7.2954E-05
519844.92	4258299.95	3757.41441	0.09012	0.45649	0.0909	0.44196	7.14E-05	2.12E-07	9.36E-07	2.13E-07	8.70E-07	7.3653E-05
519850.29	4258456.74	3748.82258	0.12653	0.46556	0.13089	0.45498	7.13E-05	2.97E-07	9.55E-07	3.07E-07	8.96E-07	7.3713E-05
519799.65	4258561.14	3746.78149	0.12101	0.32787	0.12581	0.32262	7.12E-05	2.84E-07	6.72E-07	2.95E-07	6.35E-07	7.3107E-05
519809.57	4258541.71	3741.65627	0.12253	0.34964	0.12714	0.34382	7.11E-05	2.88E-07	7.17E-07	2.98E-07	6.77E-07	7.3102E-05
519757.2	4258656.12	3740.99133	0.11464	0.25137	0.11903	0.24921	7.11E-05	2.69E-07	5.16E-07	2.79E-07	4.91E-07	7.2664E-05
519789.73	4258580.58	3739.59975	0.11936	0.30764	0.12452	0.30321	7.11E-05	2.80E-07	6.31E-07	2.92E-07	5.97E-07	7.2883E-05
519819.48	4258522.27	3729.36377	0.12398	0.37345	0.12866	0.36697	7.09E-05	2.91E-07	7.66E-07	3.02E-07	7.22E-07	7.2970E-05
519839.32	4258483.4	3727.95584	0.12666	0.42878	0.1314	0.42003	7.09E-05	2.97E-07	8.79E-07	3.08E-07	8.27E-07	7.3174E-05
519855.22	4258396.23	3727.12778	0.11412	0.48904	0.11737	0.47653	7.08E-05	2.68E-07	1.00E-06	2.76E-07	9.38E-07	7.3330E-05
519846.63	4258465.62	3723.7055	0.12643	0.45224	0.13088	0.44239	7.08E-05	2.97E-07	9.28E-07	3.07E-07	8.71E-07	7.3183E-05
519829.4	4258502.83	3720.18332	0.1254	0.39972	0.13019	0.3923	7.07E-05	2.94E-07	8.20E-07	3.06E-07	7.72E-07	7.2906E-05
519779.81	4258600.02	3720.16493	0.11758	0.28857	0.1227	0.28533	7.07E-05	2.76E-07	5.92E-07	2.88E-07	5.62E-07	7.2431E-05
519841.55	4258283.89	3720.13908	0.08638	0.44329	0.08688	0.42899	7.07E-05	2.03E-07	9.09E-07	2.04E-07	8.44E-07	7.2873E-05
519842.98	4258474.51	3719.36844	0.12653	0.4402	0.13113	0.43095	7.07E-05	2.97E-07	9.03E-07	3.08E-07	8.48E-07	7.3055E-05
519854.67	4258421.83	3716.57041	0.12019	0.4847	0.12393	0.47288	7.06E-05	2.82E-07	9.94E-07	2.91E-07	9.31E-07	7.3143E-05
519850.96	4258358.07	3712.37918	0.10352	0.4764	0.1058	0.46317	7.06E-05	2.43E-07	9.77E-07	2.48E-07	9.12E-07	7.2946E-05
519838.04	4258243.88	3711.70273	0.07935	0.42694	0.07949	0.41239	7.06E-05	1.86E-07	8.76E-07	1.87E-07	8.12E-07	7.2613E-05
519751.14	4258665.52	3701.77493	0.1128	0.2433	0.11694	0.24128	7.04E-05	2.65E-07	4.99E-07	2.75E-07	4.75E-07	7.1877E-05
519836.31	4258217.24	3700.71905	0.07541	0.4192	0.07552	0.40413	7.03E-05	1.77E-07	8.60E-07	1.77E-07	7.96E-07	7.2354E-05
519847.82	4258341.42	3689.02888	0.09884	0.46571	0.10064	0.45238	7.01E-05	2.32E-07	9.55E-07	2.36E-07	8.91E-07	7.2436E-05
519769.89	4258619.46	3688.05895	0.11554	0.2717	0.12036	0.26916	7.01E-05	2.71E-07	5.57E-07	2.83E-07	5.30E-07	7.1744E-05
519852.05	4258379.67	3680.66653	0.10882	0.47956	0.11168	0.46692	7.00E-05	2.55E-07	9.84E-07	2.62E-07	9.19E-07	7.2383E-05
519844.61	4258324.97	3669.95039	0.09453	0.45517	0.09591	0.44164	6.98E-05	2.22E-07	9.34E-07	2.25E-07	8.69E-07	7.2009E-05
519837.73	4258268.92	3669.40876	0.08297	0.42964	0.08329	0.41551	6.97E-05	1.95E-07	8.81E-07	1.96E-07	8.18E-07	7.1838E-05
519799.61	4258551.45	3655.68616	0.11888	0.32897	0.12335	0.32369	6.95E-05	2.79E-07	6.75E-07	2.90E-07	6.37E-07	7.1369E-05
519789.69	4258570.88	3654.88025	0.11734	0.30895	0.12212	0.30429	6.95E-05	2.75E-07	6.34E-07	2.87E-07	5.99E-07	7.1267E-05
519841.32	4258308.7	3650.60525	0.09056	0.44469	0.09157	0.43095	6.94E-05	2.13E-07	9.12E-07	2.15E-07	8.48E-07	7.1579E-05
519759.97	4258638.89	3650.49082	0.11334	0.25657	0.11781	0.2543	6.94E-05	2.66E-07	5.26E-07	2.77E-07	5.01E-07	7.0959E-05
519744.76	4258674.16	3649.80706	0.11067	0.23536	0.11456	0.23345	6.94E-05	2.60E-07	4.83E-07	2.69E-07	4.60E-07	7.0847E-05
519851.05	4258430.63	3649.64506	0.1204	0.47103	0.1242	0.45999	6.94E-05	2.83E-07	9.66E-07	2.92E-07	9.05E-07	7.1819E-05
519809.53	4258532.01	3645.58448	0.12033	0.35064	0.12476	0.34484	6.93E-05	2.82E-07	7.19E-07	2.93E-07	6.79E-07	7.1269E-05
519779.77	4258590.32	3640.62353	0.11567	0.29014	0.12067	0.28646	6.92E-05	2.72E-07	5.95E-07	2.83E-07	5.64E-07	7.0915E-05
519851.63	4258404.96	3634.02745	0.11449	0.47551	0.11783	0.46387	6.91E-05	2.69E-07	9.75E-07	2.77E-07	9.13E-07	7.1510E-05
519819.44	4258512.57	3631.58891	0.12173	0.37447	0.12629	0.36796	6.90E-05	2.86E-07	7.68E-07	2.96E-07	7.24E-07	7.1105E-05
519834.39	4258252.77	3627.41814	0.07972	0.41724	0.07991	0.40321	6.90E-05	1.87E-07	8.56E-07	1.88E-07	7.94E-07	7.0975E-05
519829.36	4258493.14	3626.07207	0.1231	0.40083	0.12775	0.39326	6.89E-05	2.89E-07	8.22E-07	3.00E-07	7.74E-07	7.1110E-05
519837.97	4258292.57	3623.46539	0.08682	0.4333	0.08752	0.41952	6.89E-05	2.04E-07	8.89E-07	2.05E-07	8.26E-07	7.0999E-05
519769.85	4258609.76	3613.77736	0.11382	0.27284	0.1186	0.27014	6.87E-05	2.67E-07	5.60E-07	2.78E-07	5.32E-07	7.0328E-05
519847.27	4258367.04	3600.47184	0.10403	0.46369	0.10656	0.45138	6.84E-05	2.44E-07	9.51E-07	2.50E-07	8.89E-07	7.0772E-05
519753.59	4258647.53	3598.12457	0.11131	0.24792	0.11552	0.2458	6.84E-05	2.61E-07	5.08E-07	2.71E-07	4.84E-07	6.9919E-05
519738.34	4258682.71	3598.09712	0.10853	0.22781	0.11217	0.22597	6.84E-05	2.55E-07	4.67E-07	2.63E-07	4.45E-07	6.9823E-05
519847.43	4258439.43	3596.37869	0.12052	0.45791	0.12438	0.4476	6.84E-05	2.83E-07	9.39E-07	2.92E-07	8.81E-07	7.0756E-05
519830.99	4258236.75	3580.65147	0.0767	0.40473	0.0768	0.39081	6.81E-05	1.80E-07	8.30E-07	1.80E-07	7.69E-07	7.0021E-05
519848.49	4258388.32	3580.44337	0.10923	0.4669	0.11225	0.45509	6.81E-05	2.56E-07	9.58E-07	2.64E-07	8.96E-07	7.0431E-05
519759.93	4258629.19	3576.90525	0.11176	0.25748	0.11618	0.25523	6.80E-05	2.62E-07	5.28E-07	2.73E-07	5.02E-07	6.9556E-05
519844.17	4258350.31	3574.7567	0.09931	0.45334	0.10139	0.44093	6.79E-05	2.33E-07	9.30E-07	2.38E-07	8.68E-07	7.0219E-05
519834.04	4258277.87	3574.40273	0.08337	0.41959	0.08385	0.406	6.79E-05	1.96E-07	8.61E-07	1.97E-07	7.99E-07	6.9995E-05
519789.65	4258561.19	3570.58477	0.11535	0.31005	0.11976	0.30527	6.79E-05	2.71E-07	6.36E-07	2.81E-07	6.01E-07	6.9659E-05
519799.57	4258541.75	3565.28315	0.1168	0.32988	0.12103	0.32463	6.78E-05	2.74E-07	6.77E-07	2.84E-07	6.39E-07	6.9644E-05
519779.73	4258580.62	3562.53845	0.11379	0.2915	0.11851	0.28746	6.77E-05	2.67E-07	5.98E-07	2.78E-07	5.66E-07	6.9426E-05
519843.81	4258448.23	3557.67199	0.12056	0.44538	0.1245	0.43567	6.76E-05	2.83E-07	9.13E-07	2.92E-07	8.58E-07	6.9971E-05
519848.04	4258413.68	3557.28045	0.11485	0.46308	0.11829	0.45208	6.76E-05	2.70E-07	9.50E-07	2.78E-07	8.90E-07	7.0004E-05
519747.42	4258656.67	3554.09694	0.10948	0.23993	0.11346	0.23793	6.76E-05	2.57E-07	4.92E-07	2.66E-07	4.68E-07	6.9041E-05
519840.98	4258333.79	3554.01108	0.09493	0.4428	0.09657	0.43022	6.76E-05	2.23E-07	9.08E-07	2.27E-07	8.47E-07	6.9760E-05
519809.48	4258522.31	3551.03593	0.11819	0.35156	0.1225	0.34576	6.75E-05	2.77E-07	7.21E-07	2.88E-07	6.81E-07	6.9465E-05
519830.73	4258261.65	3543.45299	0.08013	0.40843	0.08042	0.3948	6.74E-05	1.88E-07	8.38E-07	1.89E-07	7.77E-07	6.9346E-05
519769.81	4258600.06	3541.73759	0.11209	0.27406	0.11679	0.27107	6.73E-05	2.63E-07	5.62E-07	2.74E-07	5.34E-07	6.8955E-05
519837.72	4258317.45	3540.66997	0.09096	0.43318	0.09223	0.42028	6.73E-05	2.14E-07	8.88E-07	2.17E-07	8.27E-07	6.9448E-05
519829.32	4258483.44	3538.18745	0.12084	0.40169	0.1253	0.39399	6.73E-05	2.84E-07	8.24E-07	2.94E-07	7.76E-07	6.9432E-05
519819.4	4258502.88	3537.47111	0.11956	0.37541	0.12401	0.36883	6.72E-05	2.81E-07	7.70E-07	2.91E-07	7.26E-07	6.9309E-05
519840.19	4258457.03	3532.41746	0.12055	0.4334	0.1246	0.42425	6.71E-05	2.83E-07	8.89E-07	2.93E-07	8.35E-07	6.9444E-05
519832.94	4258474.64	3525.45211	0.12073	0.41172	0.12505	0.40362	6.70E-05	2.83E-07	8.44E-07	2.94E-07	7.95E-07	6.9228E-05
519834.4	4258301.26	3523.02316	0.08725	0.42351	0.08819	0.41029	6.70E-05	2.05E-07	8.69E-07	2.07E-07	8.08E-07	6.9054E-05
519836.57	4258465.84	3522.38442	0.12062	0.42225	0.12479	0.41364	6.70E-05	2.83E-07	8.66E-07	2.93E-07	8.14E-07	6.9211E-05
519759.89	4258619.5	3507.90104	0.11018	0.25843	0.11457	0.25611	6.67E-05	2.59E-07	5.30E-07	2.69E-07	5.04E-07	6.8241E-05
519741.06	4258665.38	3503.66993	0.10748	0.23219	0.11125	0.23028	6.66E-05	2.52E-07	4.76E-07	2.61E-07	4.53E-07	6.8041E-05
519827.36	4258245.58	3502.41414	0.07706	0.39617	0.07722	0.38271	6.66E-05	1.81E-07	8.13E-07	1.81E-07	7.53E-07	6.8503E-05
519843.58	4258376	3494.04002	0.10446	0.45113	0.10716	0.43972	6.64E-05	2.45E-07	9.25E-07	2.52E-07	8.66E-07	6.8703E-05
519844.45	4258422.41	3490.61464	0.11507	0.45054	0.11857	0.44023	6.64E-05	2.70E-07	9.24E-07	2.78E-07	8.67E-07	6.8689E-05
519844.93	4258396.98	3490.15044	0.1096	0.45435	0.1127	0.44338	6.63E-05	2.57E-07	9.32E-07	2.65E-07	8.73E-07	6.8668E-05
519789.61	4258551.49	3486.42193	0.11339	0.31099	0.1175	0.30618	6.63E-05	2.66E-07	6.38E-07	2.76E-07	6.03E-07	6.8053E-05
519779.69	4258570.93	3485.47186	0.11193	0.29264	0.11631	0.28838	6.63E-05	2.63E-07	6.00E-07	2.73E-07	5.68E-07	6.7956E-05
519830.36	4258286.82	3479.73459	0.0838	0.41014	0.08448	0.39706	6.61E-05	1.97E-07	8.41E-07	1.98E-07	7.82E-07	6.8161E-05
519799.53	4258532.05	3475.42276	0.11478	0.33057	0.11881	0.32539	6.61E-05	2.69E-07	6.78E-07	2.79E-07	6.41E-07	6.7928E-05
519769.77	4258590.36	3469.75195	0.11034	0.2754	0.11491	0.272	6.60E-05	2.59E-07	5.65E-07	2.70E-07	5.35E-07	6.7583E-05
519749.97	4258638.93	3468.59106	0.10812	0.24446	0.11215	0.24238	6.59E-05	2.54E-07	5.01E-07	2.63E-07	4.77E-07	6.7427E-05
519840.51	4258359.2	3467.07227	0.09977	0.44159	0.10208	0.43003	6.59E-05	2.34E-07	9.06E-07	2.40E-07	8.47E-07	6.8129E-05
519823.94	4258229.63	3461.66712	0.07425	0.38475	0.07434	0.37136	6.58E-05	1.74E-07	7.89E-07	1.75E-07	7.31E-07	6.7669E-05
519809.44	4258512.62	3458.90112	0.11613	0.35242	0.12034	0.34658	6.57E-05	2.73E-07	7.23E-07	2.83E-07	6.82E-07	6.7708E-05
519734.66	4258673.98	3454.06173	0.1055	0.22479	0.10903	0.22299	6.57E-05	2.48E-07	4.61E-07	2.56E-07	4.39E-07	6.7059E-05
519827.08	4258270.54	3453.61868	0.0805	0.39918	0.08094	0.38608	6.56E-05	1.89E-07	8.19E-07	1.90E-07	7.60E-07	6.7605E-05
519819.36	4258493.18	3447.56711	0.11745	0.37631	0.12179	0.36959	6.55E-05	2.76E-07	7.72E-07	2.86E-07	7.28E-07	6.7593E-05
519759.85	4258609.8	3442.80668	0.10863	0.25923	0.11291	0.25684	6.54E-05	2.55E-07	5.32E-07	2.65E-07	5.06E-07	6.6999E-05
519837.36	4258342.6	3442.74205	0.0953	0.43106	0.09721	0.41934	6.54E-05	2.24E-07	8.84E-07	2.28E-07	8.25E-07	6.7602E-05
519834.12	4258326.19	3434.25465	0.09137	0.42237	0.09291	0.41027	6.53E-05	2.15E-07	8.66E-07	2.18E-07	8.08E-07	6.7385E-05
519840.86	4258431.13	3433.35948	0.11517	0.43835	0.11873	0.42872	6.53E-05	2.70E-07	8.99E-07	2.79E-07	8.44E-07	6.7554E-05
519823.73	4258254.4	3422.75229	0.07744	0.38807	0.0777	0.375	6.51E-05	1.82E-07	7.96E-07	1.82E-07	7.38E-07	6.6959E-05
519830.82	4258309.95	3421.84187	0.08765	0.41314	0.08884	0.40068	6.50E-05	2.06E-07	8.47E-07	2.09E-07	7.89E-07	6.7093E-05
519743.7	4258647.82	3421.21408	0.1063	0.23656	0.11011	0.23458	6.50E-05	2.50E-07	4.85E-07	2.59E-07	4.62E-07	6.6486E-05
519779.65	4258561.23	3407.97734	0.11009	0.29362	0.11413	0.28922	6.48E-05	2.58E-07	6.02E-07	2.68E-07	5.69E-07	6.6477E-05
519841.37	4258405.63	3407.63991	0.10982	0.44195	0.11298	0.43177	6.48E-05	2.58E-07	9.06E-07	2.65E-07	8.50E-07	6.7052E-05
519749.93	4258629.24	3403.365	0.10665	0.24526	0.11066	0.24317	6.47E-05	2.50E-07	5.03E-07	2.60E-07	4.79E-07	6.6184E-05
519789.57	4258541.79	3402.40903	0.11148	0.31178	0.11536	0.30698	6.47E-05	2.62E-07	6.39E-07	2.71E-07	6.04E-07	6.6450E-05
519769.73	4258580.67	3399.34654	0.10861	0.27659	0.11293	0.27286	6.46E-05	2.55E-07	5.67E-07	2.65E-07	5.37E-07	6.6240E-05
519839.89	4258384.96	3393.95008	0.10479	0.43865	0.10761	0.42811	6.45E-05	2.46E-07	9.00E-07	2.53E-07	8.43E-07	6.6754E-05
519837.27	4258439.86	3389.57149	0.11519	0.42663	0.11881	0.41758	6.44E-05	2.70E-07	8.75E-07	2.79E-07	8.22E-07	6.6676E-05
519799.49	4258522.35	3386.87476	0.11282	0.33144	0.11677	0.32622	6.44E-05	2.65E-07	6.80E-07	2.74E-07	6.42E-07	6.6239E-05
519820.34	4258238.4	3385.43821	0.07456	0.37645	0.0747	0.36354	6.44E-05	1.75E-07	7.72E-07	1.75E-07	7.16E-07	6.6189E-05
519826.67	4258295.78	3381.11355	0.08421	0.40101	0.08514	0.38847	6.43E-05	1.98E-07	8.22E-07	2.00E-07	7.65E-07	6.6254E-05
519759.81	4258600.1	3376.9489	0.10699	0.26057	0.1113	0.25777	6.42E-05	2.51E-07	5.34E-07	2.61E-07	5.07E-07	6.5744E-05
519737.37	4258656.59	3372.5475	0.10444	0.22902	0.10805	0.22711	6.41E-05	2.45E-07	4.70E-07	2.54E-07	4.47E-07	6.5522E-05
519809.4	4258502.92	3369.51521	0.11413	0.3532	0.11826	0.3473	6.40E-05	2.68E-07	7.24E-07	2.78E-07	6.84E-07	6.6002E-05
519836.86	4258368.08	3367.5497	0.1002	0.43044	0.1027	0.41964	6.40E-05	2.35E-07	8.83E-07	2.41E-07	8.26E-07	6.6196E-05
519819.32	4258483.48	3363.12117	0.11539	0.37697	0.11957	0.37015	6.39E-05	2.71E-07	7.73E-07	2.81E-07	7.29E-07	6.5980E-05
519823.42	4258279.43	3362.48989	0.08088	0.39026	0.08152	0.37769	6.39E-05	1.90E-07	8.00E-07	1.91E-07	7.43E-07	6.5840E-05
519833.68	4258448.58	3360.26963	0.11518	0.41556	0.11889	0.40701	6.39E-05	2.70E-07	8.52E-07	2.79E-07	8.01E-07	6.6076E-05
519822.91	4258474.76	3348.99263	0.11534	0.38596	0.11942	0.37878	6.37E-05	2.71E-07	7.92E-07	2.80E-07	7.46E-07	6.5747E-05
519830.09	4258457.31	3344.92387	0.11521	0.40518	0.11904	0.39709	6.36E-05	2.70E-07	8.31E-07	2.79E-07	7.82E-07	6.5744E-05
519833.73	4258351.42	3344.58825	0.09582	0.42109	0.09797	0.41011	6.36E-05	2.25E-07	8.64E-07	2.30E-07	8.07E-07	6.5700E-05
519837.81	4258414.29	3343.93242	0.11011	0.43103	0.11336	0.42135	6.36E-05	2.59E-07	8.84E-07	2.66E-07	8.29E-07	6.5800E-05
519826.5	4258466.03	3342.9893	0.11531	0.39546	0.11927	0.38785	6.35E-05	2.71E-07	8.11E-07	2.80E-07	7.63E-07	6.5669E-05
519749.89	4258619.54	3342.37489	0.1052	0.24609	0.10919	0.24394	6.35E-05	2.47E-07	5.05E-07	2.56E-07	4.80E-07	6.5021E-05
519820.1	4258263.23	3338.1905	0.07779	0.37967	0.0782	0.36709	6.35E-05	1.83E-07	7.79E-07	1.84E-07	7.23E-07	6.5320E-05
519830.52	4258334.94	3331.32794	0.09178	0.41205	0.09358	0.40072	6.33E-05	2.15E-07	8.45E-07	2.20E-07	7.89E-07	6.5392E-05
519779.61	4258551.53	3330.14848	0.10829	0.29444	0.11205	0.29	6.33E-05	2.54E-07	6.04E-07	2.63E-07	5.71E-07	6.4992E-05
519769.69	4258570.97	3328.89253	0.1069	0.27757	0.11089	0.27363	6.33E-05	2.51E-07	5.69E-07	2.60E-07	5.39E-07	6.4895E-05
519730.99	4258665.25	3324.08192	0.10257	0.2218	0.10599	0.21999	6.32E-05	2.41E-07	4.55E-07	2.49E-07	4.33E-07	6.4562E-05
519827.25	4258318.64	3321.60976	0.08804	0.40331	0.08949	0.39158	6.31E-05	2.07E-07	8.27E-07	2.10E-07	7.71E-07	6.5153E-05
519789.53	4258532.09	3318.5155	0.10962	0.31247	0.11335	0.30768	6.31E-05	2.57E-07	6.41E-07	2.66E-07	6.06E-07	6.4849E-05
519759.77	4258590.4	3312.14888	0.10537	0.26173	0.10956	0.25856	6.30E-05	2.47E-07	5.37E-07	2.57E-07	5.09E-07	6.4508E-05
519816.73	4258247.16	3309.76065	0.0749	0.36899	0.07515	0.35646	6.29E-05	1.76E-07	7.57E-07	1.76E-07	7.02E-07	6.4723E-05
519836.2	4258393.93	3309.54537	0.10517	0.42772	0.1081	0.41775	6.29E-05	2.47E-07	8.77E-07	2.54E-07	8.22E-07	6.5109E-05
519739.97	4258638.98	3301.68056	0.10326	0.23316	0.1069	0.23122	6.28E-05	2.42E-07	4.78E-07	2.51E-07	4.55E-07	6.4186E-05
519799.44	4258512.66	3299.75993	0.11091	0.33222	0.1148	0.32694	6.27E-05	2.60E-07	6.81E-07	2.70E-07	6.44E-07	6.4577E-05
519834.25	4258422.94	3285.72557	0.11024	0.41986	0.11355	0.41077	6.25E-05	2.59E-07	8.61E-07	2.67E-07	8.09E-07	6.4651E-05
519809.36	4258493.22	3283.75118	0.11219	0.35389	0.11623	0.34789	6.24E-05	2.63E-07	7.26E-07	2.73E-07	6.85E-07	6.4365E-05
519749.85	4258609.84	3283.32016	0.10373	0.24701	0.10771	0.24467	6.24E-05	2.44E-07	5.07E-07	2.53E-07	4.82E-07	6.3895E-05
519822.99	4258304.73	3281.99145	0.08459	0.39165	0.08579	0.37976	6.24E-05	1.99E-07	8.03E-07	2.01E-07	7.48E-07	6.4336E-05
519833.2	4258376.97	3272.87904	0.10056	0.41939	0.10319	0.40933	6.22E-05	2.36E-07	8.60E-07	2.42E-07	8.06E-07	6.4356E-05
519819.76	4258288.31	3269.17207	0.08126	0.38171	0.08213	0.36971	6.21E-05	1.91E-07	7.83E-07	1.93E-07	7.28E-07	6.4035E-05
519769.65	4258561.27	3257.51774	0.1052	0.27844	0.10888	0.27436	6.19E-05	2.47E-07	5.71E-07	2.56E-07	5.40E-07	6.3533E-05
519733.67	4258647.8	3254.71167	0.10152	0.22581	0.10497	0.22394	6.19E-05	2.38E-07	4.63E-07	2.46E-07	4.41E-07	6.3255E-05
519816.47	4258272.05	3251.94584	0.07814	0.37175	0.07875	0.35966	6.18E-05	1.83E-07	7.62E-07	1.85E-07	7.08E-07	6.3652E-05
519779.57	4258541.83	3251.8307	0.10652	0.29509	0.11008	0.29066	6.18E-05	2.50E-07	6.05E-07	2.58E-07	5.72E-07	6.3497E-05
519830.1	4258360.23	3248.91577	0.09623	0.41092	0.09856	0.40063	6.18E-05	2.26E-07	8.43E-07	2.31E-07	7.89E-07	6.3845E-05
519759.73	4258580.71	3248.27166	0.10378	0.26277	0.10772	0.25928	6.17E-05	2.44E-07	5.39E-07	2.53E-07	5.10E-07	6.3290E-05
519739.93	4258629.28	3244.14896	0.10191	0.23386	0.10553	0.23191	6.17E-05	2.39E-07	4.80E-07	2.48E-07	4.57E-07	6.3089E-05
519830.69	4258431.6	3239.26099	0.11028	0.40906	0.11365	0.40054	6.16E-05	2.59E-07	8.39E-07	2.67E-07	7.88E-07	6.3726E-05
519789.49	4258522.4	3235.24141	0.10781	0.31316	0.11146	0.30834	6.15E-05	2.53E-07	6.42E-07	2.62E-07	6.07E-07	6.3260E-05
519832.52	4258402.89	3233.77683	0.1054	0.41638	0.1084	0.40705	6.15E-05	2.47E-07	8.54E-07	2.54E-07	8.01E-07	6.3625E-05
519826.92	4258343.69	3230.44832	0.09215	0.40183	0.09415	0.39131	6.14E-05	2.16E-07	8.24E-07	2.21E-07	7.70E-07	6.3437E-05
519813.12	4258255.93	3227.64487	0.0752	0.36096	0.07559	0.34893	6.14E-05	1.77E-07	7.40E-07	1.77E-07	6.87E-07	6.3133E-05
519749.81	4258600.14	3225.51257	0.10225	0.24797	0.10617	0.24536	6.13E-05	2.40E-07	5.09E-07	2.49E-07	4.83E-07	6.2792E-05
519823.67	4258327.33	3222.8321	0.08841	0.39363	0.09011	0.38266	6.13E-05	2.08E-07	8.07E-07	2.12E-07	7.53E-07	6.3240E-05
519799.4	4258502.96	3214.80733	0.10907	0.33286	0.11289	0.32751	6.11E-05	2.56E-07	6.83E-07	2.65E-07	6.45E-07	6.2956E-05
519727.32	4258656.52	3207.21888	0.09976	0.21878	0.10303	0.21698	6.10E-05	2.34E-07	4.49E-07	2.42E-07	4.27E-07	6.2315E-05
519827.13	4258440.25	3205.23115	0.11026	0.39873	0.1137	0.39066	6.09E-05	2.59E-07	8.18E-07	2.67E-07	7.69E-07	6.3038E-05
519809.32	4258483.52	3202.65533	0.1103	0.35443	0.11421	0.34831	6.09E-05	2.59E-07	7.27E-07	2.68E-07	6.86E-07	6.2816E-05
519739.89	4258619.58	3190.35147	0.10056	0.23457	0.10418	0.23256	6.06E-05	2.36E-07	4.81E-07	2.45E-07	4.58E-07	6.2062E-05
519812.88	4258474.87	3187.99184	0.11032	0.36257	0.11417	0.35612	6.06E-05	2.59E-07	7.44E-07	2.68E-07	7.01E-07	6.2570E-05
519829.54	4258385.86	3186.84736	0.10086	0.40885	0.10359	0.39942	6.06E-05	2.37E-07	8.39E-07	2.43E-07	7.86E-07	6.2681E-05
519769.61	4258551.57	3185.36684	0.10353	0.27915	0.10696	0.27501	6.05E-05	2.43E-07	5.73E-07	2.51E-07	5.41E-07	6.2156E-05
519759.69	4258571.01	3184.0193	0.1022	0.26364	0.10584	0.25994	6.05E-05	2.40E-07	5.41E-07	2.48E-07	5.12E-07	6.2063E-05
519819.31	4258313.68	3183.33079	0.08497	0.38184	0.0864	0.37077	6.05E-05	1.99E-07	7.83E-07	2.03E-07	7.30E-07	6.2425E-05
519823.57	4258448.9	3183.2995	0.11021	0.38886	0.11374	0.38123	6.05E-05	2.59E-07	7.98E-07	2.67E-07	7.50E-07	6.2582E-05
519816.44	4258466.21	3177.10636	0.11029	0.37097	0.11404	0.36417	6.04E-05	2.59E-07	7.61E-07	2.68E-07	7.17E-07	6.2395E-05
519816.11	4258297.2	3175.19198	0.08162	0.37299	0.08274	0.36163	6.04E-05	1.92E-07	7.65E-07	1.94E-07	7.12E-07	6.2217E-05
519820.01	4258457.56	3174.50747	0.11022	0.37965	0.11386	0.37243	6.03E-05	2.59E-07	7.79E-07	2.67E-07	7.33E-07	6.2379E-05

519779.53	4258532.14	3173.33058	0.10481	0.29567	0.10823	0.29124	6.03E-05	2.46E-07	6.06E-07	2.54E-07	5.73E-07	6.1999E-05
519828.83	4258411.85	3169.94453	0.1056	0.40579	0.10867	0.39698	6.03E-05	2.48E-07	8.32E-07	2.55E-07	7.81E-07	6.2372E-05
519749.77	4258590.45	3167.13969	0.10076	0.24899	0.10456	0.24602	6.02E-05	2.37E-07	5.11E-07	2.45E-07	4.84E-07	6.1679E-05
519812.84	4258280.88	3162.95795	0.07847	0.36325	0.07929	0.35176	6.01E-05	1.84E-07	7.45E-07	1.86E-07	6.92E-07	6.1930E-05
519826.47	4258369.05	3157.39343	0.09657	0.40087	0.09904	0.39125	6.00E-05	2.27E-07	8.22E-07	2.33E-07	7.70E-07	6.2068E-05
519789.44	4258512.7	3152.68636	0.10605	0.31375	0.10964	0.30889	5.99E-05	2.49E-07	6.43E-07	2.57E-07	6.08E-07	6.1685E-05
519729.97	4258639.02	3147.82864	0.09872	0.2226	0.10202	0.22077	5.98E-05	2.32E-07	4.57E-07	2.40E-07	4.35E-07	6.1197E-05
519809.51	4258264.7	3143.23386	0.0755	0.35301	0.07606	0.34153	5.97E-05	1.77E-07	7.24E-07	1.79E-07	6.72E-07	6.1499E-05
519823.32	4258352.44	3137.75841	0.09252	0.39243	0.09471	0.38256	5.96E-05	2.17E-07	8.05E-07	2.22E-07	7.53E-07	6.1641E-05
519739.85	4258609.88	3137.15306	0.09919	0.23539	0.10281	0.23319	5.96E-05	2.33E-07	4.83E-07	2.41E-07	4.59E-07	6.1048E-05
519799.36	4258493.26	3132.87642	0.10729	0.33341	0.11104	0.32798	5.96E-05	2.52E-07	6.84E-07	2.61E-07	6.46E-07	6.1392E-05
519820.1	4258336.02	3123.69275	0.08871	0.38369	0.0906	0.37355	5.94E-05	2.08E-07	7.87E-07	2.13E-07	7.35E-07	6.1319E-05
519759.65	4258561.31	3118.09684	0.10063	0.26437	0.10398	0.26054	5.93E-05	2.36E-07	5.42E-07	2.44E-07	5.13E-07	6.0805E-05
519825.14	4258420.82	3115.79065	0.1057	0.39532	0.10883	0.38703	5.92E-05	2.48E-07	8.11E-07	2.55E-07	7.62E-07	6.1302E-05
519769.57	4258541.88	3112.33325	0.1019	0.27971	0.10515	0.27556	5.92E-05	2.39E-07	5.74E-07	2.47E-07	5.42E-07	6.0762E-05
519825.89	4258394.74	3111.14301	0.10112	0.39892	0.10393	0.38998	5.91E-05	2.37E-07	8.18E-07	2.44E-07	7.68E-07	6.1204E-05
519749.73	4258580.75	3108.54853	0.09928	0.24991	0.10286	0.24664	5.91E-05	2.33E-07	5.13E-07	2.41E-07	4.86E-07	6.0561E-05
519723.65	4258647.79	3102.68024	0.09709	0.21574	0.1002	0.21398	5.90E-05	2.28E-07	4.42E-07	2.35E-07	4.21E-07	6.0303E-05
519729.93	4258629.32	3096.78987	0.09746	0.22321	0.10076	0.22135	5.89E-05	2.29E-07	4.58E-07	2.37E-07	4.36E-07	6.0223E-05
519779.49	4258522.44	3094.79419	0.10313	0.29623	0.10648	0.29177	5.88E-05	2.42E-07	6.08E-07	2.50E-07	5.74E-07	6.0500E-05
519739.81	4258600.19	3084.94291	0.09782	0.23626	0.10139	0.23377	5.86E-05	2.30E-07	4.85E-07	2.38E-07	4.60E-07	6.0052E-05
519815.62	4258322.63	3083.06096	0.08527	0.37205	0.08692	0.36181	5.86E-05	2.00E-07	7.63E-07	2.04E-07	7.12E-07	6.0483E-05
519812.45	4258306.09	3081.34338	0.08196	0.3642	0.08331	0.35355	5.86E-05	1.92E-07	7.47E-07	1.96E-07	6.96E-07	6.0402E-05
519809.21	4258289.7	3074.06559	0.07881	0.35552	0.07987	0.34461	5.84E-05	1.85E-07	7.29E-07	1.88E-07	6.78E-07	6.0212E-05
519822.85	4258377.86	3073.02504	0.09686	0.39122	0.09943	0.38219	5.84E-05	2.27E-07	8.02E-07	2.33E-07	7.52E-07	6.0428E-05
519789.4	4258503	3071.90012	0.10435	0.31423	0.10789	0.30933	5.84E-05	2.45E-07	6.44E-07	2.53E-07	6.09E-07	6.0143E-05
519821.45	4258429.78	3071.88207	0.10568	0.38505	0.10886	0.37729	5.84E-05	2.48E-07	7.90E-07	2.56E-07	7.43E-07	6.0427E-05
519805.91	4258273.47	3058.4204	0.0758	0.34539	0.07657	0.33446	5.81E-05	1.78E-07	7.08E-07	1.80E-07	6.58E-07	5.9860E-05
519799.32	4258483.56	3054.96761	0.10555	0.33383	0.10921	0.32829	5.81E-05	2.48E-07	6.85E-07	2.56E-07	6.46E-07	5.9904E-05
519759.61	4258551.61	3050.95794	0.09908	0.26497	0.10221	0.26108	5.80E-05	2.33E-07	5.43E-07	2.40E-07	5.14E-07	5.9523E-05
519819.72	4258361.19	3049.52275	0.09284	0.38324	0.09516	0.374	5.80E-05	2.18E-07	7.86E-07	2.23E-07	7.36E-07	5.9929E-05
519749.69	4258571.05	3049.34233	0.09781	0.25068	0.10112	0.24719	5.80E-05	2.30E-07	5.14E-07	2.37E-07	4.87E-07	5.9430E-05
519729.89	4258619.62	3048.95626	0.09622	0.22384	0.09951	0.22191	5.80E-05	2.26E-07	4.59E-07	2.34E-07	4.37E-07	5.9311E-05
519822.23	4258403.63	3045.84909	0.1013	0.38899	0.10418	0.38057	5.79E-05	2.38E-07	7.98E-07	2.45E-07	7.49E-07	5.9925E-05
519817.76	4258438.75	3041.44003	0.10562	0.3753	0.10888	0.36796	5.78E-05	2.48E-07	7.70E-07	2.56E-07	7.24E-07	5.9810E-05
519769.53	4258532.18	3038.49978	0.10031	0.28018	0.10344	0.27602	5.78E-05	2.35E-07	5.75E-07	2.43E-07	5.43E-07	5.9353E-05
519803.01	4258474.6	3038.30511	0.10561	0.34146	0.10922	0.33562	5.78E-05	2.48E-07	7.00E-07	2.56E-07	6.61E-07	5.9618E-05
519739.77	4258590.49	3032.6857	0.09645	0.23711	0.09989	0.23432	5.76E-05	2.26E-07	4.86E-07	2.35E-07	4.61E-07	5.9054E-05
519816.52	4258344.71	3029.49519	0.08899	0.37435	0.09103	0.36494	5.76E-05	2.09E-07	7.68E-07	2.14E-07	7.18E-07	5.9494E-05
519814.08	4258447.71	3024.75443	0.10559	0.3662	0.10894	0.35925	5.75E-05	2.48E-07	7.51E-07	2.56E-07	7.07E-07	5.9457E-05
519806.7	4258465.64	3024.00925	0.10558	0.3493	0.10912	0.34313	5.75E-05	2.48E-07	7.16E-07	2.56E-07	6.75E-07	5.9377E-05
519810.39	4258456.67	3018.51572	0.10555	0.35747	0.10899	0.35091	5.74E-05	2.48E-07	7.33E-07	2.56E-07	6.91E-07	5.9304E-05
519779.44	4258512.74	3016.54848	0.10151	0.29669	0.1048	0.29219	5.73E-05	2.38E-07	6.08E-07	2.46E-07	5.75E-07	5.9007E-05
519719.97	4258639.06	3007.03079	0.0945	0.21269	0.09748	0.21097	5.72E-05	2.22E-07	4.36E-07	2.29E-07	4.15E-07	5.8460E-05
519729.85	4258609.93	3001.78637	0.09495	0.22455	0.09825	0.22244	5.71E-05	2.23E-07	4.61E-07	2.31E-07	4.38E-07	5.8411E-05
519819.22	4258386.68	2997.44564	0.09709	0.38198	0.09974	0.37341	5.70E-05	2.28E-07	7.83E-07	2.34E-07	7.35E-07	5.8957E-05
519789.36	4258493.3	2993.61313	0.1027	0.31466	0.10619	0.30967	5.69E-05	2.41E-07	6.45E-07	2.49E-07	6.10E-07	5.8649E-05
519818.57	4258412.51	2991.91503	0.10142	0.37941	0.10437	0.37145	5.69E-05	2.38E-07	7.78E-07	2.45E-07	7.31E-07	5.8863E-05
519808.79	4258314.97	2988.9146	0.08227	0.35568	0.08385	0.34573	5.68E-05	1.93E-07	7.29E-07	1.97E-07	6.81E-07	5.8614E-05
519749.65	4258561.35	2988.21505	0.09636	0.25132	0.0994	0.24769	5.68E-05	2.26E-07	5.15E-07	2.33E-07	4.88E-07	5.8263E-05
519811.94	4258331.59	2987.52236	0.08557	0.36302	0.08741	0.35352	5.68E-05	2.01E-07	7.45E-07	2.05E-07	6.96E-07	5.8634E-05
519805.58	4258298.53	2984.91734	0.07913	0.34756	0.08042	0.3373	5.67E-05	1.86E-07	7.13E-07	1.89E-07	6.64E-07	5.8489E-05
519759.57	4258541.92	2982.55918	0.09757	0.26544	0.10053	0.26153	5.67E-05	2.29E-07	5.44E-07	2.36E-07	5.15E-07	5.8217E-05
519739.73	4258580.79	2978.40776	0.09507	0.23796	0.09832	0.23485	5.66E-05	2.23E-07	4.88E-07	2.31E-07	4.62E-07	5.8019E-05
519802.3	4258282.24	2973.82093	0.07611	0.33807	0.0771	0.32771	5.65E-05	1.79E-07	6.93E-07	1.81E-07	6.45E-07	5.8225E-05
519816.12	4258369.94	2966.7726	0.0931	0.37415	0.09551	0.36548	5.64E-05	2.19E-07	7.67E-07	2.24E-07	7.19E-07	5.8323E-05
519769.49	4258522.48	2964.2809	0.09876	0.28059	0.10182	0.27642	5.63E-05	2.32E-07	5.75E-07	2.39E-07	5.44E-07	5.7936E-05
519719.93	4258629.36	2961.32865	0.09332	0.21322	0.09632	0.21146	5.63E-05	2.19E-07	4.37E-07	2.26E-07	4.16E-07	5.7588E-05
519729.81	4258600.23	2954.48878	0.09368	0.22532	0.09693	0.22294	5.62E-05	2.20E-07	4.62E-07	2.28E-07	4.39E-07	5.7508E-05
519812.95	4258353.4	2948.39118	0.08935	0.36643	0.09154	0.35753	5.60E-05	2.10E-07	7.52E-07	2.15E-07	7.04E-07	5.7924E-05
519814.92	4258421.4	2945.97962	0.10144	0.36994	0.10443	0.36246	5.60E-05	2.38E-07	7.59E-07	2.45E-07	7.13E-07	5.7953E-05
519779.4	4258503.04	2939.60021	0.09994	0.29705	0.10319	0.29251	5.59E-05	2.35E-07	6.09E-07	2.42E-07	5.76E-07	5.7538E-05
519815.59	4258395.49	2931.53107	0.09727	0.37282	0.09998	0.36473	5.57E-05	2.28E-07	7.65E-07	2.35E-07	7.18E-07	5.7669E-05
519749.61	4258551.66	2925.80423	0.09493	0.25181	0.09775	0.24812	5.56E-05	2.23E-07	5.16E-07	2.29E-07	4.88E-07	5.7071E-05
519739.69	4258571.09	2923.81192	0.09371	0.23862	0.0967	0.2353	5.56E-05	2.20E-07	4.89E-07	2.27E-07	4.63E-07	5.6976E-05
519789.32	4258483.61	2918.87987	0.10111	0.31498	0.10452	0.30989	5.55E-05	2.37E-07	6.46E-07	2.45E-07	6.10E-07	5.7221E-05
519719.89	4258619.66	2917.92442	0.09215	0.21379	0.09517	0.21192	5.55E-05	2.16E-07	4.38E-07	2.23E-07	4.17E-07	5.6760E-05
519759.53	4258532.22	2913.08694	0.0961	0.26583	0.09895	0.2619	5.54E-05	2.26E-07	5.45E-07	2.32E-07	5.16E-07	5.6891E-05
519811.26	4258430.29	2910.74808	0.10137	0.36078	0.10442	0.35373	5.53E-05	2.38E-07	7.40E-07	2.45E-07	6.96E-07	5.7247E-05
519729.77	4258590.53	2906.49996	0.0924	0.22609	0.09554	0.2234	5.52E-05	2.17E-07	4.64E-07	2.24E-07	4.40E-07	5.6592E-05
519792.98	4258474.72	2902.46025	0.10121	0.32189	0.10462	0.31655	5.52E-05	2.38E-07	6.60E-07	2.46E-07	6.23E-07	5.6937E-05
519808.26	4258340.54	2900.87464	0.0859	0.35497	0.08791	0.34605	5.51E-05	2.02E-07	7.28E-07	2.06E-07	6.81E-07	5.6958E-05
519801.95	4258307.35	2896.45383	0.07942	0.33963	0.08092	0.33004	5.51E-05	1.86E-07	6.97E-07	1.90E-07	6.50E-07	5.6779E-05
519805.14	4258323.86	2895.43434	0.08253	0.34707	0.08429	0.33786	5.50E-05	1.94E-07	7.12E-07	1.98E-07	6.65E-07	5.6805E-05
519798.69	4258291	2893.4263	0.07646	0.33175	0.0777	0.32187	5.50E-05	1.80E-07	6.80E-07	1.82E-07	6.34E-07	5.6675E-05
519812.52	4258378.69	2891.97589	0.09332	0.36556	0.09581	0.35737	5.50E-05	2.19E-07	7.50E-07	2.25E-07	7.03E-07	5.6868E-05
519769.44	4258512.78	2890.08566	0.09726	0.28092	0.10027	0.27672	5.49E-05	2.28E-07	5.76E-07	2.35E-07	5.45E-07	5.6520E-05
519807.6	4258439.17	2889.96733	0.10136	0.35234	0.10448	0.34565	5.49E-05	2.38E-07	7.23E-07	2.45E-07	6.80E-07	5.6819E-05
519796.64	4258465.83	2886.48232	0.10124	0.32901	0.1046	0.32337	5.49E-05	2.38E-07	6.75E-07	2.46E-07	6.37E-07	5.6661E-05
519803.95	4258448.06	2879.66366	0.10133	0.34425	0.10454	0.33792	5.47E-05	2.38E-07	7.06E-07	2.45E-07	6.65E-07	5.6592E-05
519800.29	4258456.95	2879.60006	0.10131	0.33653	0.1046	0.33055	5.47E-05	2.38E-07	6.90E-07	2.46E-07	6.51E-07	5.6560E-05
519811.97	4258404.31	2875.9916	0.0974	0.36403	0.10017	0.35637	5.47E-05	2.29E-07	7.47E-07	2.35E-07	7.02E-07	5.6579E-05
519719.85	4258609.97	2875.95867	0.09098	0.2144	0.09399	0.21237	5.47E-05	2.14E-07	4.40E-07	2.21E-07	4.18E-07	5.5959E-05
519739.65	4258561.4	2867.32588	0.09236	0.23915	0.09511	0.2357	5.45E-05	2.17E-07	4.90E-07	2.23E-07	4.64E-07	5.5897E-05
519779.36	4258493.35	2864.76398	0.09842	0.29738	0.10163	0.29276	5.45E-05	2.31E-07	6.10E-07	2.39E-07	5.76E-07	5.6110E-05
519809.37	4258362.09	2864.31754	0.08955	0.35764	0.09181	0.34934	5.44E-05	2.10E-07	7.33E-07	2.16E-07	6.88E-07	5.6292E-05
519749.57	4258541.96	2861.71573	0.09352	0.25219	0.0962	0.24848	5.44E-05	2.20E-07	5.17E-07	2.26E-07	4.89E-07	5.5848E-05
519729.73	4258580.83	2857.42892	0.09112	0.22679	0.09407	0.22382	5.43E-05	2.14E-07	4.65E-07	2.21E-07	4.41E-07	5.5655E-05
519759.49	4258522.52	2842.90424	0.09467	0.26611	0.09745	0.26218	5.40E-05	2.22E-07	5.46E-07	2.29E-07	5.16E-07	5.5551E-05
519719.81	4258600.27	2832.99718	0.0898	0.21508	0.09277	0.21278	5.39E-05	2.11E-07	4.41E-07	2.18E-07	4.19E-07	5.5139E-05
519808.34	4258413.13	2830.53639	0.09745	0.35539	0.10028	0.34814	5.38E-05	2.29E-07	7.29E-07	2.35E-07	6.85E-07	5.5682E-05
519808.92	4258387.44	2825.80695	0.09349	0.35732	0.09605	0.34953	5.37E-05	2.19E-07	7.33E-07	2.25E-07	6.88E-07	5.5579E-05
519804.57	4258349.49	2817.66144	0.08617	0.34695	0.0883	0.33858	5.36E-05	2.02E-07	7.12E-07	2.07E-07	6.66E-07	5.5346E-05
519769.4	4258503.09	2816.88657	0.09581	0.2812	0.09878	0.27696	5.35E-05	2.25E-07	5.77E-07	2.32E-07	5.45E-07	5.5123E-05
519795.08	4258299.77	2809.28941	0.07674	0.32457	0.07818	0.31531	5.34E-05	1.80E-07	6.66E-07	1.84E-07	6.21E-07	5.5050E-05
519798.31	4258316.18	2809.10817	0.07968	0.33198	0.08136	0.32303	5.34E-05	1.87E-07	6.81E-07	1.91E-07	6.36E-07	5.5091E-05
519739.61	4258551.7	2808.96413	0.09103	0.23955	0.09358	0.23604	5.34E-05	2.14E-07	4.91E-07	2.20E-07	4.65E-07	5.4783E-05
519801.48	4258332.75	2808.41602	0.08279	0.33915	0.08469	0.33057	5.34E-05	1.94E-07	6.96E-07	1.99E-07	6.51E-07	5.5122E-05
519729.69	4258571.14	2806.97181	0.08986	0.22736	0.09257	0.22419	5.34E-05	2.11E-07	4.66E-07	2.17E-07	4.41E-07	5.4691E-05
519749.53	4258532.26	2796.19653	0.09216	0.25249	0.09473	0.24877	5.32E-05	2.16E-07	5.18E-07	2.22E-07	4.90E-07	5.4597E-05
519805.8	4258370.78	2792.89069	0.08978	0.34987	0.09212	0.34199	5.31E-05	2.11E-07	7.18E-07	2.16E-07	6.73E-07	5.4906E-05
519779.32	4258483.65	2792.8555	0.09694	0.29762	0.10011	0.2929	5.31E-05	2.28E-07	6.10E-07	2.35E-07	5.77E-07	5.4737E-05
519804.71	4258421.94	2792.19074	0.09742	0.34691	0.10029	0.34009	5.31E-05	2.29E-07	7.11E-07	2.35E-07	6.69E-07	5.4920E-05
519719.77	4258590.57	2789.38747	0.08861	0.21575	0.09147	0.21316	5.30E-05	2.08E-07	4.42E-07	2.15E-07	4.20E-07	5.4306E-05
519782.95	4258474.83	2775.18149	0.09708	0.30388	0.10026	0.29895	5.28E-05	2.28E-07	6.23E-07	2.35E-07	5.88E-07	5.4426E-05
519759.44	4258512.82	2772.40317	0.09328	0.26633	0.09601	0.26239	5.27E-05	2.19E-07	5.46E-07	2.25E-07	5.17E-07	5.4205E-05
519805.32	4258396.19	2768.95893	0.09362	0.34922	0.09623	0.34182	5.26E-05	2.20E-07	7.16E-07	2.26E-07	6.73E-07	5.4468E-05
519801.09	4258430.76	2767.76415	0.09741	0.33909	0.10035	0.3326	5.26E-05	2.29E-07	6.95E-07	2.36E-07	6.55E-07	5.4425E-05
519786.58	4258466.02	2759.76419	0.09716	0.31037	0.10033	0.30516	5.25E-05	2.28E-07	6.37E-07	2.36E-07	6.01E-07	5.4159E-05
519729.65	4258561.44	2754.63201	0.08861	0.22779	0.09108	0.2245	5.24E-05	2.08E-07	4.67E-07	2.14E-07	4.42E-07	5.3692E-05
519797.46	4258439.57	2751.9701	0.09735	0.33142	0.10035	0.32528	5.23E-05	2.29E-07	6.80E-07	2.36E-07	6.40E-07	5.4094E-05
519739.57	4258542	2748.93208	0.08973	0.23984	0.09213	0.23631	5.23E-05	2.11E-07	4.92E-07	2.16E-07	4.65E-07	5.3636E-05
519790.2	4258457.2	2748.34177	0.0972	0.31702	0.10032	0.31153	5.22E-05	2.28E-07	6.50E-07	2.36E-07	6.13E-07	5.3968E-05
519769.36	4258493.39	2745.20507	0.09439	0.28143	0.09735	0.27712	5.22E-05	2.22E-07	5.77E-07	2.29E-07	5.46E-07	5.3754E-05
519793.83	4258448.39	2744.8329	0.09725	0.32397	0.10031	0.31816	5.22E-05	2.28E-07	6.64E-07	2.35E-07	6.26E-07	5.3929E-05
519719.73	4258580.87	2743.75184	0.08741	0.21637	0.0901	0.2135	5.22E-05	2.05E-07	4.44E-07	2.12E-07	4.20E-07	5.3435E-05
519800.89	4258358.44	2738.78764	0.08639	0.33904	0.08859	0.33117	5.21E-05	2.03E-07	6.95E-07	2.08E-07	6.52E-07	5.3817E-05
519749.49	4258522.56	2729.76505	0.09083	0.25268	0.09334	0.24896	5.19E-05	2.13E-07	5.18E-07	2.19E-07	4.90E-07	5.3329E-05
519797.82	4258341.63	2728.42498	0.08306	0.33186	0.08507	0.32378	5.19E-05	1.95E-07	6.81E-07	2.00E-07	6.37E-07	5.3575E-05
519802.22	4258379.46	2727.82757	0.08996	0.34239	0.09237	0.33488	5.19E-05	2.11E-07	7.02E-07	2.17E-07	6.59E-07	5.3641E-05
519791.47	4258308.54	2726.87924	0.07699	0.31763	0.07861	0.30897	5.18E-05	1.81E-07	6.51E-07	1.85E-07	6.08E-07	5.3458E-05
519794.68	4258325	2724.28544	0.07991	0.32449	0.08173	0.31617	5.18E-05	1.88E-07	6.66E-07	1.92E-07	6.22E-07	5.3451E-05
519801.72	4258404.94	2721.73848	0.09368	0.34127	0.09635	0.33425	5.17E-05	2.20E-07	7.00E-07	2.26E-07	6.58E-07	5.3539E-05
519759.4	4258503.13	2702.59159	0.09192	0.26656	0.09464	0.26256	5.14E-05	2.16E-07	5.47E-07	2.22E-07	5.17E-07	5.2873E-05
519729.61	4258551.74	2700.05906	0.08737	0.2281	0.08965	0.22476	5.13E-05	2.05E-07	4.68E-07	2.10E-07	4.42E-07	5.2649E-05
519719.69	4258571.18	2696.82986	0.08623	0.21687	0.0887	0.2138	5.13E-05	2.02E-07	4.45E-07	2.08E-07	4.21E-07	5.2538E-05
519739.53	4258532.3	2687.08403	0.08845	0.24006	0.09077	0.23652	5.11E-05	2.08E-07	4.92E-07	2.13E-07	4.66E-07	5.2455E-05
519798.12	4258413.69	2682.66609	0.09369	0.33349	0.09639	0.32684	5.10E-05	2.20E-07	6.84E-07	2.26E-07	6.43E-07	5.2766E-05
519769.32	4258483.69	2676.02857	0.09302	0.28159	0.09595	0.27719	5.09E-05	2.18E-07	5.78E-07	2.25E-07	5.46E-07	5.2433E-05
519798.65	4258388.15	2670.26624	0.09007	0.33493	0.09254	0.32778	5.08E-05	2.11E-07	6.87E-07	2.17E-07	6.45E-07	5.2518E-05
519797.21	4258367.39	2667.46098	0.08657	0.33157	0.08884	0.32413	5.07E-05	2.03E-07	6.80E-07	2.09E-07	6.38E-07	5.2433E-05
519749.44	4258512.87	2662.79248	0.08953	0.25281	0.09201	0.24907	5.06E-05	2.10E-07	5.18E-07	2.16E-07	4.90E-07	5.2050E-05
519772.92	4258474.94	2657.33289	0.09317	0.28722	0.09613	0.28265	5.05E-05	2.19E-07	5.89E-07	2.26E-07	5.56E-07	5.2101E-05
519794.17	4258350.52	2653.82894	0.08329	0.32487	0.08539	0.31723	5.04E-05	1.96E-07	6.66E-07	2.00E-07	6.24E-07	5.2131E-05
519794.52	4258422.44	2652.1601	0.09363	0.32594	0.09637	0.31966	5.04E-05	2.20E-07	6.68E-07	2.26E-07	6.29E-07	5.2157E-05
519719.65	4258561.48	2648.29639	0.08507	0.21721	0.08731	0.21404	5.03E-05	2.00E-07	4.45E-07	2.05E-07	4.21E-07	5.1611E-05
519787.87	4258317.31	2647.03964	0.07723	0.31086	0.07898	0.30276	5.03E-05	1.81E-07	6.38E-07	1.85E-07	5.96E-07	5.1916E-05
519791.05	4258333.83	2645.42798	0.08014	0.31756	0.08206	0.30976	5.03E-05	1.88E-07	6.51E-07	1.93E-07	6.10E-07	5.1927E-05
519729.57	4258542.04	2643.51711	0.08616	0.22831	0.0883	0.22495	5.02E-05	2.02E-07	4.68E-07	2.07E-07	4.43E-07	5.1569E-05
519776.52	4258466.19	2638.99566	0.09323	0.29295	0.09619	0.28815	5.02E-05	2.19E-07	6.01E-07	2.26E-07	5.67E-07	5.1775E-05
519759.36	4258493.43	2633.91542	0.09061	0.26674	0.09332	0.26267	5.01E-05	2.13E-07	5.47E-07	2.19E-07	5.17E-07	5.1562E-05
519790.92	4258431.19	2632.59872	0.09356	0.3188	0.09636	0.31283	5.00E-05	2.20E-07	6.54E-07	2.26E-07	6.16E-07	5.1756E-05
519780.12	4258457.44	2627.22227	0.09334	0.29909	0.09627	0.29402	4.99E-05	2.19E-07	6.13E-07	2.26E-07	5.79E-07	5.1576E-05
519739.49	4258522.61	2624.15856	0.08722	0.2402	0.08948	0.23664	4.99E-05	2.05E-07	4.93E-07	2.10E-07	4.66E-07	5.1254E-05
519787.32	4258439.94	2623.05705	0.0935	0.31202	0.09636	0.30635	4.99E-05	2.20E-07	6.40E-07	2.26E-07	6.03E-07	5.1548E-05
519783.72	4258448.69	2622.52095	0.09345	0.30554	0.09636	0.30016	4.98E-05	2.19E-07	6.27E-07	2.26E-07	5.91E-07	5.1512E-05
519795.07	4258396.84	2621.38852	0.09014	0.32763	0.09266	0.32083	4.98E-05	2.12E-07	6.72E-07	2.18E-07	6.32E-07	5.1561E-05
519793.52	4258376.35	2603.58669	0.08671	0.32449	0.08904	0.31737	4.95E-05	2.04E-07	6.66E-07	2.09E-07	6.25E-07	5.1192E-05
519719.61	4258551.78	2597.32998	0.08393	0.21745	0.08598	0.21422	4.94E-05	1.97E-07	4.46E-07	2.02E-07	4.22E-07	5.0637E-05
519749.4	4258503.17	2596.10117	0.08828	0.25295	0.09074	0.24917	4.93E-05	2.07E-07	5.19E-07	2.13E-07	4.90E-07	5.0777E-05
519729.53	4258532.35	2585.10238	0.08498	0.22843	0.08704	0.22506	4.91E-05	2.00E-07	4.68E-07	2.04E-07	4.43E-07	5.0453E-05
519790.51	4258359.41	2583.28654	0.08345	0.31789	0.08561	0.31066	4.91E-05	1.96E-07	6.52E-07	2.01E-07	6.12E-07	5.0764E-05
519791.5	4258405.53	2579.86089	0.09014	0.32036	0.09269	0.31391	4.90E-05	2.12E-07	6.57E-07	2.18E-07	6.18E-07	5.0743E-05
519787.42	4258342.66	2573.31031	0.08036	0.31114	0.08236	0.30374	4.89E-05	1.89E-07	6.38E-07	1.93E-07	5.98E-07	5.0532E-05
519784.26	4258326.08	2570.38637	0.07743	0.30439	0.07928	0.2968	4.89E-05	1.82E-07	6.24E-07	1.86E-07	5.84E-07	5.0435E-05
519759.32	4258483.73	2567.38439	0.08933	0.26685	0.09204	0.26268	4.88E-05	2.10E-07	5.47E-07	2.16E-07	5.17E-07	5.0292E-05
519739.44	4258512.91	2560.32911	0.08601	0.24026	0.08824	0.23669	4.87E-05	2.02E-07	4.93E-07	2.07E-07	4.66E-07	5.0035E-05
519762.9	4258475.04	2548.20231	0.08951	0.27203	0.09225	0.26772	4.84E-05	2.10E-07	5.58E-07	2.17E-07	5.27E-07	4.9948E-05
519789.84	4258385.3	2548.17805	0.0868	0.31728	0.08916	0.31054	4.84E-05	2.04E-07	6.51E-07	2.09E-07	6.11E-07	5.0111E-05
519787.92	4258414.22	2546.47371	0.09008	0.31332	0.09266	0.30722	4.84E-05	2.11E-07	6.43E-07	2.18E-07	6.05E-07	5.0080E-05
519719.57	4258542.08	2543.85403	0.08279	0.2176	0.08472	0.21435	4.84E-05	1.94E-07	4.46E-07	1.99E-07	4.22E-07	4.9616E-05
519766.47	4258466.35	2530.37646	0.08961	0.27713	0.09237	0.27264	4.81E-05	2.10E-07	5.68E-07	2.17E-07	5.37E-07	4.9630E-05
519749.36	4258493.47	2529.99234	0.08705	0.25306	0.08952	0.24921	4.81E-05	2.04E-07	5.19E-07	2.10E-07	4.91E-07	4.9515E-05
519729.49	4258522.65	2525.34666	0.08383	0.2285	0.08583	0.22512	4.80E-05	1.97E-07	4.69E-07	2.02E-07	4.43E-07	4.9312E-05
519784.35	4258422.91	2524.13649	0.09004	0.30673	0.09265	0.30092	4.80E-05	2.11E-07	6.29E-07	2.18E-07	5.92E-07	4.9630E-05
519786.86	4258368.29	2519.84952	0.08358	0.31117	0.08579	0.30429	4.79E-05	1.96E-07	6.38E-07	2.01E-07	5.99E-07	4.9533E-05
519770.05	4258457.67	2514.57164	0.08967	0.28251	0.09242	0.2778	4.78E-05	2.11E-07	5.79E-07	2.17E-07	5.47E-07	4.9351E-05
519780.77	4258431.6	2510.47683	0.08997	0.30038	0.09263	0.29484	4.77E-05	2.11E-07	6.16E-07	2.17E-07	5.80E-07	4.9345E-05
519773.62	4258448.98	2504.43037	0.08972	0.28807	0.09244	0.28308	4.76E-05	2.11E-07	5.91E-07	2.17E-07	5.57E-07	4.9180E-05
519783.79	4258351.48	2504.38108	0.08052	0.3047	0.08257	0.29769	4.76E-05	1.89E-07	6.25E-07	1.94E-07	5.86E-07	4.9198E-05
519777.2	4258440.29	2503.86965	0.08985	0.29413	0.09255	0.28887	4.76E-05	2.11E-07	6.03E-07	2.17E-07	5.69E-07	4.9194E-05
519786.16	4258394.25	2501.61541	0.08684	0.31041	0.08925	0.30399	4.76E-05	2.04E-07	6.37E-07	2.10E-07	5.98E-07	4.9200E-05
519780.65	4258334.84	2497.902	0.07762	0.29836	0.07954	0.29117	4.75E-05	1.82E-07	6.12E-07	1.87E-07	5.73E-07	4.9035E-05
519739.4	4258503.21	2496.61173	0.08484	0.2403	0.08706	0.2367	4.75E-05	1.99E-07	4.93E-07	2.04E-07	4.66E-07	4.8818E-05
519719.53	4258532.39	2488.75978	0.08169	0.21767	0.08353	0.21442	4.73E-05	1.92E-07	4.46E-07	1.96E-07	4.22E-07	4.8563E-05
519749.32	4258483.77	2465.6966	0.08586	0.2531	0.08834	0.24916	4.69E-05	2.02E-07	5.19E-07	2.07E-07	4.90E-07	4.8287E-05
519729.45	4258512.95	2464.59666	0.0827	0.22851	0.08469	0.22512	4.68E-05	1.94E-07	4.69E-07	1.99E-07	4.43E-07	4.8152E-05
519783.2	4258377.18	2463.79622	0.08366	0.30456	0.0859	0.29801	4.68E-05	1.96E-07	6.25E-07	2.02E-07	5.87E-07	4.8442E-05
519782.47	4258403.2	2461.82593	0.08681	0.3035	0.08924	0.29742	4.68E-05	2.04E-07	6.22E-07	2.10E-07	5.85E-07	4.8416E-05
519753.01	4258474.82	2445.89051	0.08605	0.25805	0.08858	0.25396	4.65E-05	2.02E-07	5.29E-07	2.08E-07	5.00E-07	4.7931E-05
519780.16	4258360.31	2440.81364	0.08062	0.29831	0.08271	0.29165	4.64E-05	1.89E-07	6.12E-07	1.94E-07	5.74E-07	4.7965E-05
519739.36	4258493.51	2433.20432	0.0837	0.24032	0.08593	0.23667	4.63E-05	1.97E-07	4.93E-07	2.02E-07	4.66E-07	4.7608E-05
519719.49	4258522.69	2432.0626	0.08061	0.21767	0.08241	0.21442	4.62E-05	1.89E-07	4.46E-07	1.93E-07	4.22E-07	4.7480E-05
519778.79	4258412.16	2431.35582	0.08675	0.29692	0.08919	0.29116	4.62E-05	2.04E-07	6.09E-07	2.09E-07	5.73E-07	4.7811E-05
519777.04	4258343.61	2430.21622	0.07776	0.29237	0.07974	0.28555	4.62E-05	1.83E-07	6.00E-07	1.87E-07	5.62E-07	4.7726E-05
519756.69	4258465.87	2427.93142	0.08622	0.26306	0.08879	0.2588	4.62E-05	2.02E-07	5.40E-07	2.08E-07	5.09E-07	4.7610E-05
519779.54	4258386.06	2414.27571	0.08368	0.298	0.08594	0.29178	4.59E-05	1.96E-07	6.11E-07	2.02E-07	5.74E-07	4.7475E-05
519760.37	4258456.92	2413.74048	0.08635	0.26818	0.08894	0.26371	4.59E-05	2.03E-07	5.50E-07	2.09E-07	5.19E-07	4.7361E-05
519775.11	4258421.11	2411.17304	0.08668	0.2907	0.08916	0.28521	4.58E-05	2.03E-07	5.96E-07	2.09E-07	5.61E-07	4.7402E-05
519729.4	4258503.25	2403.52773	0.08161	0.22845	0.08359	0.22504	4.57E-05	1.92E-07	4.69E-07	1.96E-07	4.43E-07	4.6986E-05

519771.42	4258430.06	2399.8724	0.0866	0.28472	0.08911	0.2795	4.56E-05	2.03E-07	5.84E-07	2.09E-07	5.50E-07	4.7164E-05
519764.06	4258447.97	2399.81748	0.08638	0.27328	0.08894	0.26859	4.56E-05	2.03E-07	5.60E-07	2.09E-07	5.29E-07	4.7117E-05
519767.74	4258439.01	2395.58991	0.08648	0.27884	0.08901	0.27388	4.55E-05	2.03E-07	5.72E-07	2.09E-07	5.39E-07	4.7059E-05
519776.53	4258369.13	2382.50395	0.08067	0.292	0.08278	0.28569	4.53E-05	1.89E-07	5.99E-07	1.94E-07	5.62E-07	4.6832E-05
519719.45	4258512.99	2374.25395	0.07957	0.21762	0.08134	0.21436	4.51E-05	1.87E-07	4.46E-07	1.91E-07	4.22E-07	4.6376E-05
519775.89	4258394.95	2372.55906	0.08365	0.29165	0.08593	0.28575	4.51E-05	1.96E-07	5.98E-07	2.02E-07	5.62E-07	4.6657E-05
519739.32	4258483.82	2371.17797	0.08259	0.2403	0.08484	0.23657	4.51E-05	1.94E-07	4.93E-07	1.99E-07	4.66E-07	4.6423E-05
519773.44	4258352.38	2368.06425	0.07786	0.28625	0.07985	0.27979	4.50E-05	1.83E-07	5.87E-07	1.87E-07	5.51E-07	4.6521E-05
519742.98	4258474.93	2350.48331	0.08277	0.24486	0.0851	0.24098	4.47E-05	1.94E-07	5.02E-07	2.00E-07	4.74E-07	4.6049E-05
519729.36	4258493.56	2343.09279	0.08055	0.22837	0.08253	0.22493	4.45E-05	1.89E-07	4.68E-07	1.94E-07	4.43E-07	4.5832E-05
519772.23	4258403.84	2342.16965	0.08365	0.28582	0.08596	0.28018	4.45E-05	1.96E-07	5.86E-07	2.02E-07	5.52E-07	4.6056E-05
519772.9	4258377.96	2333.6632	0.08071	0.28615	0.08285	0.28012	4.44E-05	1.89E-07	5.87E-07	1.95E-07	5.51E-07	4.5881E-05
519746.64	4258466.04	2332.51522	0.08295	0.24945	0.08533	0.24542	4.43E-05	1.95E-07	5.12E-07	2.00E-07	4.83E-07	4.5727E-05
519768.57	4258412.72	2319.96276	0.08361	0.28014	0.08595	0.27474	4.41E-05	1.96E-07	5.75E-07	2.02E-07	5.41E-07	4.5612E-05
519750.29	4258457.16	2317.139	0.08311	0.25415	0.08552	0.24994	4.40E-05	1.95E-07	5.21E-07	2.01E-07	4.92E-07	4.5454E-05
519719.4	4258503.29	2316.07056	0.07855	0.21749	0.08032	0.21422	4.40E-05	1.84E-07	4.46E-07	1.89E-07	4.22E-07	4.5265E-05
519769.83	4258361.15	2309.39887	0.07789	0.2803	0.0799	0.27417	4.39E-05	1.83E-07	5.75E-07	1.88E-07	5.40E-07	4.5383E-05
519753.95	4258448.27	2305.51174	0.08323	0.2589	0.08564	0.25448	4.38E-05	1.95E-07	5.31E-07	2.01E-07	5.01E-07	4.5252E-05
519764.92	4258421.61	2303.79627	0.08351	0.27442	0.08586	0.2693	4.38E-05	1.96E-07	5.63E-07	2.02E-07	5.30E-07	4.5282E-05
519757.6	4258439.38	2297.40502	0.08332	0.26385	0.08572	0.2592	4.37E-05	1.96E-07	5.41E-07	2.01E-07	5.10E-07	4.5118E-05
519761.26	4258430.5	2296.18568	0.0834	0.26897	0.08577	0.26409	4.36E-05	1.96E-07	5.52E-07	2.01E-07	5.20E-07	4.5115E-05
519769.27	4258386.78	2293.43835	0.08074	0.28058	0.08291	0.2748	4.36E-05	1.90E-07	5.75E-07	1.95E-07	5.41E-07	4.5095E-05
519729.32	4258483.86	2283.80703	0.07952	0.22826	0.08152	0.22477	4.34E-05	1.87E-07	4.68E-07	1.91E-07	4.42E-07	4.4700E-05
519732.95	4258475.03	2262.28749	0.07969	0.23247	0.08178	0.22882	4.30E-05	1.87E-07	4.77E-07	1.92E-07	4.50E-07	4.4308E-05
519765.63	4258395.61	2260.89422	0.08074	0.27516	0.08292	0.26962	4.30E-05	1.90E-07	5.64E-07	1.95E-07	5.31E-07	4.4455E-05
519766.22	4258369.92	2260.71855	0.07795	0.27495	0.07998	0.26907	4.30E-05	1.83E-07	5.64E-07	1.88E-07	5.30E-07	4.4437E-05
519719.36	4258493.6	2258.25475	0.07756	0.21731	0.07933	0.21403	4.29E-05	1.82E-07	4.46E-07	1.86E-07	4.21E-07	4.4161E-05
519736.59	4258466.21	2243.60563	0.07987	0.23672	0.08203	0.23292	4.26E-05	1.88E-07	4.85E-07	1.93E-07	4.59E-07	4.3971E-05
519762	4258404.43	2234.38784	0.08068	0.26972	0.08287	0.26444	4.25E-05	1.89E-07	5.53E-07	1.95E-07	5.21E-07	4.3929E-05
519740.22	4258457.38	2227.21575	0.08004	0.24107	0.08226	0.23709	4.23E-05	1.88E-07	4.94E-07	1.93E-07	4.67E-07	4.3677E-05
519762.61	4258378.68	2220.06425	0.07799	0.26988	0.08004	0.26423	4.22E-05	1.83E-07	5.54E-07	1.88E-07	5.20E-07	4.3644E-05
519758.37	4258413.26	2214.66665	0.08057	0.26434	0.08277	0.25933	4.21E-05	1.89E-07	5.42E-07	1.94E-07	5.10E-07	4.3533E-05
519743.85	4258448.56	2214.54633	0.08019	0.24554	0.08244	0.24136	4.21E-05	1.88E-07	5.04E-07	1.94E-07	4.75E-07	4.3455E-05
519747.48	4258439.73	2206.4442	0.08033	0.25001	0.08258	0.24564	4.19E-05	1.89E-07	5.13E-07	1.94E-07	4.84E-07	4.3319E-05
519754.74	4258422.08	2205.28914	0.08051	0.25942	0.08272	0.25462	4.19E-05	1.89E-07	5.32E-07	1.94E-07	5.01E-07	4.3335E-05
519751.11	4258430.91	2203.2458	0.08043	0.25467	0.08267	0.25007	4.19E-05	1.89E-07	5.22E-07	1.94E-07	4.92E-07	4.3277E-05
519719.32	4258483.9	2201.16208	0.0766	0.21711	0.07838	0.2138	4.18E-05	1.80E-07	4.45E-07	1.84E-07	4.21E-07	4.3070E-05
519759.01	4258387.45	2184.93117	0.07798	0.26481	0.08005	0.25941	4.15E-05	1.83E-07	5.43E-07	1.88E-07	5.11E-07	4.2956E-05
519722.93	4258475.13	2180.00946	0.07678	0.2209	0.07865	0.21748	4.14E-05	1.80E-07	4.53E-07	1.85E-07	4.28E-07	4.2684E-05
519726.54	4258466.36	2160.15815	0.07695	0.22484	0.07891	0.22126	4.11E-05	1.81E-07	4.61E-07	1.85E-07	4.36E-07	4.2323E-05
519755.4	4258396.22	2156.92051	0.07794	0.25985	0.08001	0.25468	4.10E-05	1.83E-07	5.33E-07	1.88E-07	5.01E-07	4.2404E-05
519730.15	4258457.6	2143.41654	0.07712	0.22883	0.07915	0.22509	4.07E-05	1.81E-07	4.69E-07	1.86E-07	4.43E-07	4.2022E-05
519751.79	4258404.99	2136.22348	0.07787	0.25498	0.07995	0.25003	4.06E-05	1.83E-07	5.23E-07	1.88E-07	4.92E-07	4.1991E-05
519733.75	4258448.83	2129.43933	0.07729	0.23288	0.07935	0.22896	4.05E-05	1.81E-07	4.78E-07	1.86E-07	4.51E-07	4.1773E-05
519748.18	4258413.76	2122.55666	0.07778	0.25023	0.07986	0.2455	4.03E-05	1.83E-07	5.13E-07	1.87E-07	4.83E-07	4.1713E-05
519737.36	4258440.06	2119.6705	0.07744	0.23708	0.07953	0.23296	4.03E-05	1.82E-07	4.86E-07	1.87E-07	4.59E-07	4.1604E-05
519744.58	4258422.52	2115.61456	0.07769	0.24571	0.07977	0.24119	4.02E-05	1.82E-07	5.04E-07	1.87E-07	4.75E-07	4.1562E-05
519740.97	4258431.29	2114.83994	0.07757	0.24131	0.07966	0.237	4.02E-05	1.82E-07	4.95E-07	1.87E-07	4.67E-07	4.1530E-05
CONCUNIT ug/ DEPUNIT g/m^	m^3 2											

City of Santa Rosa—Stonebridge Subdivision Project

Project Site
Construction Annual Total PM2.5 Emissions (PM2.5 Total) **Mitigated Concentrations**

Annual Average Onsite Total PM2.5 Emission Rate (grams/m2/sec):	4.59E-08
Annual Average Offsite Total PM2.5 Emission Rate - Road Segment 1 (grams/sec):	4.09E-05
Annual Average Offsite Total PM2.5 Emission Rate - Road Segment 2 (grams/sec):	3.58E-05
Annual Average Offsite Total PM2.5 Emission Rate - Road Segment 3 (grams/sec):	4.09E-05
Annual Average Offsite Total PM2.5 Emission Rate - Road Segment 4 (grams/sec):	3.43E-05

Mitigated PM2.5 Total Concentrations		
Maximum DPM (ug/m3)	**MIR UTM** X	Y
3.0463E-02	520285.95	4258692.95

X	Y	Onsite PROJECT SITE Unit Emissions VALUES AVERAGED AVERAGE CONC	Offsite-Road Segment 2 Unit Emissions VALUES AVERAGED AVERAGE CONC	Offsite-Road Segment 3 Unit Emissions VALUES AVERAGED AVERAGE CONC	Offsite-Road Segment 4 Unit Emissions VALUES AVERAGED AVERAGE CONC	Offsite-Road Segment 5 Unit Emissions VALUES AVERAGED AVERAGE CONC	Onsite PROJECT SITE Annual PM2.5 Total w/Actual Emissions (ug/m3)	Offsite-Road Segment 2 Annual PM2.5 Total w/Actual Emissions (ug/m3)	Offsite-Road Segment 3 Annual PM2.5 Total w/Actual Emissions (ug/m3)	Offsite-Road Segment 4 Annual PM2.5 Total w/Actual Emissions (ug/m3)	Offsite-Road Segment 5 Annual PM2.5 Total w/Actual Emissions (ug/m3)	**Total DPM (ug/m3)**
520285.95	4258692.95	662010.4627	0.70541	0.47948	0.67924	0.51632	3.04E-02	2.89E-05	1.72E-05	2.78E-05	1.77E-05	3.0463E-02
520276.05	4258692.97	661730.7007	0.7558	0.50671	0.7262	0.54656	3.04E-02	3.09E-05	1.81E-05	2.97E-05	1.88E-05	3.0457E-02
520266.15	4258692.98	661237.0252	0.81334	0.53678	0.77956	0.57991	3.03E-02	3.33E-05	1.92E-05	3.19E-05	1.99E-05	3.0441E-02
520295.85	4258692.94	660914.3292	0.66038	0.45448	0.63708	0.4886	3.03E-02	2.70E-05	1.63E-05	2.61E-05	1.68E-05	3.0408E-02
520256.24	4258693	658495.184	0.87811	0.56962	0.83922	0.61631	3.02E-02	3.60E-05	2.04E-05	3.44E-05	2.12E-05	3.0322E-02
520305.75	4258692.92	656765.0041	0.61928	0.43121	0.59835	0.46286	3.01E-02	2.54E-05	1.54E-05	2.45E-05	1.59E-05	3.0212E-02
520246.34	4258693.02	654632.1663	0.95238	0.60592	0.90721	0.65636	3.00E-02	3.90E-05	2.17E-05	3.71E-05	2.25E-05	3.0154E-02
520315.65	4258692.9	650173.4768	0.58193	0.40963	0.56299	0.43904	2.98E-02	2.38E-05	1.47E-05	2.31E-05	1.51E-05	2.9905E-02
520236.44	4258693.03	647446.2042	1.03669	0.64581	0.9838	0.70018	2.97E-02	4.24E-05	2.31E-05	4.03E-05	2.40E-05	2.9833E-02
520325.55	4258692.89	642068.381	0.54847	0.38984	0.53118	0.41722	2.95E-02	2.25E-05	1.39E-05	2.17E-05	1.43E-05	2.9529E-02
520226.54	4258693.05	639146.7769	1.1371	0.69147	1.07491	0.74946	2.93E-02	4.66E-05	2.47E-05	4.40E-05	2.57E-05	2.9464E-02
520285.96	4258702.95	630959.6637	0.71756	0.46523	0.69024	0.50115	2.89E-02	2.94E-05	1.66E-05	2.83E-05	1.72E-05	2.9039E-02
520276.06	4258702.97	630957.2012	0.7694	0.49114	0.73836	0.52988	2.89E-02	3.15E-05	1.76E-05	3.02E-05	1.82E-05	2.9045E-02
520335.45	4258692.87	630938.432	0.51801	0.37153	0.50211	0.39707	2.89E-02	2.12E-05	1.33E-05	2.06E-05	1.36E-05	2.9015E-02
520266.16	4258702.98	630036.8694	0.82794	0.51957	0.79239	0.56129	2.89E-02	3.39E-05	1.86E-05	3.24E-05	1.93E-05	2.9009E-02
520295.86	4258702.94	629016.2959	0.6711	0.44135	0.64686	0.47468	2.89E-02	2.75E-05	1.58E-05	2.65E-05	1.63E-05	2.8944E-02
520256.26	4258703	627344.6224	0.89421	0.55071	0.85319	0.59556	2.88E-02	3.66E-05	1.97E-05	3.49E-05	2.04E-05	2.8893E-02
520216.64	4258693.07	626935.9391	1.2529	0.74154	1.17902	0.80314	2.88E-02	5.13E-05	2.65E-05	4.83E-05	2.76E-05	2.8916E-02
520305.77	4258702.92	624933.273	0.62914	0.41927	0.60745	0.45023	2.87E-02	2.58E-05	1.50E-05	2.49E-05	1.55E-05	2.8752E-02
520246.36	4258703.02	622952.3412	0.96996	0.58507	0.92233	0.63309	2.86E-02	3.97E-05	2.09E-05	3.78E-05	2.17E-05	2.8700E-02
520315.67	4258702.9	618385.3726	0.59112	0.39882	0.57155	0.42761	2.84E-02	2.42E-05	1.43E-05	2.34E-05	1.47E-05	2.8447E-02
520236.46	4258703.03	616231.652	1.05663	0.62291	1.00088	0.67408	2.83E-02	4.33E-05	2.23E-05	4.10E-05	2.31E-05	2.8401E-02
520345.35	4258692.85	615114.5187	0.48991	0.35441	0.47519	0.37827	2.82E-02	2.01E-05	1.27E-05	1.95E-05	1.30E-05	2.8285E-02
520206.74	4258693.08	611044.6617	1.39025	0.79675	1.30102	0.86205	2.80E-02	5.69E-05	2.85E-05	5.33E-05	2.96E-05	2.8202E-02
520325.57	4258702.89	610001.1955	0.5568	0.37996	0.53899	0.40674	2.80E-02	2.28E-05	1.36E-05	2.21E-05	1.40E-05	2.8058E-02
520226.56	4258703.05	607387.9481	1.15843	0.6654	1.09288	0.71947	2.79E-02	4.74E-05	2.38E-05	4.47E-05	2.47E-05	2.8006E-02
520335.47	4258702.87	599219.393	0.52565	0.36253	0.50934	0.3875	2.75E-02	2.15E-05	1.30E-05	2.09E-05	1.33E-05	2.7560E-02
520216.66	4258703.07	595412.1692	1.27692	0.71237	1.19948	0.76912	2.73E-02	5.23E-05	2.55E-05	4.91E-05	2.64E-05	2.7470E-02
520355.25	4258692.84	594099.7587	0.46433	0.33858	0.45059	0.36092	2.73E-02	1.90E-05	1.21E-05	1.84E-05	1.24E-05	2.7318E-02
520196.84	4258693.1	589909.9555	1.55429	0.85851	1.44609	0.92722	2.71E-02	6.36E-05	3.07E-05	5.92E-05	3.18E-05	2.7249E-02
520345.37	4258702.85	583195.2902	0.49683	0.34617	0.48175	0.36946	2.68E-02	2.03E-05	1.24E-05	1.97E-05	1.27E-05	2.6821E-02
520206.76	4258703.08	579527.2475	1.4173	0.76346	1.32431	0.82309	2.66E-02	5.80E-05	2.73E-05	5.42E-05	2.83E-05	2.6755E-02
520157.12	4258646.05	572750.5551	2.41391	1.62136	2.20438	1.77451	2.63E-02	9.88E-05	5.80E-05	9.03E-05	6.09E-05	2.6585E-02
520365.15	4258692.82	564099.0537	0.44038	0.32363	0.42748	0.34458	2.59E-02	1.80E-05	1.16E-05	1.75E-05	1.18E-05	2.5939E-02
520355.27	4258702.84	562308.3214	0.4705	0.33099	0.45646	0.35275	2.58E-02	1.93E-05	1.18E-05	1.87E-05	1.21E-05	2.5860E-02
520186.94	4258693.12	561775.8411	1.75507	0.92751	1.62237	0.99969	2.58E-02	7.19E-05	3.32E-05	6.64E-05	3.43E-05	2.5979E-02
520157.12	4258655.32	561759.9611	2.48739	1.52577	2.26179	1.65906	2.58E-02	1.02E-04	5.46E-05	9.26E-05	5.70E-05	2.6078E-02
520196.86	4258703.1	558250.8976	1.58571	0.81999	1.47332	0.88255	2.56E-02	6.49E-05	2.93E-05	6.03E-05	3.03E-05	2.5796E-02
520147.12	4258646.05	551368.5226	2.90149	1.83714	2.61828	2.00195	2.53E-02	1.19E-04	6.57E-05	1.07E-04	6.87E-05	2.5656E-02
520147.12	4258655.32	539010.2038	2.98985	1.71437	2.6866	1.85484	2.47E-02	1.22E-04	6.13E-05	1.10E-04	6.37E-05	2.5086E-02
520365.17	4258702.82	534151.4274	0.44628	0.31685	0.4331	0.33721	2.45E-02	1.83E-05	1.13E-05	1.77E-05	1.16E-05	2.4565E-02
520157.12	4258664.6	531634.1877	2.55475	1.43574	2.31624	1.55154	2.44E-02	1.05E-04	5.14E-05	9.48E-05	5.33E-05	2.4694E-02
520186.96	4258703.12	529735.306	1.79066	0.88188	1.65298	0.94795	2.43E-02	7.33E-05	3.15E-05	6.77E-05	3.25E-05	2.4508E-02
520177.04	4258693.13	525404.7531	2.00342	1.00358	1.83797	1.07998	2.41E-02	8.20E-05	3.59E-05	7.53E-05	3.71E-05	2.4335E-02
520137.12	4258646.05	525153.9319	3.57866	2.09768	3.18247	2.27288	2.41E-02	1.47E-04	7.50E-05	1.30E-04	7.80E-05	2.4523E-02
520375.05	4258692.8	523276.3796	0.41865	0.30989	0.40644	0.32958	2.40E-02	1.71E-05	1.11E-05	1.66E-05	1.13E-05	2.4063E-02
520137.12	4258655.32	512025.5326	3.6851	1.93506	3.26165	2.08215	2.35E-02	1.51E-04	6.92E-05	1.34E-04	7.15E-05	2.3916E-02
520276.1	4258722.97	505674.2331	0.79371	0.46183	0.75976	0.49782	2.32E-02	3.25E-05	1.65E-05	3.11E-05	1.71E-05	2.3297E-02
520286	4258722.95	505256.639	0.73952	0.43808	0.70971	0.47189	2.32E-02	3.03E-05	1.57E-05	2.91E-05	1.62E-05	2.3271E-02
520266.2	4258722.98	504669.1133	0.85464	0.48778	0.8158	0.52592	2.32E-02	3.50E-05	1.74E-05	3.34E-05	1.81E-05	2.3257E-02
520295.9	4258722.94	503301.2402	0.69121	0.41641	0.66492	0.44806	2.31E-02	2.83E-05	1.49E-05	2.72E-05	1.54E-05	2.3176E-02
520147.12	4258664.6	502477.166	3.06715	1.599	2.74954	1.72011	2.31E-02	1.26E-04	5.72E-05	1.13E-04	5.91E-05	2.3407E-02
520256.29	4258723	502068.1672	0.92375	0.51606	0.87902	0.55632	2.30E-02	3.78E-05	1.85E-05	3.60E-05	1.91E-05	2.3145E-02
520305.8	4258722.92	499711.4967	0.64774	0.39649	0.6244	0.42605	2.29E-02	2.65E-05	1.42E-05	2.56E-05	1.46E-05	2.3007E-02
520246.39	4258723.02	497859.4119	1.00257	0.54684	0.95073	0.58917	2.28E-02	4.10E-05	1.96E-05	3.89E-05	2.02E-05	2.2961E-02
520375.07	4258702.8	495316.0666	0.42383	0.30359	0.41136	0.32267	2.27E-02	1.74E-05	1.09E-05	1.68E-05	1.11E-05	2.2780E-02
520315.7	4258722.9	493976.8157	0.60825	0.37772	0.58724	0.40533	2.27E-02	2.49E-05	1.35E-05	2.40E-05	1.39E-05	2.2739E-02
520157.12	4258673.87	493534.2778	2.61469	1.34986	2.36669	1.45215	2.26E-02	1.07E-04	4.83E-05	9.69E-05	4.99E-05	2.2944E-02
520127.12	4258646.05	492895.6744	4.55641	2.41345	3.98368	2.59237	2.26E-02	1.87E-04	8.63E-05	1.63E-04	8.90E-05	2.3138E-02
520236.49	4258723.03	491916.287	1.09317	0.58035	1.03274	0.62471	2.26E-02	4.48E-05	2.08E-05	4.23E-05	2.14E-05	2.2697E-02
520177.05	4258703.13	491915.5288	2.04404	0.94969	1.87246	1.02006	2.26E-02	8.37E-05	3.40E-05	7.67E-05	3.50E-05	2.2797E-02
520325.6	4258722.89	485086.5142	0.57235	0.36042	0.55332	0.38619	2.23E-02	2.34E-05	1.29E-05	2.27E-05	1.33E-05	2.2327E-02
520226.59	4258723.05	483881.6868	1.19826	0.61692	1.12752	0.66328	2.22E-02	4.91E-05	2.21E-05	4.62E-05	2.28E-05	2.2340E-02
520127.12	4258655.32	480354.9216	4.68376	2.19799	4.07203	2.34136	2.20E-02	1.92E-04	7.86E-05	1.67E-04	8.04E-05	2.2555E-02
520167.14	4258693.15	479970.9033	2.31789	1.08767	2.10702	1.16908	2.20E-02	9.49E-05	3.89E-05	8.63E-05	4.01E-05	2.2280E-02
520335.5	4258722.87	473811.8752	0.53964	0.34439	0.52227	0.36844	2.17E-02	2.21E-05	1.23E-05	2.14E-05	1.26E-05	2.1806E-02
520137.12	4258664.6	473513.4601	3.77541	1.78691	3.33266	1.91154	2.17E-02	1.55E-04	6.39E-05	1.36E-04	6.56E-05	2.2144E-02
520216.69	4258723.07	473418.3444	1.32151	0.65686	1.23821	0.70529	2.17E-02	5.41E-05	2.35E-05	5.07E-05	2.42E-05	2.1872E-02
520384.96	4258692.79	467816.7544	0.39843	0.29701	0.38682	0.31554	2.15E-02	1.63E-05	1.06E-05	1.58E-05	1.08E-05	2.1516E-02
520157.12	4258683.15	461931.6033	2.67282	1.26628	2.40997	1.36004	2.12E-02	1.09E-04	4.53E-05	9.87E-05	4.67E-05	2.1493E-02
520206.79	4258723.08	459749.9231	1.46709	0.69966	1.36788	0.75072	2.11E-02	6.01E-05	2.50E-05	5.60E-05	2.58E-05	2.1259E-02
520345.4	4258722.85	459676.8086	0.50982	0.32951	0.49383	0.35197	2.11E-02	2.09E-05	1.18E-05	2.02E-05	1.21E-05	2.1154E-02
520147.12	4258673.87	458448.1957	3.13449	1.49094	2.80621	1.59781	2.10E-02	1.28E-04	5.33E-05	1.15E-04	5.49E-05	2.1384E-02
520117.12	4258646.05	453337.2361	6.02456	2.80275	5.18464	2.95182	2.08E-02	2.47E-04	1.00E-04	2.12E-04	1.01E-04	2.1459E-02
520384.97	4258702.79	444201.6386	0.40308	0.2912	0.39121	0.30911	2.04E-02	1.65E-05	1.04E-05	1.60E-05	1.06E-05	2.0433E-02
520286.01	4258732.95	443470.6967	0.74861	0.42495	0.71744	0.45747	2.03E-02	3.07E-05	1.52E-05	2.94E-05	1.57E-05	2.0437E-02
520276.11	4258732.97	443321.6464	0.80306	0.44739	0.76758	0.48176	2.03E-02	3.29E-05	1.60E-05	3.14E-05	1.65E-05	2.0436E-02
520295.91	4258732.94	443194.7901	0.70049	0.40463	0.67307	0.43525	2.03E-02	2.87E-05	1.45E-05	2.76E-05	1.49E-05	2.0419E-02
520117.12	4258655.32	442679.2421	6.17731	2.51752	5.27774	2.61964	2.03E-02	2.53E-04	9.00E-05	2.16E-04	8.99E-05	2.0958E-02
520196.89	4258723.1	441936.3227	1.64127	0.74603	1.52191	0.80023	2.03E-02	6.72E-05	2.67E-05	6.23E-05	2.75E-05	2.0459E-02
520266.21	4258732.98	441922.7961	0.8643	0.47181	0.82376	0.50799	2.03E-02	3.54E-05	1.69E-05	3.37E-05	1.74E-05	2.0378E-02
520355.3	4258722.84	441578.9503	0.48248	0.31564	0.46764	0.33663	2.03E-02	1.98E-05	1.13E-05	1.91E-05	1.16E-05	2.0321E-02
520127.12	4258664.6	441242.8549	4.78308	2.01127	4.15275	2.12313	2.02E-02	1.96E-04	7.19E-05	1.70E-04	7.29E-05	2.0754E-02
520256.31	4258733	440473.4092	0.93504	0.49867	0.88843	0.53664	2.02E-02	3.83E-05	1.78E-05	3.64E-05	1.84E-05	2.0319E-02
520305.82	4258732.92	439595.7048	0.65618	0.3856	0.63191	0.41433	2.02E-02	2.69E-05	1.38E-05	2.59E-05	1.42E-05	2.0249E-02
520246.41	4258733.02	436140.439	1.01423	0.52751	0.96051	0.56717	2.00E-02	4.15E-05	1.89E-05	3.93E-05	1.95E-05	2.0128E-02
520236.51	4258733.03	430262.5705	1.10508	0.55874	1.04291	0.60012	1.97E-02	4.52E-05	2.00E-05	4.27E-05	2.06E-05	1.9868E-02
520315.72	4258732.9	430094.4625	0.61423	0.36682	0.59234	0.39379	1.97E-02	2.51E-05	1.31E-05	2.43E-05	1.35E-05	1.9808E-02
520226.61	4258733.05	425077.4163	1.2144	0.59309	1.14168	0.63637	1.95E-02	4.97E-05	2.12E-05	4.67E-05	2.18E-05	1.9641E-02
520137.12	4258673.87	425012.9196	3.84051	1.65525	3.3984	1.75984	1.95E-02	1.57E-04	5.92E-05	1.39E-04	6.04E-05	1.9915E-02
520325.62	4258732.89	422924.2617	0.57832	0.35049	0.55854	0.37573	1.94E-02	2.37E-05	1.25E-05	2.29E-05	1.29E-05	1.9475E-02
520147.12	4258683.15	422825.3067	3.20665	1.38833	2.8509	1.48633	1.94E-02	1.31E-04	4.97E-05	1.17E-04	5.10E-05	1.9747E-02
520160.07	4258700.23	421059.4477	2.63003	1.10318	2.36922	1.18257	1.93E-02	1.08E-04	3.95E-05	9.70E-05	4.06E-05	1.9602E-02
520365.2	4258722.82	419786.6962	0.45753	0.30285	0.44368	0.32246	1.93E-02	1.87E-05	1.08E-05	1.82E-05	1.11E-05	1.9318E-02
520186.99	4258723.12	418859.9409	1.85237	0.79609	1.70623	0.85397	1.92E-02	7.58E-05	2.85E-05	6.99E-05	2.93E-05	1.9420E-02
520216.71	4258733.07	416895.7376	1.34162	0.6299	1.25594	0.67537	1.91E-02	5.49E-05	2.25E-05	5.14E-05	2.32E-05	1.9278E-02
520335.52	4258732.87	412508.9499	0.5451	0.33513	0.5271	0.35875	1.89E-02	2.23E-05	1.20E-05	2.16E-05	1.23E-05	1.8993E-02
520117.12	4258664.6	405962.6887	6.2821	2.2804	5.36663	2.34026	1.86E-02	2.57E-04	8.16E-05	2.20E-04	8.03E-05	1.9264E-02
520107.12	4258646.05	405286.502	8.29137	3.27618	7.12267	3.30505	1.86E-02	3.39E-04	1.17E-04	2.92E-04	1.13E-04	1.9456E-02
520206.81	4258733.08	403304.9696	1.48556	0.66809	1.38397	0.71652	1.85E-02	6.08E-05	2.39E-05	5.67E-05	2.46E-05	1.8669E-02
520394.86	4258692.77	402093.9677	0.37942	0.28482	0.36831	0.30228	1.84E-02	1.55E-05	1.02E-05	1.51E-05	1.04E-05	1.8498E-02
520345.42	4258732.85	398873.3084	0.51451	0.32073	0.498	0.34282	1.83E-02	2.11E-05	1.15E-05	2.04E-05	1.18E-05	1.8364E-02
520107.12	4258655.32	396695.3815	8.46977	2.89289	7.213	2.87536	1.82E-02	3.47E-04	1.03E-04	2.95E-04	9.87E-05	1.9044E-02
520276.13	4258742.97	393455.3145	0.81425	0.43442	0.77748	0.46701	1.81E-02	3.33E-05	1.55E-05	3.18E-05	1.60E-05	1.8148E-02
520286.03	4258742.95	393424.8123	0.75885	0.41304	0.72651	0.44405	1.80E-02	3.11E-05	1.48E-05	2.97E-05	1.52E-05	1.8140E-02
520295.93	4258742.94	392026.7775	0.70941	0.3935	0.68093	0.42289	1.80E-02	2.90E-05	1.41E-05	2.79E-05	1.45E-05	1.8071E-02
520127.12	4258673.87	392001.7998	4.82933	1.85072	4.22761	1.93337	1.80E-02	1.98E-04	6.62E-05	1.73E-04	6.64E-05	1.8488E-02
520266.23	4258742.98	391799.814	0.87593	0.45746	0.83403	0.49154	1.80E-02	3.59E-05	1.64E-05	3.41E-05	1.69E-05	1.8078E-02
520375.11	4258722.8	390522.566	0.43414	0.29067	0.42107	0.30901	1.79E-02	1.78E-05	1.04E-05	1.72E-05	1.06E-05	1.7972E-02
520256.33	4258743	390273.9548	0.94759	0.48275	0.89956	0.51832	1.79E-02	3.88E-05	1.73E-05	3.68E-05	1.78E-05	1.8016E-02
520177.09	4258723.13	390188.0308	2.11218	0.85123	1.93009	0.91256	1.79E-02	8.65E-05	3.04E-05	7.90E-05	3.13E-05	1.8128E-02
520305.83	4258742.92	388393.5673	0.66434	0.37519	0.6391	0.40297	1.78E-02	2.72E-05	1.34E-05	2.62E-05	1.38E-05	1.7899E-02
520137.12	4258683.15	388111.7385	3.93849	1.53176	3.44433	1.62481	1.78E-02	1.61E-04	5.48E-05	1.41E-04	5.58E-05	1.8219E-02
520246.43	4258743.02	386888.3886	1.02862	0.50985	0.9734	0.54694	1.77E-02	4.21E-05	1.82E-05	3.99E-05	1.88E-05	1.7869E-02
520196.91	4258733.1	386868.8806	1.65823	0.70949	1.53631	0.76131	1.77E-02	6.79E-05	2.54E-05	6.29E-05	2.61E-05	1.7931E-02
520394.87	4258702.77	383280.803	0.38378	0.27957	0.37241	0.29641	1.76E-02	1.57E-05	1.00E-05	1.52E-05	1.02E-05	1.7635E-02
520355.32	4258732.84	382917.3022	0.48694	0.30754	0.47163	0.32819	1.76E-02	1.99E-05	1.10E-05	1.93E-05	1.13E-05	1.7629E-02
520236.53	4258743.03	382285.2374	1.12206	0.539	1.05818	0.57776	1.75E-02	4.59E-05	1.93E-05	4.33E-05	1.98E-05	1.7667E-02
520315.73	4258742.9	379516.2051	0.6214	0.357	0.59862	0.38323	1.74E-02	2.54E-05	1.28E-05	2.45E-05	1.32E-05	1.7487E-02
520226.63	4258743.05	377159.099	1.23258	0.57048	1.15802	0.61121	1.73E-02	5.05E-05	2.04E-05	4.74E-05	2.10E-05	1.7443E-02
520325.63	4258742.89	372767.896	0.58501	0.34135	0.56444	0.36601	1.71E-02	2.40E-05	1.22E-05	2.31E-05	1.26E-05	1.7174E-02
520216.72	4258743.07	369290.478	1.36068	0.60388	1.2729	0.64707	1.69E-02	5.57E-05	2.16E-05	5.21E-05	2.22E-05	1.7094E-02
520187.01	4258733.12	367383.6721	1.86951	0.75494	1.7206	0.81017	1.69E-02	7.65E-05	2.70E-05	7.04E-05	2.78E-05	1.7057E-02
520107.12	4258664.6	364666.488	8.58552	2.58252	7.30115	2.52874	1.67E-02	3.52E-04	9.24E-05	2.99E-04	8.68E-05	1.7560E-02
520365.22	4258732.82	364491.551	0.46206	0.29545	0.44773	0.31478	1.67E-02	1.89E-05	1.06E-05	1.83E-05	1.08E-05	1.6781E-02
520335.53	4258742.87	363255.4372	0.55134	0.32663	0.53264	0.34978	1.67E-02	2.26E-05	1.17E-05	2.18E-05	1.20E-05	1.6734E-02
520117.12	4258673.87	358682.5779	6.27831	2.08017	5.44927	2.10424	1.65E-02	2.57E-04	7.44E-05	2.23E-04	7.22E-05	1.7082E-02
520206.82	4258743.08	357457.2179	1.50677	0.63879	1.40259	0.68501	1.64E-02	6.17E-05	2.28E-05	5.74E-05	2.35E-05	1.6565E-02
520142.99	4258697.3	357304.0426	3.5693	1.30295	3.14066	1.38187	1.64E-02	1.46E-04	4.66E-05	1.29E-04	4.74E-05	1.6761E-02
520127.12	4258683.15	356214.8165	4.97931	1.70276	4.27691	1.76981	1.63E-02	2.04E-04	6.09E-05	1.75E-04	6.08E-05	1.6843E-02
520385.01	4258722.79	354960.1158	0.41245	0.27924	0.40003	0.2964	1.63E-02	1.69E-05	9.99E-06	1.64E-05	1.02E-05	1.6338E-02
520345.44	4258742.85	351174.4886	0.52041	0.31286	0.50328	0.33457	1.61E-02	2.13E-05	1.12E-05	2.06E-05	1.15E-05	1.6176E-02
520276.15	4258752.97	350226.7969	0.82382	0.42162	0.78592	0.45238	1.61E-02	3.37E-05	1.51E-05	3.22E-05	1.55E-05	1.6164E-02
520286.05	4258752.95	349840.2368	0.76761	0.40127	0.73414	0.43073	1.60E-02	3.14E-05	1.44E-05	3.01E-05	1.48E-05	1.6141E-02
520266.25	4258752.98	349714.4292	0.8874	0.44361	0.84432	0.47567	1.60E-02	3.63E-05	1.59E-05	3.46E-05	1.63E-05	1.6147E-02
520295.95	4258752.94	348899.204	0.71784	0.38263	0.68827	0.41072	1.60E-02	2.94E-05	1.37E-05	2.82E-05	1.41E-05	1.6092E-02
520256.34	4258753	348163.1831	0.95986	0.46728	0.91064	0.50068	1.60E-02	3.93E-05	1.67E-05	3.73E-05	1.72E-05	1.6084E-02
520097.12	4258646.05	347956.3173	11.65187	3.77005	10.63734	3.54717	1.60E-02	4.77E-04	1.35E-04	4.36E-04	1.22E-04	1.7133E-02
520305.85	4258752.92	345341.9954	0.67218	0.36519	0.64593	0.39188	1.58E-02	2.75E-05	1.31E-05	2.64E-05	1.35E-05	1.5924E-02
520246.44	4258753.02	345010.8408	1.04171	0.49242	0.98527	0.52729	1.58E-02	4.27E-05	1.76E-05	4.03E-05	1.81E-05	1.5947E-02
520177.1	4258733.13	344232.1051	2.13034	0.80545	1.94512	0.86335	1.58E-02	8.72E-05	2.88E-05	7.96E-05	2.96E-05	1.6018E-02
520196.92	4258743.1	343214.1268	1.68112	0.67672	1.5561	0.72611	1.57E-02	6.88E-05	2.42E-05	6.37E-05	2.49E-05	1.5928E-02
520097.12	4258655.32	340656.94	11.84468	3.25763	10.70451	3.03674	1.56E-02	4.85E-04	1.17E-04	4.38E-04	1.04E-04	1.6773E-02
520236.54	4258753.03	340539.5144	1.13551	0.51913	1.07039	0.55578	1.56E-02	4.65E-05	1.86E-05	4.38E-05	1.91E-05	1.5751E-02
520375.12	4258732.8	338741.735	0.43783	0.28355	0.42435	0.30163	1.55E-02	1.79E-05	1.01E-05	1.74E-05	1.04E-05	1.5597E-02
520315.75	4258752.9	337567.1678	0.62872	0.34781	0.60503	0.37316	1.55E-02	2.57E-05	1.24E-05	2.48E-05	1.28E-05	1.5563E-02
520355.34	4258742.84	336783.4346	0.49229	0.30014	0.47644	0.32047	1.55E-02	2.02E-05	1.07E-05	1.95E-05	1.10E-05	1.5512E-02
520226.64	4258753.05	335861.3664	1.24752	0.54802	1.1714	0.58689	1.54E-02	5.11E-05	1.96E-05	4.80E-05	2.01E-05	1.5547E-02
520325.65	4258752.89	330900.4631	0.5915	0.33265	0.5701	0.35662	1.52E-02	2.42E-05	1.19E-05	2.33E-05	1.22E-05	1.5253E-02
520216.74	4258753.07	329414.4198	1.37801	0.57874	1.28823	0.62015	1.51E-02	5.64E-05	2.07E-05	5.27E-05	2.13E-05	1.5264E-02
520187.02	4258743.12	326444.1806	1.89284	0.71852	1.74055	0.7707	1.50E-02	7.75E-05	2.57E-05	7.13E-05	2.65E-05	1.5178E-02
520117.12	4258683.15	324716.8062	6.51238	1.89936	5.5032	1.90713	1.49E-02	2.67E-04	6.79E-05	2.25E-04	6.55E-05	1.5523E-02
520335.55	4258752.87	322074.6451	0.55725	0.31843	0.53781	0.34105	1.48E-02	2.28E-05	1.14E-05	2.20E-05	1.17E-05	1.4844E-02
520107.12	4258673.87	321083.8887	8.40645	2.32693	7.38238	2.24471	1.47E-02	3.44E-04	8.32E-05	3.02E-04	7.71E-05	1.5537E-02
520365.24	4258742.82	320208.0844	0.46676	0.28843	0.45197	0.30747	1.47E-02	1.91E-05	1.03E-05	1.85E-05	1.06E-05	1.4749E-02
520206.84	4258753.08	318642.7183	1.52406	0.61073	1.41773	0.65507	1.46E-02	6.24E-05	2.18E-05	5.80E-05	2.25E-05	1.4783E-02
520167.2	4258733.15	318486.6464	2.45598	0.86208	2.22171	0.92062	1.46E-02	1.01E-04	3.08E-05	9.10E-05	3.16E-05	1.4866E-02
520276.16	4258762.97	313868.4802	0.83324	0.40924	0.79438	0.43826	1.44E-02	3.41E-05	1.46E-05	3.25E-05	1.50E-05	1.4496E-02
520266.26	4258762.98	313520.6912	0.89759	0.42988	0.85357	0.46009	1.44E-02	3.68E-05	1.54E-05	3.49E-05	1.58E-05	1.4487E-02
520286.06	4258762.95	313078.043	0.77594	0.38991	0.74151	0.41779	1.44E-02	3.18E-05	1.39E-05	3.04E-05	1.43E-05	1.4454E-02
520097.12	4258664.6	312508.3724	11.80095	2.85555	10.77015	2.63932	1.43E-02	4.83E-04	1.02E-04	4.41E-04	9.06E-05	1.5454E-02
520295.96	4258762.94	312494.4961	0.72614	0.37234	0.69561	0.39906	1.43E-02	2.97E-05	1.33E-05	2.85E-05	1.37E-05	1.4422E-02
520256.36	4258763	311613.6424	0.96948	0.45157	0.91945	0.48313	1.43E-02	3.97E-05	1.62E-05	3.76E-05	1.66E-05	1.4406E-02
520135.92	4258704.38	311567.5546	4.18531	1.32404	3.635	1.38081	1.43E-02	1.71E-04	4.74E-05	1.49E-04	4.74E-05	1.4709E-02
520345.45	4258752.85	311480.473	0.5261	0.30528	0.50829	0.32656	1.43E-02	2.15E-05	1.09E-05	2.08E-05	1.12E-05	1.4355E-02
520314.49	4258473.05	309388.376	0.4091	0.59145	0.40726	0.64915	1.42E-02	1.68E-05	2.12E-05	1.67E-05	2.23E-05	1.4271E-02
520324.28	4258473.08	309380.531	0.3929	0.55447	0.39097	0.60731	1.42E-02	1.61E-05	1.98E-05	1.60E-05	2.08E-05	1.4267E-02
520385.02	4258732.79	309128.6763	0.41544	0.27236	0.40266	0.2893	1.42E-02	1.70E-05	9.74E-06	1.65E-05	9.93E-06	1.4235E-02
520305.87	4258762.92	309021.4444	0.67971	0.35555	0.65248	0.3811	1.42E-02	2.78E-05	1.27E-05	2.67E-05	1.31E-05	1.4258E-02
520246.46	4258763.02	308951.7955	1.05222	0.47477	0.99494	0.50793	1.42E-02	4.31E-05	1.70E-05	4.07E-05	1.74E-05	1.4292E-02
520334.07	4258473.11	308859.1791	0.37762	0.52078	0.37559	0.56927	1.42E-02	1.55E-05	1.86E-05	1.54E-05	1.95E-05	1.4239E-02
520304.7	4258473.02	308781.8041	0.42627	0.63235	0.4245	0.69548	1.42E-02	1.75E-05	2.26E-05	1.74E-05	2.39E-05	1.4248E-02
520158.35	4258729.5	307585.4136	2.82364	0.93886	2.52774	0.9971	1.41E-02	1.16E-04	3.36E-05	1.03E-04	3.42E-05	1.4398E-02
520294.91	4258472.99	307507.9439	0.44459	0.67825	0.44285	0.74746	1.41E-02	1.82E-05	2.43E-05	1.81E-05	2.57E-05	1.4194E-02

520177.12	4258743.13	307433.964	2.15529	0.76532	1.96619	0.81915	1.41E-02	8.82E-05	2.74E-05	8.05E-05	2.81E-05	1.4329E-02
520343.86	4258473.14	307369.3703	0.36323	0.49071	0.36119	0.53516	1.41E-02	1.49E-05	1.76E-05	1.48E-05	1.84E-05	1.4167E-02
520196.94	4258753.1	306508.537	1.7	0.64589	1.57248	0.69295	1.41E-02	6.96E-05	2.31E-05	6.44E-05	2.38E-05	1.4243E-02
520285.12	4258472.96	305923.0394	0.46418	0.72976	0.46237	0.80594	1.40E-02	1.90E-05	2.61E-05	1.89E-05	2.77E-05	1.4127E-02
520236.56	4258763.03	305242.9034	1.14743	0.49943	1.08134	0.53454	1.40E-02	4.70E-05	1.79E-05	4.43E-05	1.84E-05	1.4131E-02
520353.64	4258473.18	304906.1484	0.34956	0.46374	0.34766	0.50442	1.40E-02	1.43E-05	1.66E-05	1.42E-05	1.73E-05	1.4051E-02
520120.79	4258692	304057.1432	5.94848	1.6873	5.04001	1.70436	1.39E-02	2.44E-04	6.04E-05	2.06E-04	5.85E-05	1.4518E-02
520275.33	4258472.93	303845.8375	0.48512	0.7875	0.48306	0.87185	1.39E-02	1.99E-05	2.82E-05	1.98E-05	2.99E-05	1.4038E-02
520315.77	4258762.9	302711.3836	0.6364	0.33922	0.61179	0.3636	1.39E-02	2.61E-05	1.21E-05	2.50E-05	1.25E-05	1.3964E-02
520265.55	4258472.9	301433.2026	0.50759	0.85278	0.50514	0.94681	1.38E-02	2.08E-05	3.05E-05	2.07E-05	3.25E-05	1.3934E-02
520226.66	4258763.05	301251.3709	1.2613	0.52631	1.18384	0.5637	1.38E-02	5.16E-05	1.88E-05	4.85E-05	1.94E-05	1.3959E-02
520411.9	4258689.91	301035.6197	0.34861	0.26683	0.33828	0.28283	1.38E-02	1.43E-05	9.54E-06	1.39E-05	9.71E-06	1.3858E-02
520363.43	4258473.21	300053.3675	0.33664	0.43866	0.3348	0.47603	1.38E-02	1.38E-05	1.57E-05	1.37E-05	1.63E-05	1.3825E-02
520375.14	4258742.8	298699.69	0.4422	0.277	0.42831	0.29484	1.37E-02	1.81E-05	9.91E-06	1.75E-05	1.01E-05	1.3759E-02
520355.35	4258752.84	298671.9701	0.49749	0.293	0.48105	0.313	1.37E-02	2.04E-05	1.05E-05	1.97E-05	1.07E-05	1.3764E-02
520255.76	4258472.87	298393.792	0.53165	0.92636	0.52869	1.03215	1.37E-02	2.18E-05	3.31E-05	2.16E-05	3.54E-05	1.3802E-02
520325.67	4258762.89	296118.0267	0.59816	0.32449	0.57593	0.34765	1.36E-02	2.45E-05	1.16E-05	2.36E-05	1.19E-05	1.3657E-02
520216.76	4258763.07	295750.1791	1.39413	0.55483	1.30253	0.59474	1.36E-02	5.71E-05	1.98E-05	5.33E-05	2.04E-05	1.3719E-02
520245.97	4258472.84	294852.677	0.55746	1.01014	0.55415	1.13019	1.35E-02	2.28E-05	3.61E-05	2.27E-05	3.88E-05	1.3648E-02
520373.22	4258473.24	294038.7965	0.32441	0.41565	0.32263	0.45004	1.35E-02	1.33E-05	1.49E-05	1.32E-05	1.55E-05	1.3547E-02
520149.5	4258725.84	293506.6039	3.28357	1.02766	2.90592	1.08172	1.35E-02	1.34E-04	3.68E-05	1.19E-04	3.71E-05	1.3793E-02
520324.31	4258463.08	292757.9722	0.38593	0.5623	0.38497	0.61518	1.34E-02	1.58E-05	2.01E-05	1.58E-05	2.11E-05	1.3504E-02
520314.52	4258463.05	292651.8782	0.40143	0.60011	0.40051	0.65781	1.34E-02	1.64E-05	2.15E-05	1.64E-05	2.26E-05	1.3503E-02
520187.04	4258753.12	292520.9451	1.91434	0.68489	1.75888	0.73404	1.34E-02	7.84E-05	2.45E-05	7.20E-05	2.52E-05	1.3620E-02
520334.1	4258463.11	292254.7825	0.37132	0.52792	0.37021	0.57656	1.34E-02	1.52E-05	1.89E-05	1.52E-05	1.98E-05	1.3477E-02
520304.73	4258463.02	292020.5697	0.41787	0.64196	0.41688	0.70515	1.34E-02	1.71E-05	2.30E-05	1.71E-05	2.42E-05	1.3479E-02
520343.89	4258463.14	291048.6843	0.35748	0.4969	0.35625	0.54166	1.34E-02	1.46E-05	1.78E-05	1.46E-05	1.86E-05	1.3418E-02
520294.94	4258462.99	290883.374	0.43532	0.68855	0.43413	0.75807	1.33E-02	1.78E-05	2.46E-05	1.78E-05	2.60E-05	1.3431E-02
520107.12	4258683.15	290861.2075	8.83842	2.10028	7.43733	2.01516	1.33E-02	3.62E-04	7.51E-05	3.05E-04	6.92E-05	1.4155E-02
520236.18	4258472.81	290657.2599	0.58527	1.1071	0.58213	1.24422	1.33E-02	2.40E-05	3.96E-05	2.38E-05	4.27E-05	1.3465E-02
520408.97	4258706.94	290326.3214	0.36	0.26211	0.34908	0.27735	1.33E-02	1.47E-05	9.38E-06	1.43E-05	9.52E-06	1.3368E-02
520383.01	4258473.27	289318.9019	0.31291	0.39405	0.31103	0.42588	1.33E-02	1.28E-05	1.41E-05	1.27E-05	1.46E-05	1.3328E-02
520285.15	4258462.96	289266.1503	0.45389	0.74076	0.45236	0.81766	1.33E-02	1.86E-05	2.65E-05	1.85E-05	2.81E-05	1.3363E-02
520353.67	4258463.18	288080.5409	0.34433	0.46911	0.34309	0.51022	1.32E-02	1.41E-05	1.68E-05	1.40E-05	1.75E-05	1.3279E-02
520124.46	4258700.84	287791.9041	5.46281	1.5151	4.65242	1.53607	1.32E-02	2.24E-04	5.42E-05	1.90E-04	5.27E-05	1.3724E-02
520335.57	4258762.87	287744.711	0.56307	0.31067	0.54287	0.33264	1.32E-02	2.31E-05	1.11E-05	2.22E-05	1.14E-05	1.3269E-02
520275.37	4258462.93	287212.9599	0.47366	0.79909	0.47168	0.88478	1.32E-02	1.94E-05	2.86E-05	1.93E-05	3.04E-05	1.3274E-02
520167.22	4258743.15	286402.3925	2.48069	0.81779	2.2428	0.87084	1.31E-02	1.02E-04	2.93E-05	9.18E-05	2.99E-05	1.3392E-02
520206.86	4258763.08	286348.8114	1.54078	0.58452	1.43237	0.62704	1.31E-02	6.31E-05	2.09E-05	5.86E-05	2.15E-05	1.3301E-02
520226.39	4258472.78	286111.8106	0.61498	1.21923	0.61294	1.37703	1.31E-02	2.52E-05	4.36E-05	2.51E-05	4.73E-05	1.3267E-02
520265.58	4258462.9	284685.1689	0.49476	0.86524	0.49241	0.96126	1.31E-02	2.03E-05	3.09E-05	2.02E-05	3.30E-05	1.3165E-02
520365.25	4258752.82	284157.1373	0.47148	0.28169	0.45617	0.30045	1.30E-02	1.93E-05	1.01E-05	1.87E-05	1.03E-05	1.3095E-02
520276.18	4258772.97	283031.5062	0.84253	0.39716	0.80285	0.42461	1.30E-02	3.45E-05	1.42E-05	3.29E-05	1.46E-05	1.3081E-02
520087.12	4258646.05	283013.5226	12.31595	4.06718	18.58445	3.57844	1.30E-02	5.04E-04	1.45E-04	7.61E-04	1.23E-04	1.4518E-02
520266.28	4258772.98	282825.0237	0.90763	0.41643	0.8628	0.44508	1.30E-02	3.72E-05	1.49E-05	3.53E-05	1.53E-05	1.3078E-02
520363.46	4258463.21	282783.7456	0.33183	0.44359	0.3306	0.48138	1.30E-02	1.36E-05	1.59E-05	1.35E-05	1.65E-05	1.3033E-02
520286.08	4258772.95	282097.4704	0.78437	0.37894	0.74909	0.40532	1.29E-02	3.21E-05	1.36E-05	3.07E-05	1.39E-05	1.3032E-02
520255.79	4258462.87	281707.685	0.51729	0.93988	0.51479	1.04838	1.29E-02	2.12E-05	3.36E-05	2.11E-05	3.60E-05	1.3036E-02
520295.98	4258772.94	281385.0976	0.73397	0.36229	0.70254	0.38765	1.29E-02	3.01E-05	1.30E-05	2.88E-05	1.33E-05	1.2994E-02
520256.38	4258773	281346.1068	0.98064	0.43661	0.92975	0.46668	1.29E-02	4.02E-05	1.56E-05	3.81E-05	1.60E-05	1.3017E-02
520216.6	4258472.75	280661.851	0.64685	1.35315	0.64745	1.53474	1.29E-02	2.65E-05	4.84E-05	2.65E-05	5.27E-05	1.3030E-02
520097.12	4258673.87	279503.5641	11.5555	2.53205	10.81178	2.32385	1.28E-02	4.73E-04	9.06E-05	4.43E-04	7.98E-05	1.3909E-02
520246.48	4258773.02	279058.8694	1.06435	0.45804	1.00612	0.48985	1.28E-02	4.36E-05	1.64E-05	4.12E-05	1.68E-05	1.2921E-02
520087.12	4258636.77	278780.6896	12.06758	4.90768	18.62203	4.29346	1.28E-02	4.94E-04	1.76E-04	7.62E-04	1.47E-04	1.4369E-02
520392.8	4258473.3	278682.2932	0.30146	0.37277	0.29946	0.40235	1.28E-02	1.23E-05	1.33E-05	1.23E-05	1.38E-05	1.2837E-02
520345.47	4258762.85	278260.8142	0.53149	0.29799	0.51299	0.31876	1.28E-02	2.18E-05	1.07E-05	2.10E-05	1.09E-05	1.2830E-02
520246	4258462.84	278246.16	0.54133	1.02533	0.53925	1.14862	1.28E-02	2.22E-05	3.67E-05	2.21E-05	3.94E-05	1.2886E-02
520305.88	4258772.92	278160.5985	0.68702	0.34635	0.65894	0.37069	1.28E-02	2.81E-05	1.24E-05	2.70E-05	1.27E-05	1.2842E-02
520373.25	4258463.24	277646.9467	0.32002	0.42011	0.31875	0.45492	1.27E-02	1.31E-05	1.50E-05	1.31E-05	1.56E-05	1.2795E-02
520158.72	4258739.64	277462.8778	2.82169	0.88491	2.52898	0.9364	1.27E-02	1.16E-04	3.17E-05	1.04E-04	3.21E-05	1.3012E-02
520394.92	4258732.77	277030.9398	0.39498	0.26204	0.38276	0.2779	1.27E-02	1.62E-05	9.37E-06	1.57E-05	9.54E-06	1.2760E-02
520087.12	4258655.32	276702.3044	12.56411	3.45081	18.52842	3.04927	1.27E-02	5.14E-04	1.23E-04	7.59E-04	1.05E-04	1.4196E-02
520177.14	4258753.13	276595.2914	2.17715	0.72846	1.98474	0.77824	1.27E-02	8.91E-05	2.61E-05	8.13E-05	2.67E-05	1.2913E-02
520196.96	4258763.1	275708.4444	1.71663	0.61707	1.58692	0.66189	1.26E-02	7.03E-05	2.21E-05	6.50E-05	2.27E-05	1.2829E-02
520236.58	4258773.03	275511.2312	1.15945	0.48051	1.09237	0.51441	1.26E-02	4.75E-05	1.72E-05	4.47E-05	1.77E-05	1.2767E-02
520383.04	4258463.27	275426.5107	0.30893	0.39812	0.30743	0.43041	1.26E-02	1.26E-05	1.42E-05	1.26E-05	1.48E-05	1.2690E-02
520110.64	4258691.64	274769.7589	7.983	1.86847	6.69281	1.80934	1.26E-02	3.27E-04	6.68E-05	2.74E-04	6.21E-05	1.3336E-02
520206.81	4258472.72	274695.927	0.68054	1.51192	0.68543	1.72239	1.26E-02	2.79E-05	5.41E-05	2.81E-05	5.91E-05	1.2772E-02
520236.21	4258462.81	274259.0701	0.56692	1.1244	0.56619	1.26495	1.26E-02	2.32E-05	4.02E-05	2.32E-05	4.34E-05	1.2713E-02
520385.04	4258742.79	274102.0419	0.41932	0.26616	0.40616	0.28287	1.26E-02	1.72E-05	9.52E-06	1.66E-05	9.71E-06	1.2628E-02
520315.78	4258772.9	273086.3503	0.64383	0.33096	0.61843	0.35429	1.25E-02	2.64E-05	1.18E-05	2.53E-05	1.22E-05	1.2604E-02
520226.68	4258773.05	272257.0151	1.27559	0.50576	1.19673	0.54191	1.25E-02	5.22E-05	1.81E-05	4.90E-05	1.86E-05	1.2629E-02
520226.42	4258462.78	269761.4276	0.5941	1.23954	0.59577	1.40085	1.24E-02	2.43E-05	4.43E-05	2.44E-05	4.81E-05	1.2517E-02
520197.03	4258472.69	268126.0373	0.71572	1.70184	0.72647	1.94878	1.23E-02	2.93E-05	6.09E-05	2.97E-05	6.69E-05	1.2488E-02
520216.77	4258773.07	267204.2347	1.40914	0.53231	1.3158	0.57082	1.23E-02	5.77E-05	1.90E-05	5.39E-05	1.96E-05	1.2409E-02
520150.22	4258736.13	266751.1142	3.24743	0.96146	2.88296	1.00781	1.22E-02	1.33E-04	3.44E-05	1.18E-04	3.46E-05	1.2558E-02
520355.37	4258762.84	266747.0139	0.50227	0.28605	0.48521	0.30565	1.22E-02	2.06E-05	1.02E-05	1.99E-05	1.05E-05	1.2299E-02
520325.68	4258772.89	266699.392	0.6047	0.31669	0.58166	0.33898	1.22E-02	2.48E-05	1.13E-05	2.38E-05	1.16E-05	1.2307E-02
520343.92	4258453.14	266266.6656	0.35164	0.50334	0.35122	0.54809	1.22E-02	1.44E-05	1.80E-05	1.44E-05	1.88E-05	1.2281E-02
520402.59	4258473.33	266153.5945	0.2911	0.35503	0.28913	0.38244	1.22E-02	1.19E-05	1.27E-05	1.18E-05	1.31E-05	1.2260E-02
520375.16	4258752.8	265915.2296	0.44653	0.27068	0.43217	0.28827	1.22E-02	1.83E-05	9.68E-06	1.77E-05	9.90E-06	1.2255E-02
520392.83	4258463.3	265844.8651	0.29798	0.37658	0.29628	0.40661	1.22E-02	1.22E-05	1.35E-05	1.21E-05	1.40E-05	1.2248E-02
520216.63	4258462.75	264630.2358	0.62262	1.37672	0.62815	1.56159	1.21E-02	2.55E-05	4.92E-05	2.57E-05	5.36E-05	1.2295E-02
520187.06	4258763.12	263888.1242	1.93265	0.65366	1.77452	0.69983	1.21E-02	7.91E-05	2.34E-05	7.27E-05	2.40E-05	1.2306E-02
520353.71	4258453.18	262862.6688	0.33899	0.47476	0.33853	0.51597	1.21E-02	1.39E-05	1.70E-05	1.39E-05	1.77E-05	1.2122E-02
520114.16	4258700.13	261162.3457	7.24378	1.67766	6.08165	1.63611	1.20E-02	2.97E-04	6.00E-05	2.49E-04	5.62E-05	1.2643E-02
520187.24	4258472.66	260427.5878	0.75188	1.93561	0.76986	2.22636	1.19E-02	3.08E-05	6.92E-05	3.15E-05	7.64E-05	1.2156E-02
520335.58	4258772.87	259144.4665	0.56913	0.30342	0.54817	0.32464	1.19E-02	2.33E-05	1.09E-05	2.24E-05	1.11E-05	1.1957E-02
520206.87	4258773.08	259050.9688	1.55684	0.56011	1.44638	0.60083	1.19E-02	6.37E-05	2.00E-05	5.92E-05	2.06E-05	1.2048E-02
520363.49	4258453.21	258977.3742	0.32698	0.44862	0.32645	0.48664	1.19E-02	1.34E-05	1.60E-05	1.34E-05	1.67E-05	1.1941E-02
520206.85	4258462.72	258866.4044	0.65224	1.53977	0.6628	1.75299	1.19E-02	2.67E-05	5.51E-05	2.71E-05	6.02E-05	1.2045E-02
520087.12	4258664.6	258363.6032	12.74651	2.981	18.45586	2.64286	1.19E-02	5.22E-04	1.07E-04	7.56E-04	9.07E-05	1.3328E-02
520276.2	4258782.97	256676.296	0.85189	0.38539	0.81148	0.41149	1.18E-02	3.49E-05	1.38E-05	3.32E-05	1.41E-05	1.1872E-02
520141.73	4258732.63	256623.9795	3.83162	1.05025	3.35374	1.08578	1.18E-02	1.57E-04	3.76E-05	1.37E-04	3.73E-05	1.2142E-02
520266.3	4258782.98	256470.7656	0.91741	0.40324	0.87187	0.43061	1.18E-02	3.76E-05	1.44E-05	3.57E-05	1.48E-05	1.1869E-02
520286.1	4258782.95	255805.192	0.79317	0.36835	0.75714	0.39339	1.17E-02	3.25E-05	1.32E-05	3.10E-05	1.35E-05	1.1826E-02
520402.62	4258463.33	255598.8879	0.2879	0.35852	0.28618	0.38632	1.17E-02	1.18E-05	1.28E-05	1.17E-05	1.33E-05	1.1776E-02
520256.39	4258783	255383.1981	0.99169	0.42204	0.94	0.45097	1.17E-02	4.06E-05	1.51E-05	3.85E-05	1.55E-05	1.1826E-02
520296	4258782.94	254762.9701	0.74166	0.35254	0.70949	0.37661	1.17E-02	3.04E-05	1.26E-05	2.90E-05	1.29E-05	1.1773E-02
520373.28	4258453.24	254623.1671	0.31558	0.42463	0.31492	0.45975	1.17E-02	1.29E-05	1.52E-05	1.29E-05	1.58E-05	1.1738E-02
520246.49	4258783.02	253428.8549	1.07633	0.44189	1.01717	0.47267	1.16E-02	4.41E-05	1.58E-05	4.16E-05	1.62E-05	1.1745E-02
520097.12	4258683.15	253416.173	12.10931	2.26049	10.86067	2.07137	1.16E-02	4.96E-04	8.09E-05	4.45E-04	7.11E-05	1.2719E-02
520365.27	4258762.82	253285.2267	0.47519	0.27482	0.45935	0.29328	1.16E-02	1.95E-05	9.83E-06	1.88E-05	1.01E-05	1.1678E-02
520158.97	4258749.74	252598.3106	2.83966	0.83794	2.54412	0.88279	1.16E-02	1.16E-04	3.00E-05	1.04E-04	3.03E-05	1.1869E-02
520197.06	4258462.69	252291.6997	0.68262	1.73545	0.69883	1.98428	1.16E-02	2.79E-05	6.21E-05	2.86E-05	6.81E-05	1.1761E-02
520168.27	4258756.76	252093.1011	2.47285	0.75827	2.23646	0.8046	1.16E-02	1.01E-04	2.71E-05	9.16E-05	2.76E-05	1.1813E-02
520421.9	4258689.97	251744.1056	0.33274	0.25629	0.32273	0.27138	1.15E-02	1.36E-05	9.17E-06	1.32E-05	9.32E-06	1.1595E-02
520305.9	4258782.92	251702.0506	0.69403	0.3374	0.6652	0.36056	1.15E-02	2.84E-05	1.21E-05	2.72E-05	1.24E-05	1.1628E-02
520177.45	4258472.63	251409.8641	0.78793	2.22526	0.81346	2.56992	1.15E-02	3.23E-05	7.96E-05	3.33E-05	8.82E-05	1.1768E-02
520412.38	4258473.36	250663.1889	0.2812	0.33854	0.27923	0.36398	1.15E-02	1.15E-05	1.21E-05	1.14E-05	1.25E-05	1.1547E-02
520177.15	4258763.13	250529.6518	2.19726	0.69461	2.0017	0.74042	1.15E-02	9.00E-05	2.48E-05	8.20E-05	2.54E-05	1.1716E-02
520345.49	4258772.85	250493.5783	0.53688	0.2911	0.51768	0.31126	1.15E-02	2.20E-05	1.04E-05	2.12E-05	1.07E-05	1.1556E-02
520236.59	4258783.03	250375.0473	1.17258	0.46282	1.10432	0.4957	1.15E-02	4.80E-05	1.66E-05	4.52E-05	1.70E-05	1.1614E-02
520196.97	4258773.1	249691.0664	1.73257	0.59042	1.60063	0.63293	1.15E-02	7.09E-05	2.11E-05	6.55E-05	2.17E-05	1.1635E-02
520394.94	4258742.77	248131.206	0.39856	0.25623	0.38599	0.27189	1.14E-02	1.63E-05	9.16E-06	1.58E-05	9.33E-06	1.1434E-02
520226.69	4258783.05	247488.3872	1.2898	0.48642	1.20948	0.52142	1.14E-02	5.28E-05	1.74E-05	4.95E-05	1.79E-05	1.1492E-02
520315.8	4258782.9	247326.6836	0.6505	0.32281	0.62439	0.34507	1.13E-02	2.66E-05	1.15E-05	2.56E-05	1.18E-05	1.1422E-02
520416.03	4258714.03	245546.9875	0.35091	0.2519	0.34006	0.26619	1.13E-02	1.44E-05	9.01E-06	1.39E-05	9.14E-06	1.1312E-02
520409	4258726.94	245313.165	0.36732	0.25203	0.35587	0.2666	1.13E-02	1.50E-05	9.01E-06	1.46E-05	9.15E-06	1.1302E-02
520385.06	4258752.79	245159.6552	0.42313	0.26012	0.40956	0.27664	1.12E-02	1.73E-05	9.30E-06	1.68E-05	9.50E-06	1.1300E-02
520187.27	4258462.66	244788.8737	0.71282	1.97383	0.73481	2.26647	1.12E-02	2.92E-05	7.06E-05	3.01E-05	7.78E-05	1.1438E-02
520412.41	4258463.36	242978.2668	0.27828	0.34184	0.27654	0.36759	1.11E-02	1.14E-05	1.22E-05	1.13E-05	1.26E-05	1.1195E-02
520216.79	4258783.07	242787.2272	1.42308	0.51119	1.32805	0.54828	1.11E-02	5.83E-05	1.83E-05	5.44E-05	1.88E-05	1.1288E-02
520325.7	4258782.89	241450.8261	0.61084	0.30912	0.58709	0.33048	1.11E-02	2.50E-05	1.11E-05	2.40E-05	1.13E-05	1.1149E-02
520324.37	4258443.08	241223.2356	0.37195	0.57686	0.37164	0.62995	1.11E-02	1.52E-05	2.06E-05	1.52E-05	2.16E-05	1.1140E-02
520167.66	4258472.59	241140.7983	0.82249	2.58344	0.85457	3.00397	1.11E-02	3.37E-05	9.24E-05	3.50E-05	1.03E-04	1.1327E-02
520314.58	4258443.05	241009.1733	0.38607	0.61572	0.38544	0.67405	1.11E-02	1.58E-05	2.20E-05	1.58E-05	2.31E-05	1.1134E-02
520334.16	4258443.11	240904.8753	0.35857	0.54146	0.35845	0.59009	1.11E-02	1.47E-05	1.94E-05	1.47E-05	2.03E-05	1.1121E-02
520355.39	4258772.84	240272.4157	0.5072	0.27954	0.48948	0.29865	1.10E-02	2.08E-05	1.00E-05	2.00E-05	1.03E-05	1.1084E-02
520343.95	4258443.14	240008.861	0.34581	0.50959	0.34585	0.55425	1.10E-02	1.42E-05	1.82E-05	1.42E-05	1.90E-05	1.1077E-02
520187.07	4258773.12	239428.0909	1.94813	0.62463	1.78773	0.66779	1.10E-02	7.98E-05	2.23E-05	7.32E-05	2.29E-05	1.1183E-02
520295.01	4258442.99	239152.214	0.41672	0.70592	0.41535	0.77776	1.10E-02	1.71E-05	2.52E-05	1.70E-05	2.67E-05	1.1058E-02
520375.17	4258762.8	238062.0925	0.45019	0.26429	0.43534	0.28165	1.09E-02	1.84E-05	9.45E-06	1.78E-05	9.67E-06	1.0977E-02
520285.22	4258442.96	237575.2974	0.43336	0.75904	0.43185	0.83938	1.09E-02	1.77E-05	2.71E-05	1.77E-05	2.88E-05	1.0991E-02
520087.12	4258673.87	236446.3864	12.85658	2.6129	18.37158	2.32301	1.08E-02	5.26E-04	9.35E-05	7.52E-04	7.98E-05	1.2300E-02
520353.74	4258443.18	236268.6616	0.33357	0.4807	0.3338	0.5217	1.08E-02	1.37E-05	1.72E-05	1.37E-05	1.79E-05	1.0902E-02
520142.45	4258742.92	236238.9639	3.81046	0.98381	3.33999	1.01135	1.08E-02	1.56E-04	3.52E-05	1.37E-04	3.47E-05	1.1201E-02
520177.48	4258462.63	236179.818	0.74183	2.26684	0.76908	2.61455	1.08E-02	3.04E-05	8.11E-05	3.15E-05	8.98E-05	1.1068E-02
520206.89	4258783.08	235761.4634	1.5723	0.53741	1.45975	0.57633	1.08E-02	6.44E-05	1.92E-05	5.98E-05	1.98E-05	1.0979E-02
520275.43	4258442.93	235583.6796	0.45095	0.81889	0.44968	0.90908	1.08E-02	1.85E-05	2.93E-05	1.84E-05	3.12E-05	1.0906E-02
520335.6	4258782.87	234839.5472	0.57503	0.29643	0.55335	0.31687	1.08E-02	2.35E-05	1.06E-05	2.27E-05	1.09E-05	1.0842E-02
520103.97	4258699.66	233834.4791	9.93242	1.8214	8.39205	1.70369	1.07E-02	4.07E-04	6.51E-05	3.44E-04	5.85E-05	1.1602E-02
520266.31	4258792.98	233803.0397	0.92743	0.39044	0.88119	0.41683	1.07E-02	3.80E-05	1.40E-05	3.61E-05	1.43E-05	1.0829E-02
520363.53	4258443.21	233771.3798	0.32207	0.45387	0.32219	0.49182	1.07E-02	1.32E-05	1.62E-05	1.32E-05	1.69E-05	1.0784E-02
520276.21	4258792.97	233694.8542	0.86063	0.37373	0.81961	0.39873	1.07E-02	3.52E-05	1.34E-05	3.36E-05	1.37E-05	1.0817E-02
520265.64	4258442.9	233179.6908	0.46951	0.88695	0.46905	0.98842	1.07E-02	1.92E-05	3.17E-05	1.92E-05	3.39E-05	1.0802E-02
520286.11	4258792.95	232953.0811	0.80159	0.35789	0.76493	0.38178	1.07E-02	3.28E-05	1.28E-05	3.13E-05	1.31E-05	1.0777E-02
520403.39	4258739.27	232943.7265	0.38078	0.25008	0.36874	0.26497	1.07E-02	1.56E-05	8.95E-06	1.51E-05	9.10E-06	1.0736E-02
520422.16	4258473.39	232829.0632	0.27168	0.32303	0.26967	0.34671	1.07E-02	1.11E-05	1.16E-05	1.10E-05	1.19E-05	1.0727E-02
520256.41	4258793	232768.9396	1.00186	0.40774	0.94943	0.4358	1.07E-02	4.10E-05	1.46E-05	3.89E-05	1.50E-05	1.0788E-02
520296.01	4258792.94	231797.9577	0.7492	0.34303	0.71644	0.36593	1.06E-02	3.07E-05	1.23E-05	2.93E-05	1.26E-05	1.0719E-02
520246.51	4258793.02	230914.2593	1.08642	0.42603	1.02646	0.45598	1.06E-02	4.45E-05	1.52E-05	4.20E-05	1.57E-05	1.0711E-02
520159.16	4258759.81	230587.4727	2.85039	0.79497	2.55429	0.83382	1.06E-02	1.17E-04	2.84E-05	1.05E-04	2.86E-05	1.0857E-02
520255.85	4258442.87	230341.5274	0.48905	0.96474	0.49007	1.07913	1.06E-02	2.00E-05	3.45E-05	2.01E-05	3.70E-05	1.0679E-02
520373.31	4258443.24	230013.8374	0.31109	0.42939	0.31108	0.46455	1.06E-02	1.27E-05	1.54E-05	1.27E-05	1.59E-05	1.0609E-02
520157.87	4258472.56	229140.277	0.85374	3.03701	0.8927	3.56187	1.05E-02	3.50E-05	1.09E-04	3.66E-05	1.22E-04	1.0815E-02
520305.92	4258792.92	228842.1676	0.70076	0.32862	0.67128	0.35066	1.05E-02	2.87E-05	1.18E-05	2.75E-05	1.20E-05	1.0579E-02
520236.61	4258793.03	228491.5316	1.18452	0.44589	1.11517	0.47783	1.05E-02	4.85E-05	1.59E-05	4.57E-05	1.64E-05	1.0609E-02
520365.29	4258772.82	228327.6826	0.47952	0.26858	0.46309	0.28666	1.05E-02	1.96E-05	9.61E-06	1.90E-05	9.84E-06	1.0533E-02
520177.17	4258773.13	228256.5295	2.21527	0.66344	2.01675	0.70527	1.05E-02	9.07E-05	2.37E-05	8.26E-05	2.42E-05	1.0693E-02
520196.99	4258783.1	227712.5389	1.75002	0.56616	1.61535	0.6063	1.04E-02	7.17E-05	2.03E-05	6.61E-05	2.08E-05	1.0626E-02
520422.2	4258463.39	227705.8089	0.269	0.32608	0.26722	0.35	1.04E-02	1.10E-05	1.17E-05	1.09E-05	1.20E-05	1.0492E-02
520246.06	4258442.84	227052.7191	0.50951	1.05432	0.51275	1.18354	1.04E-02	2.09E-05	3.77E-05	2.10E-05	4.06E-05	1.0537E-02
520345.5	4258782.85	226910.6315	0.54213	0.28449	0.52224	0.304	1.04E-02	2.22E-05	1.02E-05	2.14E-05	1.04E-05	1.0474E-02
520167.69	4258462.59	226238.5309	0.76877	2.62853	0.80065	3.0537	1.04E-02	3.15E-05	9.40E-05	3.28E-05	1.05E-04	1.0643E-02
520226.71	4258793.05	225764.1542	1.30163	0.46798	1.22008	0.50184	1.04E-02	5.33E-05	1.67E-05	5.00E-05	1.72E-05	1.0495E-02
520315.82	4258792.9	224130.7746	0.65586	0.31449	0.62901	0.33572	1.03E-02	2.69E-05	1.12E-05	2.58E-05	1.15E-05	1.0358E-02
520394.96	4258752.77	223767.045	0.40208	0.25056	0.38913	0.26605	1.03E-02	1.65E-05	8.96E-06	1.59E-05	9.13E-06	1.0316E-02
520236.27	4258442.81	223291.0252	0.53079	1.15843	0.53698	1.30468	1.02E-02	2.17E-05	4.14E-05	2.20E-05	4.48E-05	1.0374E-02
520392.89	4258443.3	221798.9432	0.2908	0.38462	0.29005	0.41532	1.02E-02	1.19E-05	1.38E-05	1.19E-05	1.43E-05	1.0228E-02
520216.81	4258793.07	221662.4421	1.436	0.49141	1.33936	0.52708	1.02E-02	5.88E-05	1.76E-05	5.48E-05	1.81E-05	1.0319E-02
520385.07	4258762.79	221118.3891	0.42697	0.25436	0.41294	0.27067	1.01E-02	1.75E-05	9.10E-06	1.69E-05	9.29E-06	1.0197E-02
520426.01	4258704.08	220862.7594	0.3315	0.24669	0.32114	0.26063	1.01E-02	1.36E-05	8.82E-06	1.31E-05	8.95E-06	1.0177E-02
520226.49	4258442.78	219018.0638	0.55269	1.27989	0.56239	1.44609	1.00E-02	2.26E-05	4.58E-05	2.30E-05	4.96E-05	1.0189E-02
520325.72	4258792.89	218891.2945	0.61568	0.30145	0.59127	0.32185	1.00E-02	2.52E-05	1.08E-05	2.42E-05	1.10E-05	1.0114E-02
520187.09	4258783.12	218757.3466	1.96588	0.59838	1.80244	0.63844	1.00E-02	8.05E-05	2.14E-05	7.38E-05	2.19E-05	1.0234E-02
520355.4	4258782.84	217930.9565	0.5121	0.27335	0.49373	0.29192	1.00E-02	2.10E-05	9.78E-06	2.02E-05	1.00E-05	1.0059E-02
520142.97	4258753.13	217463.9697	3.79356	0.9257	3.33086	0.94615	9.98E-03	1.55E-04	3.31E-05	1.36E-04	3.25E-05	1.0334E-02
520324.4	4258433.08	217204.7836	0.36503	0.58297	0.36442	0.63679	9.96E-03	1.49E-05	2.09E-05	1.49E-05	2.19E-05	1.0038E-02
520334.19	4258433.11	216985.9437	0.35223	0.54727	0.35193	0.5963	9.95E-03	1.44E-05	1.96E-05	1.44E-05	2.05E-05	1.0024E-02
520314.61	4258433.05	216942.0134	0.37848	0.62238	0.37759	0.68177	9.95E-03	1.55E-05	2.23E-05	1.55E-05	2.34E-05	1.0030E-02
520411.84	4258735.77	216446.8957	0.36466	0.24449	0.35306	0.25863	9.93E-03	1.49E-05	8.75E-06	1.45E-05	8.88E-06	9.9772E-03
520343.98	4258433.14	216272.2938	0.33999	0.51552	0.34005	0.56023	9.92E-03	1.39E-05	1.84E-05	1.39E-05	1.92E-05	9.9877E-03
520167.27	4258773.15	216191.532	2.5482	0.70685	2.29926	0.74437	9.92E-03	1.04E-04	2.53E-05	9.41E-05	2.56E-05	1.0168E-02
520087.12	4258683.15	216011.222	14.7983	2.31685	18.28647	2.06507	9.91E-03	6.06E-04	8.29E-05	7.49E-04	7.09E-05	1.1419E-02
520206.91	4258793.08	215451.7602	1.5854	0.51609	1.4711	0.5532	9.88E-03	6.49E-05	1.85E-05	6.02E-05	1.90E-05	1.0047E-02
520295.04	4258432.99	215024.443	0.40759	0.71318	0.40645	0.78698	9.86E-03	1.67E-05	2.55E-05	1.66E-05	2.70E-05	9.9508E-03
520375.19	4258772.8	214824.5348	0.45377	0.25819	0.4384	0.27526	9.86E-03	1.86E-05	9.24E-06	1.79E-05	9.45E-06	9.9110E-03
520157.9	4258462.56	214683.9316	0.79189	3.08685	0.8307	3.61551	9.85E-03	3.24E-05	1.10E-04	3.40E-05	1.24E-04	1.0150E-02
520216.7	4258442.75	214173.0169	0.57494	1.42304	0.58844	1.61302	9.83E-03	2.35E-05	5.09E-05	2.41E-05	5.54E-05	9.9798E-03

520148.08	4258472.53	214158.7477	0.87805	3.61933	0.92759	4.29585	9.83E-03	3.60E-05	1.29E-04	3.80E-05	1.47E-04	1.0176E-02
520431.9	4258690.02	214080.6618	0.31853	0.24697	0.30884	0.26121	9.82E-03	1.30E-05	8.83E-06	1.26E-05	8.97E-06	9.8651E-03
520402.68	4258443.33	214077.0715	0.28121	0.36553	0.2803	0.39405	9.82E-03	1.15E-05	1.31E-05	1.15E-05	1.35E-05	9.8710E-03
520266.33	4258802.98	213740.7791	0.93603	0.3777	0.88919	0.40336	9.81E-03	3.83E-05	1.35E-05	3.64E-05	1.38E-05	9.9081E-03
520431.95	4258473.42	213557.8253	0.26262	0.30869	0.26057	0.33076	9.80E-03	1.08E-05	1.10E-05	1.07E-05	1.14E-05	9.8414E-03
520276.23	4258802.97	213446.4269	0.86832	0.36209	0.82678	0.38626	9.79E-03	3.56E-05	1.30E-05	3.39E-05	1.33E-05	9.8881E-03
520285.25	4258432.96	213441.1795	0.42328	0.7668	0.42252	0.84945	9.79E-03	1.73E-05	2.74E-05	1.73E-05	2.92E-05	9.8835E-03
520335.62	4258792.87	213154.6843	0.57976	0.28938	0.55742	0.30897	9.78E-03	2.37E-05	1.04E-05	2.28E-05	1.06E-05	9.8466E-03
520353.77	4258433.18	212840.5526	0.32816	0.4865	0.32868	0.5273	9.76E-03	1.34E-05	1.74E-05	1.35E-05	1.81E-05	9.8271E-03
520256.43	4258803	212799.6083	1.01055	0.39372	0.95747	0.42108	9.76E-03	4.14E-05	1.41E-05	3.92E-05	1.45E-05	9.8720E-03
520286.13	4258802.95	212483.1326	0.80825	0.34726	0.77113	0.37019	9.75E-03	3.31E-05	1.24E-05	3.16E-05	1.27E-05	9.8381E-03
520296.03	4258802.94	211715.2387	0.75628	0.33358	0.72299	0.35547	9.71E-03	3.10E-05	1.19E-05	2.96E-05	1.22E-05	9.7978E-03
520275.46	4258432.93	211392.3176	0.43976	0.82738	0.43986	0.92014	9.70E-03	1.80E-05	2.96E-05	1.80E-05	3.16E-05	9.7955E-03
520246.53	4258803.02	211116.0914	1.09511	0.4107	1.03444	0.43987	9.69E-03	4.48E-05	1.47E-05	4.24E-05	1.51E-05	9.8026E-03
520158.16	4258769.39	210946.5181	2.9192	0.76407	2.61193	0.79631	9.68E-03	1.20E-04	2.73E-05	1.07E-04	2.73E-05	9.9590E-03
520363.56	4258433.21	210907.3024	0.31713	0.45922	0.31765	0.49697	9.68E-03	1.30E-05	1.64E-05	1.30E-05	1.71E-05	9.7355E-03
520114.24	4258724.43	210876.955	7.37375	1.3774	6.20592	1.31766	9.67E-03	3.02E-04	4.93E-05	2.54E-04	4.52E-05	1.0325E-02
520431.98	4258463.42	210554.9306	0.26019	0.31163	0.25838	0.33387	9.66E-03	1.07E-05	1.11E-05	1.06E-05	1.15E-05	9.7037E-03
520265.67	4258432.9	209118.5107	0.45712	0.8971	0.4587	1.00122	9.59E-03	1.87E-05	3.21E-05	1.88E-05	3.44E-05	9.6979E-03
520236.63	4258803.03	209053.606	1.1939	0.42946	1.12368	0.46047	9.59E-03	4.89E-05	1.54E-05	4.60E-05	1.58E-05	9.7170E-03
520177.19	4258783.13	209003.0659	2.23167	0.6347	2.03036	0.67263	9.59E-03	9.14E-05	2.27E-05	8.31E-05	2.31E-05	9.8090E-03
520305.93	4258802.92	208960.6583	0.70728	0.32002	0.67727	0.34104	9.59E-03	2.90E-05	1.14E-05	2.77E-05	1.17E-05	9.6666E-03
520423.08	4258721.11	208727.7454	0.34177	0.24207	0.33093	0.25552	9.58E-03	1.40E-05	8.66E-06	1.35E-05	8.77E-06	9.6210E-03
520206.91	4258442.72	208708.8656	0.59705	1.59306	0.61427	1.81164	9.58E-03	2.44E-05	5.70E-05	2.52E-05	6.22E-05	9.7439E-03
520197.01	4258793.1	208512.9188	1.76477	0.54344	1.62783	0.58119	9.57E-03	7.23E-05	1.94E-05	6.67E-05	2.00E-05	9.7445E-03
520373.35	4258433.24	207710.5792	0.30655	0.43428	0.30705	0.46927	9.53E-03	1.26E-05	1.55E-05	1.26E-05	1.61E-05	9.5861E-03
520365.3	4258782.82	207489.7631	0.48412	0.26279	0.46705	0.28042	9.52E-03	1.98E-05	9.40E-06	1.91E-05	9.63E-06	9.5772E-03
520226.73	4258803.05	206564.5714	1.31089	0.45032	1.22841	0.48309	9.48E-03	5.37E-05	1.61E-05	5.03E-05	1.66E-05	9.6134E-03
520255.88	4258432.87	206349.1248	0.47518	0.97679	0.4788	1.09379	9.47E-03	1.95E-05	3.49E-05	1.96E-05	3.76E-05	9.5785E-03
520345.52	4258792.85	206066.8463	0.54641	0.27788	0.52589	0.29664	9.45E-03	2.24E-05	9.94E-06	2.15E-05	1.02E-05	9.5180E-03
520093.83	4258699.33	205898.5203	13.79158	1.91017	12.67456	1.72941	9.45E-03	5.65E-04	6.83E-05	5.19E-04	5.94E-05	1.0658E-02
520412.47	4258443.36	204975.2615	0.2721	0.3481	0.27103	0.37458	9.40E-03	1.11E-05	1.25E-05	1.11E-05	1.29E-05	9.4514E-03
520149.06	4258765.63	204575.5117	3.3925	0.82859	3.00749	0.85155	9.39E-03	1.39E-04	2.96E-05	1.23E-04	2.92E-05	9.7064E-03
520315.83	4258802.9	203792.3235	0.66007	0.30613	0.63274	0.32637	9.35E-03	2.70E-05	1.09E-05	2.59E-05	1.12E-05	9.4247E-03
520216.82	4258803.07	203255.2472	1.44832	0.47297	1.35013	0.50718	9.32E-03	5.93E-05	1.69E-05	5.53E-05	1.74E-05	9.4739E-03
520394.97	4258762.77	203214.8005	0.40563	0.24514	0.39227	0.26045	9.32E-03	1.66E-05	8.77E-06	1.61E-05	8.94E-06	9.3735E-03
520246.09	4258432.84	203127.0727	0.49386	1.06829	0.50005	1.20013	9.32E-03	2.02E-05	3.82E-05	2.05E-05	4.12E-05	9.4392E-03
520197.12	4258442.69	202538.6745	0.61856	1.79595	0.63886	2.05024	9.29E-03	2.53E-05	6.42E-05	2.62E-05	7.04E-05	9.4782E-03
520148.11	4258462.53	200932.1458	0.80881	3.67784	0.8592	4.35665	9.22E-03	3.31E-05	1.32E-04	3.52E-05	1.50E-04	9.5678E-03
520187.11	4258793.12	200787.8364	1.98234	0.57412	1.81606	0.61108	9.21E-03	8.12E-05	2.05E-05	7.44E-05	2.10E-05	9.4088E-03
520385.09	4258772.79	200559.1487	0.43046	0.24868	0.41595	0.26476	9.20E-03	1.76E-05	8.89E-06	1.70E-05	9.09E-06	9.2539E-03
520392.92	4258433.3	200428.8146	0.287	0.3886	0.28681	0.41934	9.20E-03	1.18E-05	1.39E-05	1.17E-05	1.44E-05	9.2471E-03
520236.31	4258432.81	199462.4937	0.51298	1.17466	0.52217	1.32345	9.15E-03	2.10E-05	4.20E-05	2.14E-05	4.54E-05	9.2808E-03
520325.73	4258802.89	199273.7708	0.61991	0.29381	0.59498	0.31331	9.14E-03	2.54E-05	1.05E-05	2.44E-05	1.08E-05	9.2133E-03
520167.29	4258783.15	198863.2449	2.5697	0.67594	2.31665	0.70867	9.12E-03	1.05E-04	2.42E-05	9.49E-05	2.43E-05	9.3720E-03
520139.95	4258761.88	198290.2813	4.05938	0.9026	3.54853	0.91046	9.10E-03	1.66E-04	3.23E-05	1.45E-04	3.13E-05	9.4722E-03
520355.42	4258792.84	198013.5413	0.51587	0.26707	0.4969	0.28501	9.08E-03	2.11E-05	9.55E-06	2.03E-05	9.78E-06	9.1453E-03
520206.92	4258803.08	197749.7573	1.59789	0.49629	1.4819	0.53155	9.07E-03	6.54E-05	1.78E-05	6.07E-05	1.82E-05	9.2345E-03
520138.29	4258472.5	197255.1718	0.8949	4.40995	0.96146	5.28675	9.05E-03	3.66E-05	1.58E-04	3.94E-05	1.81E-04	9.4649E-03
520324.43	4258423.08	196417.2477	0.35814	0.58896	0.35734	0.6438	9.01E-03	1.47E-05	2.11E-05	1.46E-05	2.21E-05	9.0837E-03
520334.22	4258423.11	196290.9018	0.3459	0.5531	0.34533	0.60277	9.01E-03	1.42E-05	1.98E-05	1.41E-05	2.07E-05	9.0742E-03
520266.35	4258812.98	196118.2727	0.94412	0.36537	0.8967	0.39043	9.00E-03	3.87E-05	1.31E-05	3.67E-05	1.34E-05	9.0994E-03
520314.65	4258423.05	196098.8963	0.37096	0.62869	0.3701	0.68944	9.00E-03	1.52E-05	2.25E-05	1.52E-05	2.37E-05	9.0731E-03
520276.25	4258812.97	196025.8747	0.87684	0.35098	0.83472	0.3745	8.99E-03	3.59E-05	1.26E-05	3.42E-05	1.29E-05	9.0888E-03
520344.01	4258423.14	195698.1136	0.33417	0.5211	0.334	0.56615	8.98E-03	1.37E-05	1.86E-05	1.37E-05	1.94E-05	9.0437E-03
520375.21	4258782.8	195572.2458	0.45779	0.25264	0.44185	0.26935	8.97E-03	1.87E-05	9.04E-06	1.81E-05	9.25E-06	9.0276E-03
520187.33	4258442.66	195557.629	0.63883	2.04026	0.66172	2.33996	8.97E-03	2.62E-05	7.30E-05	2.71E-05	8.03E-05	9.1784E-03
520256.44	4258813	195392.1453	1.01941	0.38046	0.96562	0.40718	8.96E-03	4.17E-05	1.36E-05	3.95E-05	1.40E-05	9.0731E-03
520226.52	4258432.78	195301.4102	0.53233	1.29889	0.54473	1.46757	8.96E-03	2.18E-05	4.65E-05	2.23E-05	5.04E-05	9.1010E-03
520286.15	4258812.95	195224.8841	0.81657	0.33721	0.7789	0.35942	8.96E-03	3.34E-05	1.21E-05	3.19E-05	1.23E-05	9.0463E-03
520158.43	4258779.5	194741.8635	2.93539	0.72792	2.6243	0.75473	8.93E-03	1.20E-04	2.60E-05	1.07E-04	2.59E-05	9.2140E-03
520422.26	4258443.39	194401.6065	0.2634	0.33214	0.26221	0.3567	8.92E-03	1.08E-05	1.19E-05	1.07E-05	1.22E-05	8.9644E-03
520295.07	4258422.99	194161.071	0.39858	0.72086	0.39837	0.7965	8.91E-03	1.63E-05	2.58E-05	1.63E-05	2.73E-05	8.9935E-03
520296.05	4258812.94	194111.846	0.76305	0.32425	0.72932	0.34532	8.91E-03	3.12E-05	1.16E-05	2.99E-05	1.19E-05	8.9900E-03
520246.54	4258813.02	194066.3475	1.10517	0.39663	1.04359	0.42505	8.90E-03	4.53E-05	1.42E-05	4.27E-05	1.46E-05	9.0201E-03
520335.64	4258802.87	193919.9266	0.58328	0.28217	0.56043	0.30093	8.90E-03	2.39E-05	1.01E-05	2.29E-05	1.03E-05	8.9639E-03
520402.71	4258433.33	193422.1501	0.27762	0.36874	0.27722	0.39741	8.87E-03	1.14E-05	1.32E-05	1.14E-05	1.36E-05	8.9234E-03
520353.8	4258423.18	192785.843	0.32278	0.49193	0.32321	0.53277	8.84E-03	1.32E-05	1.76E-05	1.32E-05	1.83E-05	8.9070E-03
520285.28	4258422.96	192546.662	0.41332	0.77507	0.41402	0.85974	8.83E-03	1.69E-05	2.77E-05	1.70E-05	2.95E-05	8.9248E-03
520441.74	4258473.45	192412.8908	0.25395	0.29529	0.25184	0.31591	8.83E-03	1.04E-05	1.06E-05	1.03E-05	1.08E-05	8.8697E-03
520236.64	4258813.03	192406.3744	1.20554	0.41461	1.13412	0.4447	8.83E-03	4.94E-05	1.48E-05	4.64E-05	1.53E-05	8.9531E-03
520177.2	4258793.13	192359.1079	2.25003	0.60857	2.04536	0.64265	8.83E-03	9.21E-05	2.18E-05	8.37E-05	2.21E-05	9.0448E-03
520197.02	4258803.1	191554.9598	1.77648	0.52204	1.63785	0.55739	8.79E-03	7.27E-05	1.87E-05	6.71E-05	1.91E-05	8.9658E-03
520305.95	4258812.92	191547.2	0.71344	0.31148	0.68294	0.33162	8.79E-03	2.92E-05	1.11E-05	2.80E-05	1.14E-05	8.8675E-03
520363.59	4258423.21	191338.3338	0.31222	0.46434	0.31276	0.50201	8.78E-03	1.28E-05	1.66E-05	1.28E-05	1.72E-05	8.8377E-03
520216.73	4258432.75	190597.7787	0.55157	1.44442	0.56698	1.63709	8.74E-03	2.26E-05	5.17E-05	2.32E-05	5.62E-05	8.8979E-03
520275.49	4258422.93	190546.8685	0.42873	0.83705	0.43084	0.9318	8.74E-03	1.76E-05	2.99E-05	1.76E-05	3.20E-05	8.8390E-03
520226.74	4258813.05	190151.7661	1.32287	0.43432	1.23901	0.46592	8.72E-03	5.42E-05	1.55E-05	5.07E-05	1.60E-05	8.8602E-03
520149.58	4258775.84	189356.0931	3.38696	0.78499	3.00326	0.80261	8.69E-03	1.39E-04	2.81E-05	1.23E-04	2.76E-05	9.0046E-03
520436.01	4258704.14	189056.4673	0.31698	0.23785	0.30691	0.251	8.67E-03	1.30E-05	8.51E-06	1.26E-05	8.62E-06	8.7162E-03
520365.32	4258792.82	188808.2097	0.48746	0.2568	0.46983	0.27391	8.66E-03	2.00E-05	9.19E-06	1.92E-05	9.40E-06	8.7199E-03
520373.38	4258423.24	188580.9163	0.30203	0.43911	0.3027	0.47394	8.65E-03	1.24E-05	1.57E-05	1.24E-05	1.63E-05	8.7085E-03
520265.7	4258422.9	188322.7336	0.44481	0.90838	0.44882	1.01438	8.64E-03	1.82E-05	3.25E-05	1.84E-05	3.48E-05	8.7438E-03
520177.54	4258442.63	187623.7884	0.65717	2.33796	0.68318	2.69635	8.61E-03	2.69E-05	8.36E-05	2.80E-05	9.26E-05	8.8389E-03
520345.54	4258802.85	187559.4304	0.54951	0.27108	0.52846	0.28911	8.60E-03	2.25E-05	9.70E-06	2.16E-05	9.93E-06	8.6686E-03
520216.84	4258813.07	187056.5774	1.4594	0.45568	1.35981	0.48841	8.58E-03	5.98E-05	1.63E-05	5.57E-05	1.68E-05	8.7303E-03
520315.85	4258812.9	186296.7234	0.66429	0.2979	0.63655	0.31725	8.55E-03	2.72E-05	1.07E-05	2.61E-05	1.09E-05	8.6217E-03
520255.91	4258422.87	185610.8294	0.46134	0.98995	0.46765	1.10865	8.52E-03	1.89E-05	3.54E-05	1.91E-05	3.81E-05	8.6270E-03
520412.5	4258433.36	185599.7911	0.26877	0.3509	0.26818	0.37761	8.51E-03	1.10E-05	1.26E-05	1.10E-05	1.30E-05	8.5625E-03
520107.24	4258731.68	185526.4428	9.09798	1.35343	7.68892	1.26197	8.51E-03	3.73E-04	4.84E-05	3.15E-04	4.33E-05	9.2907E-03
520394.99	4258772.77	185488.7999	0.40896	0.23983	0.39515	0.25495	8.51E-03	1.67E-05	8.58E-06	1.62E-05	8.75E-06	8.5601E-03
520206.94	4258432.72	185320.941	0.57034	1.61671	0.58823	1.83868	8.50E-03	2.34E-05	5.78E-05	2.41E-05	6.31E-05	8.6706E-03
520138.33	4258462.5	184931.8488	0.81745	4.47154	0.88319	5.34522	8.48E-03	3.35E-05	1.60E-04	3.62E-05	1.84E-04	8.8974E-03
520187.12	4258803.12	184864.8822	1.99526	0.55126	1.82697	0.5852	8.48E-03	8.17E-05	1.97E-05	7.48E-05	2.01E-05	8.6776E-03
520140.73	4258772.19	184062.2678	4.01535	0.85006	3.51661	0.85345	8.44E-03	1.64E-04	3.04E-05	1.44E-04	2.93E-05	8.8125E-03
520167.3	4258793.15	183624.4795	2.59056	0.64743	2.3335	0.67564	8.42E-03	1.06E-04	2.32E-05	9.55E-05	2.32E-05	8.6723E-03
520411.07	4258756.11	183390.5332	0.37236	0.23475	0.36004	0.24865	8.41E-03	1.52E-05	8.40E-06	1.47E-05	8.54E-06	8.4605E-03
520385.11	4258782.79	183112.6465	0.43397	0.24332	0.41893	0.25912	8.40E-03	1.78E-05	8.70E-06	1.72E-05	8.90E-06	8.4534E-03
520428.73	4258728.78	183090.0379	0.33535	0.23381	0.32447	0.2466	8.40E-03	1.37E-05	8.36E-06	1.33E-05	8.47E-06	8.4437E-03
520246.13	4258422.84	182472.2597	0.47819	1.08341	0.48707	1.21672	8.37E-03	1.96E-05	3.88E-05	1.99E-05	4.18E-05	8.4915E-03
520206.94	4258813.08	182365.2289	1.61136	0.47811	1.49342	0.51146	8.37E-03	6.60E-05	1.71E-05	6.11E-05	1.76E-05	8.5283E-03
520325.75	4258812.89	182321.7009	0.62409	0.28635	0.59869	0.30498	8.36E-03	2.56E-05	1.02E-05	2.45E-05	1.05E-05	8.4353E-03
520392.95	4258423.3	182104.9377	0.2832	0.39288	0.28343	0.42344	8.35E-03	1.16E-05	1.41E-05	1.16E-05	1.45E-05	8.4064E-03
520441.9	4258690.08	182084.2742	0.30469	0.23783	0.29524	0.25126	8.35E-03	1.25E-05	8.51E-06	1.21E-05	8.63E-06	8.3954E-03
520432.05	4258443.42	181597.4737	0.25502	0.31715	0.25371	0.33999	8.33E-03	1.04E-05	1.13E-05	1.04E-05	1.17E-05	8.3752E-03
520121.74	4258754.36	180686.7276	6.0718	1.06469	5.19645	1.02563	8.29E-03	2.49E-04	3.81E-05	2.13E-04	3.52E-05	8.8242E-03
520266.36	4258822.98	180554.3231	0.95179	0.35353	0.90379	0.37807	8.28E-03	3.90E-05	1.26E-05	3.70E-05	1.30E-05	8.3851E-03
520276.26	4258822.97	180362.9385	0.88393	0.33997	0.84131	0.36299	8.27E-03	3.62E-05	1.22E-05	3.44E-05	1.25E-05	8.3700E-03
520355.44	4258802.84	180360.7595	0.51855	0.26062	0.49906	0.27791	8.27E-03	2.12E-05	9.32E-06	2.04E-05	9.54E-06	8.3351E-03
520158.65	4258789.58	180244.5667	2.9486	0.69461	2.63478	0.71656	8.27E-03	1.21E-04	2.48E-05	1.08E-04	2.46E-05	8.5473E-03
520256.46	4258823	180052.9254	1.02791	0.36787	0.9734	0.39397	8.26E-03	4.21E-05	1.32E-05	3.99E-05	1.35E-05	8.3691E-03
520286.16	4258822.95	179581.7543	0.82329	0.32711	0.78517	0.34875	8.24E-03	3.37E-05	1.17E-05	3.21E-05	1.20E-05	8.3284E-03
520197.15	4258432.69	179375.9124	0.58818	1.82128	0.60795	2.08036	8.23E-03	2.41E-05	6.51E-05	2.49E-05	7.14E-05	8.4150E-03
520246.56	4258823.02	178911.4446	1.11408	0.38319	1.05167	0.41085	8.21E-03	4.56E-05	1.37E-05	4.31E-05	1.41E-05	8.3246E-03
520236.34	4258422.81	178899.4429	0.49521	1.19195	0.50678	1.34212	8.21E-03	2.03E-05	4.26E-05	2.07E-05	4.61E-05	8.3373E-03
520375.22	4258792.8	178707.6055	0.46125	0.24713	0.44474	0.26342	8.20E-03	1.89E-05	8.84E-06	1.82E-05	9.04E-06	8.2537E-03
520324.47	4258413.08	178558.975	0.35132	0.59455	0.35068	0.65067	8.19E-03	1.44E-05	2.13E-05	1.44E-05	2.23E-05	8.2643E-03
520167.75	4258442.59	178540.1828	0.67267	2.70649	0.70409	3.14241	8.19E-03	2.75E-05	9.68E-05	2.88E-05	1.08E-04	8.4521E-03
520334.25	4258413.11	178513.645	0.33964	0.55841	0.33896	0.60909	8.19E-03	1.39E-05	2.00E-05	1.39E-05	2.09E-05	8.2585E-03
520296.06	4258822.94	178423.8032	0.76924	0.31493	0.73501	0.33537	8.19E-03	3.15E-05	1.13E-05	3.01E-05	1.15E-05	8.2701E-03
520314.68	4258413.05	178189.4228	0.36353	0.6349	0.36323	0.69712	8.17E-03	1.49E-05	2.27E-05	1.49E-05	2.39E-05	8.2514E-03
520344.04	4258413.14	178031.8951	0.32842	0.52604	0.32797	0.57184	8.17E-03	1.34E-05	1.88E-05	1.34E-05	1.96E-05	8.2331E-03
520177.22	4258803.13	177491.675	2.26229	0.58368	2.05577	0.61415	8.14E-03	9.26E-05	2.09E-05	8.42E-05	2.11E-05	8.3617E-03
520335.65	4258812.87	177422.0426	0.58695	0.2752	0.56361	0.29315	8.14E-03	2.40E-05	9.84E-06	2.31E-05	1.01E-05	8.2068E-03
520236.66	4258823.03	177393.4506	1.21438	0.40017	1.14205	0.42932	8.14E-03	4.97E-05	1.43E-05	4.68E-05	1.47E-05	8.2640E-03
520128.51	4258472.47	177073.1248	0.89933	5.50615	0.98413	6.65546	8.12E-03	3.68E-05	1.97E-04	4.03E-05	2.28E-04	8.6263E-03
520197.04	4258813.1	177018.7617	1.79251	0.50297	1.65129	0.53586	8.12E-03	7.34E-05	1.80E-05	6.76E-05	1.84E-05	8.2987E-03
520422.29	4258433.39	176898.9115	0.26043	0.3349	0.25967	0.35974	8.12E-03	1.07E-05	1.20E-05	1.06E-05	1.24E-05	8.1614E-03
520295.1	4258412.99	176221.1654	0.38967	0.72871	0.39092	0.80597	8.08E-03	1.60E-05	2.61E-05	1.60E-05	2.77E-05	8.1704E-03
520305.97	4258822.92	176139.1127	0.71918	0.30297	0.6882	0.32239	8.08E-03	2.94E-05	1.08E-05	2.82E-05	1.11E-05	8.1605E-03
520402.74	4258423.33	176057.6708	0.27412	0.37259	0.2742	0.40118	8.08E-03	1.12E-05	1.33E-05	1.12E-05	1.38E-05	8.1267E-03
520149.99	4258786	175979.8141	3.3971	0.74655	3.00982	0.75915	8.07E-03	1.39E-04	2.67E-05	1.23E-04	2.61E-05	8.3887E-03
520353.83	4258413.18	175928.4883	0.31752	0.49677	0.31759	0.5381	8.07E-03	1.30E-05	1.78E-05	1.30E-05	1.85E-05	8.1335E-03
520226.76	4258823.05	175469.4524	1.33266	0.41906	1.24767	0.44949	8.05E-03	5.46E-05	1.50E-05	5.11E-05	1.54E-05	8.1863E-03
520226.55	4258422.78	174863.0099	0.51212	1.31832	0.5262	1.48842	8.02E-03	2.10E-05	4.72E-05	2.15E-05	5.11E-05	8.1631E-03
520448.95	4258466.52	174759.6949	0.24639	0.28787	0.2444	0.30754	8.02E-03	1.01E-05	1.03E-05	1.00E-05	1.06E-05	8.0586E-03
520285.31	4258412.96	174654.1498	0.4035	0.78409	0.40608	0.87038	8.01E-03	1.65E-05	2.80E-05	1.66E-05	2.99E-05	8.1039E-03
520363.62	4258413.21	174273.3874	0.30729	0.46916	0.30762	0.50697	8.00E-03	1.26E-05	1.68E-05	1.26E-05	1.74E-05	8.0547E-03
520216.86	4258823.07	172748.7269	1.46987	0.43952	1.36893	0.47074	7.93E-03	6.02E-05	1.57E-05	5.60E-05	1.62E-05	8.0735E-03
520275.52	4258412.93	172748.4598	0.41784	0.84773	0.42215	0.94393	7.93E-03	1.71E-05	3.03E-05	1.73E-05	3.24E-05	8.0225E-03
520187.36	4258432.66	172682.1728	0.60461	2.0672	0.62643	2.3736	7.92E-03	2.48E-05	7.39E-05	2.56E-05	8.15E-05	8.1282E-03
520365.34	4258802.82	172275.3653	0.48991	0.25067	0.47175	0.26722	7.90E-03	2.01E-05	8.97E-06	1.93E-05	9.17E-06	7.9612E-03
520373.41	4258413.24	172051.1507	0.29751	0.44371	0.29805	0.47851	7.89E-03	1.22E-05	1.59E-05	1.22E-05	1.64E-05	7.9501E-03
520345.55	4258812.85	171701.9901	0.55278	0.26454	0.53123	0.28181	7.88E-03	2.26E-05	9.46E-06	2.18E-05	9.67E-06	7.9409E-03
520141.34	4258782.43	171316.7144	3.99191	0.80372	3.499	0.80306	7.86E-03	1.63E-04	2.87E-05	1.43E-04	2.76E-05	8.2227E-03
520315.87	4258822.9	171206.8967	0.66902	0.29001	0.64089	0.30857	7.85E-03	2.74E-05	1.04E-05	2.62E-05	1.06E-05	7.9292E-03
520187.14	4258813.12	171038.6619	2.0109	0.53058	1.83994	0.5615	7.85E-03	8.23E-05	1.90E-05	7.53E-05	1.93E-05	8.0428E-03
520112.64	4258750.6	170812.8866	7.73874	1.14697	6.58766	1.0782	7.84E-03	3.17E-04	4.10E-05	2.70E-04	3.70E-05	8.5012E-03
520265.73	4258412.9	170470.5302	0.43256	0.92029	0.43891	1.02762	7.82E-03	1.77E-05	3.29E-05	1.80E-05	3.53E-05	7.9247E-03
520216.76	4258422.75	170324.4876	0.52863	1.46615	0.54474	1.6604	7.81E-03	2.16E-05	5.24E-05	2.23E-05	5.70E-05	7.9676E-03
520395.01	4258782.77	170101.21	0.4121	0.23468	0.39781	0.24959	7.80E-03	1.69E-05	8.39E-06	1.63E-05	8.57E-06	7.8540E-03
520167.32	4258803.15	170085.5932	2.60848	0.62079	2.34812	0.64485	7.80E-03	1.07E-04	2.22E-05	9.61E-05	2.21E-05	8.0505E-03
520123.03	4258764.88	169650.1673	5.91506	0.99028	5.07327	0.95204	7.78E-03	2.42E-04	3.54E-05	2.08E-04	3.27E-05	8.3012E-03
520412.53	4258423.36	169270.4521	0.26552	0.35428	0.26542	0.38099	7.77E-03	1.09E-05	1.27E-05	1.09E-05	1.31E-05	7.8133E-03
520206.96	4258823.08	168588.3456	1.62215	0.46092	1.50271	0.49234	7.73E-03	6.64E-05	1.65E-05	6.15E-05	1.69E-05	7.8958E-03
520448.99	4258456.52	168176.5417	0.24425	0.29059	0.24248	0.31039	7.72E-03	1.00E-05	1.04E-05	9.93E-06	1.07E-05	7.7566E-03
520157.97	4258442.56	168175.3924	0.68413	3.17201	0.72439	3.71008	7.72E-03	2.80E-05	1.13E-04	2.97E-05	1.27E-04	8.0141E-03
520095.99	4258728.64	167844.6442	13.01932	1.43916	11.69057	1.308	7.70E-03	5.33E-04	5.15E-05	4.79E-04	4.49E-05	8.8085E-03
520255.94	4258412.87	167810.0799	0.44755	1.00335	0.45614	1.12326	7.70E-03	1.83E-05	3.59E-05	1.87E-05	3.86E-05	7.8103E-03
520385.12	4258792.79	167801.9582	0.43703	0.23802	0.42147	0.25348	7.70E-03	1.79E-05	8.51E-06	1.73E-05	8.70E-06	7.7508E-03
520325.77	4258822.89	167592.0061	0.62843	0.27911	0.60261	0.29695	7.69E-03	2.57E-05	9.98E-06	2.47E-05	1.02E-05	7.7594E-03
520158.82	4258799.64	167248.0655	2.96039	0.66389	2.64439	0.68145	7.67E-03	1.21E-04	2.37E-05	1.08E-04	2.34E-05	7.9496E-03
520266.38	4258832.98	167014.778	0.96043	0.34253	0.91171	0.36654	7.66E-03	3.93E-05	1.23E-05	3.73E-05	1.26E-05	7.7638E-03
520256.48	4258833	166650.4863	1.03734	0.35623	0.98198	0.3817	7.65E-03	4.25E-05	1.27E-05	4.02E-05	1.31E-05	7.7541E-03
520276.28	4258832.97	166579.6272	0.89102	0.32946	0.84787	0.35203	7.64E-03	3.65E-05	1.18E-05	3.47E-05	1.21E-05	7.7374E-03
520392.99	4258413.3	166319.7852	0.27935	0.39712	0.27976	0.42746	7.63E-03	1.14E-05	1.42E-05	1.15E-05	1.47E-05	7.6822E-03
520432.08	4258433.42	166042.6971	0.25226	0.31954	0.25132	0.34269	7.62E-03	1.03E-05	1.14E-05	1.03E-05	1.18E-05	7.6615E-03
520128.54	4258462.47	166017.3467	0.81489	5.56852	0.89267	6.7114	7.62E-03	3.34E-05	1.99E-04	3.65E-05	2.30E-04	8.1161E-03
520440.71	4258716.85	165790.251	0.31395	0.22879	0.30358	0.24104	7.61E-03	1.29E-05	8.18E-06	1.24E-05	8.28E-06	7.6479E-03
520246.58	4258833.02	165601.0368	1.12363	0.37077	1.06028	0.39766	7.60E-03	4.60E-05	1.33E-05	4.34E-05	1.37E-05	7.7138E-03
520286.18	4258832.95	165523.6448	0.82878	0.31709	0.79028	0.3383	7.59E-03	3.39E-05	1.13E-05	3.24E-05	1.16E-05	7.6832E-03
520355.45	4258812.84	165244.8812	0.52143	0.25445	0.50143	0.27103	7.58E-03	2.13E-05	9.10E-06	2.05E-05	9.30E-06	7.6414E-03
520206.97	4258422.72	165243.8241	0.54445	1.64045	0.56203	1.86453	7.58E-03	2.23E-05	5.87E-05	2.30E-05	6.40E-05	7.7491E-03
520452.1	4258479.64	165136.3289	0.24649	0.28079	0.24413	0.29995	7.58E-03	1.01E-05	1.00E-05	1.00E-05	1.03E-05	7.6166E-03
520177.57	4258432.63	165120.2584	0.61897	2.36679	0.64439	2.73397	7.58E-03	2.53E-05	8.47E-05	2.64E-05	9.39E-05	7.8056E-03
520246.16	4258412.84	164755.4324	0.46261	1.09873	0.4735	1.23306	7.56E-03	1.89E-05	3.93E-05	1.94E-05	4.23E-05	7.6786E-03
520177.24	4258813.13	164454.3171	2.27649	0.56091	2.06759	0.5879	7.54E-03	9.32E-05	2.01E-05	8.47E-05	2.02E-05	7.7630E-03
520296.08	4258832.94	164409.6044	0.7747	0.30571	0.73998	0.32568	7.54E-03	3.17E-05	1.09E-05	3.03E-05	1.12E-05	7.6269E-03
520138.36	4258452.5	164374.3073	0.74903	4.52758	0.81237	5.38973	7.54E-03	3.07E-05	1.62E-04	3.33E-05	1.85E-04	7.9521E-03
520444.24	4258708.41	164095.5656	0.30669	0.22924	0.29667	0.24158	7.53E-03	1.26E-05	8.20E-06	1.21E-05	8.29E-06	7.5696E-03
520099.76	4258737.74	164077.586	11.48798	1.32281	10.0204	1.21026	7.53E-03	4.70E-04	4.73E-05	4.10E-04	4.15E-05	8.4971E-03
520236.68	4258833.03	164049.9859	1.22257	0.38655	1.14938	0.41475	7.53E-03	5.01E-05	1.38E-05	4.71E-05	1.42E-05	7.6515E-03
520197.06	4258823.1	163855.5012	1.80361	0.48461	1.66075	0.51509	7.52E-03	7.38E-05	1.73E-05	6.80E-05	1.77E-05	7.6942E-03
520375.24	4258802.8	163729.2594	0.46398	0.24155	0.44694	0.25735	7.51E-03	1.90E-05	8.64E-06	1.83E-05	8.84E-06	7.5664E-03
520150.32	4258796.13	163574.4795	3.39472	0.71058	3.00881	0.71903	7.50E-03	1.39E-04	2.54E-05	1.23E-04	2.47E-05	7.8168E-03
520335.67	4258822.87	163213.9116	0.59103	0.26856	0.56723	0.28574	7.49E-03	2.42E-05	9.61E-06	2.32E-05	9.81E-06	7.5548E-03
520334.28	4258403.11	163172.4698	0.33345	0.56347	0.33306	0.61533	7.49E-03	1.37E-05	2.02E-05	1.36E-05	2.11E-05	7.5546E-03
520324.5	4258403.08	163133.9297	0.3446	0.59997	0.34459	0.65744	7.48E-03	1.41E-05	2.15E-05	1.41E-05	2.26E-05	7.5565E-03
520344.07	4258403.14	162790.5604	0.32274	0.53044	0.32223	0.5773	7.47E-03	1.32E-05	1.90E-05	1.32E-05	1.98E-05	7.5337E-03
520314.71	4258403.05	162714.8931	0.3562	0.64098	0.35693	0.70462	7.47E-03	1.46E-05	2.29E-05	1.46E-05	2.42E-05	7.5414E-03

520226.78	4258833.05	162372.7783	1.34136	0.40467	1.25535	0.43391	7.45E-03	5.49E-05	1.45E-05	5.14E-05	1.49E-05	7.5850E-03
520305.98	4258832.92	162337.9309	0.72446	0.29454	0.69304	0.31342	7.45E-03	2.97E-05	1.05E-05	2.84E-05	1.08E-05	7.5271E-03
520427.16	4258749.44	162079.8507	0.34395	0.22567	0.3324	0.23827	7.44E-03	1.41E-05	8.07E-06	1.36E-05	8.18E-06	7.4799E-03
520422.32	4258423.39	161721.2167	0.2574	0.33785	0.25712	0.36279	7.42E-03	1.05E-05	1.21E-05	1.05E-05	1.25E-05	7.4651E-03
520353.86	4258403.18	161425.883	0.31233	0.50109	0.31211	0.54328	7.41E-03	1.28E-05	1.79E-05	1.28E-05	1.87E-05	7.4681E-03
520236.37	4258412.81	161287.0097	0.4776	1.20912	0.49059	1.36027	7.40E-03	1.96E-05	4.32E-05	2.01E-05	4.67E-05	7.5291E-03
520447.78	4258699.98	161212.7576	0.2996	0.22936	0.28994	0.24187	7.40E-03	1.23E-05	8.20E-06	1.19E-05	8.30E-06	7.4368E-03
520114.17	4258761.23	161131.605	7.43267	1.06019	6.346	0.99672	7.39E-03	3.04E-04	3.79E-05	2.60E-04	3.42E-05	8.0287E-03
520402.77	4258413.33	161116.7456	0.2706	0.37655	0.27097	0.40492	7.39E-03	1.11E-05	1.35E-05	1.11E-05	1.39E-05	7.4413E-03
520295.13	4258402.99	160729.2521	0.3808	0.73683	0.38381	0.8154	7.37E-03	1.56E-05	2.64E-05	1.57E-05	2.80E-05	7.4596E-03
520216.87	4258833.07	160163.0211	1.48145	0.4246	1.37893	0.45427	7.35E-03	6.07E-05	1.52E-05	5.65E-05	1.56E-05	7.4959E-03
520141.83	4258792.63	159775.9844	3.97828	0.7621	3.48837	0.75788	7.33E-03	1.63E-04	2.73E-05	1.43E-04	2.60E-05	7.6892E-03
520197.18	4258422.69	159541.8069	0.55917	1.84696	0.57814	2.10875	7.32E-03	2.29E-05	6.61E-05	2.37E-05	7.24E-05	7.5045E-03
520363.65	4258403.21	159531.3285	0.30239	0.47358	0.30246	0.51182	7.32E-03	1.24E-05	1.69E-05	1.24E-05	1.76E-05	7.3783E-03
520285.34	4258402.96	159193.7486	0.39371	0.79378	0.39828	0.88119	7.30E-03	1.61E-05	2.84E-05	1.63E-05	3.03E-05	7.3946E-03
520124.03	4258775.29	159146.0857	5.7937	0.92604	4.98121	0.88817	7.30E-03	2.37E-04	3.31E-05	2.04E-04	3.05E-05	7.8061E-03
520436.03	4258735.77	158942.7222	0.32625	0.22491	0.31536	0.23699	7.29E-03	1.34E-05	8.04E-06	1.29E-05	8.14E-06	7.3344E-03
520187.16	4258823.12	158731.8014	2.02555	0.51127	1.85211	0.53929	7.28E-03	8.29E-05	1.83E-05	7.58E-05	1.85E-05	7.4779E-03
520365.35	4258812.82	158366.3472	0.49307	0.24513	0.47438	0.26106	7.27E-03	2.02E-05	8.77E-06	1.94E-05	8.96E-06	7.3229E-03
520315.88	4258832.9	158232.7206	0.67475	0.28265	0.64622	0.3006	7.26E-03	2.76E-05	1.01E-05	2.65E-05	1.03E-05	7.3339E-03
520167.34	4258813.15	158102.953	2.62789	0.59619	2.36368	0.61634	7.25E-03	1.08E-04	2.13E-05	9.68E-05	2.12E-05	7.5003E-03
520345.57	4258822.85	157987.8639	0.55628	0.25831	0.53427	0.27483	7.25E-03	2.28E-05	9.24E-06	2.19E-05	9.44E-06	7.3115E-03
520373.44	4258403.24	157685.0845	0.29299	0.44797	0.29326	0.483	7.23E-03	1.20E-05	1.60E-05	1.20E-05	1.66E-05	7.2909E-03
520226.58	4258412.78	157379.4303	0.49225	1.33715	0.50691	1.50844	7.22E-03	2.02E-05	4.78E-05	2.08E-05	5.18E-05	7.3608E-03
520275.55	4258402.93	157313.0647	0.40691	0.85871	0.4133	0.95587	7.22E-03	1.67E-05	3.07E-05	1.69E-05	3.28E-05	7.3143E-03
520451.31	4258691.54	157296.8495	0.29278	0.22925	0.28349	0.24191	7.22E-03	1.20E-05	8.20E-06	1.16E-05	8.30E-06	7.2566E-03
520410.65	4258776.29	156891.8701	0.37934	0.22539	0.36622	0.23904	7.20E-03	1.55E-05	8.06E-06	1.50E-05	8.21E-06	7.2447E-03
520395.02	4258792.77	156600.8931	0.41499	0.22968	0.4002	0.24431	7.18E-03	1.70E-05	8.22E-06	1.64E-05	8.39E-06	7.2345E-03
520167.78	4258432.59	156542.6314	0.63036	2.73836	0.66219	3.1838	7.18E-03	2.58E-05	9.79E-05	2.71E-05	1.09E-04	7.4420E-03
520206.97	4258833.08	156386.236	1.63337	0.44502	1.51231	0.47449	7.17E-03	6.69E-05	1.59E-05	6.19E-05	1.63E-05	7.3357E-03
520158.97	4258809.7	155740.5579	2.97708	0.63577	2.65712	0.64928	7.15E-03	1.22E-04	2.27E-05	1.09E-04	2.23E-05	7.4208E-03
520412.56	4258413.36	155285.7442	0.26227	0.35794	0.26255	0.38448	7.12E-03	1.07E-05	1.28E-05	1.07E-05	1.32E-05	7.1717E-03
520266.4	4258842.98	155169.1058	0.96982	0.33221	0.92032	0.3557	7.12E-03	3.97E-05	1.19E-05	3.77E-05	1.22E-05	7.2203E-03
520265.76	4258402.9	155076.7948	0.42032	0.93265	0.42866	1.04078	7.11E-03	1.72E-05	3.34E-05	1.76E-05	3.57E-05	7.2185E-03
520256.49	4258843	155005.8279	1.0485	0.34551	0.99208	0.37032	7.11E-03	4.29E-05	1.24E-05	4.06E-05	1.27E-05	7.2200E-03
520325.78	4258832.89	154878.9495	0.6335	0.2723	0.60727	0.28947	7.11E-03	2.59E-05	9.74E-06	2.49E-05	9.94E-06	7.1760E-03
520276.3	4258842.97	154621.7359	0.89926	0.31966	0.85547	0.34181	7.09E-03	3.68E-05	1.14E-05	3.50E-05	1.17E-05	7.1888E-03
520385.14	4258802.79	154372.2649	0.4398	0.23287	0.42371	0.24791	7.08E-03	1.80E-05	8.33E-06	1.73E-05	8.51E-06	7.1345E-03
520246.59	4258843.02	154194.1161	1.13672	0.35969	1.07197	0.38576	7.07E-03	4.65E-05	1.29E-05	4.39E-05	1.32E-05	7.1907E-03
520286.2	4258842.95	153511.0574	0.83603	0.30785	0.797	0.32868	7.04E-03	3.42E-05	1.10E-05	3.26E-05	1.13E-05	7.1320E-03
520187.39	4258422.66	153131.1284	0.57229	2.09389	0.59361	2.40414	7.03E-03	2.34E-05	7.49E-05	2.43E-05	8.25E-05	7.2305E-03
520216.79	4258412.75	153005.3456	0.50633	1.48665	0.52215	1.68252	7.02E-03	2.07E-05	5.32E-05	2.14E-05	5.78E-05	7.1726E-03
520177.25	4258823.13	152950.1348	2.2935	0.54014	2.08145	0.56381	7.02E-03	9.39E-05	1.93E-05	8.52E-05	1.94E-05	7.2349E-03
520432.11	4258423.42	152715.0051	0.24953	0.32239	0.24904	0.34568	7.01E-03	1.02E-05	1.15E-05	1.02E-05	1.19E-05	7.0501E-03
520393.02	4258403.3	152650.5683	0.27549	0.40122	0.27581	0.43145	7.00E-03	1.13E-05	1.44E-05	1.13E-05	1.48E-05	7.0551E-03
520150.6	4258806.24	152594.4842	3.40298	0.67815	3.01447	0.68275	7.00E-03	1.39E-04	2.43E-05	1.23E-04	2.34E-05	7.3112E-03
520118.72	4258472.44	152517.7663	0.88627	7.08298	0.98015	8.6398	7.00E-03	3.63E-05	2.53E-04	4.01E-05	2.97E-04	7.6236E-03
520255.98	4258402.87	152479.5048	0.43378	1.01708	0.44409	1.13767	7.00E-03	1.78E-05	3.64E-05	1.82E-05	3.91E-05	7.1068E-03
520105.32	4258757.57	152319.2289	9.64774	1.12318	8.28691	1.03584	6.99E-03	3.95E-04	4.02E-05	3.39E-04	3.56E-05	7.7982E-03
520355.47	4258822.84	152261.0484	0.5247	0.24869	0.50422	0.26459	6.99E-03	2.15E-05	8.90E-06	2.06E-05	9.08E-06	7.0456E-03
520296.1	4258842.93	152128.5715	0.78016	0.29684	0.74504	0.31643	6.98E-03	3.19E-05	1.06E-05	3.05E-05	1.09E-05	7.0633E-03
520197.07	4258833.1	152076.1735	1.81341	0.46736	1.66914	0.49548	6.98E-03	7.42E-05	1.67E-05	6.83E-05	1.70E-05	7.1533E-03
520115.37	4258771.71	151797.9818	7.19456	0.98609	6.16503	0.92653	6.96E-03	2.95E-04	3.53E-05	2.52E-04	3.18E-05	7.5783E-03
520335.69	4258832.87	150912.5228	0.59563	0.2623	0.5714	0.2788	6.92E-03	2.44E-05	9.38E-06	2.34E-05	9.57E-06	6.9903E-03
520375.26	4258812.8	150745.3246	0.46671	0.23626	0.44915	0.25151	6.92E-03	1.91E-05	8.45E-06	1.84E-05	8.63E-06	6.9705E-03
520403.63	4258789.21	150703.0679	0.39625	0.22455	0.38219	0.23857	6.91E-03	1.62E-05	8.03E-06	1.56E-05	8.19E-06	6.9621E-03
520306	4258842.92	150059.4357	0.7292	0.28624	0.69737	0.30469	6.88E-03	2.99E-05	1.02E-05	2.86E-05	1.05E-05	6.9635E-03
520334.32	4258393.11	149836.3786	0.32734	0.56833	0.32764	0.6214	6.87E-03	1.34E-05	2.03E-05	1.34E-05	2.13E-05	6.9427E-03
520324.53	4258393.08	149731.3687	0.33795	0.60557	0.33899	0.66426	6.87E-03	1.38E-05	2.17E-05	1.39E-05	2.28E-05	6.9416E-03
520344.1	4258393.14	149561.6051	0.3171	0.53508	0.31699	0.583	6.86E-03	1.30E-05	1.91E-05	1.30E-05	2.00E-05	6.9267E-03
520246.19	4258402.84	149510.9677	0.44716	1.11435	0.45927	1.24924	6.86E-03	1.83E-05	3.99E-05	1.88E-05	4.29E-05	6.9791E-03
520124.83	4258785.61	149407.023	5.70462	0.86974	4.91249	0.83206	6.85E-03	2.34E-04	3.11E-05	2.01E-04	2.86E-05	7.3489E-03
520314.74	4258393.05	149259.6493	0.34894	0.64708	0.351	0.71199	6.85E-03	1.43E-05	2.31E-05	1.44E-05	2.44E-05	6.9240E-03
520422.35	4258413.39	148739.318	0.25437	0.34109	0.25452	0.36593	6.82E-03	1.04E-05	1.22E-05	1.04E-05	1.26E-05	6.8695E-03
520353.89	4258393.18	148320.4757	0.3071	0.50536	0.307	0.54844	6.80E-03	1.26E-05	1.81E-05	1.26E-05	1.88E-05	6.8667E-03
520402.81	4258403.33	148209.2501	0.26704	0.38042	0.26744	0.40858	6.80E-03	1.09E-05	1.36E-05	1.10E-05	1.40E-05	6.8491E-03
520207	4258412.72	148124.6982	0.51959	1.66261	0.53638	1.88887	6.80E-03	2.13E-05	5.95E-05	2.20E-05	6.48E-05	6.9632E-03
520089.13	4258736.23	147759.5812	14.58609	1.353	16.51823	1.22199	6.78E-03	5.97E-04	4.84E-05	6.76E-04	4.20E-05	8.1428E-03
520187.17	4258833.12	147742.7018	2.04028	0.49331	1.86429	0.51852	6.78E-03	8.35E-05	1.76E-05	7.63E-05	1.78E-05	6.9735E-03
520295.16	4258392.99	147251.6963	0.37198	0.74494	0.37672	0.82458	6.76E-03	1.52E-05	2.66E-05	1.54E-05	2.83E-05	6.8412E-03
520167.35	4258823.15	147232.621	2.64254	0.57292	2.37578	0.58956	6.75E-03	1.08E-04	2.05E-05	9.73E-05	2.02E-05	7.0010E-03
520363.68	4258393.21	146970.5411	0.29761	0.47749	0.29752	0.51653	6.74E-03	1.22E-05	1.71E-05	1.22E-05	1.77E-05	6.8019E-03
520158	4258432.56	146868.2895	0.63772	3.208	0.67847	3.75427	6.74E-03	2.61E-05	1.15E-04	2.78E-05	1.29E-04	7.0356E-03
520128.57	4258452.47	146806.0032	0.74182	5.61888	0.81118	6.77607	6.74E-03	3.04E-05	2.01E-04	3.32E-05	2.33E-04	7.2324E-03
520365.37	4258822.82	146433.9009	0.49672	0.24002	0.47749	0.25536	6.72E-03	2.03E-05	8.59E-06	1.96E-05	8.77E-06	6.7753E-03
520236.4	4258402.81	146149.1926	0.46027	1.22624	0.47378	1.37808	6.71E-03	1.88E-05	4.39E-05	1.94E-05	4.73E-05	6.8345E-03
520345.59	4258832.85	146123.3206	0.56026	0.25245	0.5378	0.2683	6.70E-03	2.29E-05	9.03E-06	2.20E-05	9.21E-06	6.7671E-03
520177.6	4258422.63	145965.4693	0.58334	2.3962	0.60919	2.7671	6.70E-03	2.39E-05	8.57E-05	2.49E-05	9.50E-05	6.9261E-03
520285.37	4258392.96	145733.2519	0.3839	0.80313	0.39026	0.89145	6.69E-03	1.57E-05	2.87E-05	1.60E-05	3.06E-05	6.7770E-03
520092.8	4258745.07	145700.3488	14.41568	1.25954	13.64284	1.1415	6.68E-03	5.90E-04	4.51E-05	5.59E-04	3.92E-05	7.9175E-03
520447.67	4258724.17	145607.6892	0.30628	0.22066	0.29593	0.23215	6.68E-03	1.25E-05	7.89E-06	1.21E-05	7.97E-06	6.7207E-03
520133.86	4258799.33	145336.9438	4.70309	0.77217	4.08184	0.7506	6.67E-03	1.93E-04	2.76E-05	1.67E-04	2.58E-05	7.0809E-03
520373.47	4258393.24	145177.8448	0.28851	0.45185	0.28854	0.48738	6.66E-03	1.18E-05	1.62E-05	1.18E-05	1.67E-05	6.7170E-03
520158.34	4258819.43	145164.6811	3.02864	0.61309	2.69901	0.62224	6.66E-03	1.24E-04	2.19E-05	1.11E-04	2.14E-05	6.9377E-03
520395.04	4258802.77	144655.2246	0.41761	0.22481	0.40231	0.23911	6.64E-03	1.71E-05	8.04E-06	1.65E-05	8.21E-06	6.6863E-03
520106.71	4258768.14	144267.2424	9.24548	1.04026	7.94914	0.96037	6.62E-03	3.79E-04	3.72E-05	3.25E-04	3.30E-05	7.3929E-03
520412.23	4258785.64	144109.9565	0.37892	0.2198	0.36547	0.23318	6.61E-03	1.55E-05	7.86E-06	1.50E-05	8.01E-06	6.6578E-03
520256.51	4258853	143994.6232	1.05529	0.33473	0.99821	0.3589	6.61E-03	4.32E-05	1.20E-05	4.09E-05	1.23E-05	6.7146E-03
520275.58	4258392.93	143886.9739	0.39597	0.86949	0.40407	0.96736	6.60E-03	1.62E-05	3.11E-05	1.65E-05	3.32E-05	6.6983E-03
520266.41	4258852.98	143881.1911	0.9751	0.32184	0.92508	0.34479	6.60E-03	3.99E-05	1.15E-05	3.79E-05	1.18E-05	6.7021E-03
520246.61	4258853.02	143460.7105	1.14511	0.34847	1.07948	0.37376	6.58E-03	4.69E-05	1.25E-05	4.42E-05	1.28E-05	6.6981E-03
520276.31	4258852.97	143365.0733	0.90441	0.30987	0.86017	0.33157	6.58E-03	3.70E-05	1.11E-05	3.52E-05	1.14E-05	6.6720E-03
520412.59	4258403.36	143282.624	0.25903	0.36178	0.25948	0.38806	6.57E-03	1.06E-05	1.29E-05	1.06E-05	1.33E-05	6.6210E-03
520118.75	4258462.44	143271.7126	0.79869	7.14588	0.87893	8.69378	6.57E-03	3.27E-05	2.56E-04	3.60E-05	2.98E-04	7.1958E-03
520116.33	4258782.1	143012.7395	7.01585	0.92162	6.0282	0.86517	6.56E-03	2.87E-04	3.30E-05	2.47E-04	2.97E-05	7.1579E-03
520385.16	4258812.79	142821.9101	0.44286	0.22812	0.42623	0.24273	6.55E-03	1.81E-05	8.16E-06	1.75E-05	8.33E-06	6.6045E-03
520177.27	4258833.13	142729.3566	2.31241	0.52096	2.09661	0.54146	6.55E-03	9.47E-05	1.86E-05	8.58E-05	1.86E-05	6.7659E-03
520197.21	4258412.69	142672.4125	0.53165	1.87099	0.55001	2.13525	6.55E-03	2.18E-05	6.69E-05	2.25E-05	7.33E-05	6.7301E-03
520138.39	4258442.5	142657.91	0.68865	4.57433	0.74783	5.43922	6.54E-03	2.82E-05	1.64E-04	3.06E-05	1.87E-04	6.9540E-03
520454.54	4258707.77	142606.7493	0.29284	0.22125	0.28307	0.23294	6.54E-03	1.20E-05	7.91E-06	1.16E-05	8.00E-06	6.5820E-03
520286.21	4258852.95	142430.0322	0.84145	0.29869	0.80198	0.31916	6.53E-03	3.45E-05	1.07E-05	3.28E-05	1.10E-05	6.6233E-03
520434.59	4258756.37	142410.519	0.33416	0.21726	0.32269	0.22918	6.53E-03	1.37E-05	7.77E-06	1.32E-05	7.87E-06	6.5761E-03
520149.33	4258815.71	142385.9726	3.51531	0.6561	3.10369	0.65532	6.53E-03	1.44E-04	2.35E-05	1.27E-04	2.25E-05	6.8494E-03
520226.61	4258402.78	142367.2333	0.47287	1.35524	0.48729	1.52767	6.53E-03	1.94E-05	4.85E-05	2.00E-05	5.24E-05	6.6718E-03
520236.71	4258853.03	142269.1917	1.24608	0.36321	1.17011	0.3894	6.53E-03	5.10E-05	1.30E-05	4.79E-05	1.34E-05	6.6523E-03
520426.3	4258769.81	142267.4914	0.35103	0.21718	0.33877	0.22961	6.53E-03	1.44E-05	7.77E-06	1.39E-05	7.88E-06	6.5709E-03
520265.8	4258392.9	141700.6337	0.40808	0.94469	0.41788	1.05338	6.50E-03	1.67E-05	3.38E-05	1.71E-05	3.62E-05	6.6047E-03
520432.14	4258413.42	141174.8786	0.24675	0.32547	0.24673	0.34871	6.48E-03	1.01E-05	1.16E-05	1.01E-05	1.20E-05	6.5207E-03
520462.09	4258480.02	141035.9007	0.23838	0.2691	0.23593	0.28703	6.47E-03	9.76E-06	9.63E-06	9.66E-06	9.85E-06	6.5094E-03
520355.49	4258832.84	141023.7697	0.52843	0.2433	0.50747	0.25856	6.47E-03	2.16E-05	8.70E-06	2.08E-05	8.88E-06	6.5299E-03
520296.11	4258852.93	140917.674	0.78436	0.28806	0.74891	0.30732	6.47E-03	3.21E-05	1.03E-05	3.07E-05	1.06E-05	6.5487E-03
520393.05	4258393.3	140791.5988	0.27164	0.40505	0.27171	0.43536	6.46E-03	1.11E-05	1.45E-05	1.11E-05	1.49E-05	6.5109E-03
520226.81	4258853.05	140481.4378	1.36095	0.37912	1.27246	0.40583	6.45E-03	5.57E-05	1.36E-05	5.21E-05	1.39E-05	6.5803E-03
520403.49	4258799.27	139665.9496	0.39905	0.21989	0.38449	0.23366	6.41E-03	1.63E-05	7.87E-06	1.57E-05	8.02E-06	6.4556E-03
520443.25	4258742.78	139587.5631	0.31748	0.21657	0.30657	0.228	6.40E-03	1.30E-05	7.75E-06	1.26E-05	7.83E-06	6.4451E-03
520375.27	4258822.8	139465.0613	0.46963	0.23127	0.45156	0.24598	6.40E-03	1.92E-05	8.27E-06	1.85E-05	8.44E-06	6.4528E-03
520256.01	4258392.87	139166.3522	0.4201	1.03052	0.43144	1.15162	6.38E-03	1.72E-05	3.69E-05	1.77E-05	3.95E-05	6.4959E-03
520140.31	4258811.99	139122.2474	4.15809	0.7018	3.6317	0.68838	6.38E-03	1.70E-04	2.51E-05	1.49E-04	2.36E-05	6.7503E-03
520306.02	4258852.92	138843.0467	0.73238	0.27785	0.70031	0.29598	6.37E-03	3.00E-05	9.94E-06	2.87E-05	1.02E-05	6.4486E-03
520216.91	4258853.07	138400.9526	1.49709	0.39695	1.39255	0.42351	6.35E-03	6.13E-05	1.42E-05	5.70E-05	1.45E-05	6.4966E-03
520334.35	4258383.11	138164.5991	0.32128	0.57345	0.32263	0.62756	6.34E-03	1.32E-05	2.05E-05	1.32E-05	2.15E-05	6.4071E-03
520216.82	4258402.75	138153.5114	0.48481	1.50581	0.49989	1.7034	6.34E-03	1.99E-05	5.39E-05	2.05E-05	5.85E-05	6.4909E-03
520324.56	4258383.08	137987.982	0.33135	0.61116	0.33366	0.67092	6.33E-03	1.36E-05	2.19E-05	1.37E-05	2.30E-05	6.4027E-03
520344.14	4258383.14	137982.1753	0.31152	0.53962	0.31216	0.58858	6.33E-03	1.28E-05	1.93E-05	1.28E-05	2.02E-05	6.3954E-03
520167.82	4258422.59	137901.49	0.59132	2.76904	0.62407	3.21885	6.33E-03	2.42E-05	9.90E-05	2.56E-05	1.11E-04	6.5860E-03
520422.38	4258403.39	137622.618	0.25136	0.34464	0.25177	0.36922	6.31E-03	1.03E-05	1.23E-05	1.03E-05	1.27E-05	6.3595E-03
520167.37	4258833.15	137565.2154	2.66022	0.55139	2.38977	0.56474	6.31E-03	1.09E-04	1.97E-05	9.78E-05	1.94E-05	6.5571E-03
520314.77	4258383.05	137473.7618	0.34171	0.65347	0.34521	0.71938	6.31E-03	1.40E-05	2.34E-05	1.41E-05	2.47E-05	6.3832E-03
520402.84	4258393.33	137050.4745	0.26351	0.3842	0.26374	0.41228	6.29E-03	1.08E-05	1.37E-05	1.08E-05	1.42E-05	6.3371E-03
520353.92	4258383.18	136894.2414	0.30194	0.50946	0.30231	0.5535	6.28E-03	1.24E-05	1.82E-05	1.24E-05	1.90E-05	6.3424E-03
520187.42	4258412.66	136565.0515	0.54202	2.11907	0.56347	2.43245	6.27E-03	2.22E-05	7.58E-05	2.31E-05	8.35E-05	6.4699E-03
520098.06	4258764.57	136488.3389	12.19537	1.08323	10.84106	0.98809	6.26E-03	4.99E-04	3.87E-05	4.44E-04	3.39E-05	7.2777E-03
520461.41	4258691.37	136482.9838	0.2803	0.22107	0.27118	0.23304	6.26E-03	1.15E-05	7.91E-06	1.11E-05	8.00E-06	6.3001E-03
520315.92	4258852.9	136399.7536	0.68563	0.26819	0.65635	0.28528	6.26E-03	2.81E-05	9.59E-06	2.69E-05	9.79E-06	6.3321E-03
520107.83	4258778.6	136345.7679	8.89636	0.96813	7.67971	0.89436	6.26E-03	3.64E-04	3.46E-05	3.14E-04	3.07E-05	6.9993E-03
520246.22	4258392.84	136285.3693	0.43189	1.1292	0.44444	1.26464	6.25E-03	1.77E-05	4.04E-05	1.82E-05	4.34E-05	6.3722E-03
520345.6	4258842.85	136031.8228	0.56551	0.24719	0.54258	0.26248	6.24E-03	2.32E-05	8.84E-06	2.22E-05	9.01E-06	6.3041E-03
520207.01	4258853.08	135947.9031	1.65914	0.41677	1.53403	0.44227	6.24E-03	6.79E-05	1.49E-05	6.28E-05	1.52E-05	6.3979E-03
520148.21	4258432.53	135940.7685	0.63945	3.8176	0.68936	4.48555	6.24E-03	2.62E-05	1.37E-04	2.82E-05	1.54E-04	6.5817E-03
520363.71	4258383.21	135914.2793	0.29288	0.48118	0.29293	0.52116	6.24E-03	1.20E-05	1.72E-05	1.20E-05	1.79E-05	6.2946E-03
520365.39	4258832.82	135910.9158	0.50037	0.23508	0.48063	0.24985	6.24E-03	2.05E-05	8.41E-06	1.97E-05	8.58E-06	6.2925E-03
520158.52	4258829.5	135605.914	3.03022	0.58761	2.70086	0.59377	6.22E-03	1.24E-04	2.10E-05	1.11E-04	2.04E-05	6.4974E-03
520295.19	4258382.99	135448.0817	0.36313	0.75356	0.36947	0.83387	6.21E-03	1.49E-05	2.70E-05	1.51E-05	2.86E-05	6.2997E-03
520117.12	4258792.42	134902.8232	6.89148	0.86492	5.92645	0.81104	6.19E-03	2.82E-04	3.09E-05	2.43E-04	2.78E-05	6.7727E-03
520395.06	4258812.77	134428.9506	0.42068	0.22043	0.40485	0.23438	6.17E-03	1.72E-05	7.88E-06	1.66E-05	8.05E-06	6.2171E-03
520373.5	4258383.24	134317.1297	0.28411	0.45537	0.28408	0.49166	6.16E-03	1.16E-05	1.63E-05	1.16E-05	1.69E-05	6.2186E-03
520411.94	4258795.77	134241.0409	0.38205	0.21543	0.36813	0.22865	6.16E-03	1.56E-05	7.71E-06	1.51E-05	7.85E-06	6.2050E-03
520285.4	4258382.96	133948.8798	0.37407	0.81303	0.38194	0.90182	6.15E-03	1.53E-05	2.91E-05	1.56E-05	3.10E-05	6.2363E-03
520325.82	4258852.89	133574.651	0.64338	0.25898	0.61643	0.27516	6.13E-03	2.63E-05	9.26E-06	2.52E-05	9.45E-06	6.1984E-03
520256.53	4258863	133566.2145	1.05717	0.3238	0.99989	0.34734	6.13E-03	4.33E-05	1.16E-05	4.09E-05	1.19E-05	6.2355E-03
520207.03	4258402.72	133480.2583	0.49588	1.68355	0.51198	1.91182	6.12E-03	2.03E-05	6.02E-05	2.10E-05	6.56E-05	6.2909E-03
520266.43	4258862.98	133441.2596	0.97719	0.31142	0.92697	0.33385	6.12E-03	4.00E-05	1.11E-05	3.80E-05	1.15E-05	6.2226E-03
520459.82	4258441.13	133383.6994	0.23253	0.28047	0.23097	0.29917	6.12E-03	9.52E-06	1.00E-05	9.46E-06	1.03E-05	6.1587E-03
520149.67	4258825.84	133257.7514	3.50448	0.62675	3.0957	0.62338	6.11E-03	1.43E-04	2.24E-05	1.27E-04	2.14E-05	6.4277E-03
520246.63	4258863.02	133137.1734	1.14678	0.33697	1.08098	0.3615	6.11E-03	4.70E-05	1.21E-05	4.43E-05	1.24E-05	6.2238E-03
520236.43	4258392.81	133035.7203	0.44329	1.24248	0.4566	1.39504	6.10E-03	1.82E-05	4.44E-05	1.87E-05	4.79E-05	6.2326E-03
520276.33	4258862.97	132905.4437	0.90642	0.29993	0.86198	0.3212	6.10E-03	3.71E-05	1.07E-05	3.53E-05	1.10E-05	6.1916E-03
520197.11	4258853.1	132828.7304	1.84852	0.43809	1.69795	0.46146	6.09E-03	7.57E-05	1.57E-05	6.95E-05	1.58E-05	6.2706E-03
520059.93	4258627.94	132802.8499	5.59286	4.642	12.35612	3.75046	6.09E-03	2.29E-04	1.66E-04	5.06E-04	1.29E-04	7.1224E-03
520412.63	4258393.36	132635.8445	0.2557	0.36515	0.25606	0.39128	6.09E-03	1.05E-05	1.31E-05	1.05E-05	1.34E-05	6.1325E-03
520385.17	4258822.79	132514.9772	0.44565	0.22346	0.4285	0.2376	6.08E-03	1.82E-05	7.99E-06	1.75E-05	8.16E-06	6.1315E-03
520275.62	4258382.93	132135.461	0.38502	0.8805	0.39439	0.97869	6.06E-03	1.58E-05	3.15E-05	1.61E-05	3.36E-05	6.1591E-03
520466.13	4258469.97	132120.1216	0.23335	0.26655	0.23113	0.28405	6.06E-03	9.55E-06	9.53E-06	9.46E-06	9.75E-06	6.0997E-03
520236.73	4258863.03	132112.3092	1.24726	0.35101	1.1712	0.37624	6.06E-03	5.11E-05	1.26E-05	4.80E-05	1.29E-05	6.1856E-03
520286.23	4258862.95	132024.313	0.84359	0.2893	0.80391	0.30941	6.06E-03	3.45E-05	1.03E-05	3.29E-05	1.06E-05	6.1454E-03
520355.5	4258842.84	131450.8379	0.5333	0.23846	0.51183	0.25319	6.03E-03	2.18E-05	8.53E-06	2.10E-05	8.69E-06	6.0907E-03
520432.17	4258403.42	130978.2417	0.24392	0.32853	0.24423	0.35158	6.01E-03	9.99E-06	1.18E-05	1.00E-05	1.21E-05	6.0528E-03
520057.12	4258655.32	130734.2964	5.70157	2.80164	10.94094	2.46113	6.00E-03	2.33E-04	1.00E-04	4.48E-04	8.45E-05	6.8640E-03
520140.81	4258822.19	130661.148	4.14003	0.6681	3.61552	0.65295	5.99E-03	1.70E-04	2.39E-05	1.48E-04	2.24E-05	6.3583E-03
520296.13	4258862.93	130625.9686	0.7865	0.27915	0.75084	0.29811	5.99E-03	3.22E-05	9.98E-06	3.07E-05	1.02E-05	6.0760E-03
520226.83	4258863.05	130576.0649	1.36202	0.36625	1.27347	0.39167	5.99E-03	5.58E-05	1.31E-05	5.21E-05	1.34E-05	6.1250E-03
520393.08	4258383.3	130406.5107	0.26781	0.4084	0.26763	0.43905	5.98E-03	1.10E-05	1.46E-05	1.10E-05	1.51E-05	6.0344E-03
520057.12	4258664.6	130193.9881	5.88804	2.46504	11.27206	2.19759	5.97E-03	2.41E-04	8.82E-05	4.62E-04	7.54E-05	6.8393E-03
520429.44	4258778.52	130181.936	0.34806	0.21117	0.33559	0.22327	5.97E-03	1.43E-05	7.55E-06	1.37E-05	7.67E-06	6.0157E-03
520403.38	4258809.32	130089.266	0.4021	0.21563	0.38702	0.22913	5.97E-03	1.65E-05	7.71E-06	1.58E-05	7.87E-06	6.0161E-03
520122.29	4258804.55	130081.4844	6.10089	0.79324	5.24665	0.74935	5.97E-03	2.50E-04	2.84E-05	2.15E-04	2.57E-05	6.4866E-03
520265.83	4258382.9	129999.0607	0.39589	0.95716	0.40662	1.06602	5.96E-03	1.62E-05	3.42E-05	1.66E-05	3.66E-05	6.0678E-03
520099.33	4258775.09	129874.4156	11.71094	1.0061	10.34697	0.91907	5.96E-03	4.79E-04	3.60E-05	4.24E-04	3.16E-05	6.9291E-03
520177.64	4258412.63	129802.1145	0.55028	2.42296	0.57697	2.79704	5.96E-03	2.25E-05	8.67E-05	2.36E-05	9.60E-05	6.1839E-03
520375.29	4258832.8	129595.1651	0.47274	0.22656	0.45416	0.24073	5.95E-03	1.94E-05	8.10E-06	1.86E-05	8.26E-06	5.9999E-03
520057.12	4258646.05	129559.9686	5.48912	3.22165	10.57322	2.77667	5.94E-03	2.25E-04	1.15E-04	4.33E-04	9.53E-05	6.8122E-03
520226.64	4258392.78	129390.869	0.45412	1.37258	0.46786	1.54617	5.94E-03	1.86E-05	4.91E-05	1.92E-05	5.31E-05	6.0761E-03
520187.21	4258853.12	129258.4221	2.07616	0.46119	1.89315	0.48107	5.93E-03	8.50E-05	1.65E-05	7.75E-05	1.65E-05	6.1257E-03
520108.75	4258788.97	129114.4304	8.66986	0.9053	7.4867	0.83655	5.92E-03	3.55E-04	3.24E-05	3.07E-04	2.87E-05	6.6461E-03
520158.03	4258422.56	128932.8088	0.59548	3.24352	0.63631	3.79087	5.92E-03	2.44E-05	1.16E-04	2.61E-05	1.30E-04	6.2118E-03
520216.92	4258863.07	128716.6999	1.49732	0.38336	1.39294	0.40836	5.91E-03	6.13E-05	1.37E-05	5.70E-05	1.40E-05	6.0513E-03
520306.03	4258862.92	128696.6476	0.73437	0.2694	0.7021	0.2872	5.90E-03	3.01E-05	9.64E-06	2.87E-05	9.86E-06	5.9827E-03
520060.71	4258691.8	128620.7213	7.29848	1.83533	16.66343	1.67402	5.90E-03	2.99E-04	6.56E-05	6.82E-04	5.75E-05	7.0051E-03
520197.24	4258402.69	128274.2611	0.50567	1.89307	0.52391	2.15985	5.88E-03	2.07E-05	6.77E-05	2.15E-05	7.41E-05	6.0690E-03
520458.02	4258723.39	128226.9709	0.2923	0.21323	0.28215	0.22407	5.88E-03	1.20E-05	7.63E-06	1.16E-05	7.69E-06	5.9216E-03

520057.12	4258673.87	128011.2239	6.04053	2.19197	11.57685	1.97632	5.87E-03	2.47E-04	7.84E-05	4.74E-04	6.78E-05	6.7405E-03
520334.38	4258373.11	127864.2489	0.31527	0.57846	0.31781	0.63352	5.87E-03	1.29E-05	2.07E-05	1.30E-05	2.17E-05	5.9345E-03
520422.41	4258393.39	127823.5263	0.2483	0.34808	0.24875	0.37241	5.86E-03	1.02E-05	1.25E-05	1.02E-05	1.28E-05	5.9099E-03
520059.89	4258618.24	127798.949	5.0988	5.70599	11.54337	4.35416	5.86E-03	2.09E-04	2.04E-04	4.73E-04	1.49E-04	6.8981E-03
520344.17	4258373.14	127770.2899	0.306	0.5441	0.30764	0.59402	5.86E-03	1.25E-05	1.95E-05	1.26E-05	2.04E-05	5.9268E-03
520324.59	4258373.08	127629.4557	0.32477	0.61704	0.32841	0.67763	5.86E-03	1.33E-05	2.21E-05	1.34E-05	2.33E-05	5.9275E-03
520256.04	4258382.87	127533.4671	0.40657	1.0442	0.41831	1.16547	5.85E-03	1.66E-05	3.73E-05	1.71E-05	4.00E-05	5.9621E-03
520158.67	4258839.55	127217.8379	3.04657	0.5646	2.71257	0.56785	5.84E-03	1.25E-04	2.02E-05	1.11E-04	1.95E-05	6.1120E-03
520402.87	4258383.33	127188.3482	0.25996	0.38752	0.25992	0.41576	5.84E-03	1.06E-05	1.39E-05	1.06E-05	1.43E-05	5.8846E-03
520314.8	4258373.05	127073.5358	0.33447	0.66008	0.33936	0.72674	5.83E-03	1.37E-05	2.36E-05	1.39E-05	2.49E-05	5.9060E-03
520459.13	4258430.83	126994.4416	0.23085	0.28358	0.22957	0.30264	5.83E-03	9.45E-06	1.01E-05	9.40E-06	1.04E-05	5.8656E-03
520353.96	4258373.18	126877.1818	0.29684	0.51347	0.29798	0.55847	5.82E-03	1.22E-05	1.84E-05	1.22E-05	1.92E-05	5.8828E-03
520118.78	4258452.44	126849.2885	0.72405	7.19521	0.79178	8.75012	5.82E-03	2.96E-05	2.57E-04	3.24E-05	3.00E-04	6.4394E-03
520057.12	4258636.77	126816.4181	5.22246	3.7567	10.15607	3.15456	5.82E-03	2.14E-04	1.34E-04	4.16E-04	1.08E-04	6.6904E-03
520365.4	4258842.82	126667.0159	0.5043	0.23037	0.48408	0.24458	5.81E-03	2.06E-05	8.24E-06	1.98E-05	8.40E-06	5.8683E-03
520128.6	4258442.47	126557.8477	0.67831	5.65848	0.73882	6.83124	5.81E-03	2.78E-05	2.02E-04	3.03E-05	2.35E-04	6.3012E-03
520207.02	4258863.08	126553.3572	1.65869	0.40251	1.53401	0.42625	5.81E-03	6.79E-05	1.44E-05	6.28E-05	1.46E-05	5.9658E-03
520315.93	4258862.9	126408.9243	0.68729	0.26019	0.65784	0.27692	5.80E-03	2.81E-05	9.31E-06	2.69E-05	9.51E-06	5.8733E-03
520363.74	4258373.21	126036.6049	0.28817	0.48485	0.28874	0.52573	5.78E-03	1.18E-05	1.73E-05	1.18E-05	1.80E-05	5.8413E-03
520441.94	4258763.34	126023.0079	0.32461	0.2093	0.31324	0.22058	5.78E-03	1.33E-05	7.49E-06	1.28E-05	7.57E-06	5.8229E-03
520411.7	4258805.88	125442.1413	0.38516	0.2113	0.37073	0.22431	5.76E-03	1.58E-05	7.56E-06	1.52E-05	7.70E-06	5.8013E-03
520216.85	4258392.75	125343.656	0.46422	1.52426	0.47857	1.72346	5.75E-03	1.90E-05	5.45E-05	1.96E-05	5.92E-05	5.9028E-03
520177.3	4258853.13	125241.4161	2.35245	0.48594	2.12804	0.50067	5.75E-03	9.63E-05	1.74E-05	8.71E-05	1.72E-05	5.9639E-03
520395.07	4258822.77	125156.8251	0.42336	0.21606	0.407	0.22961	5.74E-03	1.73E-05	7.73E-06	1.67E-05	7.88E-06	5.7916E-03
520149.95	4258835.95	125051.7093	3.50389	0.59985	3.09445	0.59418	5.74E-03	1.43E-04	2.15E-05	1.27E-04	2.04E-05	6.0491E-03
520464.75	4258707.32	125010.7697	0.28009	0.21349	0.27043	0.22459	5.74E-03	1.15E-05	7.64E-06	1.11E-05	7.71E-06	5.7731E-03
520246.25	4258382.84	124735.8452	0.41691	1.14371	0.42928	1.27958	5.72E-03	1.71E-05	4.09E-05	1.76E-05	4.39E-05	5.8421E-03
520108.93	4258472.41	124717.3121	0.85546	9.53156	0.9477	11.54478	5.72E-03	3.50E-05	3.41E-04	3.88E-05	3.96E-04	6.5329E-03
520373.53	4258373.24	124685.1433	0.27974	0.45874	0.27998	0.49586	5.72E-03	1.15E-05	1.64E-05	1.15E-05	1.70E-05	5.7767E-03
520113.27	4258800.83	124659.5734	7.65586	0.83441	6.58663	0.77545	5.72E-03	3.13E-04	2.98E-05	2.70E-04	2.66E-05	6.3588E-03
520057.12	4258683.15	124562.5859	6.15111	1.96683	11.85848	1.78869	5.71E-03	2.52E-04	7.04E-05	4.86E-04	6.14E-05	6.5838E-03
520256.54	4258873	124507.0312	1.06138	0.3138	1.00363	0.33667	5.71E-03	4.35E-05	1.12E-05	4.11E-05	1.16E-05	5.8195E-03
520266.45	4258872.98	124422.7199	0.98177	0.30202	0.93109	0.32389	5.71E-03	4.02E-05	1.08E-05	3.81E-05	1.11E-05	5.8085E-03
520246.64	4258873.02	124089.674	1.15037	0.32634	1.08414	0.35001	5.69E-03	4.71E-05	1.17E-05	4.44E-05	1.20E-05	5.8082E-03
520276.35	4258872.97	123866.2553	0.91055	0.29095	0.86572	0.31171	5.68E-03	3.73E-05	1.04E-05	3.54E-05	1.07E-05	5.7766E-03
520325.83	4258862.89	123863.4979	0.64508	0.25156	0.61794	0.26735	5.68E-03	2.64E-05	9.00E-06	2.53E-05	9.18E-06	5.7525E-03
520197.12	4258863.1	123802.2529	1.84733	0.42292	1.69753	0.44431	5.68E-03	7.56E-05	1.51E-05	6.95E-05	1.53E-05	5.8553E-03
520450.43	4258749.82	123731.0592	0.30901	0.20868	0.29808	0.21952	5.68E-03	1.27E-05	7.46E-06	1.22E-05	7.54E-06	5.7164E-03
520138.42	4258432.5	123640.5487	0.63542	4.61588	0.68931	5.48525	5.67E-03	2.60E-05	1.65E-04	2.82E-05	1.88E-04	6.0800E-03
520285.44	4258372.96	123553.217	0.36419	0.82329	0.37322	0.91214	5.67E-03	1.49E-05	2.94E-05	1.53E-05	3.13E-05	5.7593E-03
520100.38	4258785.51	123490.5115	11.32571	0.93852	9.96805	0.85837	5.67E-03	4.64E-04	3.36E-05	4.08E-04	2.95E-05	6.6004E-03
520412.66	4258383.36	123347.5167	0.25241	0.36841	0.25253	0.39453	5.66E-03	1.03E-05	1.32E-05	1.03E-05	1.35E-05	5.7063E-03
520385.19	4258832.79	123269.4833	0.44817	0.21888	0.43052	0.23251	5.66E-03	1.83E-05	7.83E-06	1.76E-05	7.98E-06	5.7072E-03
520236.74	4258873.03	123266.9844	1.25177	0.34004	1.17514	0.36416	5.66E-03	5.13E-05	1.22E-05	4.81E-05	1.25E-05	5.7793E-03
520286.25	4258872.95	122910.5116	0.84671	0.28057	0.80674	0.30022	5.64E-03	3.47E-05	1.00E-05	3.30E-05	1.03E-05	5.7269E-03
520123.11	4258814.88	122889.9973	6.00755	0.74906	5.16491	0.70674	5.64E-03	2.46E-04	2.68E-05	2.11E-04	2.43E-05	6.1465E-03
520428.83	4258788.78	122863.8962	0.3517	0.20737	0.33885	0.21939	5.64E-03	1.44E-05	7.42E-06	1.39E-05	7.53E-06	5.6800E-03
520090.84	4258771.58	122794.2832	15.24834	1.03275	15.16187	0.93849	5.63E-03	6.24E-04	3.69E-05	6.21E-04	3.22E-05	6.9478E-03
520141.24	4258832.36	122738.3269	4.11508	0.63694	3.59592	0.62044	5.63E-03	1.68E-04	2.28E-05	1.47E-04	2.13E-05	5.9908E-03
520355.52	4258852.84	122620.1712	0.53727	0.23336	0.51538	0.24756	5.63E-03	2.20E-05	8.35E-06	2.11E-05	8.50E-06	5.6855E-03
520438.05	4258774.96	122523.0276	0.33344	0.20713	0.32155	0.21859	5.62E-03	1.37E-05	7.41E-06	1.32E-05	7.50E-06	5.6629E-03
520187.46	4258402.66	122499.8936	0.51377	2.14294	0.53585	2.4586	5.62E-03	2.10E-05	7.66E-05	2.19E-05	8.44E-05	5.8241E-03
520059.85	4258608.54	122497.0667	4.51414	7.14133	10.43773	5.02645	5.62E-03	1.85E-04	2.55E-04	4.27E-04	1.73E-04	6.6601E-03
520167.85	4258412.59	122261.8449	0.55552	2.79837	0.58896	3.25095	5.61E-03	2.27E-05	1.00E-04	2.41E-05	1.12E-04	5.8677E-03
520432.2	4258393.42	122061.6155	0.24109	0.33187	0.24155	0.35465	5.60E-03	9.87E-06	1.19E-05	9.89E-06	1.22E-05	5.6438E-03
520226.84	4258873.05	122014.593	1.36825	0.35504	1.27886	0.37911	5.60E-03	5.60E-05	1.27E-05	5.24E-05	1.30E-05	5.7319E-03
520275.65	4258372.93	121771.3296	0.37405	0.89211	0.3843	0.99014	5.59E-03	1.53E-05	3.19E-05	1.57E-05	3.40E-05	5.6836E-03
520296.15	4258872.93	121617.8877	0.78957	0.27088	0.75363	0.28945	5.58E-03	3.23E-05	9.69E-06	3.09E-05	9.94E-06	5.6624E-03
520236.46	4258382.81	121593.4244	0.42678	1.25777	0.43947	1.41116	5.58E-03	1.75E-05	4.50E-05	1.80E-05	4.84E-05	5.7074E-03
520393.11	4258373.3	121253.9375	0.26402	0.41161	0.26375	0.44278	5.56E-03	1.08E-05	1.47E-05	1.08E-05	1.52E-05	5.6144E-03
520335.74	4258862.87	121188.9067	0.60747	0.24357	0.58222	0.25859	5.56E-03	2.49E-05	8.71E-06	2.38E-05	8.88E-06	5.6262E-03
520375.31	4258842.8	121077.8574	0.47653	0.22226	0.45742	0.23595	5.55E-03	1.95E-05	7.95E-06	1.87E-05	8.10E-06	5.6091E-03
520167.4	4258853.15	120919.4209	2.6963	0.51213	2.4177	0.51978	5.55E-03	1.10E-04	1.83E-05	9.90E-05	1.78E-05	5.7931E-03
520207.06	4258392.72	120866.9456	0.47337	1.70277	0.48916	1.93316	5.55E-03	1.94E-05	6.09E-05	2.00E-05	6.64E-05	5.7118E-03
520187.22	4258863.12	120643.1101	2.07393	0.44494	1.89218	0.46268	5.53E-03	8.49E-05	1.59E-05	7.75E-05	1.59E-05	5.7291E-03
520216.94	4258873.07	120314.5132	1.50282	0.37138	1.39768	0.39474	5.52E-03	6.15E-05	1.33E-05	5.72E-05	1.36E-05	5.6654E-03
520458.69	4258420.62	120293.4796	0.22892	0.28646	0.22804	0.3058	5.52E-03	9.37E-06	1.02E-05	9.34E-06	1.05E-05	5.5583E-03
520306.05	4258872.92	120006.4859	0.73826	0.26184	0.70565	0.27935	5.51E-03	3.02E-05	9.37E-06	2.89E-05	9.59E-06	5.5837E-03
520265.86	4258372.9	119685.5135	0.38375	0.96991	0.39492	1.07853	5.49E-03	1.57E-05	3.47E-05	1.62E-05	3.70E-05	5.5945E-03
520471.48	4258691.25	119469.2905	0.26859	0.2134	0.25965	0.2247	5.48E-03	1.10E-05	7.63E-06	1.06E-05	7.71E-06	5.5180E-03
520422.44	4258383.39	119137.8277	0.24523	0.35132	0.24553	0.37553	5.47E-03	1.00E-05	1.26E-05	1.01E-05	1.29E-05	5.5114E-03
520104.26	4258797.11	119008.5514	9.94722	0.86876	8.66777	0.79766	5.46E-03	4.07E-04	3.11E-05	3.55E-04	2.74E-05	6.2805E-03
520148.24	4258422.53	118946.8435	0.59435	3.85489	0.64165	4.52308	5.46E-03	2.43E-05	1.38E-04	2.63E-05	1.55E-04	5.8008E-03
520472.09	4258480.39	118941.9821	0.23055	0.25794	0.22798	0.27476	5.46E-03	9.44E-06	9.23E-06	9.33E-06	9.43E-06	5.4943E-03
520334.41	4258363.11	118723.8996	0.30926	0.58396	0.31302	0.63968	5.45E-03	1.27E-05	2.09E-05	1.28E-05	2.20E-05	5.5152E-03
520344.2	4258363.15	118714.9168	0.3005	0.54881	0.30327	0.59951	5.45E-03	1.23E-05	1.96E-05	1.24E-05	2.06E-05	5.5113E-03
520402.9	4258373.33	118499.1541	0.25646	0.39065	0.25622	0.41926	5.44E-03	1.05E-05	1.40E-05	1.05E-05	1.44E-05	5.4859E-03
520324.62	4258363.08	118431.6281	0.31817	0.62327	0.32308	0.68443	5.43E-03	1.30E-05	2.23E-05	1.32E-05	2.35E-05	5.5055E-03
520207.04	4258873.08	118305.8339	1.66248	0.38948	1.53735	0.41136	5.43E-03	6.81E-05	1.39E-05	6.29E-05	1.41E-05	5.5867E-03
520114.26	4258811.23	118282.1445	7.49525	0.78532	6.43349	0.72982	5.43E-03	3.07E-04	2.81E-05	2.63E-04	2.51E-05	6.0500E-03
520226.67	4258382.78	118088.6024	0.43605	1.38894	0.44908	1.56372	5.42E-03	1.79E-05	4.97E-05	1.84E-05	5.37E-05	5.5573E-03
520353.99	4258363.18	117991.5186	0.2918	0.51758	0.29388	0.56342	5.41E-03	1.19E-05	1.85E-05	1.20E-05	1.93E-05	5.4751E-03
520365.42	4258852.82	117893.5438	0.50668	0.22518	0.48605	0.23885	5.41E-03	2.07E-05	8.05E-06	1.99E-05	8.20E-06	5.4656E-03
520315.95	4258872.9	117844.9876	0.6906	0.25298	0.66088	0.26944	5.41E-03	2.83E-05	9.05E-06	2.71E-05	9.25E-06	5.4801E-03
520314.83	4258363.05	117836.5265	0.3272	0.66702	0.33333	0.73415	5.41E-03	1.34E-05	2.39E-05	1.36E-05	2.52E-05	5.4822E-03
520108.96	4258462.41	117707.6003	0.76902	9.58585	0.84506	11.61428	5.40E-03	3.15E-05	3.43E-04	3.46E-05	3.99E-04	6.2079E-03
520092.01	4258782.06	117339.7232	14.77259	0.96193	14.31826	0.87563	5.38E-03	6.05E-04	3.44E-05	5.86E-04	3.01E-05	6.6389E-03
520256.07	4258372.87	117291.683	0.39319	1.05805	0.40488	1.17914	5.38E-03	1.61E-05	3.78E-05	1.66E-05	4.05E-05	5.4921E-03
520363.78	4258363.21	117140.166	0.28344	0.48863	0.28484	0.53025	5.37E-03	1.16E-05	1.75E-05	1.17E-05	1.82E-05	5.4331E-03
520177.32	4258863.13	117045.5749	2.34694	0.4682	2.12485	0.48074	5.37E-03	9.61E-05	1.67E-05	8.70E-05	1.65E-05	5.5862E-03
520305.04	4258363.02	116949.1769	0.3363	0.71606	0.34369	0.78974	5.37E-03	1.38E-05	2.56E-05	1.41E-05	2.71E-05	5.4460E-03
520059.81	4258598.85	116771.6907	3.78442	8.9405	8.72421	5.65802	5.36E-03	1.55E-04	3.20E-04	3.57E-04	1.94E-04	6.3834E-03
520467.75	4258434.52	116731.7623	0.22541	0.27218	0.22389	0.29004	5.36E-03	9.23E-06	9.74E-06	9.17E-06	9.96E-06	5.3935E-03
520395.09	4258832.77	116684.092	0.42556	0.21167	0.40871	0.22477	5.35E-03	1.74E-05	7.57E-06	1.67E-05	7.72E-06	5.4027E-03
520256.56	4258883	116508.0465	1.06715	0.30473	1.00873	0.32694	5.35E-03	4.37E-05	1.09E-05	4.13E-05	1.12E-05	5.4523E-03
520266.46	4258882.98	116398.5835	0.98726	0.29337	0.936	0.3147	5.34E-03	4.04E-05	1.05E-05	3.83E-05	1.08E-05	5.4402E-03
520473.34	4258463.05	116296.5474	0.22668	0.26021	0.22457	0.27691	5.34E-03	9.28E-06	9.31E-06	9.19E-06	9.51E-06	5.3728E-03
520246.66	4258883.02	116209.6131	1.15714	0.317	1.09006	0.33983	5.33E-03	4.74E-05	1.13E-05	4.46E-05	1.17E-05	5.4465E-03
520123.81	4258825.16	116178.2826	5.9324	0.70926	5.09729	0.66833	5.33E-03	2.43E-04	2.54E-05	2.09E-04	2.29E-05	5.8300E-03
520177.67	4258402.63	116133.059	0.51969	2.44863	0.54728	2.82496	5.33E-03	2.13E-05	8.76E-05	2.24E-05	9.70E-05	5.5562E-03
520437.28	4258785.28	116101.0763	0.3371	0.2034	0.3248	0.21483	5.33E-03	1.38E-05	7.28E-06	1.33E-05	7.38E-06	5.3682E-03
520373.56	4258363.24	116071.2179	0.27541	0.4621	0.27622	0.50001	5.33E-03	1.13E-05	1.65E-05	1.13E-05	1.72E-05	5.3814E-03
520197.28	4258392.69	115919.7878	0.48122	1.91323	0.49983	2.18238	5.32E-03	1.97E-05	6.84E-05	2.05E-05	7.49E-05	5.5017E-03
520276.36	4258882.97	115911.415	0.91613	0.28281	0.87076	0.30314	5.32E-03	3.75E-05	1.01E-05	3.57E-05	1.04E-05	5.4115E-03
520197.14	4258873.1	115852.6276	1.85088	0.40896	1.70073	0.42832	5.32E-03	7.58E-05	1.46E-05	6.96E-05	1.47E-05	5.4898E-03
520428.34	4258798.99	115832.2635	0.35498	0.20357	0.34171	0.21551	5.31E-03	1.45E-05	7.28E-06	1.40E-05	7.40E-06	5.3574E-03
520295.26	4258362.99	115774.6334	0.34538	0.77105	0.35399	0.85194	5.31E-03	1.41E-05	2.76E-05	1.45E-05	2.92E-05	5.3970E-03
520061.21	4258717.12	115629.3663	7.55732	1.43669	17.63332	1.32556	5.30E-03	3.09E-04	5.14E-05	7.22E-04	4.55E-05	6.4332E-03
520236.76	4258883.03	115514.2898	1.25938	0.33035	1.18172	0.35342	5.30E-03	5.16E-05	1.18E-05	4.84E-05	1.21E-05	5.4235E-03
520325.85	4258872.89	115430.1794	0.64775	0.24468	0.62038	0.26017	5.30E-03	2.65E-05	8.75E-06	2.54E-05	8.93E-06	5.3653E-03
520385.21	4258842.79	115283.0009	0.45132	0.21471	0.43315	0.22789	5.29E-03	1.85E-05	7.68E-06	1.77E-05	7.82E-06	5.3407E-03
520412.69	4258373.36	115118.8841	0.24913	0.37137	0.249	0.3977	5.28E-03	1.02E-05	1.33E-05	1.02E-05	1.37E-05	5.3288E-03
520461.66	4258738.63	115079.7257	0.29129	0.20514	0.28079	0.2154	5.28E-03	1.19E-05	7.34E-06	1.15E-05	7.39E-06	5.3178E-03
520286.26	4258882.95	115048.4904	0.85223	0.27289	0.81175	0.29219	5.28E-03	3.49E-05	9.76E-06	3.32E-05	1.00E-05	5.3661E-03
520446.65	4258771.39	114729.1854	0.31949	0.20296	0.30806	0.21383	5.26E-03	1.31E-05	7.26E-06	1.26E-05	7.34E-06	5.3038E-03
520246.28	4258372.84	114583.7415	0.40223	1.15847	0.41415	1.29436	5.26E-03	1.65E-05	4.14E-05	1.70E-05	4.44E-05	5.3762E-03
520226.86	4258883.05	114461.5989	1.37748	0.34503	1.28674	0.36784	5.25E-03	5.64E-05	1.23E-05	5.27E-05	1.26E-05	5.3853E-03
520285.47	4258362.96	114312.6785	0.35438	0.83305	0.36409	0.92197	5.24E-03	1.45E-05	2.98E-05	1.49E-05	3.17E-05	5.3353E-03
520216.88	4258382.75	114210.6964	0.44456	1.54172	0.4585	1.74241	5.24E-03	1.82E-05	5.51E-05	1.88E-05	5.98E-05	5.3917E-03
520355.54	4258862.84	114171.6069	0.53935	0.22771	0.51713	0.24142	5.24E-03	2.21E-05	8.14E-06	2.12E-05	8.29E-06	5.2977E-03
520432.23	4258383.42	114138.1713	0.23822	0.3349	0.23863	0.35747	5.24E-03	9.75E-06	1.20E-05	9.77E-06	1.23E-05	5.2802E-03
520158.06	4258412.56	113992.7823	0.55714	3.27538	0.59706	3.82522	5.23E-03	2.28E-05	1.17E-04	2.44E-05	1.31E-04	5.5255E-03
520296.17	4258882.93	113799.9688	0.79439	0.26351	0.758	0.28177	5.22E-03	3.25E-05	9.43E-06	3.10E-05	9.67E-06	5.3036E-03
520057.69	4258708.63	113753.036	6.34969	1.52196	12.77138	1.40367	5.22E-03	2.60E-04	5.44E-05	5.23E-04	4.82E-05	6.1043E-03
520468.29	4258722.81	113634.1804	0.27939	0.20604	0.26937	0.21631	5.21E-03	1.14E-05	7.37E-06	1.10E-05	7.43E-06	5.2506E-03
520095.25	4258793.39	113564.9744	13.38444	0.89426	12.31441	0.8159	5.21E-03	5.48E-04	3.20E-05	5.04E-04	2.80E-05	6.3224E-03
520105.4	4258807.57	113368.8308	9.64865	0.8156	8.36747	0.74953	5.20E-03	3.95E-04	2.92E-05	3.43E-04	2.57E-05	5.9937E-03
520167.42	4258863.15	113200.2549	2.6881	0.49288	2.41305	0.49842	5.19E-03	1.10E-04	1.76E-05	9.88E-05	1.71E-05	5.4370E-03
520393.14	4258363.3	113124.7898	0.26027	0.4146	0.26016	0.44641	5.19E-03	1.07E-05	1.48E-05	1.07E-05	1.53E-05	5.2414E-03
520335.75	4258872.87	113121.0629	0.61057	0.23733	0.58502	0.25204	5.19E-03	2.50E-05	8.49E-06	2.40E-05	8.65E-06	5.2559E-03
520187.24	4258873.12	113085.4786	2.07894	0.43009	1.89657	0.44569	5.19E-03	8.51E-05	1.54E-05	7.77E-05	1.53E-05	5.3816E-03
520375.32	4258852.8	113051.7155	0.47921	0.21762	0.45964	0.2308	5.19E-03	1.96E-05	7.78E-06	1.88E-05	7.92E-06	5.2407E-03
520216.96	4258883.07	112997.6094	1.51405	0.36097	1.40714	0.38286	5.18E-03	6.20E-05	1.29E-05	5.76E-05	1.31E-05	5.3298E-03
520275.68	4258362.93	112554.0575	0.36322	0.90282	0.37377	1.00087	5.16E-03	1.49E-05	3.23E-05	1.53E-05	3.44E-05	5.2606E-03
520306.07	4258882.92	112345.7591	0.74299	0.25488	0.70996	0.27216	5.15E-03	3.04E-05	9.12E-06	2.91E-05	9.34E-06	5.2322E-03
520467.07	4258424.21	112253.5207	0.22381	0.27506	0.22259	0.29327	5.15E-03	9.16E-06	9.84E-06	9.11E-06	1.01E-05	5.1882E-03
520115.09	4258821.56	112176.9083	7.35523	0.74127	6.30434	0.68881	5.15E-03	3.01E-04	2.65E-05	2.58E-04	2.36E-05	5.7559E-03
520158.32	4258859.39	111975.3068	3.0764	0.52349	2.73854	0.52181	5.14E-03	1.26E-04	1.87E-05	1.12E-04	1.79E-05	5.4119E-03
520054.16	4258700.13	111611.0321	5.6169	1.61282	9.94732	1.4881	5.12E-03	2.30E-04	5.77E-05	4.07E-04	5.11E-05	5.8665E-03
520236.49	4258372.81	111551.4125	0.41079	1.27314	0.42285	1.42697	5.12E-03	1.68E-05	4.55E-05	1.73E-05	4.90E-05	5.2464E-03
520422.48	4258373.39	111421.2067	0.24214	0.35441	0.24221	0.37863	5.11E-03	9.91E-06	1.27E-05	9.92E-06	1.30E-05	5.1573E-03
520207.06	4258883.08	111194.6568	1.67487	0.37838	1.54764	0.39854	5.10E-03	6.86E-05	1.35E-05	6.34E-05	1.37E-05	5.2606E-03
520402.93	4258363.33	110719.4093	0.25298	0.3936	0.25273	0.42274	5.08E-03	1.04E-05	1.41E-05	1.03E-05	1.45E-05	5.1289E-03
520059.77	4258589.15	110619.6087	3.04233	10.75058	6.37004	6.12036	5.08E-03	1.25E-04	3.85E-04	2.61E-04	2.10E-04	6.0550E-03
520344.23	4258353.15	110583.159	0.29496	0.55398	0.29889	0.60518	5.07E-03	1.21E-05	1.98E-05	1.22E-05	2.08E-05	5.1382E-03
520334.44	4258353.11	110557.5662	0.3032	0.58982	0.30814	0.64597	5.07E-03	1.24E-05	2.11E-05	1.26E-05	2.22E-05	5.1405E-03
520457.59	4258756.86	110540.1485	0.30083	0.20117	0.28985	0.21147	5.07E-03	1.23E-05	7.20E-06	1.19E-05	7.26E-06	5.1100E-03
520265.89	4258362.9	110498.9696	0.37183	0.98157	0.38289	1.09021	5.07E-03	1.52E-05	3.51E-05	1.57E-05	3.74E-05	5.1729E-03
520187.49	4258392.66	110470.0993	0.48739	2.16548	0.51034	2.48305	5.07E-03	2.00E-05	7.75E-05	2.09E-05	8.52E-05	5.2717E-03
520474.91	4258707	110392.3136	0.26822	0.20602	0.25862	0.2166	5.06E-03	1.10E-05	7.37E-06	1.06E-05	7.44E-06	5.1010E-03
520149.21	4258855.63	110360.0392	3.57183	0.55559	3.15019	0.54508	5.06E-03	1.46E-04	1.99E-05	1.29E-04	1.87E-05	5.3769E-03
520315.97	4258882.9	110339.6568	0.69493	0.24637	0.6648	0.26262	5.06E-03	2.85E-05	8.81E-06	2.72E-05	9.02E-06	5.1357E-03
520324.65	4258353.08	110210.8729	0.31153	0.62975	0.31756	0.69123	5.06E-03	1.28E-05	2.25E-05	1.30E-05	2.37E-05	5.1283E-03
520411.34	4258826.04	110123.8349	0.39062	0.20336	0.37519	0.21581	5.05E-03	1.60E-05	7.27E-06	1.54E-05	7.41E-06	5.0983E-03
520354.02	4258353.18	109968.9373	0.28672	0.52192	0.28988	0.56838	5.05E-03	1.17E-05	1.87E-05	1.19E-05	1.95E-05	5.1070E-03
520207.1	4258382.72	109942.8235	0.45206	1.721	0.46803	1.95303	5.04E-03	1.85E-05	6.16E-05	1.92E-05	6.70E-05	5.2102E-03
520436.66	4258795.55	109918.7996	0.34042	0.19962	0.32765	0.21101	5.04E-03	1.39E-05	7.14E-06	1.34E-05	7.24E-06	5.0846E-03
520124.41	4258835.4	109877.6637	5.86404	0.67307	5.03704	0.63345	5.04E-03	2.40E-04	2.41E-05	2.06E-04	2.17E-05	5.5331E-03
520177.34	4258873.13	109849.1619	2.35113	0.45201	2.1287	0.46237	5.04E-03	9.63E-05	1.62E-05	8.72E-05	1.59E-05	5.2551E-03
520128.63	4258432.47	109660.6478	0.62363	5.70127	0.67586	6.87447	5.03E-03	2.55E-05	2.04E-04	2.77E-05	2.36E-04	5.5242E-03
520314.86	4258353.05	109582.5538	0.31989	0.67437	0.32705	0.74167	5.03E-03	1.31E-05	2.41E-05	1.34E-05	2.55E-05	5.1035E-03
520365.44	4258862.82	109551.8987	0.50733	0.21951	0.48644	0.23259	5.03E-03	2.08E-05	7.85E-06	1.99E-05	7.99E-06	5.0826E-03
520118.81	4258442.44	109491.883	0.65995	7.23077	0.71673	8.80412	5.02E-03	2.70E-05	2.59E-04	2.93E-05	3.02E-04	5.6405E-03
520363.81	4258353.21	109351.7298	0.27881	0.49237	0.28113	0.53474	5.02E-03	1.14E-05	1.76E-05	1.15E-05	1.84E-05	5.0757E-03
520445.73	4258781.78	109336.8365	0.32322	0.19948	0.31142	0.21033	5.02E-03	1.32E-05	7.14E-06	1.28E-05	7.22E-06	5.0565E-03
520395.11	4258842.77	109318.4382	0.42825	0.20766	0.4109	0.22034	5.02E-03	1.75E-05	7.43E-06	1.68E-05	7.56E-06	5.0647E-03
520167.88	4258402.59	109133.1497	0.52272	2.82683	0.55632	3.28049	5.01E-03	2.14E-05	1.01E-04	2.28E-05	1.13E-04	5.2647E-03
520256.58	4258893	109097.975	1.07085	0.29585	1.01194	0.3173	5.01E-03	4.38E-05	1.06E-05	4.14E-05	1.09E-05	5.1120E-03
520266.48	4258892.98	109039.7121	0.99155	0.28501	0.93978	0.30576	5.00E-03	4.06E-05	1.02E-05	3.85E-05	1.05E-05	5.1023E-03
520197.16	4258883.1	108976.5265	1.86432	0.39699	1.71173	0.41442	5.00E-03	7.63E-05	1.42E-05	7.01E-05	1.42E-05	5.1745E-03
520246.68	4258893.02	108890.01	1.16146	0.30782	1.09377	0.32972	5.00E-03	4.76E-05	1.10E-05	4.48E-05	1.13E-05	5.1103E-03
520305.08	4258353.02	108677.0272	0.32825	0.72392	0.33647	0.7977	4.99E-03	1.34E-05	2.59E-05	1.38E-05	2.74E-05	5.0664E-03
520276.38	4258892.97	108578.5093	0.9203	0.27483	0.87446	0.2947	4.98E-03	3.77E-05	9.83E-06	3.58E-05	1.01E-05	5.0748E-03
520096.55	4258803.92	108559.0269	12.84618	0.83818	11.65184	0.76577	4.98E-03	5.26E-04	3.00E-05	4.77E-04	2.63E-05	6.0398E-03
520373.6	4258353.24	108477.3664	0.27114	0.46536	0.27269	0.50407	4.98E-03	1.11E-05	1.66E-05	1.12E-05	1.73E-05	5.0330E-03
520236.78	4258893.03	108363.0097	1.26515	0.32096	1.18665	0.34293	4.97E-03	5.18E-05	1.15E-05	4.86E-05	1.18E-05	5.0951E-03
520050.64	4258691.64	108241.8075	4.88251	1.71325	7.92564	1.57659	4.97E-03	2.00E-04	6.13E-05	3.25E-04	5.41E-05	5.6058E-03
520256.1	4258362.87	108204.8804	0.38014	1.0705	0.39136	1.19179	4.96E-03	1.56E-05	3.83E-05	1.60E-05	4.09E-05	5.0750E-03
520226.7	4258372.78	108187.3722	0.4187	1.40551	0.43132	1.58084	4.96E-03	1.71E-05	5.03E-05	1.77E-05	5.43E-05	5.1028E-03
520325.87	4258882.89	108174.3618	0.65204	0.23852	0.62427	0.25384	4.96E-03	2.67E-05	8.53E-06	2.56E-05	8.71E-06	5.0323E-03
520138.45	4258422.5	107950.0865	0.5883	4.65338	0.63638	5.52632	4.95E-03	2.41E-05	1.66E-04	2.61E-05	1.90E-04	5.3589E-03
520385.22	4258852.79	107913.0372	0.45392	0.21044	0.43528	0.22315	4.95E-03	1.86E-05	7.53E-06	1.78E-05	7.66E-06	5.0024E-03
520412.72	4258363.36	107844.4084	0.24591	0.37424	0.24564	0.40096	4.95E-03	1.01E-05	1.34E-05	1.01E-05	1.38E-05	4.9950E-03
520106.37	4258817.97	107795.6467	9.36398	0.76774	8.10522	0.70615	4.95E-03	3.83E-04	2.75E-05	3.32E-04	2.42E-05	5.7124E-03
520286.28	4258892.95	107775.2143	0.85625	0.26531	0.81535	0.28421	4.94E-03	3.51E-05	9.49E-06	3.34E-05	9.76E-06	5.0322E-03
520295.29	4258352.99	107493.4041	0.33656	0.77902	0.34568	0.86015	4.93E-03	1.38E-05	2.79E-05	1.42E-05	2.95E-05	5.0169E-03
520226.88	4258893.05	107451.5452	1.38403	0.33523	1.2923	0.35672	4.93E-03	5.67E-05	1.20E-05	5.29E-05	1.22E-05	5.0635E-03
520466.58	4258413.99	107394.1519	0.22203	0.27781	0.2212	0.29627	4.93E-03	9.09E-06	9.94E-06	9.06E-06	1.02E-05	4.9653E-03
520086.23	4258789.67	107325.5708	13.91869	0.908	19.87962	0.82876	4.92E-03	5.70E-04	3.25E-05	8.14E-04	2.85E-05	6.3687E-03
520455.26	4258767.83	107226.7585	0.30641	0.19872	0.29522	0.20906	4.92E-03	1.25E-05	7.11E-06	1.21E-05	7.18E-06	4.9583E-03

520432.26	4258373.42	107067.715	0.23536	0.33782	0.23556	0.3603	4.91E-03	9.64E-06	1.21E-05	9.64E-06	1.24E-05	4.9558E-03
520355.55	4258872.84	106709.0299	0.54181	0.22231	0.51927	0.23561	4.90E-03	2.22E-05	7.95E-06	2.13E-05	8.09E-06	4.9551E-03
520296.18	4258892.93	106623.0072	0.79831	0.25631	0.76152	0.27423	4.89E-03	3.27E-05	9.17E-06	3.12E-05	9.41E-06	4.9741E-03
520187.26	4258883.12	106453.2689	2.0928	0.41698	1.90775	0.43047	4.88E-03	8.57E-05	1.49E-05	7.81E-05	1.48E-05	5.0774E-03
520167.44	4258873.15	106406.0295	2.69201	0.47522	2.41676	0.47871	4.88E-03	1.10E-04	1.70E-05	9.90E-05	1.64E-05	5.1243E-03
520115.81	4258831.85	106378.5908	7.22662	0.7014	6.18938	0.65165	4.88E-03	2.96E-04	2.51E-05	2.53E-04	2.24E-05	5.4772E-03
520216.97	4258893.07	106151.8843	1.52146	0.35064	1.41338	0.37101	4.87E-03	6.23E-05	1.25E-05	5.79E-05	1.27E-05	5.0155E-03
520285.5	4258352.96	106055.4397	0.34467	0.84233	0.35458	0.93131	4.87E-03	1.41E-05	3.01E-05	1.45E-05	3.20E-05	4.9564E-03
520335.77	4258882.87	106038.401	0.61442	0.23151	0.5885	0.24602	4.86E-03	2.52E-05	8.28E-06	2.41E-05	8.45E-06	4.9308E-03
520403.77	4258839.18	105909.5252	0.40774	0.20277	0.39124	0.21512	4.86E-03	1.67E-05	7.25E-06	1.60E-05	7.39E-06	4.9063E-03
520393.17	4258353.3	105856.5985	0.25656	0.41739	0.25687	0.4499	4.86E-03	1.05E-05	1.49E-05	1.05E-05	1.54E-05	4.9079E-03
520476.37	4258438.21	105718.0657	0.22008	0.26173	0.21837	0.27844	4.85E-03	9.01E-06	9.36E-06	8.94E-06	9.56E-06	4.8870E-03
520246.31	4258362.84	105586.6476	0.38802	1.17167	0.39931	1.308	4.84E-03	1.59E-05	4.19E-05	1.63E-05	4.49E-05	4.9632E-03
520481.53	4258691.19	105423.489	0.25765	0.20602	0.2488	0.21672	4.84E-03	1.05E-05	7.37E-06	1.02E-05	7.44E-06	4.8722E-03
520375.34	4258862.8	105343.3661	0.48022	0.21249	0.46033	0.22512	4.83E-03	1.97E-05	7.60E-06	1.88E-05	7.73E-06	4.8868E-03
520158.47	4258869.45	105318.7525	3.07054	0.50323	2.73468	0.49986	4.83E-03	1.26E-04	1.80E-05	1.12E-04	1.72E-05	5.1047E-03
520197.31	4258382.69	105251.7771	0.45826	1.93329	0.47762	2.20383	4.83E-03	1.88E-05	6.92E-05	1.96E-05	7.57E-05	5.0119E-03
520306.08	4258892.92	105188.2415	0.74609	0.24788	0.71271	0.26484	4.83E-03	3.05E-05	8.87E-06	2.92E-05	9.09E-06	4.9035E-03
520108.99	4258452.41	104957.4952	0.69593	9.62409	0.75893	11.66282	4.82E-03	2.85E-05	3.44E-04	3.11E-05	4.00E-04	5.6195E-03
520148.27	4258412.53	104917.3067	0.55391	3.88845	0.59761	4.55859	4.81E-03	2.27E-05	1.39E-04	2.45E-05	1.57E-04	5.1561E-03
520047.12	4258664.6	104619.5494	3.95167	2.24575	6.12433	2.00939	4.80E-03	1.62E-04	8.03E-05	2.51E-04	6.90E-05	5.3616E-03
520047.12	4258673.87	104568.0113	4.08627	2.01746	6.30665	1.82703	4.80E-03	1.67E-04	7.22E-05	2.58E-04	6.27E-05	5.3578E-03
520207.07	4258893.08	104534.2599	1.68286	0.36735	1.55434	0.38582	4.80E-03	6.89E-05	1.31E-05	6.36E-05	1.32E-05	4.9548E-03
520422.51	4258363.39	104515.5423	0.2391	0.35692	0.23894	0.38141	4.79E-03	9.79E-06	1.28E-05	9.78E-06	1.31E-05	4.8404E-03
520177.7	4258392.63	104510.0708	0.49135	2.47247	0.51958	2.85055	4.79E-03	2.01E-05	8.84E-05	2.13E-05	9.79E-05	5.0224E-03
520216.92	4258372.75	104482.2261	0.42579	1.55912	0.43984	1.76035	4.79E-03	1.74E-05	5.58E-05	1.80E-05	6.04E-05	4.9451E-03
520061.4	4258741.7	104436.9872	8.15642	1.16717	18.12166	1.08754	4.79E-03	3.34E-04	4.17E-05	7.42E-04	3.73E-05	5.9464E-03
520275.71	4258352.93	104339.997	0.3526	0.91256	0.36293	1.01087	4.79E-03	1.44E-05	3.26E-05	1.49E-05	3.47E-05	4.8836E-03
520436.14	4258805.77	104073.9263	0.34345	0.19604	0.33029	0.20734	4.77E-03	1.41E-05	7.01E-06	1.35E-05	7.12E-06	4.8164E-03
520444.98	4258792.1	104015.6237	0.32663	0.19589	0.31436	0.20672	4.77E-03	1.34E-05	7.01E-06	1.29E-05	7.10E-06	4.8124E-03
520059.73	4258579.45	103971.4385	2.5146	12.03481	4.53985	6.47735	4.77E-03	1.03E-04	4.30E-04	1.86E-04	2.22E-04	5.7117E-03
520149.5	4258865.74	103872.5981	3.54739	0.5323	3.13273	0.52077	4.77E-03	1.45E-04	1.90E-05	1.28E-04	1.79E-05	5.0759E-03
520402.96	4258353.33	103748.6003	0.24953	0.39613	0.2495	0.42591	4.76E-03	1.02E-05	1.42E-05	1.02E-05	1.46E-05	4.8090E-03
520097.66	4258814.37	103621.0435	12.38413	0.78784	11.10901	0.72069	4.75E-03	5.07E-04	2.82E-05	4.55E-04	2.47E-05	5.7688E-03
520177.35	4258883.13	103568.4087	2.36872	0.4379	2.14252	0.44608	4.75E-03	9.70E-05	1.57E-05	8.77E-05	1.53E-05	4.9672E-03
520047.12	4258683.15	103482.8226	4.19826	1.82437	6.46955	1.66827	4.75E-03	1.72E-04	6.53E-05	2.65E-04	5.73E-05	5.3069E-03
520047.12	4258655.32	103478.4047	3.79612	2.51763	5.91625	2.21941	4.75E-03	1.55E-04	9.01E-05	2.42E-04	7.62E-05	5.3113E-03
520315.98	4258892.9	103434.6094	0.69843	0.23986	0.66793	0.25589	4.75E-03	2.86E-05	8.58E-06	2.73E-05	8.78E-06	4.8187E-03
520475.44	4258427.8	103394.8956	0.21877	0.2646	0.2173	0.28169	4.74E-03	8.96E-06	9.46E-06	8.90E-06	9.67E-06	4.7805E-03
520344.26	4258343.15	103174.9312	0.28938	0.55925	0.2944	0.61077	4.73E-03	1.18E-05	2.00E-05	1.21E-05	2.10E-05	4.7983E-03
520087.7	4258800.27	103108.3497	15.27936	0.85111	18.13949	0.77763	4.73E-03	6.26E-04	3.04E-05	7.43E-04	2.67E-05	6.1559E-03
520427.58	4258819.32	103072.2303	0.36076	0.19626	0.34662	0.20788	4.73E-03	1.48E-05	7.02E-06	1.42E-05	7.14E-06	4.7719E-03
520334.47	4258343.11	103047.2009	0.29705	0.59599	0.30309	0.65224	4.73E-03	1.22E-05	2.13E-05	1.24E-05	2.24E-05	4.7959E-03
520471.95	4258738	103012.2162	0.27837	0.19848	0.26801	0.20816	4.73E-03	1.14E-05	7.10E-06	1.10E-05	7.15E-06	4.7626E-03
520412.44	4258835.59	102951.565	0.39053	0.19895	0.37471	0.21102	4.72E-03	1.60E-05	7.12E-06	1.53E-05	7.24E-06	4.7689E-03
520121.89	4258844.36	102915.4704	6.22361	0.64937	5.33522	0.60765	4.72E-03	2.55E-04	2.32E-05	2.18E-04	2.09E-05	5.2389E-03
520354.05	4258343.18	102803.3622	0.28167	0.52636	0.28584	0.57331	4.72E-03	1.15E-05	1.88E-05	1.17E-05	1.97E-05	4.7782E-03
520454.18	4258778.28	102766.0557	0.31017	0.19553	0.2987	0.20584	4.71E-03	1.27E-05	6.99E-06	1.22E-05	7.07E-06	4.7537E-03
520324.68	4258343.08	102669.037	0.30477	0.63673	0.31182	0.69817	4.71E-03	1.25E-05	2.28E-05	1.28E-05	2.40E-05	4.7822E-03
520236.52	4258362.81	102668.3307	0.39539	1.28719	0.40697	1.44165	4.71E-03	1.62E-05	4.60E-05	1.67E-05	4.95E-05	4.8386E-03
520107.21	4258828.3	102646.0596	9.16981	0.72505	7.89922	0.66729	4.71E-03	3.75E-04	2.59E-05	3.23E-04	2.29E-05	5.4569E-03
520395.12	4258852.77	102622.6404	0.43079	0.2037	0.41295	0.21596	4.71E-03	1.76E-05	7.29E-06	1.69E-05	7.41E-06	4.7574E-03
520197.17	4258893.1	102577.8239	1.87423	0.38527	1.71993	0.40085	4.71E-03	7.67E-05	1.38E-05	7.04E-05	1.38E-05	4.8808E-03
520466.23	4258403.82	102494.768	0.22011	0.28062	0.21973	0.29916	4.70E-03	9.01E-06	1.00E-05	9.00E-06	1.03E-05	4.7406E-03
520256.59	4258903	102451.8826	1.0755	0.2877	1.01595	0.30841	4.70E-03	4.40E-05	1.03E-05	4.16E-05	1.06E-05	4.8068E-03
520140.53	4258862.04	102449.5091	4.20634	0.56284	3.66819	0.54172	4.70E-03	1.72E-04	2.01E-05	1.50E-04	1.86E-05	5.0613E-03
520365.45	4258872.82	102433.8188	0.50922	0.21442	0.48803	0.22705	4.70E-03	2.08E-05	7.67E-06	2.00E-05	7.79E-06	4.7558E-03
520265.92	4258352.9	102357.4291	0.36024	0.99195	0.37073	1.10107	4.70E-03	1.47E-05	3.55E-05	1.52E-05	3.78E-05	4.7992E-03
520266.5	4258902.98	102331.456	0.99535	0.27706	0.94307	0.29721	4.69E-03	4.08E-05	9.91E-06	3.86E-05	1.02E-05	4.7943E-03
520246.69	4258903.02	102285.0237	1.16641	0.29933	1.098	0.32031	4.69E-03	4.78E-05	1.07E-05	4.50E-05	1.10E-05	4.8071E-03
520363.84	4258343.21	102212.8483	0.27412	0.49638	0.27745	0.53923	4.69E-03	1.12E-05	1.78E-05	1.14E-05	1.85E-05	4.7482E-03
520054.46	4258724.97	102212.1665	5.84044	1.29142	10.27215	1.20498	4.69E-03	2.39E-04	4.62E-05	4.21E-04	4.14E-05	5.4366E-03
520481.25	4258457.95	102067.906	0.22008	0.25294	0.21801	0.2688	4.68E-03	9.01E-06	9.05E-06	8.93E-06	9.23E-06	4.7189E-03
520314.9	4258343.05	102018.4452	0.31246	0.68205	0.32049	0.74915	4.68E-03	1.28E-05	2.44E-05	1.31E-05	2.57E-05	4.7564E-03
520049.93	4258627.98	101877.4904	3.5615	3.85492	5.93579	3.16212	4.67E-03	1.46E-04	1.38E-04	2.43E-04	1.09E-04	5.3092E-03
520276.4	4258902.97	101863.42	0.92367	0.26717	0.8774	0.28653	4.67E-03	3.78E-05	9.56E-06	3.59E-05	9.84E-06	4.7664E-03
520236.79	4258903.03	101795.6751	1.26989	0.312	1.19066	0.33283	4.67E-03	5.20E-05	1.12E-05	4.88E-05	1.14E-05	4.7935E-03
520158.09	4258402.56	101540.4031	0.52226	3.305	0.56041	3.85602	4.66E-03	2.14E-05	1.18E-04	2.29E-05	1.32E-04	4.9534E-03
520325.88	4258892.89	101515.8007	0.65572	0.23245	0.62755	0.2476	4.66E-03	2.68E-05	8.31E-06	2.57E-05	8.50E-06	4.7267E-03
520373.63	4258343.24	101460.076	0.26681	0.46894	0.2693	0.50817	4.65E-03	1.09E-05	1.68E-05	1.10E-05	1.74E-05	4.7110E-03
520047.12	4258646.05	101298.2705	3.6197	2.84111	5.6737	2.46016	4.65E-03	1.48E-04	1.02E-04	2.32E-04	8.45E-05	5.2140E-03
520478.49	4258722.38	101292.2787	0.26744	0.19906	0.25746	0.20883	4.65E-03	1.10E-05	7.12E-06	1.05E-05	7.17E-06	4.6829E-03
520412.75	4258353.36	101230.0018	0.24269	0.37677	0.24249	0.40401	4.64E-03	9.94E-06	1.35E-05	9.93E-06	1.39E-05	4.6914E-03
520305.11	4258343.02	101165.3938	0.32013	0.73251	0.32897	0.80597	4.64E-03	1.31E-05	2.62E-05	1.35E-05	2.77E-05	4.7217E-03
520286.3	4258902.95	101138.7125	0.85974	0.25804	0.81842	0.27654	4.64E-03	3.52E-05	9.23E-06	3.35E-05	9.49E-06	4.7275E-03
520459.98	4258391.14	101047.8738	0.22138	0.29213	0.22161	0.31117	4.64E-03	9.06E-06	1.04E-05	9.07E-06	1.07E-05	4.6752E-03
520482.08	4258480.77	101039.6651	0.22306	0.24739	0.22034	0.2632	4.64E-03	9.13E-06	8.85E-06	9.02E-06	9.04E-06	4.6715E-03
520226.89	4258903.05	100976.7171	1.38884	0.32576	1.29635	0.34593	4.63E-03	5.69E-05	1.17E-05	5.31E-05	1.19E-05	4.7661E-03
520385.24	4258862.79	100771.2254	0.45495	0.20567	0.43594	0.21787	4.62E-03	1.86E-05	7.36E-06	1.78E-05	7.48E-06	4.6745E-03
520432.3	4258363.42	100707.6038	0.2325	0.34044	0.23246	0.36301	4.62E-03	9.52E-06	1.22E-05	9.52E-06	1.25E-05	4.6639E-03
520167.45	4258883.15	100473.3836	2.71315	0.45972	2.43274	0.46111	4.61E-03	1.11E-04	1.64E-05	9.96E-05	1.58E-05	4.8525E-03
520207.13	4258372.72	100415.6138	0.43186	1.73948	0.44851	1.97188	4.61E-03	1.77E-05	6.22E-05	1.84E-05	6.77E-05	4.7728E-03
520050.99	4258716.6	100360.4099	5.04562	1.36055	8.33612	1.26831	4.60E-03	2.07E-04	4.87E-05	3.41E-04	4.35E-05	5.2445E-03
520187.27	4258893.12	100264.0608	2.10211	0.40414	1.91544	0.41571	4.60E-03	8.61E-05	1.45E-05	7.84E-05	1.43E-05	4.7931E-03
520355.57	4258882.84	100166.7392	0.54498	0.21725	0.52207	0.23026	4.60E-03	2.23E-05	7.77E-06	2.14E-05	7.91E-06	4.6548E-03
520187.52	4258382.66	100126.9752	0.46278	2.18714	0.48658	2.5058	4.59E-03	1.89E-05	7.82E-05	1.99E-05	8.60E-05	4.7968E-03
520463.86	4258764.27	100122.8658	0.2941	0.19456	0.28311	0.20441	4.59E-03	1.20E-05	6.96E-06	1.16E-05	7.02E-06	4.6311E-03
520256.13	4258352.87	100102.2724	0.36753	1.08138	0.37802	1.20346	4.59E-03	1.50E-05	3.87E-05	1.55E-05	4.13E-05	4.7030E-03
520295.32	4258342.99	100070.3491	0.32768	0.78871	0.33712	0.8694	4.59E-03	1.34E-05	2.82E-05	1.38E-05	2.98E-05	4.6763E-03
520296.2	4258902.93	100040.4885	0.8014	0.24933	0.76424	0.26689	4.59E-03	3.28E-05	8.92E-06	3.13E-05	9.16E-06	4.6719E-03
520216.99	4258903.07	99766.34423	1.52518	0.34043	1.41652	0.3593	4.58E-03	6.24E-05	1.22E-05	5.80E-05	1.23E-05	4.7220E-03
520335.79	4258892.87	99569.04779	0.61787	0.22577	0.59158	0.24011	4.57E-03	2.53E-05	8.08E-06	2.42E-05	8.24E-06	4.6339E-03
520112.79	4258840.6	99549.78366	7.83442	0.67476	6.70481	0.62417	4.57E-03	3.21E-04	2.41E-05	2.75E-04	2.14E-05	5.2080E-03
520226.74	4258362.78	99446.65237	0.40209	1.42016	0.41463	1.59626	4.56E-03	1.65E-05	5.08E-05	1.70E-05	5.48E-05	4.7015E-03
520158.6	4258879.5	99427.12015	3.08084	0.4851	2.74193	0.48003	4.56E-03	1.26E-04	1.74E-05	1.12E-04	1.65E-05	4.8338E-03
520450.83	4258377.21	99387.2402	0.22394	0.30882	0.22445	0.32853	4.56E-03	9.17E-06	1.10E-05	9.19E-06	1.13E-05	4.6004E-03
520393.2	4258343.3	99321.91859	0.25289	0.42024	0.25381	0.4534	4.56E-03	1.04E-05	1.50E-05	1.04E-05	1.56E-05	4.6080E-03
520088.94	4258810.77	98905.23773	14.80654	0.80001	16.84123	0.73174	4.54E-03	6.06E-04	2.86E-05	6.90E-04	2.51E-05	5.8871E-03
520098.61	4258824.75	98787.58034	11.97909	0.7426	10.65881	0.68011	4.53E-03	4.90E-04	2.66E-05	4.36E-04	2.33E-05	5.5090E-03
520306.1	4258902.92	98708.47935	0.74899	0.24121	0.71527	0.25787	4.53E-03	3.07E-05	8.63E-06	2.93E-05	8.85E-06	4.6060E-03
520285.53	4258342.96	98604.7512	0.33495	0.85228	0.34485	0.94089	4.52E-03	1.37E-05	3.05E-05	1.41E-05	3.23E-05	4.6144E-03
520375.36	4258872.8	98579.24005	0.48174	0.20768	0.46151	0.21984	4.52E-03	1.97E-05	7.43E-06	1.89E-05	7.55E-06	4.5762E-03
520207.09	4258903.08	98325.10969	1.68687	0.35647	1.55776	0.37332	4.51E-03	6.91E-05	1.28E-05	6.38E-05	1.28E-05	4.6694E-03
520047.12	4258636.77	98308.77144	3.40868	3.22763	5.38755	2.73211	4.51E-03	1.40E-04	1.15E-04	2.21E-04	9.38E-05	5.0796E-03
520422.54	4258353.39	98308.45848	0.23607	0.35944	0.23585	0.38431	4.51E-03	9.67E-06	1.29E-05	9.66E-06	1.32E-05	4.5556E-03
520453.3	4258788.66	98245.48509	0.31359	0.19221	0.30178	0.20251	4.51E-03	1.28E-05	6.88E-06	1.24E-05	6.95E-06	4.5463E-03
520149.75	4258875.84	98159.67812	3.54914	0.51159	3.13225	0.4989	4.50E-03	1.45E-04	1.83E-05	1.28E-04	1.71E-05	4.8124E-03
520047.53	4258708.24	98153.1564	4.46991	1.43458	6.94217	1.33547	4.50E-03	1.83E-04	5.13E-05	2.84E-04	4.58E-05	5.0675E-03
520485.03	4258706.76	98123.54788	0.25708	0.19896	0.24758	0.20903	4.50E-03	1.05E-05	7.12E-06	1.01E-05	7.18E-06	4.5367E-03
520167.91	4258392.59	97976.36693	0.49244	2.85066	0.52544	3.30648	4.49E-03	2.02E-05	1.02E-04	2.15E-05	1.14E-04	4.7521E-03
520177.37	4258893.13	97752.05313	2.3831	0.4242	2.15391	0.43042	4.48E-03	9.76E-05	1.52E-05	8.82E-05	1.48E-05	4.7004E-03
520122.59	4258854.64	97660.61767	6.13487	0.61749	5.25412	0.57754	4.48E-03	2.51E-04	2.21E-05	2.15E-04	1.98E-05	4.9887E-03
520246.34	4258352.84	97576.4535	0.37436	1.18341	0.38503	1.32072	4.48E-03	1.53E-05	4.23E-05	1.58E-05	4.53E-05	4.5954E-03
520402.99	4258343.33	97479.05858	0.24611	0.39891	0.24654	0.42928	4.47E-03	1.01E-05	1.43E-05	1.01E-05	1.47E-05	4.5213E-03
520049.89	4258618.28	97427.77614	3.2211	4.48042	5.4233	3.53232	4.47E-03	1.32E-04	1.60E-04	2.22E-04	1.21E-04	5.1053E-03
520316	4258902.9	97054.46901	0.70092	0.23345	0.6701	0.2492	4.45E-03	2.87E-05	8.35E-06	2.74E-05	8.56E-06	4.5257E-03
520275.74	4258342.93	96964.02415	0.34206	0.92293	0.35204	1.02109	4.45E-03	1.40E-05	3.30E-05	1.44E-05	3.51E-05	4.5450E-03
520484.73	4258467.07	96942.34573	0.21905	0.24725	0.2167	0.26279	4.45E-03	8.97E-06	8.84E-06	8.87E-06	9.02E-06	4.4832E-03
520140.9	4258872.19	96884.88333	4.18811	0.53913	3.65181	0.5177	4.44E-03	1.71E-04	1.93E-05	1.50E-04	1.78E-05	4.8029E-03
520256.61	4258913	96780.93946	1.08535	0.28092	1.02462	0.30095	4.44E-03	4.44E-05	1.00E-05	4.20E-05	1.03E-05	4.5469E-03
520059.69	4258569.75	96770.19266	2.12571	12.82806	3.33569	6.85191	4.44E-03	8.70E-05	4.59E-04	1.37E-04	2.35E-04	5.3573E-03
520246.71	4258913.02	96640.07475	1.17725	0.29227	1.10745	0.31237	4.43E-03	4.82E-05	1.05E-05	4.53E-05	1.07E-05	4.5484E-03
520197.19	4258903.1	96583.35762	1.87886	0.37364	1.72392	0.38753	4.43E-03	7.69E-05	1.34E-05	7.06E-05	1.33E-05	4.6052E-03
520266.51	4258912.98	96565.97827	1.00328	0.27035	0.95008	0.28997	4.43E-03	4.11E-05	9.67E-06	3.89E-05	9.95E-06	4.5299E-03
520395.14	4258862.77	96475.16064	0.43306	0.19975	0.41474	0.21159	4.43E-03	1.77E-05	7.14E-06	1.70E-05	7.26E-06	4.4752E-03
520462.63	4258774.79	96469.64031	0.29787	0.19164	0.28667	0.20146	4.43E-03	1.22E-05	6.85E-06	1.17E-05	6.92E-06	4.4635E-03
520365.47	4258882.82	96389.89334	0.51261	0.20991	0.49098	0.22223	4.42E-03	2.10E-05	7.51E-06	2.01E-05	7.63E-06	4.4784E-03
520236.81	4258913.03	96202.71595	1.28187	0.30459	1.201	0.32434	4.41E-03	5.25E-05	1.09E-05	4.92E-05	1.11E-05	4.5373E-03
520429.77	4258828.42	96168.81832	0.35875	0.19166	0.34439	0.20294	4.41E-03	1.47E-05	6.86E-06	1.41E-05	6.97E-06	4.4547E-03
520276.41	4258912.97	96131.87099	0.93106	0.26073	0.88399	0.27971	4.41E-03	3.81E-05	9.33E-06	3.62E-05	9.60E-06	4.5036E-03
520099.14	4258472.38	96100.00321	0.81096	13.82781	0.89932	15.73937	4.41E-03	3.32E-05	4.95E-04	3.68E-05	5.40E-04	5.5139E-03
520459.61	4258380.96	96049.70161	0.21926	0.29533	0.21967	0.31414	4.41E-03	8.98E-06	1.06E-05	8.99E-06	1.08E-05	4.4459E-03
520103.68	4258836.84	96035.98539	10.23108	0.69487	8.8498	0.63807	4.41E-03	4.19E-04	2.49E-05	3.62E-04	2.19E-05	5.2340E-03
520128.66	4258422.47	95988.43063	0.57589	5.74265	0.62063	6.9111	4.40E-03	2.36E-05	2.05E-04	2.54E-05	2.37E-04	4.8954E-03
520197.34	4258372.69	95982.38955	0.4366	1.9531	0.45696	2.22342	4.40E-03	1.79E-05	6.99E-05	1.87E-05	7.63E-05	4.5863E-03
520468.95	4258394.98	95962.84011	0.21646	0.27936	0.21636	0.29751	4.40E-03	8.86E-06	9.99E-06	8.86E-06	1.02E-05	4.4405E-03
520216.95	4258362.75	95908.00982	0.408	1.57452	0.42245	1.77681	4.40E-03	1.67E-05	5.63E-05	1.73E-05	6.10E-05	4.5514E-03
520226.91	4258913.05	95462.97781	1.40215	0.31791	1.3077	0.33681	4.38E-03	5.74E-05	1.14E-05	5.35E-05	1.16E-05	4.5135E-03
520286.31	4258912.95	95452.19103	0.86655	0.25185	0.82453	0.27004	4.38E-03	3.55E-05	9.01E-06	3.38E-05	9.27E-06	4.4667E-03
520325.9	4258902.89	95330.93257	0.65834	0.2264	0.62983	0.24133	4.37E-03	2.70E-05	8.10E-06	2.58E-05	8.29E-06	4.4427E-03
520412.78	4258343.36	95268.7575	0.23951	0.37947	0.23961	0.40725	4.37E-03	9.81E-06	1.36E-05	9.81E-06	1.40E-05	4.4179E-03
520138.48	4258412.5	95164.07803	0.54639	4.68896	0.58872	5.55751	4.37E-03	2.24E-05	1.68E-04	2.41E-05	1.91E-04	4.7709E-03
520118.84	4258432.44	95079.08181	0.60527	7.26911	0.65297	8.84459	4.36E-03	2.48E-05	2.60E-04	2.67E-05	3.04E-04	4.9772E-03
520265.95	4258342.9	95033.395	0.34881	1.00283	0.35877	1.112	4.36E-03	1.43E-05	3.59E-05	1.47E-05	3.82E-05	4.4630E-03
520432.33	4258353.42	94959.85164	0.22968	0.34268	0.22947	0.36555	4.36E-03	9.40E-06	1.23E-05	9.40E-06	1.25E-05	4.4002E-03
520167.47	4258893.15	94939.90425	2.72872	0.44463	2.44473	0.4442	4.36E-03	1.12E-04	1.59E-05	1.00E-04	1.52E-05	4.5986E-03
520090.01	4258821.21	94777.94513	15.57065	0.75393	15.80948	0.69034	4.35E-03	6.38E-04	2.70E-05	6.47E-04	2.37E-05	5.6837E-03
520113.61	4258850.93	94725.20389	7.6777	0.64018	6.55437	0.59239	4.35E-03	3.14E-04	2.29E-05	2.68E-04	2.03E-05	4.9718E-03
520236.55	4258352.81	94654.0795	0.38056	1.30048	0.39202	1.45535	4.34E-03	1.56E-05	4.65E-05	1.61E-05	5.00E-05	4.4707E-03
520060.74	4258764.21	94591.0113	8.11071	0.98555	17.28105	0.92384	4.34E-03	3.32E-04	3.53E-05	7.08E-04	3.17E-05	5.4463E-03
520177.73	4258382.63	94575.47412	0.46512	2.49617	0.49356	2.87457	4.34E-03	1.90E-05	8.93E-05	2.02E-05	9.87E-05	4.5662E-03
520385.26	4258872.79	94516.84468	0.45654	0.20125	0.43714	0.21299	4.34E-03	1.87E-05	7.20E-06	1.79E-05	7.31E-06	4.3874E-03
520187.29	4258903.12	94495.58484	2.10671	0.39158	1.91948	0.40142	4.34E-03	8.63E-05	1.40E-05	7.86E-05	1.38E-05	4.5279E-03
520383.45	4258333.27	94411.5019	0.25578	0.44691	0.25831	0.48346	4.33E-03	1.05E-05	1.60E-05	1.06E-05	1.66E-05	4.3851E-03
520296.22	4258912.93	94405.93509	0.80743	0.24336	0.76965	0.26069	4.33E-03	3.31E-05	8.70E-06	3.15E-05	8.95E-06	4.4134E-03
520217.01	4258913.07	94336.38261	1.53933	0.33203	1.42844	0.34949	4.33E-03	6.30E-05	1.19E-05	5.85E-05	1.20E-05	4.4734E-03
520355.59	4258892.84	94295.79229	0.54837	0.21236	0.52506	0.22517	4.33E-03	2.25E-05	7.60E-06	2.15E-05	7.73E-06	4.3854E-03
520403.59	4258859.27	94234.63085	0.41386	0.1958	0.39632	0.20741	4.32E-03	1.69E-05	7.00E-06	1.62E-05	7.12E-06	4.3706E-03
520483.82	4258431.38	94233.45435	0.21381	0.25482	0.21214	0.27086	4.32E-03	8.75E-06	9.11E-06	8.69E-06	9.30E-06	4.3591E-03
520158.72	4258889.54	94204.99318	3.10761	0.46867	2.76018	0.46189	4.32E-03	1.27E-04	1.68E-05	1.13E-04	1.59E-05	4.5948E-03
520057	4258755.21	94155.39162	6.90518	1.03206	12.50685	0.97063	4.32E-03	2.83E-04	3.69E-05	5.12E-04	3.33E-05	5.1847E-03
520450.7	4258367.14	94065.73775	0.22151	0.31166	0.22188	0.33121	4.32E-03	9.07E-06	1.11E-05	9.08E-06	1.14E-05	4.3562E-03
520443.83	4258812.59	94029.4416	0.33247	0.18913	0.31956	0.19982	4.31E-03	1.36E-05	6.76E-06	1.31E-05	6.86E-06	4.3542E-03
520452.57	4258798.97	93776.5796	0.31674	0.18877	0.30448	0.19906	4.30E-03	1.30E-05	6.75E-06	1.25E-05	6.83E-06	4.3413E-03
520491.57	4258691.14	93631.08516	0.24734	0.1991	0.2386	0.20921	4.30E-03	1.01E-05	7.12E-06	9.77E-06	7.18E-06	4.3298E-03
520335.8	4258902.87	93523.20073	0.62025	0.21996	0.59359	0.23413	4.29E-03	2.54E-05	7.87E-06	2.43E-05	8.04E-06	4.3563E-03
520476.06	4258752.12	93395.89096	0.27638	0.19123	0.26582	0.20047	4.28E-03	1.13E-05	6.84E-06	1.09E-05	6.88E-06	4.3207E-03
520053.27	4258746.2	93380.67328	5.9247	1.08283	9.71313	1.02061	4.28E-03	2.43E-04	3.87E-05	3.98E-04	3.50E-05	4.9982E-03
520148.3	4258402.53	93359.99135	0.51753	3.91894	0.55708	4.59149	4.28E-03	2.12E-05	1.40E-04	2.28E-05	1.58E-04	4.6250E-03
520306.12	4258912.92	93147.42905	0.7544	0.23547	0.7201	0.25193	4.27E-03	3.09E-05	8.42E-06	2.95E-05	8.65E-06	4.3509E-03
520149.97	4258885.93	93072.65149	3.5719	0.49286	3.1453	0.47897	4.27E-03	1.46E-04	1.76E-05	1.29E-04	1.64E-05	4.5791E-03
520479.66	4258743.53	93054.92787	0.2704	0.19196	0.26012	0.2011	4.27E-03	1.11E-05	6.87E-06	1.07E-05	6.90E-06	4.3047E-03
520207.11	4258913.08	93027.7612	1.70279	0.34741	1.57098	0.36267	4.27E-03	6.97E-05	1.24E-05	6.43E-05	1.25E-05	4.4269E-03
520256.16	4258342.87	92849.88229	0.35523	1.09264	0.36518	1.21509	4.26E-03	1.45E-05	3.91E-05	1.50E-05	4.17E-05	4.3701E-03
520375.37	4258882.8	92798.45871	0.48452	0.20339	0.46387	0.21519	4.26E-03	1.98E-05	7.27E-06	1.90E-05	7.39E-06	4.3109E-03
520422.57	4258343.39	92689.30869	0.23309	0.36168	0.233	0.38705	4.25E-03	9.54E-06	1.29E-05	9.54E-06	1.33E-05	4.2977E-03
520049.85	4258608.59	92638.5658	2.83555	5.1694	4.76511	3.89594	4.25E-03	1.16E-04	1.85E-04	1.95E-04	1.34E-04	4.8799E-03
520483	4258421.02	92534.7754	0.21252	0.25755	0.21111	0.27392	4.25E-03	8.70E-06	9.21E-06	8.64E-06	9.40E-06	4.2813E-03
520483.26	4258734.93	92399.39344	0.26458	0.19244	0.25453	0.20157	4.24E-03	1.08E-05	6.88E-06	1.04E-05	6.92E-06	4.2742E-03
520177.39	4258903.13	92268.602	2.38984	0.41073	2.15967	0.41524	4.23E-03	9.78E-05	1.47E-05	8.84E-05	1.43E-05	4.4483E-03
520207.16	4258362.72	92050.87449	0.41285	1.75571	0.43026	1.98927	4.22E-03	1.69E-05	6.28E-05	1.76E-05	6.83E-05	4.3887E-03
520049.53	4258737.19	92023.02838	5.01796	1.14028	7.85534	1.07397	4.22E-03	2.05E-04	4.08E-05	3.22E-04	3.69E-05	4.8266E-03
520468.39	4258384.72	91871.16622	0.21461	0.28257	0.21482	0.30057	4.21E-03	8.79E-06	1.01E-05	8.80E-06	1.03E-05	4.2529E-03
520438.43	4258824.83	91870.75003	0.34343	0.18789	0.32973	0.19873	4.21E-03	1.41E-05	6.72E-06	1.35E-05	6.82E-06	4.2560E-03
520099.17	4258462.38	91804.13437	0.72841	13.82615	0.80114	15.79152	4.21E-03	2.98E-05	4.95E-04	3.28E-05	5.42E-04	5.3111E-03
520141.23	4258882.32	91796.71595	4.18074	0.51719	3.64263	0.49553	4.21E-03	1.71E-04	1.85E-05	1.49E-04	1.70E-05	4.5673E-03
520412.04	4258855.77	91759.18868	0.3961	0.19203	0.3793	0.20339	4.21E-03	1.62E-05	6.87E-06	1.55E-05	6.98E-06	4.2553E-03
520395.16	4258872.77	91691.52456	0.43729	0.19657	0.41853	0.20801	4.21E-03	1.79E-05	7.03E-06	1.71E-05	7.14E-06	4.2558E-03
520316.02	4258912.9	91593.31162	0.70579	0.22792	0.6744	0.2435	4.20E-03	2.89E-05	8.15E-06	2.76E-05	8.36E-06	4.2751E-03
520226.77	4258352.78	91592.27534	0.38625	1.43397	0.39908	1.61074	4.20E-03	1.58E-05	5.13E-05	1.63E-05	5.53E-05	4.3408E-03

520104.64	4258847.23	91579.267	9.91839	0.65803	8.54143	0.60481	4.20E-03	4.06E-04	2.35E-05	3.50E-04	2.08E-05	5.0016E-03
520486.85	4258726.34	91411.10498	0.25897	0.19266	0.2491	0.20187	4.19E-03	1.06E-05	6.89E-06	1.02E-05	6.93E-06	4.2284E-03
520256.63	4258923	91396.63196	1.09222	0.27398	1.03056	0.2932	4.19E-03	4.47E-05	9.80E-06	4.22E-05	1.01E-05	4.2999E-03
520197.21	4258913.1	91393.22591	1.89496	0.36365	1.73707	0.37581	4.19E-03	7.76E-05	1.30E-05	7.11E-05	1.29E-05	4.3676E-03
520109.02	4258442.41	91391.429	0.63348	9.64666	0.68592	11.70149	4.19E-03	2.59E-05	3.45E-04	2.81E-05	4.02E-04	4.9937E-03
520459.32	4258370.83	91338.06871	0.21706	0.29842	0.21748	0.31699	4.19E-03	8.89E-06	1.07E-05	8.90E-06	1.09E-05	4.2298E-03
520488.6	4258472.02	91304.88749	0.21703	0.2424	0.2145	0.25759	4.19E-03	8.89E-06	8.67E-06	8.78E-06	8.84E-06	4.2241E-03
520246.73	4258923.02	91279.6848	1.18471	0.28502	1.11386	0.30415	4.19E-03	4.85E-05	1.02E-05	4.56E-05	1.04E-05	4.3025E-03
520266.53	4258922.98	91214.15312	1.01004	0.26375	0.956	0.28273	4.18E-03	4.14E-05	9.43E-06	3.91E-05	9.71E-06	4.2844E-03
520187.55	4258372.66	91182.60501	0.43965	2.20928	0.46427	2.52605	4.18E-03	1.80E-05	7.90E-05	1.90E-05	8.67E-05	4.3860E-03
520040.59	4258691.51	91174.47535	3.44682	1.60192	4.93618	1.47694	4.18E-03	1.41E-04	5.73E-05	2.02E-04	5.07E-05	4.6341E-03
520429.32	4258838.61	91109.0773	0.36149	0.18826	0.34661	0.19931	4.18E-03	1.48E-05	6.73E-06	1.42E-05	6.84E-06	4.2225E-03
520158.12	4258392.56	91090.32943	0.49052	3.33074	0.5261	3.88495	4.18E-03	2.01E-05	1.19E-04	2.15E-05	1.33E-04	4.4732E-03
520365.49	4258892.82	90964.66024	0.51628	0.20555	0.49419	0.21766	4.17E-03	2.11E-05	7.35E-06	2.02E-05	7.47E-06	4.2295E-03
520236.83	4258923.03	90917.19894	1.29041	0.29701	1.20831	0.31563	4.17E-03	5.28E-05	1.06E-05	4.95E-05	1.08E-05	4.2949E-03
520276.43	4258922.97	90754.39344	0.93672	0.25428	0.88898	0.27276	4.16E-03	3.84E-05	9.10E-06	3.64E-05	9.36E-06	4.2568E-03
520471.08	4258771.29	90502.74106	0.28623	0.18789	0.27533	0.19724	4.15E-03	1.17E-05	6.72E-06	1.13E-05	6.77E-06	4.1886E-03
520246.37	4258342.84	90414.12545	0.36117	1.19492	0.37152	1.33295	4.15E-03	1.48E-05	4.27E-05	1.52E-05	4.58E-05	4.2665E-03
520344.32	4258323.15	90306.55992	0.27797	0.57035	0.28482	0.62162	4.14E-03	1.14E-05	2.04E-05	1.17E-05	2.13E-05	4.2079E-03
520354.11	4258323.18	90305.3834	0.27136	0.53591	0.27733	0.58313	4.14E-03	1.11E-05	1.92E-05	1.14E-05	2.00E-05	4.2047E-03
520226.93	4258923.05	90214.92463	1.41082	0.30982	1.31505	0.32744	4.14E-03	5.78E-05	1.11E-05	5.38E-05	1.12E-05	4.2728E-03
520045.8	4258728.19	90190.3446	4.30977	1.20126	6.51248	1.12936	4.14E-03	1.76E-04	4.30E-05	2.67E-04	3.88E-05	4.6626E-03
520477.93	4258398.82	90168.37894	0.21157	0.26766	0.21111	0.28486	4.14E-03	8.66E-06	9.57E-06	8.64E-06	9.78E-06	4.1734E-03
520482.39	4258410.74	90164.668	0.21104	0.26014	0.20999	0.27677	4.14E-03	8.64E-06	9.30E-06	8.60E-06	9.50E-06	4.1726E-03
520114.34	4258861.23	90160.59153	7.54222	0.60858	6.42382	0.56332	4.14E-03	3.09E-04	2.18E-05	2.63E-04	1.93E-05	4.7493E-03
520325.92	4258912.89	90075.15973	0.66334	0.22124	0.63427	0.23605	4.13E-03	2.72E-05	7.91E-06	2.60E-05	8.10E-06	4.2016E-03
520334.53	4258323.11	90069.56293	0.28457	0.6084	0.29223	0.66411	4.13E-03	1.17E-05	2.18E-05	1.20E-05	2.28E-05	4.2004E-03
520286.33	4258922.95	90048.57052	0.87107	0.24553	0.8285	0.26332	4.13E-03	3.57E-05	8.78E-06	3.39E-05	9.04E-06	4.2187E-03
520490.45	4258717.75	90047.13237	0.25353	0.19258	0.24382	0.20195	4.13E-03	1.04E-05	6.89E-06	9.98E-06	6.93E-06	4.1654E-03
520432.36	4258343.42	89740.79249	0.22688	0.34492	0.22667	0.36818	4.12E-03	9.29E-06	1.23E-05	9.28E-06	1.26E-05	4.1607E-03
520167.49	4258903.15	89736.84271	2.7367	0.42994	2.45142	0.428	4.12E-03	1.12E-04	1.54E-05	1.00E-04	1.47E-05	4.3594E-03
520324.75	4258323.08	89512.95878	0.29103	0.65064	0.29948	0.71103	4.11E-03	1.19E-05	2.33E-05	1.23E-05	2.44E-05	4.1785E-03
520187.31	4258913.12	89485.2593	2.12464	0.38069	1.93382	0.38874	4.11E-03	8.70E-05	1.36E-05	7.92E-05	1.33E-05	4.2985E-03
520217.02	4258923.07	89284.40069	1.55144	0.32363	1.43865	0.33967	4.10E-03	6.35E-05	1.16E-05	5.89E-05	1.17E-05	4.2419E-03
520403.52	4258869.31	89246.1977	0.41708	0.19247	0.39907	0.20369	4.09E-03	1.71E-05	6.88E-06	1.63E-05	6.99E-06	4.1417E-03
520450.6	4258357.08	89231.29642	0.21908	0.31417	0.21921	0.33373	4.09E-03	8.97E-06	1.12E-05	8.98E-06	1.15E-05	4.1344E-03
520385.27	4258882.79	89160.50774	0.45927	0.19732	0.43942	0.2087	4.09E-03	1.88E-05	7.06E-06	1.80E-05	7.16E-06	4.1415E-03
520296.23	4258922.93	89132.05118	0.81224	0.23743	0.77392	0.25444	4.09E-03	3.33E-05	8.49E-06	3.17E-05	8.74E-06	4.1714E-03
520420.49	4258852.28	89090.57918	0.37957	0.1884	0.36345	0.19948	4.09E-03	1.55E-05	6.74E-06	1.49E-05	6.85E-06	4.1313E-03
520059.65	4258560.06	89049.42614	1.77752	13.22401	2.51946	7.13694	4.09E-03	7.28E-05	4.73E-04	1.03E-04	2.45E-04	4.9794E-03
520158.83	4258899.58	88988.80677	3.10129	0.45178	2.75656	0.44394	4.08E-03	1.27E-04	1.62E-05	1.13E-04	1.52E-05	4.3539E-03
520355.6	4258902.84	88837.2435	0.55113	0.2074	0.52743	0.22004	4.08E-03	2.26E-05	7.42E-06	2.16E-05	7.55E-06	4.1348E-03
520167.94	4258382.59	88598.34995	0.46478	2.87664	0.49659	3.3318	4.06E-03	1.90E-05	1.03E-04	2.03E-05	1.14E-04	4.3214E-03
520314.96	4258323.05	88545.19382	0.2972	0.69777	0.30643	0.76297	4.06E-03	1.22E-05	2.50E-05	1.25E-05	2.62E-05	4.1382E-03
520095.67	4258843.53	88450.65162	13.18314	0.67038	11.92996	0.61488	4.06E-03	5.40E-04	2.40E-05	4.88E-04	2.11E-05	5.1313E-03
520216.98	4258352.75	88323.72354	0.39123	1.58806	0.40619	1.79221	4.05E-03	1.60E-05	5.68E-05	1.66E-05	6.15E-05	4.2031E-03
520494.05	4258709.16	88318.59411	0.24823	0.19246	0.23878	0.202	4.05E-03	1.02E-05	6.88E-06	9.78E-06	6.93E-06	4.0856E-03
520085.47	4258829.33	88286.42159	15.98889	0.71469	20.56115	0.65689	4.05E-03	6.55E-04	2.56E-05	8.42E-04	2.26E-05	5.5950E-03
520335.82	4258912.87	88245.9786	0.62385	0.21475	0.59673	0.22877	4.05E-03	2.55E-05	7.68E-06	2.44E-05	7.85E-06	4.1141E-03
520150.18	4258896	88098.71859	3.56582	0.47428	3.14053	0.45972	4.04E-03	1.46E-04	1.70E-05	1.29E-04	1.58E-05	4.3491E-03
520042.06	4258719.18	88079.22885	3.81068	1.26618	5.52515	1.18798	4.04E-03	1.56E-04	4.53E-05	2.26E-04	4.08E-05	4.5092E-03
520306.13	4258922.92	88011.20841	0.75927	0.22988	0.72444	0.24607	4.04E-03	3.11E-05	8.22E-06	2.97E-05	8.45E-06	4.1152E-03
520207.12	4258923.08	88004.07784	1.71365	0.3382	1.58003	0.35194	4.04E-03	7.02E-05	1.21E-05	6.47E-05	1.21E-05	4.1965E-03
520467.94	4258374.52	87897.41161	0.21265	0.28581	0.21301	0.30356	4.03E-03	8.71E-06	1.02E-05	8.72E-06	1.04E-05	4.0706E-03
520197.37	4258362.69	87841.00388	0.41632	1.97076	0.43748	2.2416	4.03E-03	1.70E-05	7.05E-05	1.79E-05	7.70E-05	4.2124E-03
520305.17	4258323.02	87817.86469	0.30366	0.74945	0.31313	0.82111	4.03E-03	1.24E-05	2.68E-05	1.28E-05	2.82E-05	4.1092E-03
520375.39	4258892.8	87732.05128	0.48809	0.19941	0.46695	0.21097	4.02E-03	2.00E-05	7.13E-06	1.91E-05	7.24E-06	4.0785E-03
520049.81	4258598.89	87562.19374	2.42919	5.83157	3.9813	4.20921	4.02E-03	9.95E-05	2.09E-04	1.63E-04	1.45E-04	4.6328E-03
520236.59	4258342.81	87547.55459	0.36642	1.31245	0.37799	1.46802	4.02E-03	1.50E-05	4.69E-05	1.55E-05	5.04E-05	4.1443E-03
520447.1	4258821.24	87541.10433	0.32898	0.18428	0.31596	0.19464	4.02E-03	1.35E-05	6.59E-06	1.29E-05	6.68E-06	4.0559E-03
520491.66	4258459.42	87478.20388	0.21308	0.24206	0.21086	0.2569	4.01E-03	8.72E-06	8.66E-06	8.63E-06	8.82E-06	4.0482E-03
520177.4	4258913.13	87409.09588	2.40783	0.39855	2.17371	0.40135	4.01E-03	9.86E-05	1.43E-05	8.90E-05	1.38E-05	4.2258E-03
520105.49	4258857.57	87372.27633	9.66473	0.62454	8.28388	0.57452	4.01E-03	3.96E-04	2.23E-05	3.39E-04	1.97E-05	4.7854E-03
520469.94	4258781.77	87327.94343	0.28969	0.18498	0.27853	0.19432	4.01E-03	1.19E-05	6.62E-06	1.14E-05	6.67E-06	4.0430E-03
520437.87	4258835.07	87317.46788	0.34624	0.18461	0.33204	0.19528	4.01E-03	1.42E-05	6.60E-06	1.36E-05	6.70E-06	4.0470E-03
520141.52	4258892.43	87086.77204	4.17626	0.49676	3.63679	0.47496	4.00E-03	1.71E-04	1.78E-05	1.49E-04	1.63E-05	4.3493E-03
520477.17	4258388.48	87075.35925	0.20999	0.27079	0.20991	0.28797	3.99E-03	8.60E-06	9.69E-06	8.59E-06	9.89E-06	4.0316E-03
520459.09	4258360.72	86962.16101	0.21484	0.30114	0.21509	0.3196	3.99E-03	8.80E-06	1.08E-05	8.81E-06	1.10E-05	4.0290E-03
520411.88	4258865.85	86891.71084	0.39885	0.1887	0.38158	0.19969	3.99E-03	1.63E-05	6.75E-06	1.56E-05	6.86E-06	4.0320E-03
520492.07	4258481.14	86835.28691	0.21587	0.23761	0.21301	0.25246	3.98E-03	8.84E-06	8.50E-06	8.72E-06	8.67E-06	4.0186E-03
520295.38	4258322.99	86753.41351	0.30983	0.80705	0.31937	0.88589	3.98E-03	1.27E-05	2.89E-05	1.31E-05	3.04E-05	4.0651E-03
520316.03	4258922.9	86716.32667	0.71144	0.22283	0.67948	0.23821	3.98E-03	2.91E-05	7.97E-06	2.78E-05	8.18E-06	4.0515E-03
520395.17	4258882.77	86698.81126	0.43949	0.19317	0.42076	0.20419	3.98E-03	1.80E-05	6.91E-06	1.72E-05	7.01E-06	4.0267E-03
520197.22	4258923.1	86477.99166	1.90566	0.35362	1.74591	0.36421	3.97E-03	7.80E-05	1.26E-05	7.15E-05	1.25E-05	4.1421E-03
520428.93	4258848.78	86388.47358	0.36403	0.18499	0.34867	0.19577	3.96E-03	1.49E-05	6.62E-06	1.43E-05	6.72E-06	4.0059E-03
520037.12	4258683.15	86313.46727	3.00815	1.69355	4.21178	1.54866	3.96E-03	1.23E-04	6.06E-05	1.72E-04	5.32E-05	4.3693E-03
520497.64	4258700.57	86271.46949	0.2431	0.19251	0.23404	0.20212	3.96E-03	9.95E-06	6.89E-06	9.58E-06	6.94E-06	3.9913E-03
520037.12	4258673.87	86096.63812	2.90821	1.85608	4.08675	1.68053	3.95E-03	1.19E-04	6.64E-05	1.67E-04	5.77E-05	4.3604E-03
520256.65	4258933	86042.7521	1.09249	0.26659	1.03055	0.28505	3.95E-03	4.47E-05	9.54E-06	4.22E-05	9.79E-06	4.0537E-03
520057.47	4258780.46	86029.12259	7.2075	0.87184	13.11518	0.82308	3.95E-03	2.95E-04	3.12E-05	5.37E-04	2.83E-05	4.8384E-03
520177.76	4258372.63	86025.76706	0.44063	2.52017	0.46895	2.89536	3.95E-03	1.80E-05	9.01E-05	1.92E-05	9.94E-05	4.1735E-03
520246.74	4258933.02	85910.82024	1.18414	0.27722	1.11313	0.29545	3.94E-03	4.85E-05	9.92E-06	4.56E-05	1.01E-05	4.0555E-03
520266.55	4258932.98	85866.65109	1.01048	0.25663	0.95612	0.27498	3.94E-03	4.14E-05	9.18E-06	3.91E-05	9.44E-06	4.0385E-03
520114.98	4258871.48	85837.87886	7.42133	0.57961	6.31078	0.53665	3.94E-03	3.04E-04	2.07E-05	2.58E-04	1.84E-05	4.5395E-03
520365.5	4258902.82	85798.09204	0.51889	0.20095	0.49639	0.21286	3.94E-03	2.12E-05	7.19E-06	2.03E-05	7.31E-06	3.9923E-03
520053.81	4258771.61	85731.45593	6.21284	0.90891	10.19945	0.86073	3.93E-03	2.54E-04	3.25E-05	4.18E-04	2.95E-05	4.6672E-03
520236.84	4258933.03	85622.1762	1.29024	0.28892	1.20801	0.30652	3.93E-03	5.28E-05	1.03E-05	4.95E-05	1.05E-05	4.0513E-03
520285.59	4258322.96	85538.141	0.31585	0.87097	0.3252	0.95849	3.92E-03	1.29E-05	3.12E-05	1.33E-05	3.29E-05	4.0146E-03
520276.45	4258932.97	85463.26966	0.93767	0.24747	0.88956	0.26544	3.92E-03	3.84E-05	8.85E-06	3.64E-05	9.11E-06	4.0137E-03
520038.33	4258710.17	85274.87608	3.35222	1.33676	4.70555	1.24884	3.91E-03	1.37E-04	4.78E-05	1.93E-04	4.29E-05	4.3329E-03
520325.93	4258922.89	85245.59613	0.66805	0.21621	0.63846	0.23081	3.91E-03	2.74E-05	7.73E-06	2.61E-05	7.92E-06	3.9801E-03
520354.14	4258313.18	85182.76945	0.26637	0.54042	0.27281	0.58796	3.91E-03	1.09E-05	1.93E-05	1.12E-05	2.02E-05	3.9696E-03
520050.14	4258762.77	85136.84696	5.39066	0.94867	8.26461	0.90042	3.91E-03	2.21E-04	3.39E-05	3.38E-04	3.09E-05	4.5299E-03
520037.12	4258664.6	85112.04839	2.79532	2.04192	3.94425	1.82776	3.90E-03	1.14E-04	7.30E-05	1.61E-04	6.27E-05	4.3165E-03
520167.5	4258913.15	85079.41046	2.7555	0.41645	2.4657	0.41302	3.90E-03	1.13E-04	1.49E-05	1.01E-04	1.42E-05	4.1461E-03
520460.08	4258805.86	85022.84143	0.30734	0.18211	0.29512	0.19189	3.90E-03	1.26E-05	6.51E-06	1.21E-05	6.59E-06	3.9385E-03
520363.93	4258313.21	85003.97983	0.26019	0.50869	0.26584	0.55255	3.90E-03	1.07E-05	1.82E-05	1.09E-05	1.90E-05	3.9585E-03
520344.35	4258313.15	84955.34521	0.27238	0.57569	0.2797	0.62693	3.90E-03	1.12E-05	2.06E-05	1.15E-05	2.15E-05	3.9623E-03
520226.94	4258933.05	84908.49075	1.40791	0.30099	1.3125	0.31752	3.90E-03	5.76E-05	1.08E-05	5.37E-05	1.09E-05	4.0285E-03
520128.69	4258412.47	84869.28826	0.53388	5.78203	0.57204	6.93622	3.89E-03	2.19E-05	2.07E-04	2.34E-05	2.38E-04	4.3839E-03
520086.7	4258839.83	84846.84843	15.5131	0.67659	18.79702	0.62227	3.89E-03	6.35E-04	2.42E-05	7.70E-04	2.14E-05	5.3430E-03
520483.06	4258759.36	84829.09194	0.26959	0.18473	0.25902	0.19354	3.89E-03	1.10E-05	6.61E-06	1.06E-05	6.64E-06	3.9267E-03
520420.24	4258862.39	84813.92287	0.38247	0.18536	0.36599	0.19612	3.89E-03	1.57E-05	6.63E-06	1.50E-05	6.73E-06	3.9351E-03
520286.35	4258932.95	84772.50759	0.8717	0.23888	0.82879	0.25625	3.89E-03	3.57E-05	8.54E-06	3.39E-05	8.80E-06	3.9762E-03
520187.32	4258923.12	84741.35392	2.13655	0.36982	1.94354	0.37629	3.89E-03	8.75E-05	1.32E-05	7.96E-05	1.29E-05	4.0810E-03
520138.51	4258402.5	84689.81628	0.50906	4.72078	0.54585	5.58806	3.89E-03	2.08E-05	1.69E-04	2.23E-05	1.92E-04	4.2893E-03
520207.19	4258352.72	84675.16876	0.39503	1.7698	0.41307	2.00566	3.88E-03	1.62E-05	6.33E-05	1.69E-05	6.89E-05	4.0500E-03
520096.64	4258853.92	84649.24094	12.79461	0.63582	11.3963	0.58375	3.88E-03	5.24E-04	2.27E-05	4.67E-04	2.00E-05	4.9168E-03
520226.8	4258342.78	84608.7405	0.37117	1.44683	0.38455	1.62425	3.88E-03	1.52E-05	5.18E-05	1.57E-05	5.58E-05	4.0201E-03
520486.59	4258750.92	84584.79065	0.26399	0.18544	0.25367	0.19413	3.88E-03	1.08E-05	6.63E-06	1.04E-05	6.66E-06	3.9151E-03
520334.57	4258313.11	84577.71676	0.27838	0.61442	0.28644	0.66981	3.88E-03	1.14E-05	2.20E-05	1.17E-05	2.30E-05	3.9484E-03
520373.72	4258313.24	84481.01086	0.25395	0.47998	0.25888	0.52032	3.88E-03	1.04E-05	1.72E-05	1.06E-05	1.79E-05	3.9319E-03
520158.45	4258909.41	84423.11546	3.14453	0.43791	2.78975	0.42853	3.87E-03	1.29E-04	1.57E-05	1.14E-04	1.47E-05	4.1465E-03
520385.29	4258892.79	84420.26823	0.46258	0.19364	0.44224	0.20474	3.87E-03	1.89E-05	6.93E-06	1.81E-05	7.03E-06	3.9240E-03
520046.47	4258753.92	84226.81337	4.706	0.99228	6.88273	0.94258	3.86E-03	1.93E-04	3.55E-05	2.82E-04	3.24E-05	4.4065E-03
520217.04	4258933.07	84164.13002	1.55042	0.31456	1.43789	0.32938	3.86E-03	6.35E-05	1.13E-05	5.89E-05	1.13E-05	4.0062E-03
520490.12	4258742.49	84094.04676	0.25851	0.18602	0.24843	0.19465	3.86E-03	1.06E-05	6.65E-06	1.02E-05	6.68E-06	3.8922E-03
520467.58	4258364.35	84072.84981	0.21063	0.28877	0.21095	0.30631	3.86E-03	8.62E-06	1.03E-05	8.64E-06	1.05E-05	3.8952E-03
520324.78	4258313.08	84043.90616	0.28434	0.65718	0.29295	0.71726	3.86E-03	1.16E-05	2.35E-05	1.20E-05	2.46E-05	3.9275E-03
520469	4258792.16	84036.50388	0.29284	0.18196	0.28137	0.19129	3.86E-03	1.20E-05	6.51E-06	1.15E-05	6.57E-06	3.8920E-03
520296.25	4258932.93	83924.57811	0.81299	0.23103	0.77432	0.24769	3.85E-03	3.33E-05	8.26E-06	3.17E-05	8.50E-06	3.9321E-03
520501.24	4258691.98	83912.43596	0.23812	0.19253	0.22946	0.20211	3.85E-03	9.75E-06	6.89E-06	9.40E-06	6.94E-06	3.8827E-03
520486.91	4258402.66	83895.79415	0.20675	0.25673	0.2059	0.27297	3.85E-03	8.47E-06	9.18E-06	8.43E-06	9.37E-06	3.8844E-03
520476.56	4258378.21	83890.01941	0.20826	0.27413	0.20848	0.2911	3.85E-03	8.53E-06	9.81E-06	8.54E-06	9.99E-06	3.8856E-03
520275.8	4258322.93	83879.73668	0.32137	0.94295	0.33071	1.03988	3.85E-03	1.32E-05	3.37E-05	1.35E-05	3.57E-05	3.9444E-03
520355.62	4258912.84	83849.80489	0.55374	0.20256	0.52963	0.21506	3.85E-03	2.27E-05	7.25E-06	2.17E-05	7.38E-06	3.9059E-03
520383.51	4258313.27	83845.36076	0.24786	0.45358	0.25198	0.49083	3.85E-03	1.01E-05	1.62E-05	1.03E-05	1.69E-05	3.9002E-03
520062.79	4258799.98	83784.65051	9.1055	0.78993	17.2231	0.74233	3.84E-03	3.73E-04	2.83E-05	7.05E-04	2.55E-05	4.9756E-03
520118.87	4258422.44	83548.15397	0.55801	7.30821	0.59824	8.88098	3.83E-03	2.28E-05	2.61E-04	2.45E-05	3.05E-04	4.4467E-03
520446.42	4258831.53	83485.86277	0.33184	0.18118	0.31839	0.19143	3.83E-03	1.36E-05	6.48E-06	1.30E-05	6.57E-06	3.8698E-03
520149.41	4258905.68	83439.71275	3.62542	0.45927	3.18866	0.44337	3.83E-03	1.48E-04	1.64E-05	1.31E-04	1.52E-05	4.1387E-03
520187.58	4258362.66	83355.63517	0.41815	2.22831	0.44301	2.54502	3.82E-03	1.71E-05	7.97E-05	1.81E-05	8.74E-05	4.0265E-03
520037.12	4258655.32	83343.36916	2.66772	2.25418	3.78072	1.99134	3.82E-03	1.09E-04	8.06E-05	1.55E-04	6.84E-05	4.2367E-03
520314.99	4258313.05	83342.88378	0.29021	0.70441	0.29916	0.76989	3.82E-03	1.19E-05	2.52E-05	1.22E-05	2.64E-05	3.8994E-03
520493.65	4258734.05	83340.7498	0.25318	0.18641	0.24332	0.19506	3.82E-03	1.04E-05	6.67E-06	9.96E-06	6.70E-06	3.8572E-03
520099.2	4258452.38	83321.50609	0.65953	13.82893	0.72015	15.83704	3.82E-03	2.70E-05	4.95E-04	2.95E-05	5.44E-04	4.9175E-03
520106.23	4258867.87	83315.69847	9.42837	0.59373	8.05927	0.54667	3.82E-03	3.86E-04	2.12E-05	3.30E-04	1.88E-05	4.5784E-03
520495	4258468.18	83231.41901	0.21203	0.23691	0.20952	0.2515	3.82E-03	8.68E-06	8.47E-06	8.58E-06	8.63E-06	3.8529E-03
520455.76	4258817.66	83217.08052	0.31543	0.18071	0.30293	0.19061	3.82E-03	1.29E-05	6.46E-06	1.24E-05	6.54E-06	3.8562E-03
520207.14	4258933.08	83054.71724	1.71329	0.3286	1.58002	0.34105	3.81E-03	7.01E-05	1.18E-05	6.47E-05	1.17E-05	3.9687E-03
520437.38	4258845.28	83034.34485	0.34882	0.18151	0.3342	0.19196	3.81E-03	1.43E-05	6.49E-06	1.37E-05	6.59E-06	3.8505E-03
520393.3	4258313.3	83003.82002	0.24186	0.42934	0.24517	0.46378	3.81E-03	9.90E-06	1.54E-05	1.00E-05	1.59E-05	3.8593E-03
520306.15	4258932.92	82899.00474	0.76019	0.22377	0.72501	0.23967	3.80E-03	3.11E-05	8.00E-06	2.97E-05	8.23E-06	3.8803E-03
520458.9	4258350.62	82855.9088	0.2126	0.30362	0.21261	0.3221	3.80E-03	8.70E-06	1.09E-05	8.71E-06	1.11E-05	3.8406E-03
520375.41	4258902.8	82853.60398	0.49052	0.19513	0.46898	0.20646	3.80E-03	2.01E-05	6.98E-06	1.92E-05	7.09E-06	3.8545E-03
520042.8	4258745.07	82846.17439	4.07594	1.04073	5.84402	0.98707	3.80E-03	1.67E-04	3.72E-05	2.39E-04	3.39E-05	4.2781E-03
520411.74	4258875.91	82803.16042	0.40161	0.18608	0.38461	0.19664	3.80E-03	1.64E-05	6.66E-06	1.57E-05	6.75E-06	3.8444E-03
520177.42	4258923.13	82794.58077	2.41723	0.38651	2.18155	0.38786	3.80E-03	9.90E-05	1.38E-05	8.93E-05	1.33E-05	4.0139E-03
520495.45	4258443.49	82555.90289	0.20817	0.24115	0.20617	0.25574	3.79E-03	8.52E-06	8.63E-06	8.44E-06	8.78E-06	3.8219E-03
520305.2	4258313.02	82491.35942	0.29597	0.75659	0.30499	0.82843	3.78E-03	1.21E-05	2.71E-05	1.25E-05	2.84E-05	3.8647E-03
520140.36	4258901.94	82405.12918	4.27268	0.48066	3.71478	0.45779	3.78E-03	1.75E-04	1.72E-05	1.52E-04	1.57E-05	4.1405E-03
520497.18	4258725.62	82302.39617	0.24801	0.18655	0.23834	0.19532	3.78E-03	1.02E-05	6.67E-06	9.76E-06	6.71E-06	3.8092E-03
520158.15	4258382.56	82267.44232	0.46154	3.35636	0.49418	3.91005	3.77E-03	1.89E-05	1.20E-04	2.02E-05	1.34E-04	4.0677E-03
520478.26	4258778.32	82248.59079	0.27871	0.18147	0.26782	0.19038	3.77E-03	1.14E-05	6.49E-06	1.10E-05	6.54E-06	3.8088E-03
520049.77	4258589.19	82228.50204	2.0809	6.38381	3.25707	4.47122	3.77E-03	8.52E-05	2.28E-04	1.33E-04	1.54E-04	4.3729E-03
520266.01	4258322.9	82170.65121	0.32676	1.02313	0.33608	1.13193	3.77E-03	1.34E-05	3.66E-05	1.38E-05	3.89E-05	3.8724E-03
520428.6	4258858.92	82002.68045	0.36632	0.18205	0.35074	0.19252	3.76E-03	1.50E-05	6.51E-06	1.44E-05	6.61E-06	3.8046E-03
520395.19	4258892.77	81896.94468	0.44144	0.18926	0.42224	0.19994	3.76E-03	1.81E-05	6.77E-06	1.73E-05	6.86E-06	3.8063E-03
520485.94	4258392.24	81822.02517	0.20542	0.25989	0.20501	0.27623	3.75E-03	8.41E-06	9.30E-06	8.39E-06	9.48E-06	3.7894E-03
520115.55	4258881.71	81808.27427	7.33325	0.55303	6.2202	0.51215	3.75E-03	3.00E-04	1.98E-05	2.55E-04	1.76E-05	4.3455E-03
520403.09	4258313.33	81751.41791	0.23586	0.40733	0.2385	0.43901	3.75E-03	9.66E-06	1.46E-05	9.77E-06	1.51E-05	3.7997E-03
520197.24	4258933.1	81731.72212	1.90703	0.34348	1.74753	0.35272	3.75E-03	7.81E-05	1.23E-05	7.16E-05	1.21E-05	3.9237E-03
520034.59	4258701.16	81703.93805	2.93956	1.41209	4.02786	1.31096	3.75E-03	1.20E-04	5.05E-05	1.65E-04	4.50E-05	4.1292E-03
520316.05	4258932.9	81624.55234	0.71173	0.21685	0.67943	0.23195	3.74E-03	2.91E-05	7.76E-06	2.78E-05	7.96E-06	3.8175E-03
520217.01	4258342.75	81575.5016	0.37524	1.60193	0.39097	1.80665	3.74E-03	1.54E-05	5.73E-05	1.60E-05	6.20E-05	3.8932E-03
520087.78	4258850.27	81476.47694	15.04291	0.64178	17.44691	0.59066	3.74E-03	6.16E-04	2.30E-05	7.14E-04	2.03E-05	5.1115E-03
520295.41	4258312.99	81380.73934	0.30149	0.81458	0.31044	0.89367	3.73E-03	1.23E-05	2.91E-05	1.27E-05	3.07E-05	3.8185E-03
520256.66	4258943	81291.92058	1.09521	0.25991	1.03274	0.27756	3.73E-03	4.48E-05	9.30E-06	4.23E-05	9.53E-06	3.8355E-03
520246.76	4258943.02	81166.27409	1.18659	0.27017	1.1151	0.28748	3.72E-03	4.86E-05	9.66E-06	4.57E-05	9.87E-06	3.8375E-03
520365.52	4258912.82	81147.82944	0.52176	0.19653	0.49883	0.20833	3.72E-03	2.14E-05	7.03E-06	2.04E-05	7.15E-06	3.7789E-03
520266.56	4258942.98	81134.46542	1.01329	0.25024	0.95841	0.26792	3.72E-03	4.15E-05	8.95E-06	3.92E-05	9.20E-06	3.8212E-03
520039.13	4258736.23	81052.56127	3.55864	1.09235	5.01452	1.03304	3.72E-03	1.46E-04	3.91E-05	2.05E-04	3.55E-05	4.1441E-03
520097.49	4258864.26	80982.896	12.46281	0.60418	10.9551	0.55523	3.72E-03	5.10E-04	2.16E-05	4.49E-04	1.91E-05	4.7148E-03
520236.86	4258943.03	80944.23784	1.29354	0.2816	1.21075	0.29816	3.71E-03	5.30E-05	1.01E-05	4.96E-05	1.02E-05	3.8364E-03
520037.12	4258646.05	80887.11257	2.52398	2.49403	3.59196	2.17033	3.71E-03	1.03E-04	8.92E-05	1.47E-04	7.45E-05	4.1251E-03
520059.6	4258550.36	80817.46227	1.49072	13.34975	1.96939	7.34557	3.71E-03	6.10E-05	4.78E-04	8.06E-05	2.52E-04	4.5791E-03
520276.46	4258942.97	80809.58029	0.94111	0.24144	0.89244	0.25887	3.71E-03	3.85E-05	8.64E-06	3.65E-05	8.89E-06	3.8000E-03
520197.4	4258352.69	80753.1912	0.39744	1.98598	0.41894	2.25921	3.70E-03	1.63E-05	7.10E-05	1.72E-05	7.76E-05	3.8868E-03
520476.07	4258367.98	80692.46465	0.20644	0.2771	0.20675	0.29385	3.70E-03	8.45E-06	9.91E-06	8.47E-06	1.01E-05	3.7389E-03
520167.52	4258923.15	80671.83565	2.76565	0.40326	2.47405	0.39863	3.70E-03	1.13E-04	1.44E-05	1.01E-04	1.37E-05	3.9437E-03
520167.97	4258372.59	80530.32436	0.43913	2.90317	0.46937	3.35295	3.69E-03	1.80E-05	1.04E-04	1.92E-05	1.15E-04	3.9507E-03
520467.28	4258354.21	80431.83298	0.20857	0.29137	0.2087	0.30882	3.69E-03	8.54E-06	1.04E-05	8.55E-06	1.06E-05	3.7282E-03
520325.95	4258932.89	80352.51111	0.66911	0.21066	0.63912	0.22504	3.69E-03	2.74E-05	7.54E-06	2.62E-05	7.73E-06	3.7552E-03
520354.17	4258303.18	80305.34096	0.2612	0.54533	0.26808	0.59276	3.68E-03	1.07E-05	1.95E-05	1.10E-05	2.04E-05	3.7458E-03
520226.96	4258943.05	80291.39967	1.41118	0.29321	1.31526	0.30859	3.68E-03	5.78E-05	1.05E-05	5.39E-05	1.06E-05	3.8163E-03
520412.87	4258313.36	80255.96082	0.22999	0.38706	0.23199	0.41622	3.68E-03	9.42E-06	1.38E-05	9.50E-06	1.43E-05	3.7290E-03
520363.96	4258303.21	80240.57502	0.25548	0.51301	0.26165	0.55693	3.68E-03	1.05E-05	1.83E-05	1.07E-05	1.91E-05	3.7399E-03
520403.89	4258889.17	80213.6144	0.42073	0.18584	0.40271	0.19624	3.68E-03	1.72E-05	6.65E-06	1.65E-05	6.74E-06	3.7271E-03
520286.36	4258942.95	80212.24273	0.8755	0.23316	0.83203	0.25013	3.68E-03	3.58E-05	8.34E-06	3.41E-05	8.59E-06	3.7668E-03
520158.57	4258919.46	80184.84079	3.15667	0.42326	2.7994	0.41297	3.68E-03	1.29E-04	1.51E-05	1.15E-04	1.42E-05	3.9519E-03

520187.34	4258933.12	80126.97819	2.13587	0.35878	1.94382	0.36395	3.68E-03	8.75E-05	1.28E-05	7.96E-05	1.25E-05	3.8684E-03
520109.05	4258432.41	80126.01377	0.58058	9.67626	0.6247	11.73287	3.68E-03	2.38E-05	3.46E-04	2.56E-05	4.03E-04	4.4743E-03
520285.62	4258312.96	80121.11756	0.30683	0.87886	0.31559	0.9667	3.68E-03	1.26E-05	3.14E-05	1.29E-05	3.32E-05	3.7659E-03
520256.23	4258322.87	80043.96576	0.33155	1.11416	0.34147	1.23588	3.67E-03	1.36E-05	3.99E-05	1.40E-05	4.24E-05	3.7821E-03
520344.39	4258303.15	79979.58935	0.2667	0.58118	0.27436	0.63209	3.67E-03	1.09E-05	2.08E-05	1.12E-05	2.17E-05	3.7340E-03
520385.31	4258902.79	79844.22355	0.46486	0.18966	0.44413	0.20051	3.66E-03	1.90E-05	6.78E-06	1.82E-05	6.88E-06	3.7140E-03
520373.75	4258303.24	79827.35624	0.24965	0.48382	0.25515	0.52432	3.66E-03	1.02E-05	1.73E-05	1.04E-05	1.80E-05	3.7183E-03
520039.93	4258628.02	79775.93649	2.41343	3.19592	3.54716	2.66784	3.66E-03	9.88E-05	1.14E-04	1.45E-04	9.16E-05	4.1099E-03
520454.97	4258827.99	79634.16971	0.31831	0.17775	0.30546	0.18757	3.65E-03	1.30E-05	6.36E-06	1.25E-05	6.44E-06	3.6918E-03
520445.83	4258841.78	79624.06708	0.33447	0.17816	0.3206	0.18825	3.65E-03	1.37E-05	6.37E-06	1.31E-05	6.46E-06	3.6927E-03
520217.06	4258943.07	79598.74258	1.55311	0.30621	1.44023	0.31982	3.65E-03	6.36E-05	1.10E-05	5.90E-05	1.10E-05	3.7963E-03
520106.9	4258878.14	79592.53197	9.27436	0.56579	7.88558	0.52127	3.65E-03	3.80E-04	2.02E-05	3.23E-04	1.79E-05	4.3923E-03
520334.6	4258303.11	79571.2515	0.27221	0.62044	0.28043	0.67543	3.65E-03	1.11E-05	2.22E-05	1.15E-05	2.32E-05	3.7186E-03
520485.18	4258381.89	79435.61216	0.20392	0.26292	0.20387	0.27919	3.64E-03	8.35E-06	9.40E-06	8.35E-06	9.58E-06	3.6800E-03
520296.27	4258942.93	79403.39654	0.81626	0.22547	0.77708	0.24181	3.64E-03	3.34E-05	8.06E-06	3.18E-05	8.30E-06	3.7245E-03
520504.24	4258708.75	79354.08959	0.23819	0.1863	0.22894	0.19538	3.64E-03	9.75E-06	6.66E-06	9.37E-06	6.71E-06	3.6731E-03
520149.63	4258915.77	79352.06123	3.6386	0.44297	3.19633	0.4266	3.64E-03	1.49E-04	1.58E-05	1.31E-04	1.46E-05	3.9509E-03
520355.64	4258922.84	79292.56644	0.55628	0.19786	0.53174	0.21024	3.64E-03	2.28E-05	7.08E-06	2.18E-05	7.22E-06	3.6966E-03
520383.54	4258303.27	79269.90217	0.24389	0.45703	0.24865	0.49448	3.64E-03	9.99E-06	1.63E-05	1.02E-05	1.70E-05	3.6902E-03
520122.26	4258894.47	79223.38425	6.21394	0.51791	5.29762	0.48235	3.63E-03	2.54E-04	1.85E-05	2.17E-04	1.66E-05	4.1410E-03
520035.46	4258727.38	79056.73053	3.17942	1.14665	4.3631	1.08125	3.63E-03	1.30E-04	4.10E-05	1.79E-04	3.71E-05	4.0139E-03
520436.96	4258855.46	79034.08975	0.35115	0.1786	0.33628	0.18878	3.63E-03	1.44E-05	6.39E-06	1.38E-05	6.48E-06	3.6669E-03
520324.81	4258303.08	79029.16922	0.27767	0.66362	0.28623	0.72332	3.63E-03	1.14E-05	2.37E-05	1.17E-05	2.48E-05	3.6974E-03
520498.73	4258472.76	78962.63874	0.21011	0.23264	0.20742	0.24691	3.62E-03	8.60E-06	8.32E-06	8.49E-06	8.48E-06	3.6565E-03
520464.43	4258814.07	78957.92413	0.30273	0.17716	0.29053	0.18661	3.62E-03	1.24E-05	6.34E-06	1.19E-05	6.41E-06	3.6595E-03
520275.83	4258312.93	78693.36112	0.31196	0.95034	0.32056	1.04871	3.61E-03	1.28E-05	3.40E-05	1.31E-05	3.60E-05	3.7062E-03
520460.13	4258341.14	78645.5454	0.20967	0.3039	0.20955	0.3223	3.61E-03	8.58E-06	1.09E-05	8.58E-06	1.11E-05	3.6472E-03
520207.16	4258943.08	78627.4054	1.71736	0.31979	1.58363	0.33095	3.61E-03	7.03E-05	1.14E-05	6.48E-05	1.14E-05	3.7652E-03
520177.79	4258362.63	78607.96467	0.418	2.54047	0.44545	2.9151	3.61E-03	1.71E-05	9.09E-05	1.82E-05	1.00E-04	3.8327E-03
520422.66	4258313.39	78547.58632	0.22426	0.36824	0.22566	0.3951	3.60E-03	9.18E-06	1.32E-05	9.24E-06	1.36E-05	3.6488E-03
520050.47	4258787.67	78493.0757	5.58704	0.80977	8.52941	0.77145	3.60E-03	2.29E-04	2.90E-05	3.49E-04	2.65E-05	4.2345E-03
520393.33	4258303.3	78478.34033	0.23816	0.43252	0.24219	0.46715	3.60E-03	9.75E-06	1.55E-05	9.92E-06	1.60E-05	3.6516E-03
520306.17	4258942.92	78431.78803	0.76306	0.21838	0.72739	0.234	3.60E-03	3.12E-05	7.81E-06	2.98E-05	8.03E-06	3.6752E-03
520375.42	4258912.8	78394.92152	0.49293	0.19092	0.47098	0.20209	3.60E-03	2.02E-05	6.83E-06	1.93E-05	6.94E-06	3.6498E-03
520177.44	4258933.13	78330.79093	2.41362	0.37444	2.17996	0.37465	3.59E-03	9.88E-05	1.34E-05	8.93E-05	1.29E-05	3.8080E-03
520315.02	4258303.05	78316.24048	0.28301	0.71123	0.2917	0.77638	3.59E-03	1.16E-05	2.54E-05	1.19E-05	2.67E-05	3.6686E-03
520140.68	4258912.07	78280.52614	4.25323	0.4621	3.69915	0.43945	3.59E-03	1.74E-04	1.65E-05	1.51E-04	1.51E-05	3.9486E-03
520412.58	4258885.57	78250.13456	0.40134	0.18236	0.38438	0.19252	3.59E-03	1.64E-05	6.52E-06	1.57E-05	6.61E-06	3.6353E-03
520088.74	4258860.65	78206.10544	16.02295	0.60987	16.37517	0.56171	3.59E-03	6.56E-04	2.18E-05	6.70E-04	1.93E-05	4.9556E-03
520207.22	4258342.72	78147.29737	0.37809	1.78474	0.39683	2.02086	3.59E-03	1.55E-05	6.38E-05	1.62E-05	6.94E-05	3.7502E-03
520046.85	4258778.96	78054.39662	4.901	0.84193	7.12507	0.8038	3.58E-03	2.01E-04	3.01E-05	2.92E-04	2.76E-05	4.1311E-03
520246.44	4258322.84	77964.37974	0.33621	1.21648	0.34696	1.35504	3.58E-03	1.38E-05	4.35E-05	1.42E-05	4.65E-05	3.6949E-03
520037.12	4258636.77	77919.31872	2.36049	2.7619	3.37405	2.36154	3.57E-03	9.66E-05	9.88E-05	1.38E-04	8.11E-05	3.9894E-03
520428.3	4258869.05	77886.73301	0.36857	0.17885	0.3525	0.18903	3.57E-03	1.51E-05	6.40E-06	1.44E-05	6.49E-06	3.6157E-03
520475.66	4258357.8	77565.92053	0.20456	0.27989	0.20479	0.29645	3.56E-03	8.38E-06	1.00E-05	8.38E-06	1.02E-05	3.5955E-03
520395.21	4258902.77	77500.39846	0.44325	0.18545	0.42372	0.19583	3.56E-03	1.81E-05	6.63E-06	1.73E-05	6.72E-06	3.6044E-03
520197.26	4258943.1	77485.29514	1.91419	0.33419	1.7537	0.34208	3.55E-03	7.84E-05	1.20E-05	7.18E-05	1.17E-05	3.7288E-03
520305.23	4258303.02	77479.08522	0.28826	0.76367	0.29683	0.83537	3.55E-03	1.18E-05	2.73E-05	1.22E-05	2.87E-05	3.6345E-03
520507.78	4258700.32	77468.08167	0.23346	0.18628	0.22457	0.19541	3.55E-03	9.56E-06	6.66E-06	9.19E-06	6.71E-06	3.5862E-03
520098.24	4258874.57	77417.46248	12.15308	0.57499	10.5781	0.52892	3.55E-03	4.98E-04	2.06E-05	4.33E-04	1.82E-05	4.5212E-03
520403.12	4258303.33	77411.59075	0.23246	0.41009	0.23581	0.44206	3.55E-03	9.52E-06	1.47E-05	9.66E-06	1.52E-05	3.6005E-03
520030.86	4258692.16	77403.4986	2.57417	1.49019	3.46039	1.37293	3.55E-03	1.05E-04	5.33E-05	1.42E-04	4.71E-05	3.8986E-03
520495.89	4258406.5	77380.79645	0.20196	0.24645	0.20076	0.26172	3.55E-03	8.27E-06	8.82E-06	8.22E-06	8.99E-06	3.5844E-03
520043.24	4258770.25	77368.64241	4.32457	0.87654	6.06921	0.8378	3.55E-03	1.77E-04	3.14E-05	2.48E-04	2.88E-05	4.0352E-03
520113.21	4258890.74	77365.35578	7.808	0.53266	6.60339	0.49243	3.55E-03	3.20E-04	1.91E-05	2.70E-04	1.69E-05	4.1754E-03
520493.54	4258758.26	77224.65896	0.25772	0.17913	0.24735	0.18743	3.54E-03	1.06E-05	6.41E-06	1.01E-05	6.43E-06	3.5764E-03
520316.07	4258942.9	77222.23292	0.71416	0.21161	0.68139	0.22648	3.54E-03	2.92E-05	7.57E-06	2.79E-05	7.78E-06	3.6153E-03
520256.68	4258953	77145.54208	1.10197	0.25412	1.03864	0.27095	3.54E-03	4.51E-05	9.09E-06	4.25E-05	9.30E-06	3.6453E-03
520266.58	4258952.98	77040.60969	1.02017	0.24479	0.96443	0.26176	3.53E-03	4.18E-05	8.76E-06	3.95E-05	8.99E-06	3.6335E-03
520246.78	4258953.02	77033.96563	1.19408	0.26413	1.1216	0.2805	3.53E-03	4.89E-05	9.45E-06	4.59E-05	9.63E-06	3.6481E-03
520266.05	4258312.9	76944.84649	0.31663	1.03088	0.32552	1.1411	3.53E-03	1.30E-05	3.69E-05	1.33E-05	3.92E-05	3.6324E-03
520498.55	4258417.66	76927.8609	0.20218	0.24199	0.2006	0.25678	3.53E-03	8.28E-06	8.66E-06	8.21E-06	8.82E-06	3.5633E-03
520484.55	4258371.61	76913.90397	0.2023	0.26598	0.20249	0.28205	3.53E-03	8.28E-06	9.51E-06	8.29E-06	9.68E-06	3.5644E-03
520497.01	4258749.96	76854.22454	0.25258	0.17974	0.24242	0.18795	3.53E-03	1.03E-05	6.43E-06	9.93E-06	6.45E-06	3.5591E-03
520365.54	4258922.82	76842.902	0.52433	0.19216	0.50096	0.20386	3.53E-03	2.15E-05	6.87E-06	2.05E-05	7.00E-06	3.5813E-03
520236.88	4258953.03	76756.58558	1.2998	0.27496	1.21615	0.29049	3.52E-03	5.32E-05	9.83E-06	4.98E-05	9.97E-06	3.6443E-03
520055.61	4258807.01	76755.09214	6.85081	0.7368	11.62339	0.6997	3.52E-03	2.81E-04	2.64E-05	4.76E-04	2.40E-05	4.3282E-03
520276.48	4258952.97	76682.1285	0.94657	0.23605	0.89719	0.2529	3.52E-03	3.88E-05	8.44E-06	3.67E-05	8.68E-06	3.6106E-03
520049.73	4258579.49	76635.26388	1.80328	6.83525	2.68075	4.70097	3.52E-03	7.38E-05	2.44E-04	1.10E-04	1.61E-04	4.1053E-03
520476.32	4258799.14	76598.81114	0.28475	0.17575	0.27333	0.18465	3.51E-03	1.17E-05	6.29E-06	1.12E-05	6.34E-06	3.5497E-03
520187.61	4258352.66	76567.33172	0.39821	2.24465	0.42266	2.56378	3.51E-03	1.63E-05	8.03E-05	1.73E-05	8.80E-05	3.7147E-03
520432.45	4258313.42	76546.89046	0.21865	0.35085	0.21953	0.37555	3.51E-03	8.95E-06	1.25E-05	8.99E-06	1.29E-05	3.5552E-03
520031.79	4258718.53	76520.60235	2.82848	1.20472	3.79988	1.13079	3.51E-03	1.16E-04	4.31E-05	1.56E-04	3.88E-05	3.8639E-03
520167.54	4258933.15	76446.35243	2.76438	0.39035	2.47459	0.38475	3.51E-03	1.13E-04	1.40E-05	1.01E-04	1.32E-05	3.7489E-03
520039.63	4258761.54	76401.44978	3.83276	0.91431	5.24334	0.87365	3.51E-03	1.57E-04	3.27E-05	2.15E-04	3.00E-05	3.9395E-03
520469.11	4258344.98	76399.46786	0.20551	0.29094	0.20546	0.30814	3.51E-03	8.41E-06	1.04E-05	8.41E-06	1.06E-05	3.5429E-03
520295.44	4258302.99	76388.51946	0.29324	0.82185	0.30166	0.90105	3.50E-03	1.20E-05	2.94E-05	1.24E-05	3.09E-05	3.5892E-03
520494.72	4258395.99	76276.86134	0.2009	0.24965	0.20013	0.26514	3.50E-03	8.23E-06	8.93E-06	8.19E-06	9.10E-06	3.5339E-03
520226.98	4258953.05	76237.01047	1.42038	0.28643	1.3232	0.30069	3.50E-03	5.82E-05	1.02E-05	5.42E-05	1.03E-05	3.6305E-03
520454.28	4258838.28	76180.19624	0.32097	0.17484	0.30774	0.18455	3.50E-03	1.31E-05	6.25E-06	1.26E-05	6.34E-06	3.5333E-03
520412.91	4258303.36	76172.2929	0.22689	0.38932	0.22953	0.4189	3.49E-03	9.29E-06	1.39E-05	9.40E-06	1.44E-05	3.5416E-03
520286.38	4258952.95	76092.47681	0.88012	0.22789	0.83602	0.2444	3.49E-03	3.60E-05	8.15E-06	3.42E-05	8.39E-06	3.5778E-03
520138.54	4258392.5	76027.56458	0.47575	4.7484	0.50733	5.62239	3.49E-03	1.95E-05	1.70E-04	2.08E-05	1.93E-04	3.8911E-03
520325.97	4258942.89	76017.28085	0.67117	0.20558	0.64071	0.21975	3.49E-03	2.75E-05	7.35E-06	2.62E-05	7.54E-06	3.5561E-03
520158.68	4258929.5	76001.6616	3.14859	0.40883	2.79418	0.3979	3.49E-03	1.29E-04	1.46E-05	1.14E-04	1.37E-05	3.7584E-03
520403.81	4258899.21	75992.59783	0.42272	0.18223	0.40427	0.19233	3.49E-03	1.73E-05	6.52E-06	1.66E-05	6.60E-06	3.5334E-03
520187.36	4258943.12	75973.73844	2.14094	0.34858	1.94853	0.35246	3.49E-03	8.77E-05	1.25E-05	7.98E-05	1.21E-05	3.6775E-03
520445.32	4258852	75969.32815	0.33688	0.17524	0.32266	0.18512	3.49E-03	1.38E-05	6.27E-06	1.32E-05	6.36E-06	3.5250E-03
520501.93	4258460.52	75951.76887	0.20639	0.23203	0.20399	0.24597	3.48E-03	8.45E-06	8.30E-06	8.35E-06	8.44E-06	3.5181E-03
520421.28	4258881.97	75911.09358	0.3838	0.17823	0.36659	0.18829	3.48E-03	1.57E-05	6.38E-06	1.50E-05	6.46E-06	3.5262E-03
520463.52	4258824.45	75831.00993	0.3056	0.1744	0.29321	0.1838	3.48E-03	1.25E-05	6.24E-06	1.20E-05	6.31E-06	3.5160E-03
520363.99	4258293.21	75819.93839	0.2507	0.5175	0.25727	0.56129	3.48E-03	1.03E-05	1.85E-05	1.05E-05	1.93E-05	3.5371E-03
520039.89	4258618.32	75816.89227	2.18261	3.55246	3.20466	2.89523	3.48E-03	8.94E-05	1.27E-04	1.31E-04	9.94E-05	3.9254E-03
520354.21	4258293.18	75763.00651	0.25594	0.55038	0.26316	0.59747	3.48E-03	1.05E-05	1.97E-05	1.08E-05	2.05E-05	3.5373E-03
520128.72	4258402.47	75722.37547	0.49649	5.81651	0.52906	6.95403	3.47E-03	2.03E-05	2.08E-04	2.17E-05	2.39E-04	3.9628E-03
520385.32	4258912.79	75586.71947	0.46683	0.18565	0.44572	0.19628	3.47E-03	1.91E-05	6.64E-06	1.82E-05	6.74E-06	3.5185E-03
520217.07	4258953.07	75556.66473	1.56182	0.29877	1.44772	0.31117	3.47E-03	6.39E-05	1.07E-05	5.93E-05	1.07E-05	3.6110E-03
520502.07	4258481.52	75536.02711	0.20897	0.22825	0.20593	0.24224	3.47E-03	8.56E-06	8.16E-06	8.43E-06	8.32E-06	3.4989E-03
520373.78	4258293.24	75528.79499	0.24528	0.4878	0.25126	0.5283	3.47E-03	1.00E-05	1.74E-05	1.03E-05	1.81E-05	3.5210E-03
520503.97	4258733.34	75469.4977	0.2426	0.18056	0.2329	0.18881	3.46E-03	9.93E-06	6.46E-06	9.54E-06	6.48E-06	3.4948E-03
520344.42	4258293.15	75420.53629	0.26102	0.58667	0.26884	0.63718	3.46E-03	1.07E-05	2.10E-05	1.10E-05	2.19E-05	3.5247E-03
520236.65	4258322.81	75401.00747	0.33995	1.33482	0.35255	1.49105	3.46E-03	1.39E-05	4.77E-05	1.44E-05	5.12E-05	3.5865E-03
520149.83	4258925.84	75366.93052	3.63076	0.42717	3.19091	0.41056	3.46E-03	1.49E-04	1.53E-05	1.31E-04	1.41E-05	3.7664E-03
520511.31	4258691.88	75365.9069	0.22891	0.18619	0.22034	0.19527	3.46E-03	9.37E-06	6.66E-06	9.02E-06	6.70E-06	3.4894E-03
520296.28	4258952.93	75338.84159	0.82056	0.22038	0.78079	0.23637	3.46E-03	3.36E-05	7.88E-06	3.20E-05	8.11E-06	3.5380E-03
520104.16	4258887	75300.2271	10.10179	0.54366	8.57809	0.50072	3.45E-03	4.14E-04	1.94E-05	3.51E-04	1.72E-05	4.2561E-03
520058.16	4258818.05	75272.16268	7.62198	0.69903	14.115	0.66257	3.45E-03	3.12E-04	2.50E-05	5.78E-04	2.27E-05	4.3911E-03
520285.65	4258302.96	75156.19859	0.29805	0.88627	0.30631	0.9745	3.45E-03	1.22E-05	3.17E-05	1.25E-05	3.35E-05	3.5379E-03
520485.42	4258785.36	75101.85031	0.27145	0.17541	0.26062	0.1839	3.45E-03	1.11E-05	6.27E-06	1.07E-05	6.31E-06	3.4799E-03
520355.65	4258932.84	75066.0684	0.55847	0.19327	0.53347	0.20553	3.44E-03	2.29E-05	6.91E-06	2.18E-05	7.06E-06	3.5026E-03
520383.57	4258293.27	75060.64076	0.23987	0.46059	0.24518	0.49812	3.44E-03	9.82E-06	1.65E-05	1.00E-05	1.71E-05	3.4971E-03
520036.02	4258752.83	75050.24888	3.38228	0.95608	4.58254	0.91135	3.44E-03	1.38E-04	3.42E-05	1.88E-04	3.13E-05	3.8348E-03
520089.59	4258871	75039.22448	15.72186	0.58037	15.50529	0.535	3.44E-03	6.44E-04	2.08E-05	6.35E-04	1.84E-05	4.7603E-03
520502.59	4258436.39	75020.34348	0.20256	0.23519	0.20055	0.24923	3.44E-03	8.29E-06	8.41E-06	8.21E-06	8.56E-06	3.4753E-03
520334.63	4258293.11	75009.00662	0.2661	0.6263	0.27426	0.68091	3.44E-03	1.09E-05	2.24E-05	1.12E-05	2.34E-05	3.5092E-03
520256.26	4258312.87	74969.22689	0.32091	1.12196	0.33059	1.24591	3.44E-03	1.31E-05	4.01E-05	1.35E-05	4.28E-05	3.5490E-03
520473.09	4258810.48	74861.36577	0.29072	0.17375	0.27888	0.18276	3.43E-03	1.19E-05	6.21E-06	1.14E-05	6.27E-06	3.4703E-03
520158.18	4258372.56	74757.83843	0.43497	3.38278	0.46459	3.9306	3.43E-03	1.78E-05	1.21E-04	1.90E-05	1.35E-04	3.7225E-03
520493.79	4258385.58	74689.22515	0.19962	0.25255	0.19925	0.26809	3.43E-03	8.17E-06	9.03E-06	8.16E-06	9.20E-06	3.4612E-03
520207.17	4258953.08	74642.16494	1.72594	0.31171	1.591	0.32161	3.42E-03	7.07E-05	1.11E-05	6.51E-05	1.10E-05	3.5824E-03
520422.69	4258303.39	74633.91322	0.22138	0.37028	0.2234	0.39757	3.42E-03	9.06E-06	1.32E-05	9.15E-06	1.36E-05	3.4692E-03
520140.98	4258922.19	74510.57663	4.24523	0.44483	3.69181	0.42242	3.42E-03	1.74E-04	1.59E-05	1.51E-04	1.45E-05	3.7738E-03
520197.43	4258342.69	74468.70069	0.37953	2.0021	0.40128	2.27492	3.42E-03	1.55E-05	7.16E-05	1.64E-05	7.81E-05	3.5982E-03
520324.84	4258293.08	74429.72358	0.27106	0.66986	0.27939	0.72918	3.41E-03	1.11E-05	2.40E-05	1.14E-05	2.50E-05	3.4862E-03
520507.45	4258725.04	74424.95008	0.23785	0.18059	0.22832	0.18898	3.41E-03	9.74E-06	6.46E-06	9.35E-06	6.49E-06	3.4465E-03
520306.18	4258952.92	74410.60542	0.76677	0.21342	0.73054	0.22876	3.41E-03	3.14E-05	7.63E-06	2.99E-05	7.85E-06	3.4906E-03
520393.36	4258293.3	74400.34664	0.23448	0.43564	0.23909	0.47045	3.41E-03	9.60E-06	1.56E-05	9.79E-06	1.62E-05	3.4645E-03
520118.9	4258412.44	74368.84836	0.51686	7.34987	0.55101	8.90376	3.41E-03	2.12E-05	2.63E-04	2.26E-05	3.06E-04	4.0242E-03
520177.45	4258943.13	74363.35587	2.42152	0.36349	2.18704	0.36251	3.41E-03	9.91E-05	1.30E-05	8.95E-05	1.24E-05	3.6258E-03
520484.04	4258361.38	74329.02332	0.2006	0.2688	0.20083	0.28465	3.41E-03	8.21E-06	9.61E-06	8.22E-06	9.77E-06	3.4459E-03
520375.44	4258922.8	74286.04518	0.49518	0.18676	0.47282	0.19781	3.41E-03	2.03E-05	6.68E-06	1.94E-05	6.79E-06	3.4612E-03
520412.42	4258895.64	74253.06182	0.40336	0.17899	0.38603	0.18884	3.41E-03	1.65E-05	6.40E-06	1.58E-05	6.48E-06	3.4518E-03
520442.24	4258313.45	74208.60134	0.21313	0.33489	0.21363	0.35755	3.40E-03	8.73E-06	1.20E-05	8.75E-06	1.23E-05	3.4463E-03
520099.23	4258442.38	74145.44306	0.60121	13.83618	0.65228	15.87986	3.40E-03	2.46E-05	4.95E-04	2.67E-05	5.45E-04	4.4930E-03
520113.85	4258901	73741.63813	7.63126	0.50878	6.47059	0.47072	3.38E-03	3.12E-04	1.82E-05	2.65E-04	1.62E-05	3.9949E-03
520315.05	4258293.05	73707.98484	0.27592	0.71775	0.28422	0.78262	3.38E-03	1.13E-05	2.57E-05	1.16E-05	2.69E-05	3.4571E-03
520275.87	4258302.93	73683.33507	0.30253	0.9582	0.31091	1.05683	3.38E-03	1.24E-05	3.43E-05	1.27E-05	3.63E-05	3.4761E-03
520478.09	4258348.82	73637.53636	0.20134	0.27882	0.20144	0.29499	3.38E-03	8.24E-06	9.97E-06	8.25E-06	1.01E-05	3.4149E-03
520197.27	4258953.1	73566.49119	1.92181	0.32535	1.76036	0.33197	3.38E-03	7.87E-05	1.16E-05	7.21E-05	1.14E-05	3.5489E-03
520168	4258362.6	73564.39921	0.41557	2.92447	0.44361	3.3734	3.37E-03	1.70E-05	1.05E-04	1.82E-05	1.16E-04	3.6306E-03
520429.98	4258878.37	73497.89285	0.36703	0.17482	0.35059	0.18467	3.37E-03	1.50E-05	6.25E-06	1.44E-05	6.34E-06	3.4139E-03
520403.15	4258293.33	73454.41056	0.22907	0.41288	0.23304	0.44507	3.37E-03	9.38E-06	1.48E-05	9.54E-06	1.53E-05	3.4189E-03
520395.22	4258912.77	73444.12269	0.44498	0.18165	0.42512	0.19179	3.37E-03	1.82E-05	6.50E-06	1.74E-05	6.58E-06	3.4182E-03
520316.08	4258952.9	73443.53345	0.7191	0.20712	0.68573	0.22177	3.37E-03	2.94E-05	7.41E-06	2.81E-05	7.61E-06	3.4420E-03
520028.13	4258709.69	73429.87436	2.51027	1.2658	3.31777	1.18093	3.37E-03	1.03E-04	4.53E-05	1.36E-04	4.05E-05	3.6933E-03
520095.11	4258883.27	73247.94411	13.41912	0.55083	11.92286	0.50742	3.36E-03	5.49E-04	1.97E-05	4.88E-04	1.74E-05	4.4352E-03
520032.4	4258744.12	73238.47406	2.97135	1.00074	4.00913	0.94988	3.36E-03	1.22E-04	3.58E-05	1.64E-04	3.26E-05	3.7143E-03
520450.96	4258317.18	73194.4279	0.20922	0.32099	0.20931	0.3418	3.36E-03	8.57E-06	1.15E-05	8.57E-06	1.17E-05	3.3984E-03
520468.73	4258334.8	73056.66198	0.20342	0.29364	0.2033	0.31087	3.35E-03	8.33E-06	1.05E-05	8.32E-06	1.07E-05	3.3895E-03
520256.7	4258963	73017.30338	1.10257	0.24788	1.03889	0.26393	3.35E-03	4.51E-05	8.87E-06	4.25E-05	9.06E-06	3.4555E-03
520246.79	4258963.02	72902.84138	1.1942	0.25751	1.12147	0.27302	3.34E-03	4.89E-05	9.21E-06	4.59E-05	9.37E-06	3.4580E-03
520305.26	4258293.02	72874.23839	0.28069	0.77037	0.28878	0.842	3.34E-03	1.15E-05	2.76E-05	1.18E-05	2.89E-05	3.4231E-03
520453.68	4258848.54	72872.26498	0.32342	0.17201	0.30984	0.18156	3.34E-03	1.32E-05	6.15E-06	1.27E-05	6.23E-06	3.3816E-03
520266.6	4258962.98	72869.13162	1.02006	0.23871	0.964	0.25501	3.34E-03	4.18E-05	8.54E-06	3.95E-05	8.75E-06	3.4416E-03
520432.48	4258303.42	72852.2952	0.21597	0.35265	0.21742	0.37781	3.34E-03	8.84E-06	1.26E-05	8.90E-06	1.30E-05	3.3857E-03
520246.47	4258312.84	72828.53137	0.32476	1.22523	0.33575	1.36538	3.34E-03	1.33E-05	4.38E-05	1.37E-05	4.69E-05	3.4590E-03
520493.04	4258375.25	72827.57084	0.1982	0.25553	0.19816	0.27095	3.34E-03	8.12E-06	9.14E-06	8.11E-06	9.30E-06	3.3759E-03
520462.73	4258834.79	72756.78283	0.30828	0.17161	0.29558	0.18093	3.34E-03	1.26E-05	6.14E-06	1.21E-05	6.21E-06	3.3750E-03
520236.89	4258963.03	72703.30296	1.30106	0.26813	1.21711	0.28271	3.34E-03	5.33E-05	9.59E-06	4.98E-05	9.71E-06	3.4579E-03
520365.55	4258932.82	72687.32106	0.52565	0.1876	0.50187	0.19917	3.33E-03	2.15E-05	6.71E-06	2.05E-05	6.84E-06	3.3904E-03
520226.86	4258322.78	72668.13219	0.34301	1.47111	0.35798	1.64796	3.33E-03	1.40E-05	5.26E-05	1.47E-05	5.66E-05	3.4718E-03
520167.55	4258943.15	72640.93147	2.7728	0.37838	2.48222	0.37184	3.33E-03	1.14E-04	1.35E-05	1.02E-04	1.28E-05	3.5741E-03
520276.5	4258962.97	72521.61579	0.94642	0.23016	0.89668	0.24645	3.33E-03	3.88E-05	8.23E-06	3.67E-05	8.46E-06	3.4193E-03
520444.87	4258862.19	72508.12744	0.33913	0.17237	0.32455	0.18202	3.33E-03	1.39E-05	6.17E-06	1.33E-05	6.25E-06	3.3661E-03
520505.17	4258469.04	72409.0705	0.2053	0.22732	0.20262	0.24105	3.32E-03	8.41E-06	8.13E-06	8.30E-06	8.28E-06	3.3551E-03
520027.12	4258683.15	72383.67715	2.2452	1.5684	2.97529	1.43252	3.32E-03	9.19E-05	5.61E-05	1.22E-04	4.92E-05	3.6399E-03
520412.94	4258293.36	72320.23758	0.22373	0.39189	0.22704	0.42169	3.32E-03	9.16E-06	1.40E-05	9.30E-06	1.45E-05	3.3649E-03
520187.37	4258953.12	72279.60941	2.15505	0.33932	1.96034	0.34191	3.32E-03	8.82E-05	1.21E-05	8.03E-05	1.17E-05	3.5084E-03
520059.56	4258540.66	72255.47644	1.26617	13.34593	1.59225	7.51885	3.31E-03	5.18E-05	4.77E-04	6.52E-05	2.58E-04	4.1675E-03
520158.79	4258939.53	72254.00075	3.15168	0.39545	2.79757	0.38393	3.31E-03	1.29E-04	1.41E-05	1.15E-04	1.32E-05	3.5858E-03
520226.99	4258963.05	72239.41138	1.4218	0.2792	1.32438	0.29243	3.31E-03	5.82E-05	9.99E-06	5.42E-05	1.00E-05	3.4467E-03
520421.02	4258892.08	72160.74402	0.3859	0.17506	0.36829	0.18482	3.31E-03	1.58E-05	6.26E-06	1.51E-05	6.35E-06	3.3541E-03
520177.82	4258352.63	72140.68335	0.39708	2.55821	0.42306	2.93462	3.31E-03	1.63E-05	9.15E-05	1.73E-05	1.01E-04	3.5355E-03
520472.06	4258820.91	72136.80447	0.29362	0.17116	0.28165	0.18014	3.31E-03	1.20E-05	6.12E-06	1.15E-05	6.18E-06	3.3454E-03
520403.75	4258909.24	72090.41399	0.42454	0.17865	0.40573	0.18848	3.31E-03	1.74E-05	6.39E-06	1.66E-05	6.47E-06	3.3542E-03
520266.08	4258302.9	71976.06451	0.30664	1.03916	0.3156	1.14973	3.30E-03	1.26E-05	3.72E-05	1.29E-05	3.95E-05	3.4042E-03
520286.4	4258962.95	71953.63287	0.87978	0.22214	0.83532	0.23817	3.30E-03	3.60E-05	7.95E-06	3.42E-05	8.18E-06	3.3874E-03
520043.45	4258794.86	71882.07167	4.45511	0.75478	6.22755	0.72426	3.30E-03	1.82E-04	2.70E-05	2.55E-04	2.49E-05	3.7871E-03
520104.9	4258897.3	71868.46738	9.79092	0.51861	8.32661	0.4782	3.30E-03	4.01E-04	1.85E-05	3.41E-04	1.64E-05	4.0740E-03
520459.68	4258320.92	71815.63945	0.20531	0.30798	0.20518	0.32706	3.29E-03	8.41E-06	1.10E-05	8.40E-06	1.12E-05	3.3338E-03
520295.47	4258292.99	71756.52355	0.28513	0.82885	0.29314	0.90802	3.29E-03	1.17E-05	2.96E-05	1.20E-05	3.12E-05	3.3765E-03
520385.34	4258922.79	71727.86457	0.469	0.18178	0.44752	0.19226	3.29E-03	1.92E-05	6.50E-06	1.83E-05	6.60E-06	3.3414E-03
520364.03	4258283.21	71681.27339	0.24584	0.52217	0.25271	0.56557	3.29E-03	1.01E-05	1.87E-05	1.03E-05	1.94E-05	3.3471E-03
520514.4	4258708.42	71641.66466	0.22876	0.18043	0.21973	0.18907	3.29E-03	9.37E-06	6.45E-06	9.00E-06	6.49E-06	3.3181E-03
520150.02	4258935.91	71595.17556	3.6139	0.41204	3.18082	0.39534	3.28E-03	1.48E-04	1.47E-05	1.30E-04	1.36E-05	3.5912E-03
520039.85	4258608.63	71588.3185	1.94447	3.89281	2.82138	3.10539	3.28E-03	7.96E-05	1.39E-04	1.16E-04	1.07E-04	3.7253E-03
520354.24	4258283.18	71582.06369	0.25069	0.55545	0.25806	0.6021	3.28E-03	1.03E-05	1.99E-05	1.06E-05	2.07E-05	3.3454E-03
520217.09	4258963.07	71565.51181	1.56084	0.29088	1.44699	0.30222	3.28E-03	6.39E-05	1.04E-05	5.92E-05	1.04E-05	3.4272E-03
520373.81	4258283.24	71561.47992	0.24089	0.49184	0.24719	0.53223	3.28E-03	9.86E-06	1.76E-05	1.01E-05	1.83E-05	3.3390E-03
520027.12	4258673.87	71471.82176	2.15949	1.70166	2.87135	1.54021	3.28E-03	8.84E-05	6.09E-05	1.18E-04	5.29E-05	3.5987E-03

520028.79	4258735.41	71417.85438	2.69044	1.04649	3.55652	0.99022	3.28E-03	1.10E-04	3.74E-05	1.46E-04	3.40E-05	3.6037E-03
520039.88	4258786.27	71365.23448	3.97141	0.78326	5.39742	0.75236	3.27E-03	1.63E-04	2.80E-05	2.21E-04	2.58E-05	3.7115E-03
520296.3	4258962.93	71292.11391	0.82087	0.2149	0.78068	0.23051	3.27E-03	3.36E-05	7.69E-06	3.20E-05	7.91E-06	3.3519E-03
520344.45	4258283.15	71251.34477	0.25538	0.59202	0.26316	0.64215	3.27E-03	1.05E-05	2.12E-05	1.08E-05	2.20E-05	3.3333E-03
520383.6	4258283.27	71188.49988	0.23583	0.46421	0.24156	0.50172	3.27E-03	9.66E-06	1.66E-05	9.89E-06	1.72E-05	3.3194E-03
520109.08	4258422.41	71182.74741	0.53535	9.71718	0.57288	11.77283	3.27E-03	2.19E-05	3.48E-04	2.35E-05	4.04E-04	4.0628E-03
520355.67	4258942.84	71151.98925	0.56033	0.18881	0.53486	0.20094	3.26E-03	2.29E-05	6.75E-06	2.19E-05	6.90E-06	3.3228E-03
520504.86	4258410.35	71016.76731	0.19731	0.2372	0.19582	0.25149	3.26E-03	8.08E-06	8.48E-06	8.02E-06	8.63E-06	3.2913E-03
520422.73	4258293.39	70985.39176	0.21847	0.37247	0.22113	0.40007	3.26E-03	8.95E-06	1.33E-05	9.05E-06	1.37E-05	3.3017E-03
520438.67	4258874.77	70949.3572	0.35128	0.17157	0.33564	0.18117	3.26E-03	1.44E-05	6.14E-06	1.37E-05	6.22E-06	3.2955E-03
520497.07	4258773.76	70942.08348	0.25654	0.17282	0.24614	0.18083	3.25E-03	1.05E-05	6.18E-06	1.01E-05	6.21E-06	3.2877E-03
520481.76	4258806.89	70936.74089	0.27935	0.17047	0.26788	0.17905	3.25E-03	1.14E-05	6.10E-06	1.10E-05	6.15E-06	3.2891E-03
520141.25	4258932.29	70854.49252	4.21801	0.4283	3.67377	0.40625	3.25E-03	1.73E-04	1.53E-05	1.50E-04	1.39E-05	3.6031E-03
520049.05	4258814.29	70850.9085	5.44229	0.69011	8.0621	0.66066	3.25E-03	2.23E-04	2.47E-05	3.30E-04	2.27E-05	3.8508E-03
520086.06	4258879.53	70828.60964	14.04818	0.5539	18.67299	0.51233	3.25E-03	5.75E-04	1.98E-05	7.65E-04	1.76E-05	4.6266E-03
520334.66	4258283.11	70803.91405	0.26002	0.63198	0.26798	0.68622	3.25E-03	1.06E-05	2.26E-05	1.10E-05	2.36E-05	3.3161E-03
520492.42	4258364.97	70802.12089	0.19666	0.25839	0.19682	0.27361	3.25E-03	8.05E-06	9.24E-06	8.06E-06	9.39E-06	3.2830E-03
520177.47	4258953.13	70790.48061	2.43639	0.35333	2.19944	0.35121	3.25E-03	9.98E-05	1.26E-05	9.01E-05	1.21E-05	3.4622E-03
520049.69	4258569.8	70769.13705	1.56866	7.16762	2.19599	4.91445	3.25E-03	6.42E-05	2.56E-04	8.99E-05	1.69E-04	3.8260E-03
520442.27	4258303.45	70760.31357	0.21063	0.33652	0.21162	0.35964	3.25E-03	8.62E-06	1.20E-05	8.66E-06	1.23E-05	3.2880E-03
520477.57	4258338.58	70748.22631	0.19945	0.28169	0.19943	0.29778	3.25E-03	8.17E-06	1.01E-05	8.17E-06	1.02E-05	3.2824E-03
520207.19	4258963.08	70709.51854	1.72329	0.30319	1.58913	0.31201	3.24E-03	7.06E-05	1.08E-05	6.51E-05	1.07E-05	3.4012E-03
520503.5	4258399.75	70657.41896	0.19644	0.24022	0.19533	0.25481	3.24E-03	8.04E-06	8.59E-06	8.00E-06	8.75E-06	3.2750E-03
520036.32	4258777.68	70630.14412	3.55422	0.81389	4.72927	0.78179	3.24E-03	1.46E-04	2.91E-05	1.94E-04	2.68E-05	3.6355E-03
520393.39	4258283.3	70602.1046	0.23075	0.43893	0.23586	0.47375	3.24E-03	9.45E-06	1.57E-05	9.66E-06	1.63E-05	3.2902E-03
520187.64	4258342.66	70569.30035	0.3794	2.2621	0.40326	2.5799	3.24E-03	1.55E-05	8.09E-05	1.65E-05	8.86E-05	3.4391E-03
520285.69	4258292.96	70543.19626	0.28944	0.8934	0.29744	0.98178	3.24E-03	1.19E-05	3.20E-05	1.22E-05	3.37E-05	3.3261E-03
520412.27	4258905.71	70518.01334	0.40546	0.17557	0.38753	0.18515	3.24E-03	1.66E-05	6.28E-06	1.59E-05	6.36E-06	3.2803E-03
520503.94	4258757.36	70504.66167	0.24671	0.17388	0.23661	0.18171	3.23E-03	1.01E-05	6.22E-06	9.69E-06	6.24E-06	3.2669E-03
520487.07	4258352.66	70503.46663	0.19725	0.26705	0.1974	0.28242	3.23E-03	8.08E-06	9.55E-06	8.08E-06	9.70E-06	3.2700E-03
520306.2	4258962.92	70462.66968	0.76752	0.20818	0.73083	0.22323	3.23E-03	3.14E-05	7.45E-06	2.99E-05	7.66E-06	3.3092E-03
520236.68	4258312.81	70433.71435	0.32793	1.34388	0.34089	1.50222	3.23E-03	1.34E-05	4.81E-05	1.40E-05	5.16E-05	3.3584E-03
520114.42	4258911.23	70403.41389	7.50828	0.48691	6.36939	0.45075	3.23E-03	3.07E-04	1.74E-05	2.61E-04	1.55E-05	3.8311E-03
520375.46	4258932.8	70383.8913	0.49667	0.18251	0.47391	0.19344	3.23E-03	2.03E-05	6.53E-06	1.94E-05	6.64E-06	3.2820E-03
520324.87	4258283.08	70237.42513	0.26459	0.67574	0.27253	0.73485	3.22E-03	1.08E-05	2.42E-05	1.12E-05	2.52E-05	3.2937E-03
520256.29	4258302.87	70094.33392	0.31038	1.1305	0.32038	1.25498	3.22E-03	1.27E-05	4.04E-05	1.31E-05	4.31E-05	3.3251E-03
520095.96	4258893.61	70073.95213	13.03243	0.52549	11.43155	0.48454	3.21E-03	5.34E-04	1.88E-05	4.68E-04	1.66E-05	4.2519E-03
520507.37	4258749.16	70052.04587	0.24194	0.17438	0.23204	0.18216	3.21E-03	9.91E-06	6.24E-06	9.50E-06	6.25E-06	3.2458E-03
520027.12	4258664.6	70021.54012	2.06541	1.84842	2.75386	1.65694	3.21E-03	8.46E-05	6.61E-05	1.13E-04	5.69E-05	3.5328E-03
520450.89	4258307.14	69946.85261	0.20691	0.32256	0.20736	0.34387	3.21E-03	8.47E-06	1.15E-05	8.49E-06	1.18E-05	3.2493E-03
520217.07	4258322.75	69933.87479	0.34547	1.62853	0.36284	1.83168	3.21E-03	1.41E-05	5.83E-05	1.49E-05	6.29E-05	3.3586E-03
520429.63	4258888.52	69895.48641	0.36905	0.17171	0.35215	0.18127	3.21E-03	1.51E-05	6.14E-06	1.44E-05	6.22E-06	3.2486E-03
520502.41	4258389.27	69787.01199	0.19536	0.24312	0.19467	0.25786	3.20E-03	8.00E-06	8.70E-06	7.97E-06	8.85E-06	3.2352E-03
520024.46	4258700.84	69781.83533	2.22368	1.32825	2.89884	1.23058	3.20E-03	9.10E-05	4.75E-05	1.19E-04	4.22E-05	3.5010E-03
520462.04	4258845.08	69781.02814	0.31075	0.16886	0.29773	0.17807	3.20E-03	1.27E-05	6.04E-06	1.22E-05	6.11E-06	3.2385E-03
520197.29	4258963.1	69778.64747	1.92115	0.31642	1.76056	0.32196	3.20E-03	7.87E-05	1.13E-05	7.21E-05	1.11E-05	3.3744E-03
520403.18	4258283.33	69753.56669	0.22561	0.41587	0.23015	0.4481	3.20E-03	9.24E-06	1.49E-05	9.42E-06	1.54E-05	3.2491E-03
520395.24	4258922.77	69687.35492	0.44659	0.17786	0.42638	0.18781	3.20E-03	1.83E-05	6.36E-06	1.75E-05	6.45E-06	3.2457E-03
520032.76	4258769.08	69651.60082	3.18997	0.84693	4.17786	0.8126	3.20E-03	1.31E-04	3.03E-05	1.71E-04	2.79E-05	3.5553E-03
520315.08	4258283.05	69514.88171	0.26902	0.72379	0.27683	0.78864	3.19E-03	1.10E-05	2.59E-05	1.13E-05	2.71E-05	3.2645E-03
520345.79	4258952.85	69445.29775	0.59758	0.18999	0.57021	0.20261	3.19E-03	2.45E-05	6.80E-06	2.33E-05	6.96E-06	3.2476E-03
520471.18	4258831.29	69409.13885	0.2963	0.16847	0.28408	0.17741	3.18E-03	1.21E-05	6.03E-06	1.16E-05	6.09E-06	3.2202E-03
520432.51	4258293.42	69404.99645	0.21328	0.35458	0.21534	0.3801	3.18E-03	8.73E-06	1.27E-05	8.82E-06	1.30E-05	3.2274E-03
520256.71	4258973	69332.78075	1.10582	0.24226	1.04159	0.25753	3.18E-03	4.53E-05	8.67E-06	4.26E-05	8.84E-06	3.2863E-03
520050.82	4258825.02	69280.05516	5.78377	0.65605	8.89386	0.62733	3.18E-03	2.37E-04	2.35E-05	3.64E-04	2.15E-05	3.8244E-03
520246.81	4258973.02	69243.85845	1.19798	0.25165	1.12467	0.26628	3.18E-03	4.91E-05	9.00E-06	4.60E-05	9.14E-06	3.2900E-03
520266.61	4258972.98	69197.40448	1.02317	0.23336	0.96655	0.24896	3.17E-03	4.19E-05	8.35E-06	3.96E-05	8.55E-06	3.2730E-03
520167.57	4258953.15	69163.4176	2.78485	0.36708	2.49273	0.35971	3.17E-03	1.14E-04	1.31E-05	1.02E-04	1.23E-05	3.4146E-03
520025.18	4258726.7	69148.81582	2.42133	1.09467	3.14766	1.03122	3.17E-03	9.91E-05	3.92E-05	1.29E-04	3.54E-05	3.4750E-03
520275.9	4258292.93	69075.85183	0.29339	0.96577	0.30179	1.06454	3.17E-03	1.20E-05	3.45E-05	1.24E-05	3.65E-05	3.2645E-03
520365.57	4258942.82	69073.5244	0.52817	0.18354	0.50391	0.19503	3.17E-03	2.16E-05	6.56E-06	2.06E-05	6.70E-06	3.2245E-03
520236.91	4258973.03	68971.36231	1.30241	0.2616	1.21818	0.27526	3.16E-03	5.33E-05	9.36E-06	4.99E-05	9.45E-06	3.2863E-03
520508.82	4258473.37	68948.15442	0.20342	0.22335	0.20055	0.23681	3.16E-03	8.33E-06	7.99E-06	8.21E-06	8.13E-06	3.1959E-03
520276.51	4258972.97	68843.98807	0.94879	0.22495	0.89852	0.24064	3.16E-03	3.88E-05	8.05E-06	3.68E-05	8.26E-06	3.2504E-03
520492.57	4258792.41	68842.1122	0.26449	0.1695	0.25365	0.17763	3.16E-03	1.08E-05	6.06E-06	1.04E-05	6.10E-06	3.1917E-03
520412.97	4258283.36	68833.76723	0.2206	0.39434	0.22445	0.42436	3.16E-03	9.03E-06	1.41E-05	9.19E-06	1.46E-05	3.2049E-03
520459.51	4258310.83	68812.64333	0.20319	0.30954	0.20324	0.32916	3.16E-03	8.32E-06	1.11E-05	8.32E-06	1.13E-05	3.1960E-03
520158.47	4258949.39	68804.59835	3.18073	0.38363	2.82222	0.37136	3.16E-03	1.30E-04	1.37E-05	1.16E-04	1.27E-05	3.4289E-03
520138.58	4258382.5	68796.33599	0.44579	4.77466	0.47287	5.64604	3.16E-03	1.83E-05	1.71E-04	1.94E-05	1.94E-04	3.5585E-03
520420.79	4258902.18	68665.32267	0.3879	0.17212	0.3701	0.18157	3.15E-03	1.59E-05	6.16E-06	1.52E-05	6.23E-06	3.1937E-03
520105.57	4258907.57	68632.40515	9.51588	0.49522	8.10751	0.45717	3.15E-03	3.90E-04	1.77E-05	3.32E-04	1.57E-05	3.9037E-03
520227.01	4258973.05	68598.51732	1.42484	0.27246	1.32701	0.28469	3.15E-03	5.83E-05	9.75E-06	5.43E-05	9.77E-06	3.2794E-03
520514.24	4258732.76	68596.51	0.23274	0.17493	0.22322	0.18282	3.15E-03	9.53E-06	6.26E-06	9.14E-06	6.28E-06	3.1783E-03
520187.39	4258963.12	68592.34235	2.15336	0.32967	1.96013	0.33126	3.15E-03	8.82E-05	1.18E-05	8.03E-05	1.14E-05	3.3385E-03
520305.29	4258283.02	68588.16073	0.27323	0.77682	0.28094	0.84826	3.15E-03	1.12E-05	2.78E-05	1.15E-05	2.91E-05	3.2263E-03
520501.53	4258378.88	68547.89768	0.19412	0.2459	0.19382	0.26064	3.14E-03	7.95E-06	8.80E-06	7.94E-06	8.95E-06	3.1785E-03
520480.61	4258817.37	68547.60049	0.28232	0.16795	0.27066	0.17653	3.14E-03	1.16E-05	6.01E-06	1.11E-05	6.06E-06	3.1795E-03
520403.69	4258919.27	68477.00097	0.42627	0.1751	0.40714	0.1847	3.14E-03	1.75E-05	6.26E-06	1.67E-05	6.34E-06	3.1883E-03
520286.41	4258972.95	68359.63046	0.8827	0.21722	0.83765	0.23277	3.14E-03	3.61E-05	7.77E-06	3.43E-05	7.99E-06	3.2224E-03
520029.19	4258760.49	68348.30521	2.85681	0.88315	3.71783	0.84486	3.14E-03	1.17E-04	3.16E-05	1.52E-04	2.90E-05	3.4655E-03
520447.37	4258871.17	68310.96164	0.33647	0.16835	0.3216	0.17769	3.13E-03	1.38E-05	6.02E-06	1.32E-05	6.10E-06	3.1730E-03
520158.21	4258362.56	68301.13401	0.41072	3.40506	0.43711	3.95121	3.13E-03	1.68E-05	1.22E-04	1.79E-05	1.36E-04	3.4257E-03
520385.36	4258932.79	68233.39609	0.47144	0.17805	0.44959	0.18842	3.13E-03	1.93E-05	6.37E-06	1.84E-05	6.47E-06	3.1810E-03
520486.41	4258342.37	68186.18428	0.19557	0.27014	0.19562	0.28536	3.13E-03	8.01E-06	9.66E-06	8.01E-06	9.80E-06	3.1637E-03
520128.76	4258392.47	68174.93712	0.46336	5.83713	0.49082	6.99866	3.13E-03	1.90E-05	2.09E-04	2.01E-05	2.40E-04	3.6159E-03
520149.36	4258945.63	68149.17364	3.66653	0.39958	3.22456	0.38226	3.13E-03	1.50E-04	1.43E-05	1.32E-04	1.31E-05	3.4361E-03
520087.01	4258889.92	68087.5125	15.52568	0.52874	17.48178	0.48935	3.12E-03	6.36E-04	1.89E-05	7.16E-04	1.68E-05	4.5109E-03
520027.12	4258655.32	68057.89442	1.96193	2.00876	2.62136	1.78219	3.12E-03	8.03E-05	7.19E-05	1.07E-04	6.12E-05	3.4431E-03
520217.11	4258973.07	68041.16092	1.56651	0.2839	1.45198	0.29416	3.12E-03	6.41E-05	1.02E-05	5.95E-05	1.01E-05	3.2654E-03
520521.36	4258691.81	68034.16547	0.22023	0.18014	0.21176	0.18876	3.12E-03	9.02E-06	6.44E-06	8.67E-06	6.48E-06	3.1519E-03
520246.5	4258302.84	68032.23737	0.31363	1.23436	0.32519	1.37487	3.12E-03	1.28E-05	4.42E-05	1.33E-05	4.72E-05	3.2387E-03
520364.06	4258273.21	67916.75887	0.24102	0.5267	0.248	0.56976	3.12E-03	9.87E-06	1.88E-05	1.02E-05	1.96E-05	3.1743E-03
520226.89	4258312.78	67895.59349	0.33042	1.48053	0.34568	1.66022	3.11E-03	1.35E-05	5.30E-05	1.42E-05	5.70E-05	3.2526E-03
520373.85	4258273.24	67852.18843	0.23642	0.49599	0.24297	0.53609	3.11E-03	9.68E-06	1.77E-05	9.95E-06	1.84E-05	3.1687E-03
520354.27	4258273.18	67796.3755	0.24551	0.56027	0.25282	0.60661	3.11E-03	1.01E-05	2.00E-05	1.04E-05	2.08E-05	3.1716E-03
520296.32	4258972.93	67741.52632	0.82349	0.21012	0.78272	0.22534	3.11E-03	3.37E-05	7.52E-06	3.20E-05	7.74E-06	3.1889E-03
520438.23	4258884.96	67696.70348	0.35344	0.16853	0.3373	0.17788	3.11E-03	1.45E-05	6.03E-06	1.38E-05	6.11E-06	3.1462E-03
520355.69	4258952.84	67686.12223	0.56291	0.18471	0.53695	0.1967	3.11E-03	2.30E-05	6.61E-06	2.20E-05	6.75E-06	3.1637E-03
520422.76	4258283.39	67590.65824	0.21554	0.37479	0.2188	0.40259	3.10E-03	8.83E-06	1.34E-05	8.96E-06	1.38E-05	3.1459E-03
520052.37	4258835.65	67556.71051	6.08535	0.62441	9.76329	0.59647	3.10E-03	2.49E-04	2.23E-05	4.00E-04	2.05E-05	3.7911E-03
520442.3	4258293.45	67538.0819	0.20812	0.33822	0.20968	0.36172	3.10E-03	8.52E-06	1.21E-05	8.59E-06	1.24E-05	3.1401E-03
520383.63	4258273.27	67512.85794	0.23168	0.46812	0.23778	0.50533	3.10E-03	9.49E-06	1.67E-05	9.74E-06	1.73E-05	3.1507E-03
520168.03	4258352.6	67504.78011	0.39391	2.94239	0.41934	3.3937	3.10E-03	1.61E-05	1.05E-04	1.72E-05	1.17E-04	3.3520E-03
520295.51	4258282.99	67500.63187	0.27724	0.83535	0.28497	0.91454	3.10E-03	1.14E-05	2.99E-05	1.17E-05	3.14E-05	3.1811E-03
520344.48	4258273.15	67473.69235	0.24987	0.59706	0.25738	0.64699	3.10E-03	1.02E-05	2.14E-05	1.05E-05	2.22E-05	3.1599E-03
520140.25	4258941.88	67470.77132	4.31533	0.41514	3.75202	0.39269	3.10E-03	1.77E-04	1.48E-05	1.54E-04	1.35E-05	3.4541E-03
520266.11	4258292.9	67425.01761	0.297	1.04705	0.30624	1.15779	3.09E-03	1.22E-05	3.75E-05	1.25E-05	3.97E-05	3.1952E-03
520335.9	4258962.87	67419.34687	0.63678	0.19101	0.60725	0.2041	3.09E-03	2.61E-05	6.83E-06	2.49E-05	7.01E-06	3.1578E-03
520468.13	4258314.52	67358.55545	0.19948	0.29735	0.19928	0.31539	3.09E-03	8.17E-06	1.06E-05	8.16E-06	1.08E-05	3.1281E-03
520114.95	4258921.44	67273.58845	7.40312	0.46664	6.2837	0.4322	3.09E-03	3.03E-04	1.67E-05	2.57E-04	1.48E-05	3.6783E-03
520207.21	4258973.08	67266.71059	1.73008	0.29576	1.59516	0.30346	3.09E-03	7.08E-05	1.06E-05	6.53E-05	1.04E-05	3.2432E-03
520177.49	4258963.13	67225.33608	2.4331	0.34287	2.19856	0.33992	3.08E-03	9.96E-05	1.23E-05	9.00E-05	1.17E-05	3.2977E-03
520490.42	4258803.31	67186.07901	0.26861	0.16726	0.25749	0.17545	3.08E-03	1.10E-05	5.98E-06	1.05E-05	6.02E-06	3.1159E-03
520039.81	4258598.93	67166.03637	1.71612	4.18897	2.44419	3.28564	3.08E-03	7.03E-05	1.50E-04	1.00E-04	1.13E-04	3.5144E-03
520496.04	4258356.5	67078.66314	0.19318	0.256	0.19332	0.27071	3.08E-03	7.91E-06	9.16E-06	7.92E-06	9.29E-06	3.1117E-03
520500.8	4258368.55	67065.01065	0.19276	0.24873	0.19275	0.26332	3.08E-03	7.89E-06	8.90E-06	7.89E-06	9.04E-06	3.1105E-03
520412.14	4258915.77	67037.98023	0.40737	0.17215	0.38889	0.1815	3.08E-03	1.67E-05	6.16E-06	1.59E-05	6.23E-06	3.1206E-03
520334.69	4258273.11	67025.98398	0.25414	0.6372	0.26168	0.6914	3.08E-03	1.04E-05	2.28E-05	1.07E-05	2.37E-05	3.1427E-03
520393.42	4258273.3	67020.78113	0.22692	0.44246	0.23249	0.47707	3.07E-03	9.29E-06	1.58E-05	9.52E-06	1.64E-05	3.1258E-03
520096.72	4258903.92	67014.99478	12.62655	0.50175	11.00146	0.46318	3.07E-03	5.17E-04	1.79E-05	4.50E-04	1.59E-05	4.0758E-03
520461.44	4258855.34	66913.50231	0.31304	0.16616	0.29969	0.17523	3.07E-03	1.28E-05	5.94E-06	1.23E-05	6.02E-06	3.1069E-03
520375.47	4258942.8	66900.505	0.49876	0.17856	0.47557	0.18942	3.07E-03	2.04E-05	6.39E-06	1.95E-05	6.50E-06	3.1220E-03
520450.83	4258297.1	66846.34587	0.20458	0.32427	0.20553	0.34601	3.07E-03	8.38E-06	1.16E-05	8.42E-06	1.19E-05	3.1071E-03
520207.28	4258322.72	66804.2752	0.34649	1.81472	0.36645	2.04556	3.06E-03	1.42E-05	6.49E-05	1.50E-05	7.02E-05	3.2292E-03
520470.4	4258841.62	66742.30132	0.29879	0.16581	0.28629	0.17468	3.06E-03	1.22E-05	5.93E-06	1.17E-05	6.00E-06	3.0979E-03
520118.94	4258402.44	66727.24285	0.48045	7.38365	0.5096	8.91	3.06E-03	1.97E-05	2.64E-04	2.09E-05	3.06E-04	3.6718E-03
520025.63	4258751.9	66682.22047	2.54787	0.92172	3.31277	0.87782	3.06E-03	1.04E-04	3.30E-05	1.36E-04	3.01E-05	3.3623E-03
520512.12	4258461.42	66679.69661	0.19995	0.22268	0.19738	0.2358	3.06E-03	8.19E-06	7.96E-06	8.08E-06	8.10E-06	3.0915E-03
520429.31	4258898.66	66569.60073	0.37101	0.16872	0.35375	0.17799	3.05E-03	1.52E-05	6.03E-06	1.45E-05	6.11E-06	3.0959E-03
520177.85	4258342.63	66473.54191	0.37748	2.57704	0.40185	2.95076	3.05E-03	1.55E-05	9.22E-05	1.65E-05	1.01E-04	3.2751E-03
520021.57	4258717.99	66458.6131	2.17388	1.14433	2.78436	1.07234	3.05E-03	8.90E-05	4.09E-05	1.14E-04	3.68E-05	3.3297E-03
520324.9	4258273.08	66406.98762	0.25827	0.6812	0.26573	0.74031	3.05E-03	1.06E-05	2.44E-05	1.09E-05	2.54E-05	3.1179E-03
520521.1	4258716.36	66367.67141	0.22406	0.17495	0.215	0.1831	3.04E-03	9.17E-06	6.26E-06	8.80E-06	6.29E-06	3.0753E-03
520197.31	4258973.1	66357.38838	1.92534	0.30817	1.76463	0.31263	3.04E-03	7.88E-05	1.10E-05	7.23E-05	1.07E-05	3.2172E-03
520403.21	4258273.33	66357.09375	0.22214	0.41886	0.22713	0.45109	3.04E-03	9.10E-06	1.50E-05	9.30E-06	1.55E-05	3.0932E-03
520512.06	4258481.89	66312.22942	0.20233	0.21944	0.19912	0.23262	3.04E-03	8.28E-06	7.85E-06	8.15E-06	7.99E-06	3.0745E-03
520285.72	4258282.96	66293.51468	0.28109	0.90021	0.28904	0.98869	3.04E-03	1.15E-05	3.22E-05	1.18E-05	3.39E-05	3.1309E-03
520099.26	4258432.38	66246.05501	0.5517	13.86168	0.59523	15.91144	3.04E-03	2.26E-05	4.96E-04	2.44E-05	5.46E-04	4.1283E-03
520395.26	4258932.77	66213.65843	0.44808	0.17413	0.42758	0.18393	3.04E-03	1.83E-05	6.23E-06	1.75E-05	6.31E-06	3.0862E-03
520345.8	4258962.85	66176.33859	0.59981	0.18607	0.57234	0.19851	3.04E-03	2.46E-05	6.66E-06	2.34E-05	6.82E-06	3.0975E-03
520432.55	4258283.42	66176.27132	0.21055	0.35665	0.21323	0.38241	3.04E-03	8.62E-06	1.28E-05	8.73E-06	1.31E-05	3.0793E-03
520479.62	4258827.79	66156.733	0.28502	0.16541	0.27318	0.17397	3.04E-03	1.17E-05	5.92E-06	1.12E-05	5.97E-06	3.0699E-03
520365.59	4258952.82	66098.07055	0.53202	0.17999	0.50738	0.19137	3.03E-03	2.18E-05	6.44E-06	2.08E-05	6.57E-06	3.0880E-03
520036.17	4258801.44	66032.06856	3.62419	0.70783	4.79642	0.68289	3.03E-03	1.48E-04	2.53E-05	1.96E-04	2.34E-05	3.4230E-03
520459.36	4258300.75	65906.74014	0.20103	0.3112	0.20145	0.33128	3.02E-03	8.23E-06	1.11E-05	8.25E-06	1.14E-05	3.0627E-03
520106.18	4258917.82	65783.13274	9.40007	0.47465	7.97682	0.43842	3.02E-03	3.85E-04	1.70E-05	3.27E-04	1.51E-05	3.7615E-03
520236.71	4258302.81	65765.37016	0.31622	1.35357	0.32982	1.51215	3.02E-03	1.29E-05	4.84E-05	1.35E-05	5.19E-05	3.1440E-03
520053.74	4258846.21	65743.21763	6.40646	0.59484	10.72055	0.56781	3.02E-03	2.62E-04	2.13E-05	4.39E-04	1.95E-05	3.7582E-03
520167.59	4258963.15	65742.18441	2.78105	0.3558	2.49206	0.34783	3.02E-03	1.14E-04	1.27E-05	1.02E-04	1.19E-05	3.2567E-03
520027.12	4258646.05	65653.08603	1.84887	2.18087	2.47343	1.91373	3.01E-03	7.57E-05	7.80E-05	1.01E-04	6.57E-05	3.3327E-03
520456.07	4258867.56	65642.11288	0.32256	0.1652	0.30842	0.17427	3.01E-03	1.32E-05	5.91E-06	1.26E-05	5.98E-06	3.0493E-03
520256.32	4258292.87	65635.54699	0.30024	1.13871	0.31074	1.26344	3.01E-03	1.23E-05	4.07E-05	1.27E-05	4.34E-05	3.1204E-03
520020.79	4258692	65633.36835	1.96546	1.38942	2.53132	1.27805	3.01E-03	8.05E-05	4.97E-05	1.04E-04	4.39E-05	3.2888E-03
520315.11	4258273.05	65569.84347	0.26216	0.72966	0.2696	0.79429	3.01E-03	1.07E-05	2.61E-05	1.10E-05	2.73E-05	3.0834E-03
520476.75	4258318.21	65542.8319	0.19575	0.28592	0.1955	0.30248	3.01E-03	8.01E-06	1.02E-05	8.00E-06	1.04E-05	3.0436E-03
520413	4258273.36	65503.32213	0.21736	0.39715	0.22175	0.42716	3.01E-03	8.90E-06	1.42E-05	9.08E-06	1.47E-05	3.0520E-03
520158.57	4258959.43	65471.78454	3.17595	0.37128	2.82081	0.35868	3.00E-03	1.30E-04	1.33E-05	1.15E-04	1.23E-05	3.2748E-03
520087.87	4258900.27	65442.37231	15.23026	0.50535	16.54014	0.46802	3.00E-03	6.24E-04	1.81E-05	6.77E-04	1.61E-05	4.3373E-03
520032.4	4258792.34	65405.0401	3.24496	0.73558	4.22096	0.70951	3.00E-03	1.33E-04	2.63E-05	1.73E-04	2.44E-05	3.3570E-03
520420.59	4258912.28	65392.80037	0.38976	0.16894	0.3716	0.17813	3.00E-03	1.60E-05	6.04E-06	1.52E-05	6.12E-06	3.0434E-03
520326.02	4258972.89	65346.5309	0.67945	0.19218	0.64747	0.20573	3.00E-03	2.78E-05	6.87E-06	2.65E-05	7.06E-06	3.0662E-03
520446.84	4258881.39	65342.3547	0.33872	0.16541	0.32332	0.17454	3.00E-03	1.39E-05	5.92E-06	1.32E-05	5.99E-06	3.0368E-03
520041.85	4258821.31	65297.38129	4.32005	0.64827	5.95521	0.62472	3.00E-03	1.77E-04	2.32E-05	2.44E-04	2.14E-05	3.4611E-03
520495.25	4258346.15	65252.13538	0.19172	0.25898	0.19179	0.2735	2.99E-03	7.85E-06	9.26E-06	7.85E-06	9.39E-06	3.0280E-03
520187.41	4258973.12	65214.91631	2.15378	0.32055	1.96154	0.32119	2.99E-03	8.82E-05	1.15E-05	8.03E-05	1.10E-05	3.1829E-03
520217.1	4258312.75	65205.17484	0.33203	1.63937	0.34962	1.84404	2.99E-03	1.36E-05	5.86E-05	1.43E-05	6.33E-05	3.1413E-03
520507.49	4258772.83	65143.92133	0.24558	0.16788	0.23549	0.17543	2.99E-03	1.01E-05	6.00E-06	9.64E-06	6.02E-06	3.0204E-03
520489.16	4258813.84	65120.71342	0.27161	0.16477	0.26028	0.17297	2.99E-03	1.11E-05	5.89E-06	1.07E-05	5.94E-06	3.0212E-03
520403.64	4258929.3	65102.80736	0.42794	0.17151	0.40835	0.18095	2.99E-03	1.75E-05	6.13E-06	1.67E-05	6.21E-06	3.0334E-03
520385.37	4258942.79	65100.47988	0.47404	0.17446	0.45182	0.18474	2.99E-03	1.94E-05	6.24E-06	1.85E-05	6.34E-06	3.0372E-03
520149.56	4258955.71	64995.38742	3.66618	0.38622	3.22538	0.36889	2.98E-03	1.50E-04	1.38E-05	1.32E-04	1.27E-05	3.2905E-03
520524.54	4258708.16	64965.74142	0.21991	0.17483	0.21112	0.18306	2.98E-03	9.00E-06	6.25E-06	8.64E-06	6.28E-06	3.0107E-03
520275.93	4258282.93	64924.67495	0.28467	0.97257	0.29318	1.07187	2.98E-03	1.17E-05	3.48E-05	1.20E-05	3.68E-05	3.0739E-03
520510.88	4258764.72	64917.89809	0.24097	0.16845	0.23105	0.1759	2.98E-03	9.87E-06	6.03E-06	9.46E-06	6.04E-06	3.0097E-03
520022.07	4258743.3	64887.8951	2.30741	0.96113	2.96702	0.9117	2.98E-03	9.45E-05	3.44E-05	1.21E-04	3.13E-05	3.2586E-03
520049.65	4258560.1	64712.33512	1.35979	7.40139	1.80865	5.08338	2.97E-03	5.57E-05	2.65E-04	7.41E-05	1.75E-04	3.5379E-03
520467.89	4258304.4	64641.90467	0.19746	0.29908	0.19751	0.31754	2.97E-03	8.08E-06	1.07E-05	8.09E-06	1.09E-05	3.0034E-03
520355.7	4258962.84	64628.84307	0.56521	0.18117	0.5395	0.19298	2.97E-03	2.31E-05	6.48E-06	2.21E-05	6.63E-06	3.0234E-03
520305.32	4258273.02	64606.98068	0.26592	0.78293	0.27338	0.85413	2.96E-03	1.09E-05	2.80E-05	1.12E-05	2.93E-05	3.0435E-03
520437.84	4258895.13	64594.51902	0.35544	0.1657	0.33895	0.17478	2.96E-03	1.46E-05	5.93E-06	1.39E-05	6.00E-06	3.0038E-03
520028.63	4258783.24	64550.46512	2.91721	0.76526	3.73952	0.73727	2.96E-03	1.19E-04	2.74E-05	1.53E-04	2.53E-05	3.2867E-03
520442.33	4258283.45	64528.05353	0.20561	0.33999	0.20775	0.36379	2.96E-03	8.42E-06	1.22E-05	8.51E-06	1.25E-05	3.0020E-03
520140.55	4258951.99	64438.24372	4.30436	0.40056	3.74591	0.37852	2.96E-03	1.76E-04	1.43E-05	1.53E-04	1.30E-05	3.3132E-03
520422.79	4258273.39	64410.3397	0.21256	0.37726	0.21639	0.40512	2.96E-03	8.70E-06	1.35E-05	8.86E-06	1.39E-05	3.0000E-03
520364.09	4258263.21	64399.64015	0.23617	0.53124	0.24315	0.57385	2.95E-03	9.67E-06	1.90E-05	9.96E-06	1.97E-05	3.0129E-03
520373.88	4258263.24	64362.75175	0.2319	0.50028	0.23859	0.53992	2.95E-03	9.49E-06	1.79E-05	9.77E-06	1.85E-05	3.0085E-03
520335.92	4258972.87	64262.77211	0.63877	0.18705	0.60914	0.19993	2.95E-03	2.62E-05	6.69E-06	2.49E-05	6.86E-06	3.0129E-03
520354.3	4258263.18	64253.98329	0.24033	0.56504	0.24747	0.61097	2.95E-03	9.84E-06	2.02E-05	1.01E-05	2.10E-05	3.0090E-03
520097.41	4258914.2	64230.86681	12.32647	0.48005	10.6813	0.44357	2.95E-03	5.05E-04	1.72E-05	4.37E-04	1.52E-05	3.9212E-03
520383.67	4258263.27	64147.34873	0.22753	0.47191	0.23385	0.50882	2.94E-03	9.32E-06	1.69E-05	9.57E-06	1.75E-05	2.9962E-03

520109.12	4258412.41	64059.94829	0.49613	9.76209	0.52838	11.79485	2.94E-03	2.03E-05	3.49E-04	2.16E-05	4.05E-04	3.7350E-03
520517.67	4258748.5	64053.48207	0.23203	0.16926	0.22241	0.17664	2.94E-03	9.50E-06	6.05E-06	9.11E-06	6.06E-06	2.9694E-03
520177.5	4258973.13	64027.29189	2.43929	0.33327	2.20485	0.32946	2.94E-03	9.99E-05	1.19E-05	9.03E-05	1.13E-05	3.1508E-03
520375.49	4258952.8	63973.74825	0.5023	0.17512	0.47869	0.1859	2.93E-03	2.06E-05	6.26E-06	1.96E-05	6.38E-06	2.9878E-03
520112.94	4258930.6	63958.55402	7.79797	0.45014	6.6155	0.4167	2.93E-03	3.19E-04	1.61E-05	2.71E-04	1.43E-05	3.5548E-03
520043.52	4258832	63955.53049	4.55647	0.617	6.40691	0.59431	2.93E-03	1.87E-04	2.21E-05	2.62E-04	2.04E-05	3.4255E-03
520344.51	4258263.15	63925.68401	0.24436	0.60198	0.25154	0.65164	2.93E-03	1.00E-05	2.15E-05	1.03E-05	2.24E-05	2.9970E-03
520451.31	4258287.29	63917.58639	0.20205	0.3251	0.2035	0.34711	2.93E-03	8.27E-06	1.16E-05	8.33E-06	1.19E-05	2.9726E-03
520054.96	4258856.71	63870.77833	6.71133	0.56739	11.76173	0.54129	2.93E-03	2.75E-04	2.03E-05	4.82E-04	1.86E-05	3.7255E-03
520029.93	4258628.06	63823.44766	1.73978	2.66306	2.36914	2.26801	2.93E-03	7.12E-05	9.53E-05	9.70E-05	7.79E-05	3.2695E-03
520412.02	4258925.83	63819.55135	0.40907	0.16881	0.39028	0.17796	2.93E-03	1.67E-05	6.04E-06	1.60E-05	6.11E-06	2.9728E-03
520478.76	4258838.16	63785.0792	0.28749	0.16288	0.27547	0.17139	2.93E-03	1.18E-05	5.83E-06	1.13E-05	5.88E-06	2.9611E-03
520393.45	4258263.3	63724.40756	0.22308	0.44596	0.22897	0.48033	2.92E-03	9.13E-06	1.60E-05	9.37E-06	1.65E-05	2.9745E-03
520246.53	4258292.84	63691.28425	0.30299	1.24295	0.31515	1.38379	2.92E-03	1.24E-05	4.45E-05	1.29E-05	4.75E-05	3.0393E-03
520515.3	4258469.76	63651.13446	0.19883	0.21834	0.19596	0.23127	2.92E-03	8.14E-06	7.81E-06	8.02E-06	7.94E-06	2.9521E-03
520499.09	4258799.72	63607.67095	0.25842	0.1642	0.24769	0.172	2.92E-03	1.06E-05	5.87E-06	1.01E-05	5.90E-06	2.9507E-03
520059.52	4258530.96	63578.99187	1.09112	13.28282	1.32468	7.65591	2.92E-03	4.47E-05	4.75E-04	5.42E-05	2.63E-04	3.7537E-03
520429.03	4258908.78	63574.03288	0.37301	0.16582	0.35546	0.17482	2.92E-03	1.53E-05	5.93E-06	1.46E-05	6.00E-06	2.9584E-03
520295.54	4258272.99	63526.15713	0.26951	0.84164	0.27718	0.92064	2.91E-03	1.10E-05	3.01E-05	1.13E-05	3.16E-05	2.9986E-03
520197.49	4258322.69	63512.19159	0.34622	2.03507	0.36802	2.29825	2.91E-03	1.42E-05	7.28E-05	1.51E-05	7.89E-05	3.0948E-03
520334.72	4258263.11	63450.61533	0.24826	0.6423	0.25539	0.69631	2.91E-03	1.02E-05	2.30E-05	1.05E-05	2.39E-05	2.9785E-03
520505.02	4258360.35	63447.12707	0.18913	0.24596	0.18919	0.26001	2.91E-03	7.74E-06	8.80E-06	7.75E-06	8.93E-06	2.9440E-03
520024.85	4258774.14	63442.27128	2.62765	0.79695	3.32931	0.76613	2.91E-03	1.08E-04	2.85E-05	1.36E-04	2.63E-05	3.2093E-03
520266.14	4258282.9	63358.07748	0.28785	1.05401	0.29739	1.16551	2.91E-03	1.18E-05	3.77E-05	1.22E-05	4.00E-05	3.0084E-03
520226.92	4258302.78	63341.99738	0.31805	1.49118	0.33389	1.67045	2.91E-03	1.30E-05	5.33E-05	1.37E-05	5.73E-05	3.0434E-03
520017.96	4258709.28	63312.58018	1.94396	1.1946	2.46491	1.11272	2.90E-03	7.96E-05	4.27E-05	1.01E-04	3.82E-05	3.1661E-03
520432.58	4258273.42	63187.52179	0.20782	0.35875	0.21106	0.38468	2.90E-03	8.51E-06	1.28E-05	8.64E-06	1.32E-05	2.9421E-03
520403.24	4258263.33	63154.1056	0.2186	0.42203	0.22398	0.45408	2.90E-03	8.95E-06	1.51E-05	9.17E-06	1.56E-05	2.9462E-03
520494.57	4258335.85	63151.45531	0.19004	0.26218	0.19011	0.27642	2.90E-03	7.78E-06	9.38E-06	7.78E-06	9.49E-06	2.9317E-03
520476.42	4258308.05	63116.51471	0.19389	0.28764	0.19372	0.30462	2.90E-03	7.94E-06	1.03E-05	7.93E-06	1.05E-05	2.9323E-03
520316.13	4258982.9	63070.3292	0.72521	0.19342	0.69023	0.20733	2.89E-03	2.97E-05	6.92E-06	2.83E-05	7.12E-06	2.9655E-03
520460.29	4258291.14	63051.47066	0.19845	0.31125	0.19928	0.33156	2.89E-03	8.13E-06	1.11E-05	8.16E-06	1.14E-05	2.9315E-03
520488.07	4258824.29	63012.95449	0.27435	0.16232	0.26282	0.17052	2.89E-03	1.12E-05	5.81E-06	1.08E-05	5.85E-06	2.9246E-03
520395.27	4258942.77	63003.73247	0.44945	0.17048	0.42875	0.18017	2.89E-03	1.84E-05	6.10E-06	1.76E-05	6.19E-06	2.9387E-03
520464.77	4258863.96	62963.87777	0.30949	0.16211	0.29601	0.1709	2.89E-03	1.27E-05	5.80E-06	1.21E-05	5.87E-06	2.9251E-03
520345.82	4258972.85	62946.85057	0.60106	0.18204	0.57343	0.1943	2.89E-03	2.46E-05	6.51E-06	2.35E-05	6.67E-06	2.9492E-03
520256.75	4258993	62932.58317	1.11493	0.23211	1.04949	0.24583	2.89E-03	4.56E-05	8.30E-06	4.30E-05	8.44E-06	2.9926E-03
520455.44	4258877.83	62920.80106	0.32489	0.16242	0.31023	0.1713	2.89E-03	1.33E-05	5.81E-06	1.27E-05	5.88E-06	2.9244E-03
520365.6	4258962.82	62919.96573	0.53351	0.17627	0.50876	0.18751	2.89E-03	2.18E-05	6.30E-06	2.08E-05	6.44E-06	2.9421E-03
520027.12	4258636.77	62917.32357	1.72569	2.36234	2.3111	2.04783	2.89E-03	7.07E-05	8.45E-05	9.46E-05	7.03E-05	3.2066E-03
520517.32	4258423.32	62915.68398	0.19194	0.22428	0.19001	0.23713	2.89E-03	7.86E-06	8.02E-06	7.78E-06	8.14E-06	2.9183E-03
520148.43	4258362.53	62902.85888	0.40364	4.01685	0.42677	4.69858	2.89E-03	1.65E-05	1.44E-04	1.75E-05	1.61E-04	3.2248E-03
520088.64	4258910.58	62896.04374	14.95675	0.48363	15.80866	0.44822	2.89E-03	6.12E-04	1.73E-05	6.47E-04	1.54E-05	4.1779E-03
520246.84	4258993.02	62885.32253	1.20911	0.24104	1.13444	0.25399	2.89E-03	4.95E-05	8.62E-06	4.64E-05	8.72E-06	2.9984E-03
520058.92	4258868.33	62864.21256	7.93548	0.5435	16.4273	0.51675	2.88E-03	3.25E-04	1.94E-05	6.73E-04	1.77E-05	3.9188E-03
520266.65	4258992.98	62843.35441	1.03173	0.22373	0.97392	0.23794	2.88E-03	4.22E-05	8.00E-06	3.99E-05	8.17E-06	2.9814E-03
520018.5	4258734.71	62830.74122	2.09531	1.00158	2.65827	0.94602	2.88E-03	8.58E-05	3.58E-05	1.09E-04	3.25E-05	3.1455E-03
520324.93	4258263.08	62767.88528	0.25196	0.68658	0.25905	0.74544	2.88E-03	1.03E-05	2.46E-05	1.06E-05	2.56E-05	2.9507E-03
520236.94	4258993.03	62717.48341	1.31651	0.25056	1.23068	0.26238	2.88E-03	5.39E-05	8.96E-06	5.04E-05	9.01E-06	2.9996E-03
520158.25	4258352.56	62715.68744	0.38856	3.42407	0.41173	3.97105	2.88E-03	1.59E-05	1.22E-04	1.69E-05	1.36E-04	3.1688E-03
520138.61	4258372.5	62676.54897	0.41876	4.80034	0.44195	5.66578	2.88E-03	1.71E-05	1.72E-04	1.81E-05	1.95E-04	3.2769E-03
520167.6	4258973.15	62638.40908	2.78477	0.34527	2.49709	0.33673	2.87E-03	1.14E-04	1.23E-05	1.02E-04	1.16E-05	3.1139E-03
520039.77	4258589.23	62606.54953	1.52089	4.44824	2.12594	3.4428	2.87E-03	6.23E-05	1.59E-04	8.70E-05	1.18E-04	3.2989E-03
520276.55	4258992.97	62583.282	0.95738	0.21584	0.90589	0.2303	2.87E-03	3.92E-05	7.72E-06	3.71E-05	7.91E-06	2.9631E-03
520524.46	4258732.28	62581.08206	0.22351	0.16962	0.21423	0.17716	2.87E-03	9.15E-06	6.07E-06	8.77E-06	6.08E-06	2.9012E-03
520103.83	4258926.84	62540.81202	10.07805	0.45699	8.5717	0.42235	2.87E-03	4.13E-04	1.63E-05	3.51E-04	1.45E-05	3.6637E-03
520045	4258842.6	62494.3978	4.80901	0.58784	6.87773	0.56603	2.87E-03	1.97E-04	2.10E-05	2.82E-04	1.94E-05	3.3861E-03
520413.03	4258263.36	62429.75984	0.21411	0.39996	0.21893	0.42989	2.86E-03	8.77E-06	1.43E-05	8.96E-06	1.48E-05	2.9110E-03
520446.36	4258891.6	62416.16613	0.34069	0.16266	0.32492	0.17154	2.86E-03	1.39E-05	5.82E-06	1.33E-05	5.89E-06	2.9025E-03
520227.04	4258993.05	62408.99238	1.43969	0.26063	1.3404	0.27089	2.86E-03	5.89E-05	9.32E-06	5.49E-05	9.30E-06	2.9957E-03
520207.31	4258312.72	62380.48029	0.33261	1.82541	0.35207	2.05987	2.86E-03	1.36E-05	6.53E-05	1.44E-05	7.07E-05	3.0259E-03
520158.67	4258969.46	62344.29272	3.16653	0.3594	2.81678	0.34661	2.86E-03	1.30E-04	1.29E-05	1.15E-04	1.19E-05	3.1300E-03
520420.4	4258922.36	62342.41717	0.39149	0.1659	0.37312	0.17484	2.86E-03	1.60E-05	5.93E-06	1.53E-05	6.00E-06	2.9034E-03
520285.75	4258272.96	62338.53696	0.27294	0.90678	0.28106	0.99506	2.86E-03	1.12E-05	3.24E-05	1.15E-05	3.42E-05	2.9493E-03
520326.03	4258982.89	62281.97224	0.68119	0.18812	0.64894	0.20145	2.86E-03	2.79E-05	6.73E-06	2.66E-05	6.92E-06	2.9255E-03
520168.07	4258342.6	62219.68018	0.37377	2.96195	0.39673	3.40981	2.85E-03	1.53E-05	1.06E-04	1.62E-05	1.17E-04	3.1091E-03
520286.45	4258992.95	62162.86827	0.89062	0.20845	0.84432	0.22295	2.85E-03	3.65E-05	7.46E-06	3.46E-05	7.65E-06	2.9381E-03
520385.39	4258952.79	62133.95622	0.47581	0.17081	0.45333	0.18102	2.85E-03	1.95E-05	6.11E-06	1.86E-05	6.21E-06	2.9010E-03
520504.08	4258349.93	62078.29481	0.18785	0.24884	0.18795	0.26271	2.85E-03	7.69E-06	8.90E-06	7.70E-06	9.02E-06	2.8813E-03
520021.08	4258765.04	62059.98996	2.36812	0.83094	2.97885	0.79612	2.85E-03	9.70E-05	2.97E-05	1.22E-04	2.73E-05	3.1232E-03
520315.14	4258263.05	61985.07822	0.25556	0.73499	0.26263	0.79973	2.84E-03	1.05E-05	2.63E-05	1.08E-05	2.75E-05	2.9187E-03
520149.75	4258965.78	61950.42781	3.65174	0.37327	3.21761	0.35607	2.84E-03	1.50E-04	1.34E-05	1.32E-04	1.22E-05	3.1490E-03
520403.99	4258939.16	61939.50887	0.42848	0.16791	0.40873	0.17719	2.84E-03	1.75E-05	6.01E-06	1.67E-05	6.08E-06	2.8880E-03
520217.14	4258993.07	61915.78896	1.58163	0.27116	1.46578	0.27935	2.84E-03	6.48E-05	9.70E-06	6.00E-05	9.59E-06	2.9846E-03
520128.79	4258382.47	61893.12564	0.43384	5.86707	0.45725	7.02077	2.84E-03	1.78E-05	2.10E-04	1.87E-05	2.41E-04	3.3269E-03
520469.27	4258294.98	61872.67636	0.19482	0.29844	0.19516	0.31708	2.84E-03	7.98E-06	1.07E-05	7.99E-06	1.09E-05	2.8761E-03
520497.71	4258810.3	61848.10751	0.26144	0.16184	0.25051	0.16965	2.84E-03	1.07E-05	5.79E-06	1.03E-05	5.82E-06	2.8700E-03
520442.37	4258273.45	61791.98181	0.20314	0.34146	0.20578	0.36559	2.83E-03	8.32E-06	1.22E-05	8.43E-06	1.26E-05	2.8764E-03
520531.4	4258691.76	61710.06088	0.21201	0.17463	0.20376	0.18278	2.83E-03	8.68E-06	6.25E-06	8.34E-06	6.28E-06	2.8607E-03
520437.48	4258905.28	61687.96499	0.35732	0.16289	0.34052	0.17171	2.83E-03	1.46E-05	5.83E-06	1.39E-05	5.89E-06	2.8704E-03
520256.35	4258282.87	61637.69433	0.29062	1.1461	0.30158	1.27154	2.83E-03	1.19E-05	4.10E-05	1.23E-05	4.37E-05	2.9367E-03
520296.35	4258992.93	61590.31538	0.83039	0.20155	0.78837	0.21591	2.83E-03	3.40E-05	7.21E-06	3.23E-05	7.41E-06	2.9065E-03
520236.74	4258292.81	61514.31578	0.30499	1.36299	0.31921	1.52132	2.82E-03	1.25E-05	4.88E-05	1.31E-05	5.22E-05	2.9487E-03
520140.82	4258962.09	61507.27769	4.28663	0.38662	3.73443	0.36504	2.82E-03	1.76E-04	1.38E-05	1.53E-04	1.25E-05	3.1766E-03
520422.82	4258263.39	61498.14818	0.20958	0.37967	0.21386	0.40757	2.82E-03	8.58E-06	1.36E-05	8.76E-06	1.40E-05	2.8663E-03
520355.72	4258972.84	61491.88925	0.56649	0.17715	0.54028	0.18881	2.82E-03	2.32E-05	6.34E-06	2.21E-05	6.48E-06	2.8793E-03
520478	4258848.48	61457.09731	0.28978	0.16037	0.27754	0.1688	2.82E-03	1.19E-05	5.74E-06	1.14E-05	5.80E-06	2.8543E-03
520484.95	4258311.7	61453.09128	0.19043	0.2766	0.19008	0.29236	2.82E-03	7.80E-06	9.89E-06	7.78E-06	1.00E-05	2.8549E-03
520113.51	4258940.83	61305.11653	7.72282	0.43262	6.54205	0.40061	2.81E-03	3.16E-04	1.55E-05	2.68E-04	1.38E-05	3.4259E-03
520451.24	4258277.25	61288.09589	0.19978	0.32662	0.20175	0.34902	2.81E-03	8.18E-06	1.17E-05	8.26E-06	1.20E-05	2.8519E-03
520207.24	4258993.08	61252.26998	1.74697	0.28208	1.61067	0.28766	2.81E-03	7.15E-05	1.01E-05	6.59E-05	9.88E-06	2.9676E-03
520094.73	4258923.08	61228.16265	13.53111	0.46187	11.91497	0.42737	2.81E-03	5.54E-04	1.65E-05	4.88E-04	1.47E-05	3.8821E-03
520335.94	4258982.87	61161.39489	0.63996	0.18295	0.60996	0.19566	2.81E-03	2.62E-05	6.54E-06	2.50E-05	6.72E-06	2.8704E-03
520373.91	4258253.24	61117.06306	0.22737	0.50451	0.23409	0.54361	2.80E-03	9.31E-06	1.80E-05	9.58E-06	1.87E-05	2.8595E-03
520375.51	4258962.8	61109.80503	0.50419	0.1716	0.48043	0.18228	2.80E-03	2.06E-05	6.14E-06	1.97E-05	6.26E-06	2.8563E-03
520364.12	4258253.21	61103.08537	0.23132	0.53573	0.23818	0.5778	2.80E-03	9.47E-06	1.92E-05	9.75E-06	1.98E-05	2.8615E-03
520017.12	4258683.15	61048.83775	1.73178	1.44644	2.20619	1.32151	2.80E-03	7.09E-05	5.17E-05	9.03E-05	4.54E-05	3.0591E-03
520305.36	4258263.02	61028.76903	0.25894	0.78832	0.26619	0.85974	2.80E-03	1.06E-05	2.82E-05	1.09E-05	2.95E-05	2.8791E-03
520275.96	4258272.93	60999.14107	0.27609	0.97952	0.28501	1.07849	2.80E-03	1.13E-05	3.50E-05	1.17E-05	3.70E-05	2.8936E-03
520383.7	4258253.27	60995.20939	0.22335	0.47577	0.22978	0.51227	2.80E-03	9.14E-06	1.70E-05	9.41E-06	1.76E-05	2.8515E-03
520060.17	4258878.84	60954.5146	8.40351	0.51965	15.98008	0.4938	2.80E-03	3.44E-04	1.86E-05	6.54E-04	1.70E-05	3.8304E-03
520046.31	4258853.13	60931.93116	5.04025	0.56088	7.35846	0.53984	2.80E-03	2.06E-04	2.01E-05	3.01E-04	1.85E-05	3.3417E-03
520354.33	4258253.18	60930.94621	0.23516	0.56971	0.24206	0.61516	2.80E-03	9.63E-06	2.04E-05	9.91E-06	2.11E-05	2.8564E-03
520487.12	4258834.69	60908.88332	0.27681	0.15998	0.26518	0.16815	2.79E-03	1.13E-05	5.72E-06	1.09E-05	5.77E-06	2.8281E-03
520306.25	4258992.92	60881.19705	0.77588	0.19513	0.7374	0.20919	2.79E-03	3.18E-05	6.98E-06	3.02E-05	7.18E-06	2.8692E-03
520029.16	4258808.65	60878.26095	3.03102	0.66469	3.88562	0.64347	2.79E-03	1.24E-04	2.38E-05	1.59E-04	2.21E-05	3.1220E-03
520217.13	4258302.75	60843.9057	0.31912	1.65061	0.33688	1.85493	2.79E-03	1.31E-05	5.90E-05	1.38E-05	6.37E-05	2.9410E-03
520428.78	4258918.89	60748.95181	0.37484	0.16292	0.35704	0.17167	2.79E-03	1.53E-05	5.83E-06	1.46E-05	5.89E-06	2.8287E-03
520520.79	4258432.44	60712.0833	0.19113	0.21997	0.189	0.23243	2.79E-03	7.83E-06	7.87E-06	7.74E-06	7.98E-06	2.8168E-03
520412.71	4258935.55	60706.98703	0.4089	0.16527	0.38994	0.17421	2.79E-03	1.67E-05	5.91E-06	1.60E-05	5.98E-06	2.8297E-03
520393.48	4258253.3	60678.50541	0.21923	0.44944	0.22531	0.48351	2.78E-03	8.98E-06	1.61E-05	9.23E-06	1.66E-05	2.8347E-03
520344.54	4258253.15	60573.0528	0.23885	0.60682	0.24572	0.65605	2.78E-03	9.78E-06	2.17E-05	1.01E-05	2.25E-05	2.8430E-03
520460.11	4258281.05	60518.04289	0.19635	0.31289	0.19769	0.33361	2.78E-03	8.04E-06	1.12E-05	8.09E-06	1.15E-05	2.8152E-03
520503.29	4258339.58	60485.83599	0.18641	0.25185	0.18649	0.26546	2.77E-03	7.63E-06	9.01E-06	7.64E-06	9.11E-06	2.8084E-03
520464.05	4258874.27	60485.74454	0.31183	0.1595	0.29791	0.16813	2.77E-03	1.28E-05	5.71E-06	1.22E-05	5.77E-06	2.8114E-03
520531.26	4258716.06	60451.79148	0.21544	0.16958	0.20664	0.17736	2.77E-03	8.82E-06	6.07E-06	8.46E-06	6.09E-06	2.8028E-03
520014.94	4258726.12	60428.39726	1.89633	1.04302	2.37919	0.98022	2.77E-03	7.76E-05	3.73E-05	9.74E-05	3.37E-05	3.0184E-03
520478.24	4258298.82	60416.64116	0.19118	0.28648	0.19117	0.30354	2.77E-03	7.83E-06	1.02E-05	7.83E-06	1.04E-05	2.8081E-03
520197.34	4258993.1	60401.13693	1.94135	0.2932	1.77954	0.29563	2.77E-03	7.95E-05	1.05E-05	7.29E-05	1.01E-05	2.9441E-03
520118.97	4258392.44	60398.83816	0.44817	7.4066	0.47298	8.95933	2.77E-03	1.83E-05	2.65E-04	1.94E-05	3.08E-04	3.3812E-03
520432.61	4258263.42	60383.15569	0.20506	0.36096	0.2088	0.38694	2.77E-03	8.40E-06	1.29E-05	8.55E-06	1.33E-05	2.8134E-03
520034.67	4258828.34	60372.2201	3.55253	0.6103	4.66205	0.59124	2.77E-03	1.45E-04	2.18E-05	1.91E-04	2.03E-05	3.1482E-03
520187.71	4258322.66	60336.87622	0.34504	2.29579	0.36695	2.60542	2.77E-03	1.41E-05	8.21E-05	1.50E-05	8.94E-05	2.9689E-03
520473.46	4258860.36	60330.64339	0.29718	0.15915	0.28436	0.16763	2.77E-03	1.22E-05	5.69E-06	1.16E-05	5.75E-06	2.8031E-03
520029.89	4258618.37	60326.79516	1.58299	2.87004	2.1453	2.41176	2.77E-03	6.48E-05	1.03E-04	8.78E-05	8.28E-05	3.1058E-03
520454.88	4258888.07	60310.89067	0.32694	0.15978	0.31192	0.16844	2.77E-03	1.34E-05	5.72E-06	1.28E-05	5.78E-06	2.8046E-03
520316.15	4258992.9	60256.17561	0.72732	0.18944	0.69196	0.20306	2.76E-03	2.98E-05	6.78E-06	2.83E-05	6.97E-06	2.8363E-03
520025.45	4258799.68	60235.81354	2.74633	0.68951	3.47487	0.66685	2.76E-03	1.12E-04	2.47E-05	1.42E-04	2.29E-05	3.0658E-03
520511.37	4258787.48	60224.54275	0.24389	0.162	0.23379	0.16932	2.76E-03	9.99E-06	5.79E-06	9.57E-06	5.81E-06	2.7942E-03
520017.31	4258755.94	60223.79578	2.10953	0.86781	2.66719	0.82666	2.76E-03	8.64E-05	3.10E-05	1.09E-04	2.84E-05	3.0180E-03
520403.27	4258253.33	60215.93819	0.21506	0.42514	0.22069	0.457	2.76E-03	8.81E-06	1.52E-05	9.04E-06	1.57E-05	2.8113E-03
520515	4258778.83	60122.96496	0.23907	0.1627	0.22919	0.1699	2.76E-03	9.79E-06	5.82E-06	9.38E-06	5.83E-06	2.7892E-03
520334.75	4258253.12	60074.56342	0.24242	0.64727	0.24921	0.70094	2.76E-03	9.93E-06	2.32E-05	1.02E-05	2.41E-05	2.8235E-03
520519.65	4258396.65	60054.19496	0.18697	0.22595	0.18567	0.23905	2.76E-03	7.66E-06	8.08E-06	7.60E-06	8.21E-06	2.7867E-03
520049.87	4258864.6	60052.19627	5.67077	0.53752	8.83531	0.51591	2.76E-03	2.32E-04	1.92E-05	3.62E-04	1.77E-05	3.3860E-03
520256.76	4259003	60044.81827	1.11763	0.22724	1.05195	0.24022	2.75E-03	4.58E-05	8.13E-06	4.31E-05	8.25E-06	2.8599E-03
520104.49	4258937.11	60020.77732	9.91854	0.43878	8.4191	0.40577	2.75E-03	4.06E-04	1.57E-05	3.45E-04	1.39E-05	3.5341E-03
520496.52	4258820.8	60012.47659	0.26418	0.15951	0.25311	0.16733	2.75E-03	1.08E-05	5.71E-06	1.04E-05	5.74E-06	2.7859E-03
520395.29	4258952.77	60004.38903	0.45071	0.16684	0.42972	0.17646	2.75E-03	1.85E-05	5.97E-06	1.76E-05	6.06E-06	2.8010E-03
520266.66	4259002.98	59973.97724	1.0341	0.21914	0.9761	0.23266	2.75E-03	4.23E-05	7.84E-06	4.00E-05	7.99E-06	2.8496E-03
520246.86	4259003.02	59968.58496	1.2118	0.23585	1.13689	0.24801	2.75E-03	4.96E-05	8.44E-06	4.65E-05	8.51E-06	2.8644E-03
520295.57	4258262.99	59957.10428	0.26216	0.84725	0.26981	0.92655	2.75E-03	1.07E-05	3.03E-05	1.10E-05	3.18E-05	2.8346E-03
520345.84	4258982.85	59921.64882	0.60228	0.17796	0.57395	0.19007	2.75E-03	2.47E-05	6.37E-06	2.35E-05	6.53E-06	2.8101E-03
520365.62	4258972.82	59911.84877	0.53468	0.17245	0.5096	0.18356	2.75E-03	2.19E-05	6.17E-06	2.09E-05	6.30E-06	2.8039E-03
520518.62	4258770.18	59907.19542	0.23437	0.1633	0.22467	0.1704	2.75E-03	9.60E-06	5.84E-06	9.20E-06	5.85E-06	2.7789E-03
520099.3	4258422.38	59821.70777	0.50937	13.90391	0.54689	15.93435	2.74E-03	2.09E-05	4.97E-04	2.24E-05	5.47E-04	3.8321E-03
520518.51	4258386.15	59813.7668	0.18607	0.22853	0.18517	0.24182	2.74E-03	7.62E-06	8.17E-06	7.58E-06	8.30E-06	2.7758E-03
520017.12	4258673.87	59807.47258	1.66012	1.55246	2.11824	1.40835	2.74E-03	6.80E-05	5.55E-05	8.67E-05	4.83E-05	3.0024E-03
520445.93	4258901.78	59790.10747	0.34268	0.16005	0.32664	0.16868	2.74E-03	1.40E-05	5.72E-06	1.34E-05	5.79E-06	2.7820E-03
520085.62	4258919.33	59761.71853	15.99824	0.46354	18.61698	0.43094	2.74E-03	6.55E-04	1.66E-05	7.62E-04	1.48E-05	4.1904E-03
520236.96	4259003.03	59741.05518	1.31855	0.24493	1.23243	0.25593	2.74E-03	5.40E-05	8.76E-06	5.05E-05	8.79E-06	2.8628E-03
520014.34	4258700.57	59740.05953	1.73331	1.24463	2.18128	1.15125	2.74E-03	7.10E-05	4.45E-05	8.93E-05	3.95E-05	2.9851E-03
520246.56	4258282.84	59712.52472	0.29277	1.25134	0.30555	1.39202	2.74E-03	1.20E-05	4.48E-05	1.25E-05	4.78E-05	2.8565E-03
520276.56	4259002.97	59692.3919	0.95936	0.21137	0.90747	0.22522	2.74E-03	3.93E-05	7.56E-06	3.72E-05	7.73E-06	2.8303E-03
520514	4258364.19	59621.27917	0.18508	0.23643	0.185	0.24985	2.74E-03	7.58E-06	8.46E-06	7.57E-06	8.58E-06	2.7675E-03
520158.77	4258979.5	59611.36486	3.18006	0.34871	2.8285	0.33559	2.73E-03	1.30E-04	1.25E-05	1.16E-04	1.15E-05	3.0049E-03
520413.06	4258253.36	59578.52976	0.21083	0.40278	0.21599	0.43257	2.73E-03	8.63E-06	1.44E-05	8.84E-06	1.49E-05	2.7801E-03
520522.24	4258761.53	59563.60959	0.22979	0.16372	0.2202	0.17075	2.73E-03	9.41E-06	5.86E-06	9.02E-06	5.86E-06	2.7628E-03
520227.06	4259003.05	59503.60707	1.44228	0.25473	1.34288	0.2641	2.73E-03	5.91E-05	9.11E-06	5.50E-05	9.07E-06	2.8621E-03
520266.17	4258272.9	59495.57991	0.27885	1.06136	0.28898	1.1724	2.73E-03	1.14E-05	3.80E-05	1.18E-05	4.02E-05	2.8310E-03
520468.98	4258284.84	59491.49228	0.19287	0.30012	0.19367	0.31919	2.73E-03	7.90E-06	1.07E-05	7.93E-06	1.10E-05	2.7669E-03
520493.47	4258315.35	59482.06403	0.18695	0.26627	0.18659	0.28088	2.73E-03	7.65E-06	9.52E-06	7.64E-06	9.64E-06	2.7634E-03
520187.44	4258993.12	59429.73347	2.17346	0.30441	1.97962	0.30319	2.73E-03	8.90E-05	1.09E-05	8.11E-05	1.04E-05	2.9179E-03
520324.96	4258253.08	59400.83531	0.2458	0.69158	0.25258	0.7503	2.73E-03	1.01E-05	2.47E-05	1.03E-05	2.58E-05	2.7961E-03
520021.73	4258790.72	59387.2426	2.49441	0.71578	3.11991	0.69106	2.72E-03	1.02E-04	2.56E-05	1.28E-04	2.37E-05	3.0038E-03
520421.42	4258931.94	59370.54775	0.3904	0.1627	0.37256	0.17133	2.72E-03	1.60E-05	5.82E-06	1.53E-05	5.88E-06	2.7667E-03
520197.53	4258312.69	59369.72395	0.33188	2.04568	0.35235	2.31477	2.72E-03	1.36E-05	7.32E-05	1.44E-05	7.95E-05	2.9044E-03
520286.46	4259002.95	59340.97477	0.89257	0.2042	0.84589	0.21816	2.72E-03	3.65E-05	7.30E-06	3.46E-05	7.49E-06	2.8084E-03
520326.05	4258992.89	59325.90602	0.68224	0.18412	0.64968	0.19722	2.72E-03	2.79E-05	6.59E-06	2.66E-05	6.77E-06	2.7896E-03
520517.56	4258375.73	59260.27556	0.18503	0.23105	0.18453	0.24439	2.72E-03	7.58E-06	8.26E-06	7.56E-06	8.39E-06	2.7505E-03
520226.95	4258292.78	59236.13929	0.3063	1.50129	0.32251	1.68002	2.72E-03	1.25E-05	5.37E-05	1.32E-05	5.77E-05	2.8548E-03
520036.25	4258838.99	59235.15309	3.7425	0.58141	4.94835	0.56343	2.72E-03	1.53E-04	2.08E-05	2.03E-04	1.93E-05	3.1136E-03
520385.41	4258962.79	59192.92594	0.47704	0.16733	0.45446	0.17744	2.72E-03	1.95E-05	5.99E-06	1.86E-05	6.09E-06	2.7659E-03
520149.92	4258975.84	59192.81748	3.65224	0.36132	3.21992	0.34417	2.72E-03	1.50E-04	1.29E-05	1.32E-04	1.18E-05	3.0218E-03
520442.4	4258263.45	59089.03885	0.20054	0.34368	0.20376	0.36785	2.71E-03	8.21E-06	1.23E-05	8.34E-06	1.26E-05	2.7524E-03
520525.86	4258752.88	59080.91057	0.22528	0.16399	0.2158	0.17102	2.71E-03	9.22E-06	5.87E-06	8.84E-06	5.87E-06	2.7403E-03
520522.26	4258462.18	59080.2337	0.19378	0.21404	0.19104	0.2264	2.71E-03	7.93E-06	7.66E-06	7.82E-06	7.77E-06	2.7417E-03
520061.31	4258889.3	59046.48343	8.7725	0.49757	17.52718	0.47255	2.71E-03	3.59E-04	1.78E-05	7.18E-04	1.62E-05	3.8198E-03
520403.93	4258949.19	59040.95467	0.4299	0.16445	0.40989	0.17363	2.71E-03	1.76E-05	5.88E-06	1.68E-05	5.96E-06	2.7549E-03
520437.16	4258915.42	58964.89374	0.3591	0.16011	0.34202	0.16867	2.71E-03	1.47E-05	5.73E-06	1.40E-05	5.79E-06	2.7454E-03
520217.16	4259003.07	58920.49491	1.58271	0.26462	1.46658	0.27194	2.70E-03	6.48E-05	9.47E-06	6.00E-05	9.34E-06	2.8468E-03
520114.03	4258951.04	58881.21726	7.71107	0.41652	6.49863	0.38574	2.70E-03	3.16E-04	1.49E-05	2.66E-04	1.32E-05	3.3113E-03
520487.22	4258302.66	58881.09549	0.18768	0.27476	0.18733	0.29057	2.70E-03	7.68E-06	9.83E-06	7.67E-06	9.98E-06	2.7365E-03
520296.37	4259002.93	58835.9912	0.8323	0.19748	0.78989	0.21137	2.70E-03	3.41E-05	7.06E-06	3.23E-05	7.26E-06	2.7800E-03
520285.78	4258262.96	58784.04053	0.2652	0.91264	0.27352	1.00119	2.70E-03	1.09E-05	3.26E-05	1.12E-05	3.44E-05	2.7860E-03
520095.48	4258933.39	58783.21893	13.20616	0.44299	11.55912	0.41022	2.70E-03	5.41E-04	1.58E-05	4.73E-04	1.41E-05	3.7408E-03
520451.17	4258267.21	58769.34393	0.19747	0.32835	0.19996	0.351	2.70E-03	8.09E-06	1.17E-05	8.19E-06	1.21E-05	2.7363E-03
520422.85	4258253.39	58768.47442	0.20657	0.38216	0.21122	0.41001	2.70E-03	8.46E-06	1.37E-05	8.65E-06	1.41E-05	2.7410E-03
520141.06	4258972.19	58761.70625	4.27111	0.37347	3.72554	0.35236	2.70E-03	1.75E-04	1.34E-05	1.53E-04	1.21E-05	3.0487E-03
520506.26	4258806.76	58722.47205	0.25178	0.15907	0.24131	0.16651	2.69E-03	1.03E-05	5.69E-06	9.88E-06	5.72E-06	2.7257E-03

520315.18	4258253.05	58622.96968	0.24907	0.74003	0.25595	0.80474	2.69E-03	1.02E-05	2.65E-05	1.05E-05	2.76E-05	2.7643E-03
520355.74	4258982.84	58565.30284	0.56766	0.1732	0.54075	0.18473	2.69E-03	2.32E-05	6.20E-06	2.21E-05	6.34E-06	2.7448E-03
520049.6	4258550.4	58504.54961	1.18236	7.54373	1.50489	5.2306	2.68E-03	4.84E-05	2.70E-04	6.16E-05	1.80E-04	3.2435E-03
520529.48	4258744.23	58454.55511	0.22091	0.16427	0.21159	0.17135	2.68E-03	9.04E-06	5.88E-06	8.66E-06	5.88E-06	2.7112E-03
520051.23	4258875.15	58422.17105	5.97633	0.51423	9.63062	0.49323	2.68E-03	2.45E-04	1.84E-05	3.94E-04	1.69E-05	3.3546E-03
520524.27	4258441.57	58353.97248	0.19025	0.21565	0.18792	0.22779	2.68E-03	7.79E-06	7.71E-06	7.69E-06	7.82E-06	2.7082E-03
520013.53	4258746.84	58340.73755	1.91565	0.90432	2.39682	0.85773	2.68E-03	7.84E-05	3.23E-05	9.81E-05	2.94E-05	2.9149E-03
520018.01	4258781.76	58318.50919	2.26729	0.74366	2.81123	0.71613	2.68E-03	9.28E-05	2.66E-05	1.15E-04	2.46E-05	2.9347E-03
520335.95	4258992.87	58285.84273	0.64102	0.17901	0.61061	0.19153	2.67E-03	2.62E-05	6.40E-06	2.50E-05	6.58E-06	2.7383E-03
520477.85	4258288.64	58255.52816	0.1894	0.28812	0.18973	0.30565	2.67E-03	7.75E-06	1.03E-05	7.77E-06	1.05E-05	2.7090E-03
520207.26	4259003.08	58234.73666	1.74543	0.2749	1.60936	0.27965	2.67E-03	7.15E-05	9.83E-06	6.59E-05	9.60E-06	2.8285E-03
520375.52	4258972.8	58227.78853	0.50531	0.16798	0.48132	0.17855	2.67E-03	2.07E-05	6.01E-06	1.97E-05	6.13E-06	2.7239E-03
520207.35	4258302.72	58223.24539	0.31916	1.837	0.33817	2.07121	2.67E-03	1.31E-05	6.57E-05	1.38E-05	7.11E-05	2.8349E-03
520017.12	4258664.6	58187.86172	1.58231	1.66595	2.02276	1.49974	2.67E-03	6.48E-05	5.96E-05	8.28E-05	5.15E-05	2.9282E-03
520306.27	4259002.92	58186.01607	0.77778	0.19119	0.73885	0.20487	2.67E-03	3.18E-05	6.84E-06	3.03E-05	7.03E-06	2.7454E-03
520524.45	4258416.19	58167.17724	0.18701	0.21901	0.18509	0.2314	2.67E-03	7.66E-06	7.83E-06	7.58E-06	7.94E-06	2.6996E-03
520373.94	4258243.24	58146.60235	0.22291	0.5085	0.22949	0.54719	2.67E-03	9.13E-06	1.82E-05	9.40E-06	1.88E-05	2.7232E-03
520459.95	4258270.97	58127.85537	0.19423	0.31454	0.1961	0.33559	2.67E-03	7.95E-06	1.13E-05	8.03E-06	1.15E-05	2.7055E-03
520463.4	4258884.54	58118.53856	0.31393	0.15692	0.29963	0.16536	2.67E-03	1.29E-05	5.61E-06	1.23E-05	5.68E-06	2.7028E-03
520472.65	4258870.71	58077.79841	0.29954	0.15664	0.2863	0.16501	2.66E-03	1.23E-05	5.60E-06	1.17E-05	5.66E-06	2.6998E-03
520383.73	4258243.27	58053.81823	0.21916	0.47958	0.22559	0.51561	2.66E-03	8.97E-06	1.72E-05	9.24E-06	1.77E-05	2.7165E-03
520364.15	4258243.21	58044.0473	0.22651	0.54002	0.23316	0.58158	2.66E-03	9.27E-06	1.93E-05	9.55E-06	2.00E-05	2.7211E-03
520109.15	4258402.41	58017.62765	0.46145	9.8017	0.48933	11.79989	2.66E-03	1.89E-05	3.51E-04	2.00E-05	4.05E-04	3.4564E-03
520037.65	4258849.56	57968.82987	3.92074	0.55472	5.23294	0.5376	2.66E-03	1.61E-04	1.98E-05	2.14E-04	1.85E-05	3.0726E-03
520412.57	4258945.61	57952.45915	0.41032	0.16208	0.39138	0.17087	2.66E-03	1.68E-05	5.80E-06	1.60E-05	5.87E-06	2.7032E-03
520039.73	4258579.53	57942.50988	1.35497	4.68102	1.84768	3.58376	2.66E-03	5.55E-05	1.67E-04	7.57E-05	1.23E-04	3.0799E-03
520158.28	4258342.56	57844.71869	0.36811	3.44421	0.3884	3.98681	2.65E-03	1.51E-05	1.23E-04	1.59E-05	1.37E-04	2.9448E-03
520354.36	4258243.18	57834.69559	0.23004	0.57416	0.23665	0.61915	2.65E-03	9.42E-06	2.05E-05	9.69E-06	2.13E-05	2.7142E-03
520256.38	4258272.87	57834.48873	0.28115	1.15405	0.29281	1.2786	2.65E-03	1.15E-05	4.13E-05	1.20E-05	4.39E-05	2.7620E-03
520148.46	4258352.53	57830.77037	0.3813	4.03717	0.40117	4.71787	2.65E-03	1.56E-05	1.44E-04	1.64E-05	1.62E-04	2.9916E-03
520393.52	4258243.3	57821.53805	0.21535	0.4529	0.22152	0.48659	2.65E-03	8.82E-06	1.62E-05	9.07E-06	1.67E-05	2.7035E-03
520454.38	4258898.28	57782.7481	0.32883	0.15722	0.31353	0.16566	2.65E-03	1.35E-05	5.62E-06	1.28E-05	5.69E-06	2.6886E-03
520432.64	4258253.42	57775.27534	0.20227	0.36318	0.20643	0.38916	2.65E-03	8.28E-06	1.30E-05	8.45E-06	1.34E-05	2.6937E-03
520430.14	4258928.33	57761.76049	0.37346	0.15951	0.35557	0.16799	2.65E-03	1.53E-05	5.71E-06	1.46E-05	5.77E-06	2.6913E-03
520482.16	4258856.76	57752.49356	0.28556	0.15627	0.27335	0.16444	2.65E-03	1.17E-05	5.59E-06	1.12E-05	5.65E-06	2.6837E-03
520538.05	4258699.84	57737.18318	0.20786	0.1694	0.19959	0.17721	2.65E-03	8.51E-06	6.06E-06	8.17E-06	6.08E-06	2.6777E-03
520105.1	4258947.35	57715.93437	9.84747	0.42215	8.31439	0.3905	2.65E-03	4.03E-04	1.51E-05	3.40E-04	1.34E-05	3.4200E-03
520011.37	4258717.52	57705.59409	1.71294	1.08346	2.1246	1.01345	2.65E-03	7.01E-05	3.88E-05	8.70E-05	3.48E-05	2.8781E-03
520305.39	4258253.02	57683.13089	0.25213	0.7935	0.25934	0.86502	2.65E-03	1.03E-05	2.84E-05	1.06E-05	2.97E-05	2.7254E-03
520533.11	4258735.58	57668.50777	0.21663	0.16451	0.20754	0.17168	2.65E-03	8.87E-06	5.88E-06	8.50E-06	5.89E-06	2.6749E-03
520236.77	4258282.81	57637.57982	0.29425	1.37211	0.30898	1.52974	2.64E-03	1.20E-05	4.91E-05	1.27E-05	5.25E-05	2.7706E-03
520086.47	4258929.67	57523.21176	15.66034	0.4448	17.7428	0.41371	2.64E-03	6.41E-04	1.59E-05	7.26E-04	1.42E-05	4.0368E-03
520275.99	4258262.93	57490.54318	0.26797	0.98565	0.27727	1.0849	2.64E-03	1.10E-05	3.53E-05	1.14E-05	3.72E-05	2.7324E-03
520344.57	4258243.15	57482.89694	0.23347	0.6113	0.23998	0.66027	2.64E-03	9.56E-06	2.19E-05	9.83E-06	2.27E-05	2.7011E-03
520197.36	4259003.1	57467.10817	1.93841	0.28549	1.77764	0.28716	2.64E-03	7.94E-05	1.02E-05	7.28E-05	9.86E-06	2.8087E-03
520138.64	4258362.5	57445.63148	0.39439	4.82252	0.41414	5.68892	2.64E-03	1.61E-05	1.72E-04	1.70E-05	1.95E-04	3.0364E-03
520316.17	4259002.9	57443.95927	0.72834	0.1854	0.69238	0.19874	2.64E-03	2.98E-05	6.63E-06	2.83E-05	6.82E-06	2.7070E-03
520403.3	4258243.33	57437.01179	0.21146	0.42834	0.21728	0.45989	2.64E-03	8.66E-06	1.53E-05	8.90E-06	1.58E-05	2.6838E-03
520502	4258319	57288.18359	0.18347	0.25643	0.18321	0.27004	2.63E-03	7.51E-06	9.17E-06	7.50E-06	9.27E-06	2.6617E-03
520256.78	4259013	57287.34267	1.11932	0.22251	1.05347	0.23479	2.63E-03	4.58E-05	7.96E-06	4.31E-05	8.06E-06	2.7332E-03
520246.88	4259013.02	57251.41552	1.2139	0.23087	1.1389	0.24227	2.63E-03	4.97E-05	8.26E-06	4.66E-05	8.32E-06	2.7395E-03
520468.73	4258274.72	57240.25749	0.19091	0.30174	0.19222	0.3212	2.63E-03	7.82E-06	1.08E-05	7.87E-06	1.10E-05	2.6636E-03
520395.31	4258962.77	57218.03947	0.45184	0.16331	0.43062	0.17286	2.63E-03	1.85E-05	5.84E-06	1.76E-05	5.93E-06	2.6730E-03
520040.82	4258860.86	57215.39045	4.30631	0.53134	5.92596	0.51411	2.62E-03	1.76E-04	1.90E-05	2.43E-04	1.76E-05	3.0805E-03
520266.68	4259012.98	57189.51256	1.03549	0.21458	0.97714	0.22746	2.62E-03	4.24E-05	7.68E-06	4.00E-05	7.81E-06	2.7216E-03
520062.34	4258899.72	57151.61917	9.15261	0.47684	16.05601	0.45271	2.62E-03	3.75E-04	1.71E-05	6.57E-04	1.55E-05	3.6867E-03
520345.85	4258992.85	57144.16506	0.60323	0.1742	0.57471	0.18614	2.62E-03	2.47E-05	6.23E-06	2.35E-05	6.39E-06	2.6825E-03
520504.97	4258817.3	57138.00906	0.25453	0.15681	0.24391	0.16427	2.62E-03	1.04E-05	5.61E-06	9.99E-06	5.64E-06	2.6530E-03
520445.55	4258911.95	57125.97621	0.34427	0.15732	0.32794	0.16571	2.62E-03	1.41E-05	5.63E-06	1.34E-05	5.69E-06	2.6597E-03
520365.64	4258982.82	57116.00614	0.53571	0.16875	0.51027	0.17972	2.62E-03	2.19E-05	6.04E-06	2.09E-05	6.17E-06	2.6754E-03
520014.29	4258772.79	57027.0168	2.06299	0.77295	2.5388	0.74194	2.62E-03	8.45E-05	2.76E-05	1.04E-04	2.55E-05	2.8578E-03
520236.98	4259013.03	57024.14394	1.32098	0.23962	1.23473	0.24981	2.62E-03	5.41E-05	8.57E-06	5.06E-05	8.58E-06	2.7379E-03
520334.78	4258243.12	56978.27025	0.23675	0.65181	0.24321	0.70536	2.61E-03	9.69E-06	2.33E-05	9.96E-06	2.42E-05	2.6812E-03
520496.2	4258306.51	56969.14968	0.18411	0.26413	0.18367	0.27868	2.61E-03	7.54E-06	9.45E-06	7.52E-06	9.57E-06	2.6477E-03
520276.58	4259012.97	56958.11556	0.96075	0.20708	0.90851	0.22033	2.61E-03	3.93E-05	7.41E-06	3.72E-05	7.56E-06	2.7046E-03
520486.72	4258292.44	56928.73071	0.18603	0.27648	0.18589	0.29273	2.61E-03	7.62E-06	9.89E-06	7.61E-06	1.00E-05	2.6469E-03
520217.17	4258292.75	56900.82495	0.30684	1.66126	0.32453	1.86482	2.61E-03	1.26E-05	5.94E-05	1.33E-05	6.40E-05	2.7598E-03
520413.09	4258243.36	56880.08465	0.20749	0.40571	0.21292	0.43524	2.61E-03	8.50E-06	1.45E-05	8.72E-06	1.49E-05	2.6562E-03
520052.46	4258885.65	56759.42128	6.26509	0.4925	10.47565	0.4721	2.60E-03	2.57E-04	1.76E-05	4.29E-04	1.62E-05	3.3233E-03
520227.08	4259013.05	56752.64962	1.44424	0.24898	1.34468	0.25752	2.60E-03	5.91E-05	8.91E-06	5.51E-05	8.84E-06	2.7356E-03
520177.92	4258322.63	56740.21173	0.34179	2.61419	0.36282	2.97154	2.60E-03	1.40E-05	9.35E-05	1.49E-05	1.02E-04	2.8275E-03
520536.73	4258726.93	56722.75178	0.21249	0.1645	0.20361	0.17181	2.60E-03	8.70E-06	5.88E-06	8.34E-06	5.90E-06	2.6312E-03
520421.21	4258942.04	56721.43005	0.39198	0.15964	0.374	0.16811	2.60E-03	1.60E-05	5.71E-06	1.53E-05	5.77E-06	2.6451E-03
520029.85	4258608.67	56667.42939	1.43258	3.05372	1.9179	2.54288	2.60E-03	5.87E-05	1.09E-04	7.85E-05	8.73E-05	2.9335E-03
520295.6	4258252.99	56659.44609	0.25506	0.85251	0.26283	0.9321	2.60E-03	1.04E-05	3.05E-05	1.08E-05	3.20E-05	2.6831E-03
520442.43	4258253.45	56635.37232	0.19799	0.34559	0.20163	0.36984	2.60E-03	8.11E-06	1.24E-05	8.26E-06	1.27E-05	2.6397E-03
520286.48	4259012.95	56603.10453	0.89375	0.20006	0.84663	0.21348	2.60E-03	3.66E-05	7.16E-06	3.47E-05	7.33E-06	2.6826E-03
520525.39	4258470.4	56579.49844	0.19269	0.21012	0.18965	0.2223	2.60E-03	7.89E-06	7.52E-06	7.77E-06	7.63E-06	2.6266E-03
520187.46	4259003.12	56578.65129	2.1685	0.2961	1.9769	0.29424	2.60E-03	8.88E-05	1.06E-05	8.09E-05	1.01E-05	2.7861E-03
520326.07	4259002.89	56574.51594	0.68321	0.18014	0.64997	0.19301	2.60E-03	2.80E-05	6.44E-06	2.66E-05	6.63E-06	2.6632E-03
520128.82	4258372.47	56555.99102	0.40709	5.90104	0.42745	7.00157	2.59E-03	1.67E-05	2.11E-04	1.75E-05	2.40E-04	3.0803E-03
520096.17	4258943.67	56508.48178	12.94703	0.42555	11.28113	0.39433	2.59E-03	5.30E-04	1.52E-05	4.62E-04	1.35E-05	3.6133E-03
520385.42	4258972.79	56463.61346	0.47809	0.16383	0.45538	0.17385	2.59E-03	1.96E-05	5.86E-06	1.86E-05	5.97E-06	2.6405E-03
520451.12	4258257.17	56355.49635	0.19509	0.33033	0.19811	0.3531	2.59E-03	7.99E-06	1.18E-05	8.11E-06	1.21E-05	2.6255E-03
520403.88	4258959.22	56334.2741	0.43119	0.16104	0.41093	0.17015	2.58E-03	1.77E-05	5.76E-06	1.68E-05	5.84E-06	2.6306E-03
520325	4258243.08	56327.48117	0.23987	0.69606	0.24638	0.7549	2.58E-03	9.82E-06	2.49E-05	1.01E-05	2.59E-05	2.6549E-03
520022.15	4258815.84	56318.6066	2.58888	0.62587	3.23065	0.60742	2.58E-03	1.06E-04	2.24E-05	1.32E-04	2.09E-05	2.8653E-03
520494.57	4258841.62	56295.14169	0.26894	0.15493	0.25767	0.16271	2.58E-03	1.10E-05	5.54E-06	1.06E-05	5.59E-06	2.6154E-03
520114.51	4258961.23	56289.13152	7.53376	0.40029	6.39801	0.37107	2.58E-03	3.08E-04	1.43E-05	2.62E-04	1.27E-05	3.1799E-03
520527.85	4258425.11	56268.26537	0.18626	0.21487	0.18411	0.22688	2.58E-03	7.63E-06	7.69E-06	7.54E-06	7.79E-06	2.6121E-03
520217.18	4259013.07	56244.0665	1.58544	0.25856	1.46932	0.26502	2.58E-03	6.49E-05	9.25E-06	6.02E-05	9.10E-06	2.7238E-03
520017.12	4258655.32	56220.07633	1.49953	1.78457	1.91759	1.59487	2.58E-03	6.14E-05	6.38E-05	7.85E-05	5.48E-05	2.8378E-03
520187.74	4258312.66	56218.8975	0.32981	2.30899	0.35	2.61994	2.58E-03	1.35E-05	8.26E-05	1.43E-05	8.99E-05	2.7796E-03
520541.44	4258691.73	56204.97161	0.20425	0.16927	0.1962	0.17699	2.58E-03	8.36E-06	6.05E-06	8.03E-06	6.08E-06	2.6071E-03
520009.76	4258737.74	56175.10011	1.73775	0.94156	2.1517	0.88881	2.58E-03	7.12E-05	3.37E-05	8.81E-05	3.05E-05	2.8006E-03
520422.88	4258243.39	56172.08589	0.20348	0.38482	0.20847	0.41246	2.58E-03	8.33E-06	1.38E-05	8.54E-06	1.42E-05	2.6219E-03
520477.51	4258278.48	56169.30548	0.18759	0.2897	0.18836	0.30766	2.58E-03	7.68E-06	1.04E-05	7.71E-06	1.06E-05	2.6133E-03
520140.2	4258981.82	56165.98561	4.34414	0.36245	3.79007	0.34134	2.58E-03	1.78E-04	1.30E-05	1.55E-04	1.17E-05	2.9345E-03
520296.38	4259012.93	56125.70219	0.83337	0.19342	0.79036	0.20686	2.57E-03	3.41E-05	6.92E-06	3.24E-05	7.10E-06	2.6554E-03
520246.59	4258272.84	56061.10856	0.28294	1.25953	0.29629	1.39954	2.57E-03	1.16E-05	4.51E-05	1.21E-05	4.80E-05	2.6888E-03
520266.2	4258262.9	56042.30271	0.27034	1.06788	0.28096	1.17907	2.57E-03	1.11E-05	3.82E-05	1.15E-05	4.05E-05	2.6724E-03
520438.86	4258924.73	56006.34258	0.35714	0.1567	0.34002	0.16499	2.57E-03	1.46E-05	5.60E-06	1.39E-05	5.66E-06	2.6093E-03
520027.5	4258835.38	55982.13246	2.99278	0.57601	3.78373	0.56023	2.57E-03	1.23E-04	2.06E-05	1.55E-04	1.92E-05	2.8856E-03
520471.93	4258881.01	55924.82844	0.30168	0.15418	0.28811	0.16239	2.57E-03	1.24E-05	5.51E-06	1.18E-05	5.58E-06	2.6010E-03
520010.73	4258691.86	55892.38768	1.54426	1.2899	1.92483	1.18653	2.56E-03	6.32E-05	4.61E-05	7.88E-05	4.07E-05	2.7931E-03
520522.98	4258368.03	55888.84787	0.18117	0.22714	0.18075	0.24003	2.56E-03	7.42E-06	8.12E-06	7.40E-06	8.24E-06	2.5953E-03
520355.75	4258992.84	55884.57771	0.56853	0.1696	0.54154	0.18097	2.56E-03	2.33E-05	6.07E-06	2.22E-05	6.21E-06	2.6216E-03
520459.82	4258260.89	55857.72888	0.19207	0.31623	0.19446	0.33753	2.56E-03	7.86E-06	1.13E-05	7.96E-06	1.16E-05	2.6014E-03
520042.28	4258871.46	55845.68983	4.50945	0.50857	6.33086	0.49178	2.56E-03	1.85E-04	1.82E-05	2.59E-04	1.69E-05	3.0410E-03
520462.83	4258894.79	55775.2243	0.31583	0.15447	0.30126	0.16271	2.56E-03	1.29E-05	5.53E-06	1.23E-05	5.59E-06	2.5952E-03
520518.38	4258794.68	55761.86858	0.23802	0.15701	0.22817	0.16401	2.56E-03	9.75E-06	5.62E-06	9.34E-06	5.63E-06	2.5886E-03
520481.26	4258867.14	55716.15816	0.28792	0.15387	0.27535	0.16195	2.56E-03	1.18E-05	5.50E-06	1.13E-05	5.56E-06	2.5903E-03
520521.96	4258786.15	55683.61827	0.23349	0.15761	0.22381	0.16451	2.55E-03	9.56E-06	5.64E-06	9.16E-06	5.65E-06	2.5847E-03
520207.27	4259013.08	55651.95105	1.75042	0.26854	1.61422	0.27242	2.55E-03	7.17E-05	9.61E-06	6.61E-05	9.35E-06	2.7099E-03
520018.48	4258807	55645.58616	2.35913	0.64839	2.92373	0.62813	2.55E-03	9.66E-05	2.32E-05	1.20E-04	2.16E-05	2.8140E-03
520526.99	4258389.78	55638.43616	0.18219	0.22021	0.18091	0.23285	2.55E-03	7.46E-06	7.88E-06	7.41E-06	7.99E-06	2.5833E-03
520540.35	4258718.28	55618.53092	0.20849	0.16438	0.19984	0.17181	2.55E-03	8.54E-06	5.88E-06	8.18E-06	5.90E-06	2.5802E-03
520335.97	4259002.87	55598.81809	0.64192	0.17515	0.61089	0.1875	2.55E-03	2.63E-05	6.26E-06	2.50E-05	6.44E-06	2.6148E-03
520177.55	4259003.13	55588.47438	2.44821	0.30651	2.21714	0.30078	2.55E-03	1.00E-04	1.10E-05	9.08E-05	1.03E-05	2.7626E-03
520375.54	4258982.8	55565.28695	0.50624	0.16449	0.48213	0.17492	2.55E-03	2.07E-05	5.88E-06	1.97E-05	6.01E-06	2.6016E-03
520315.21	4258243.05	55525.25621	0.2428	0.74472	0.24959	0.80954	2.55E-03	9.94E-06	2.66E-05	1.02E-05	2.78E-05	2.6220E-03
520226.98	4258282.78	55518.47751	0.29511	1.51092	0.31148	1.68898	2.55E-03	1.21E-05	5.40E-05	1.28E-05	5.80E-05	2.6839E-03
520525.53	4258777.61	55515.6609	0.22904	0.15822	0.21954	0.16501	2.55E-03	9.38E-06	5.66E-06	8.99E-06	5.66E-06	2.5766E-03
520503.84	4258827.77	55510.17626	0.25702	0.15461	0.24633	0.16206	2.55E-03	1.05E-05	5.53E-06	1.01E-05	5.56E-06	2.5784E-03
520285.81	4258252.96	55497.129	0.25772	0.91819	0.26636	1.0069	2.55E-03	1.06E-05	3.28E-05	1.09E-05	3.46E-05	2.6350E-03
520306.28	4259012.92	55495.69075	0.77868	0.18721	0.73908	0.20051	2.55E-03	3.19E-05	6.70E-06	3.03E-05	6.88E-06	2.6218E-03
520010.58	4258763.83	55469.08837	1.87321	0.80399	2.29964	0.76835	2.54E-03	7.67E-05	2.88E-05	9.42E-05	2.64E-05	2.7708E-03
520525.94	4258379.31	55462.46055	0.1813	0.22262	0.18041	0.23539	2.54E-03	7.42E-06	7.96E-06	7.39E-06	8.08E-06	2.5754E-03
520197.56	4258302.69	55432.80448	0.31796	2.05783	0.33726	2.32715	2.54E-03	1.30E-05	7.36E-05	1.38E-05	7.99E-05	2.7235E-03
520087.24	4258939.98	55367.98779	15.32321	0.42726	17.03636	0.39759	2.54E-03	6.27E-04	1.53E-05	6.98E-04	1.36E-05	3.8940E-03
520412.45	4258955.67	55344.17464	0.41174	0.15883	0.39257	0.16753	2.54E-03	1.69E-05	5.68E-06	1.61E-05	5.75E-06	2.5834E-03
520521.76	4258357.5	55324.42432	0.18021	0.23006	0.18009	0.24282	2.54E-03	7.38E-06	8.23E-06	7.37E-06	8.34E-06	2.5695E-03
520105.65	4258957.57	55319.85693	9.63781	0.40572	8.17073	0.37565	2.54E-03	3.95E-04	1.45E-05	3.35E-04	1.29E-05	3.2945E-03
520373.97	4258233.24	55318.88772	0.21842	0.51246	0.22482	0.5506	2.54E-03	8.94E-06	1.83E-05	9.21E-06	1.89E-05	2.5933E-03
520495.6	4258296.23	55272.70413	0.1826	0.26582	0.18222	0.28077	2.54E-03	7.48E-06	9.51E-06	7.46E-06	9.64E-06	2.5699E-03
520432.67	4258243.42	55269.35837	0.19939	0.36562	0.20396	0.39142	2.54E-03	8.16E-06	1.31E-05	8.35E-06	1.34E-05	2.5787E-03
520383.76	4258233.27	55265.3729	0.21493	0.48337	0.2213	0.51882	2.54E-03	8.80E-06	1.73E-05	9.06E-06	1.78E-05	2.5884E-03
520490.86	4258853.16	55255.76993	0.27458	0.15351	0.26297	0.16135	2.54E-03	1.12E-05	5.49E-06	1.08E-05	5.54E-06	2.5681E-03
520429.85	4258938.46	55255.44435	0.37515	0.15663	0.35708	0.16493	2.54E-03	1.54E-05	5.60E-06	1.46E-05	5.66E-06	2.5763E-03
520453.93	4258908.48	55247.95448	0.33032	0.15458	0.31475	0.16278	2.53E-03	1.35E-05	5.53E-06	1.29E-05	5.59E-06	2.5722E-03
520529.1	4258769.08	55240.90524	0.22471	0.15862	0.21529	0.16535	2.53E-03	9.20E-06	5.67E-06	8.81E-06	5.68E-06	2.5637E-03
520364.18	4258233.21	55211.0645	0.22178	0.54404	0.22814	0.5852	2.53E-03	9.08E-06	1.95E-05	9.34E-06	2.01E-05	2.5909E-03
520059.48	4258521.27	55174.71735	0.9535	13.20721	1.12797	7.76162	2.53E-03	3.90E-05	4.72E-04	4.62E-05	2.66E-04	3.3554E-03
520119	4258382.44	55120.09386	0.41956	7.43683	0.44093	8.97942	2.53E-03	1.72E-05	2.66E-04	1.81E-05	3.08E-04	3.1383E-03
520393.55	4258233.3	55114.21399	0.21142	0.45643	0.21761	0.4896	2.53E-03	8.66E-06	1.63E-05	8.91E-06	1.68E-05	2.5792E-03
520468.51	4258264.61	55109.86718	0.18895	0.30334	0.19076	0.32313	2.53E-03	7.74E-06	1.09E-05	7.81E-06	1.11E-05	2.5658E-03
520053.57	4258896.1	55084.76948	6.56251	0.47211	11.38423	0.45235	2.53E-03	2.69E-04	1.69E-05	4.66E-04	1.55E-05	3.2944E-03
520486.29	4258282.24	55030.58841	0.18437	0.27804	0.18457	0.29473	2.52E-03	7.55E-06	9.95E-06	7.56E-06	1.01E-05	2.5599E-03
520029	4258845.99	55001.34692	3.1306	0.54959	3.98	0.5349	2.52E-03	1.28E-04	1.97E-05	1.63E-04	1.84E-05	2.8525E-03
520197.37	4259013.1	54961.07069	1.94523	0.27872	1.78424	0.27955	2.52E-03	7.96E-05	9.97E-06	7.31E-05	9.60E-06	2.6938E-03
520354.39	4258233.18	54959.24128	0.22502	0.57832	0.23131	0.62295	2.52E-03	9.21E-06	2.07E-05	9.47E-06	2.14E-05	2.5822E-03
520505.18	4258310.35	54854.16267	0.18056	0.25398	0.18014	0.26745	2.52E-03	7.39E-06	9.08E-06	7.38E-06	9.18E-06	2.5496E-03
520532.68	4258760.54	54852.46608	0.22041	0.15897	0.21111	0.16565	2.52E-03	9.02E-06	5.69E-06	8.64E-06	5.69E-06	2.5456E-03
520014.81	4258798.15	54823.22833	2.16152	0.67172	2.65239	0.64943	2.52E-03	8.85E-05	2.40E-05	1.09E-04	2.23E-05	2.7586E-03
520403.34	4258233.33	54819.42834	0.20782	0.43155	0.21374	0.46267	2.52E-03	8.51E-06	1.54E-05	8.75E-06	1.59E-05	2.5636E-03
520316.18	4259012.9	54784.52835	0.72909	0.18148	0.6924	0.19451	2.51E-03	2.99E-05	6.49E-06	2.83E-05	6.68E-06	2.5848E-03
520121.9	4258974.27	54710.93677	6.33363	0.38084	5.4023	0.354	2.51E-03	2.59E-04	1.36E-05	2.21E-04	1.22E-05	3.0163E-03
520256.8	4259023	54662.35306	1.12047	0.21777	1.054	0.22938	2.51E-03	4.59E-05	7.79E-06	4.32E-05	7.87E-06	2.6125E-03
520007.81	4258708.93	54647.78964	1.54217	1.12376	1.89899	1.04523	2.51E-03	6.31E-05	4.02E-05	7.78E-05	3.59E-05	2.7241E-03
520246.89	4259023.02	54639.62011	1.21534	0.22593	1.1399	0.23661	2.51E-03	4.98E-05	8.08E-06	4.67E-05	8.12E-06	2.6194E-03
520395.32	4258972.77	54604.90258	0.45292	0.15982	0.43132	0.16931	2.51E-03	1.85E-05	5.72E-06	1.77E-05	5.81E-06	2.5529E-03
520305.42	4258243.02	54604.86763	0.24556	0.79829	0.25285	0.87001	2.51E-03	1.01E-05	2.86E-05	1.04E-05	2.99E-05	2.5840E-03
520266.7	4259022.98	54590.20778	1.03661	0.21013	0.97768	0.22238	2.50E-03	4.24E-05	7.52E-06	4.00E-05	7.63E-06	2.6021E-03
520344.6	4258233.15	54578.89585	0.22816	0.61555	0.23438	0.66424	2.50E-03	9.34E-06	2.20E-05	9.60E-06	2.28E-05	2.5677E-03
520099.33	4258412.38	54552.31934	0.47264	13.96792	0.50533	15.87652	2.50E-03	1.94E-05	5.00E-04	2.07E-05	5.45E-04	3.5875E-03
520345.87	4259002.85	54523.14052	0.60411	0.17042	0.57488	0.18222	2.50E-03	2.47E-05	6.10E-06	2.35E-05	6.26E-06	2.5620E-03
520520.73	4258347.04	54520.01029	0.17911	0.23288	0.17916	0.24542	2.50E-03	7.33E-06	8.33E-06	7.34E-06	8.43E-06	2.5327E-03
520365.65	4258992.82	54507.92984	0.53664	0.16516	0.51078	0.176	2.50E-03	2.20E-05	5.91E-06	2.09E-05	6.04E-06	2.5556E-03
520167.65	4259003.15	54485.89842	2.79117	0.31631	2.5094	0.30656	2.50E-03	1.14E-04	1.13E-05	1.03E-04	1.05E-05	2.7386E-03
520256.41	4258262.87	54482.89744	0.27229	1.16089	0.28441	1.2857	2.50E-03	1.11E-05	4.15E-05	1.16E-05	4.41E-05	2.6080E-03
520207.38	4258292.72	54451.92118	0.3064	1.84843	0.32475	2.08181	2.50E-03	1.25E-05	6.61E-05	1.33E-05	7.15E-05	2.6616E-03
520236.99	4259023.03	54447.17011	1.32274	0.23444	1.23629	0.24387	2.50E-03	5.42E-05	8.39E-06	5.06E-05	8.37E-06	2.6195E-03
520043.6	4258882	54423.00133	4.72261	0.48716	6.74383	0.47085	2.50E-03	1.93E-04	1.74E-05	2.76E-04	1.62E-05	2.9999E-03
520513.42	4258813.8	54385.6573	0.24537	0.15417	0.23519	0.16129	2.50E-03	1.00E-05	5.51E-06	9.63E-06	5.54E-06	2.5258E-03
520276.6	4259022.97	54374.10246	0.96175	0.20285	0.90894	0.21552	2.49E-03	3.94E-05	7.26E-06	3.72E-05	7.40E-06	2.5858E-03
520543.97	4258709.63	54368.80228	0.2046	0.16427	0.19622	0.17176	2.49E-03	8.38E-06	5.88E-06	8.03E-06	5.90E-06	2.5225E-03
520031.77	4258857.13	54357.61776	3.38104	0.52581	4.35564	0.51165	2.49E-03	1.38E-04	1.88E-05	1.78E-04	1.76E-05	2.8470E-03
520536.25	4258752.01	54349.70991	0.21625	0.15928	0.20709	0.16598	2.49E-03	8.85E-06	5.70E-06	8.48E-06	5.70E-06	2.5222E-03
520413.12	4258233.36	54347.69065	0.20411	0.40866	0.20973	0.43783	2.49E-03	8.36E-06	1.46E-05	8.59E-06	1.50E-05	2.5400E-03
520158.59	4258999.41	54327.38081	3.18476	0.32825	2.83982	0.31484	2.49E-03	1.30E-04	1.17E-05	1.16E-04	1.08E-05	2.7617E-03
520096.8	4258953.92	54322.69424	12.70579	0.40919	11.03961	0.37943	2.49E-03	5.20E-04	1.46E-05	4.52E-04	1.30E-05	3.4921E-03
520276.02	4258252.93	54249.92706	0.26014	0.99152	0.26989	1.09085	2.49E-03	1.07E-05	3.55E-05	1.11E-05	3.74E-05	2.5835E-03
520531.25	4258434.03	54248.55186	0.18542	0.21086	0.18309	0.22255	2.49E-03	7.59E-06	7.54E-06	7.50E-06	7.64E-06	2.5191E-03
520442.46	4258243.45	54243.46305	0.19532	0.3478	0.19942	0.3719	2.49E-03	8.00E-06	1.24E-05	8.17E-06	1.28E-05	2.5300E-03
520058.31	4258908.05	54223.42773	7.86047	0.45494	16.71729	0.43408	2.49E-03	3.22E-04	1.63E-05	6.84E-04	1.49E-05	3.5252E-03
520421.02	4258952.12	54217.64144	0.39358	0.15653	0.37527	0.16489	2.49E-03	1.61E-05	5.60E-06	1.54E-05	5.66E-06	2.5301E-03
520227.09	4259023.05	54209.21421	1.4462	0.24354	1.34675	0.25127	2.49E-03	5.92E-05	8.71E-06	5.51E-05	8.63E-06	2.6187E-03
520447.57	4258921.12	54177.8653	0.34171	0.15389	0.32539	0.16199	2.49E-03	1.40E-05	5.50E-06	1.33E-05	5.56E-06	2.5240E-03
520477.2	4258268.34	54173.86173	0.18577	0.29126	0.18704	0.30959	2.49E-03	7.61E-06	1.04E-05	7.66E-06	1.06E-05	2.5217E-03
520236.8	4258272.81	54163.88751	0.28409	1.38047	0.29908	1.53797	2.48E-03	1.16E-05	4.94E-05	1.22E-05	5.28E-05	2.6110E-03

520187.47	4259013.12	54119.0162	2.17614	0.28876	1.98433	0.28616	2.48E-03	8.91E-05	1.03E-05	8.12E-05	9.82E-06	2.6734E-03
520334.82	4258233.12	54078.7613	0.23118	0.65604	0.23742	0.70947	2.48E-03	9.47E-06	2.35E-05	9.72E-06	2.44E-05	2.5480E-03
520451.08	4258247.14	54075.35954	0.19268	0.33234	0.19616	0.35514	2.48E-03	7.89E-06	1.19E-05	8.03E-06	1.22E-05	2.5209E-03
520149.52	4258995.67	54073.61223	3.68338	0.33976	3.25293	0.32266	2.48E-03	1.51E-04	1.22E-05	1.33E-04	1.11E-05	2.7880E-03
520286.5	4259022.95	54042.35966	0.89464	0.196	0.84688	0.2089	2.48E-03	3.66E-05	7.01E-06	3.47E-05	7.17E-06	2.5648E-03
520326.08	4259012.89	54010.12892	0.68405	0.17624	0.64992	0.18888	2.48E-03	2.80E-05	6.30E-06	2.66E-05	6.48E-06	2.5453E-03
520531.6	4258409.1	53984.24051	0.18228	0.21374	0.18035	0.22572	2.48E-03	7.46E-06	7.65E-06	7.38E-06	7.75E-06	2.5069E-03
520017.12	4258646.05	53967.56951	1.41155	1.90682	1.80477	1.69131	2.48E-03	5.78E-05	6.82E-05	7.39E-05	5.81E-05	2.7339E-03
520385.44	4258982.79	53916.18569	0.479	0.16041	0.45612	0.17033	2.47E-03	1.96E-05	5.74E-06	1.87E-05	5.85E-06	2.5234E-03
520471.28	4258891.29	53848.75812	0.30366	0.15188	0.28986	0.15991	2.47E-03	1.24E-05	5.43E-06	1.19E-05	5.49E-06	2.5057E-03
520011.14	4258789.3	53805.49525	1.98003	0.69627	2.41165	0.67137	2.47E-03	8.11E-05	2.49E-05	9.87E-05	2.30E-05	2.6963E-03
520403.83	4258969.25	53790.40734	0.43242	0.15764	0.41177	0.16672	2.47E-03	1.77E-05	5.64E-06	1.69E-05	5.72E-06	2.5137E-03
520217.19	4259023.07	53787.7566	1.58822	0.25283	1.47242	0.25845	2.47E-03	6.50E-05	9.04E-06	6.03E-05	8.87E-06	2.6109E-03
520480.45	4258877.48	53759.34302	0.29009	0.1515	0.27721	0.15947	2.47E-03	1.19E-05	5.42E-06	1.14E-05	5.47E-06	2.5005E-03
520112.75	4258970.5	53737.75876	7.87503	0.38687	6.6966	0.35868	2.47E-03	3.22E-04	1.38E-05	2.74E-04	1.23E-05	3.0882E-03
520422.91	4258233.39	53728.94688	0.20035	0.38751	0.20559	0.41486	2.46E-03	8.20E-06	1.39E-05	8.42E-06	1.42E-05	2.5097E-03
520539.82	4258743.47	53721.31583	0.21222	0.15953	0.20323	0.1663	2.46E-03	8.69E-06	5.71E-06	8.32E-06	5.71E-06	2.4931E-03
520005.99	4258728.64	53703.78316	1.57224	0.97872	1.92789	0.91919	2.46E-03	6.44E-05	3.50E-05	7.89E-05	3.16E-05	2.6737E-03
520459.7	4258250.83	53677.71601	0.18987	0.31812	0.19276	0.33954	2.46E-03	7.77E-06	1.14E-05	7.89E-06	1.17E-05	2.5013E-03
520295.63	4258242.99	53604.11725	0.24818	0.85747	0.2562	0.93728	2.46E-03	1.02E-05	3.07E-05	1.05E-05	3.22E-05	2.5428E-03
520438.49	4258934.88	53602.84072	0.35876	0.15396	0.34145	0.16204	2.46E-03	1.47E-05	5.51E-06	1.40E-05	5.56E-06	2.4989E-03
520296.4	4259022.93	53596.15361	0.83417	0.18953	0.79051	0.2025	2.46E-03	3.42E-05	6.78E-06	3.24E-05	6.95E-06	2.5391E-03
520495.06	4258285.99	53585.14354	0.18108	0.26734	0.1809	0.28274	2.46E-03	7.41E-06	9.56E-06	7.41E-06	9.71E-06	2.4925E-03
520519.84	4258336.65	53573.26708	0.17792	0.23549	0.17797	0.2478	2.46E-03	7.28E-06	8.42E-06	7.29E-06	8.51E-06	2.4893E-03
520006.86	4258754.86	53564.82096	1.68996	0.83626	2.07927	0.79457	2.46E-03	6.92E-05	2.99E-05	8.51E-05	2.73E-05	2.6690E-03
520462.31	4258905.01	53542.38223	0.31757	0.15204	0.30277	0.16007	2.46E-03	1.30E-05	5.44E-06	1.24E-05	5.50E-06	2.4928E-03
520531.22	4258459.82	53523.11921	0.18823	0.2074	0.18542	0.2191	2.46E-03	7.71E-06	7.42E-06	7.59E-06	7.52E-06	2.4858E-03
520489.86	4258863.58	53430.41337	0.27695	0.15123	0.26504	0.15902	2.45E-03	1.13E-05	5.41E-06	1.09E-05	5.46E-06	2.4843E-03
520325.03	4258233.08	53424.24383	0.23403	0.7004	0.24045	0.75921	2.45E-03	9.58E-06	2.51E-05	9.85E-06	2.61E-05	2.5215E-03
520148.49	4258342.53	53417.9575	0.36086	4.0575	0.37792	4.73336	2.45E-03	1.48E-05	1.45E-04	1.55E-05	1.63E-04	2.7886E-03
520504.47	4258300.03	53400.32952	0.17918	0.25584	0.1787	0.26961	2.45E-03	7.34E-06	9.15E-06	7.32E-06	9.26E-06	2.4830E-03
520355.77	4259002.84	53346.95439	0.56936	0.16596	0.54173	0.1772	2.45E-03	2.33E-05	5.94E-06	2.22E-05	6.08E-06	2.5050E-03
520087.95	4258950.27	53298.27414	16.50572	0.41077	16.44111	0.38246	2.45E-03	6.76E-04	1.47E-05	6.73E-04	1.31E-05	3.8220E-03
520217.2	4258282.75	53276.37	0.29508	1.6721	0.31255	1.87362	2.44E-03	1.21E-05	5.98E-05	1.28E-05	6.43E-05	2.5932E-03
520207.29	4259023.08	53274.97654	1.75388	0.26248	1.61844	0.26552	2.44E-03	7.18E-05	9.39E-06	6.63E-05	9.12E-06	2.6007E-03
520033.34	4258867.77	53249.14449	3.53878	0.50332	4.61327	0.4897	2.44E-03	1.45E-04	1.80E-05	1.89E-04	1.68E-05	2.8116E-03
520039.69	4258569.84	53207.87675	1.2109	4.86356	1.59274	3.7197	2.44E-03	4.96E-05	1.74E-04	6.52E-05	1.28E-04	2.8575E-03
520177.57	4259013.13	53197.21512	2.45643	0.29855	2.22534	0.29226	2.44E-03	1.01E-04	1.07E-05	9.11E-05	1.00E-05	2.6530E-03
520485.9	4258272.06	53194.3661	0.18273	0.27909	0.18331	0.29628	2.44E-03	7.48E-06	9.98E-06	7.51E-06	1.02E-05	2.4756E-03
520168.13	4258322.6	53169.01698	0.33731	3.00231	0.35601	3.42576	2.44E-03	1.38E-05	1.07E-04	1.46E-05	1.18E-04	2.6927E-03
520335.99	4259012.87	53096.19728	0.64271	0.17135	0.6108	0.18352	2.44E-03	2.63E-05	6.13E-06	2.50E-05	6.30E-06	2.4997E-03
520375.56	4258992.8	53059.77155	0.5071	0.16101	0.48262	0.17133	2.43E-03	2.08E-05	5.76E-06	1.98E-05	5.88E-06	2.4864E-03
520468.31	4258254.52	53043.61475	0.18692	0.30508	0.18926	0.32506	2.43E-03	7.65E-06	1.09E-05	7.75E-06	1.12E-05	2.4710E-03
520306.3	4259022.92	53027.64203	0.77944	0.18346	0.7392	0.19636	2.43E-03	3.19E-05	6.56E-06	3.03E-05	6.74E-06	2.5083E-03
520547.59	4258700.97	52990.64375	0.20083	0.16422	0.19273	0.17166	2.43E-03	8.22E-06	5.87E-06	7.89E-06	5.89E-06	2.4590E-03
520177.95	4258312.63	52979.38933	0.3264	2.6264	0.34499	2.99029	2.43E-03	1.34E-05	9.39E-05	1.41E-05	1.03E-04	2.6547E-03
520044.8	4258892.48	52967.57124	4.93667	0.46711	7.16145	0.45128	2.43E-03	2.02E-04	1.67E-05	2.93E-04	1.55E-05	2.9576E-03
520512.2	4258824.31	52963.85553	0.24788	0.15201	0.23761	0.15914	2.43E-03	1.01E-05	5.44E-06	9.73E-06	5.46E-06	2.4607E-03
520432.7	4258233.42	52952.63398	0.19652	0.36798	0.20137	0.39359	2.43E-03	8.05E-06	1.32E-05	8.24E-06	1.35E-05	2.4723E-03
520543.4	4258734.94	52949.99644	0.20826	0.15957	0.19945	0.16646	2.43E-03	8.53E-06	5.71E-06	8.17E-06	5.71E-06	2.4574E-03
520138.67	4258352.5	52933.44512	0.37227	4.84359	0.38911	5.70705	2.43E-03	1.52E-05	1.73E-04	1.59E-05	1.96E-04	2.8288E-03
520109.18	4258392.41	52924.318	0.43063	9.82729	0.4548	11.84313	2.43E-03	1.76E-05	3.52E-04	1.86E-05	4.07E-04	3.2224E-03
520029.81	4258598.97	52884.42774	1.29539	3.21443	1.71407	2.65889	2.43E-03	5.30E-05	1.15E-04	7.02E-05	9.13E-05	2.7557E-03
520266.23	4258252.9	52872.67757	0.26217	1.07409	0.27326	1.18533	2.43E-03	1.07E-05	3.84E-05	1.12E-05	4.07E-05	2.5267E-03
520429.59	4258948.58	52871.41079	0.3767	0.15374	0.35845	0.16188	2.43E-03	1.54E-05	5.50E-06	1.47E-05	5.56E-06	2.4668E-03
520412.34	4258965.73	52866.42353	0.41317	0.1555	0.39347	0.16418	2.43E-03	1.69E-05	5.56E-06	1.61E-05	5.64E-06	2.4696E-03
520499.55	4258849.56	52840.19078	0.26423	0.15082	0.25314	0.15834	2.42E-03	1.08E-05	5.39E-06	1.04E-05	5.44E-06	2.4562E-03
520246.62	4258262.84	52797.09305	0.27367	1.2669	0.28736	1.40697	2.42E-03	1.12E-05	4.53E-05	1.18E-05	4.83E-05	2.5388E-03
520103.61	4258966.72	52765.92673	10.1761	0.39125	8.69025	0.36269	2.42E-03	4.17E-04	1.40E-05	3.56E-04	1.25E-05	3.2197E-03
520383.79	4258223.27	52693.7461	0.21077	0.48693	0.21695	0.52189	2.42E-03	8.63E-06	1.74E-05	8.88E-06	1.79E-05	2.4703E-03
520374	4258223.24	52665.99325	0.21395	0.51624	0.22012	0.55382	2.42E-03	8.76E-06	1.85E-05	9.01E-06	1.90E-05	2.4715E-03
520315.24	4258233.05	52633.38288	0.23669	0.74913	0.24353	0.81401	2.41E-03	9.69E-06	2.68E-05	9.97E-06	2.79E-05	2.4891E-03
520197.39	4259023.1	52630.88976	1.94881	0.27216	1.78884	0.27222	2.41E-03	7.98E-05	9.73E-06	7.32E-05	9.35E-06	2.5867E-03
520514.15	4258314.19	52627.47405	0.17709	0.24417	0.17673	0.25678	2.41E-03	7.25E-06	8.73E-06	7.24E-06	8.82E-06	2.4465E-03
520007.47	4258780.46	52597.54505	1.81517	0.7217	2.19534	0.69373	2.41E-03	7.43E-05	2.58E-05	8.99E-05	2.38E-05	2.6269E-03
520393.58	4258223.3	52568.44161	0.20748	0.45987	0.21361	0.49248	2.41E-03	8.50E-06	1.64E-05	8.75E-06	1.69E-05	2.4623E-03
520364.21	4258223.21	52566.05598	0.21711	0.54783	0.22317	0.58863	2.41E-03	8.89E-06	1.96E-05	9.14E-06	2.02E-05	2.4695E-03
520059.43	4258918.51	52537.50618	8.30808	0.4369	18.78784	0.41671	2.41E-03	3.40E-04	1.56E-05	7.69E-04	1.43E-05	3.5497E-03
520285.84	4258242.96	52495.07635	0.25056	0.92333	0.25955	1.01236	2.41E-03	1.03E-05	3.30E-05	1.06E-05	3.48E-05	2.4970E-03
520187.77	4258302.66	52447.34572	0.31536	2.32254	0.3339	2.63168	2.41E-03	1.29E-05	8.31E-05	1.37E-05	9.03E-05	2.6062E-03
520403.37	4258223.33	52371.39693	0.20418	0.43471	0.2101	0.46538	2.40E-03	8.36E-06	1.55E-05	8.60E-06	1.60E-05	2.4512E-03
520456.29	4258917.51	52369.84253	0.32732	0.15115	0.3118	0.15907	2.40E-03	1.34E-05	5.41E-06	1.28E-05	5.46E-06	2.4397E-03
520049.56	4258540.7	52344.02875	1.03533	7.62916	1.2709	5.3466	2.40E-03	4.24E-05	2.73E-04	5.20E-05	1.84E-04	2.9523E-03
520534.94	4258417.86	52330.15172	0.18154	0.20985	0.17939	0.22144	2.40E-03	7.43E-06	7.51E-06	7.34E-06	7.60E-06	2.4307E-03
520354.42	4258223.18	52305.21392	0.22013	0.58213	0.22611	0.62656	2.40E-03	9.01E-06	2.08E-05	9.26E-06	2.15E-05	2.4603E-03
520316.2	4259022.9	52304.18117	0.72959	0.17776	0.6922	0.19046	2.40E-03	2.99E-05	6.36E-06	2.83E-05	6.54E-06	2.4707E-03
520476.93	4258258.21	52259.10792	0.18393	0.29283	0.1857	0.31146	2.40E-03	7.53E-06	1.05E-05	7.60E-06	1.07E-05	2.4338E-03
520015.13	4258823.02	52252.81191	2.24438	0.59076	2.73789	0.57439	2.40E-03	9.19E-05	2.11E-05	1.12E-04	1.97E-05	2.6421E-03
520049.2	4258904.29	52229.04617	5.72055	0.45004	8.91349	0.43333	2.40E-03	2.34E-04	1.61E-05	3.65E-04	1.49E-05	3.0263E-03
520256.81	4259033	52187.50346	1.12134	0.21323	1.05434	0.2242	2.39E-03	4.59E-05	7.63E-06	4.32E-05	7.70E-06	2.4987E-03
520534.65	4258442.96	52161.93531	0.18452	0.20707	0.18201	0.21849	2.39E-03	7.56E-06	7.41E-06	7.45E-06	7.50E-06	2.4230E-03
520266.71	4259032.98	52161.39039	1.03758	0.20588	0.97815	0.21753	2.39E-03	4.25E-05	7.36E-06	4.00E-05	7.47E-06	2.4904E-03
520531.95	4258371.87	52160.98345	0.17731	0.21829	0.17651	0.23064	2.39E-03	7.26E-06	7.81E-06	7.23E-06	7.92E-06	2.4233E-03
520227.02	4258272.78	52160.46211	0.2845	1.51982	0.30077	1.69736	2.39E-03	1.16E-05	5.44E-05	1.23E-05	5.83E-05	2.5296E-03
520246.91	4259033.02	52158.56943	1.2162	0.22111	1.14031	0.23112	2.39E-03	4.98E-05	7.91E-06	4.67E-05	7.93E-06	2.5053E-03
520395.34	4258982.77	52155.39248	0.45387	0.15639	0.43183	0.16583	2.39E-03	1.86E-05	5.59E-06	1.77E-05	5.69E-06	2.4403E-03
520167.67	4259013.15	52150.79861	2.79852	0.30764	2.51735	0.29757	2.39E-03	1.15E-04	1.10E-05	1.03E-04	1.02E-05	2.6315E-03
520442.49	4258233.45	52104.8772	0.19273	0.34973	0.1971	0.37383	2.39E-03	7.89E-06	1.25E-05	8.07E-06	1.28E-05	2.4318E-03
520345.89	4259012.85	52085.90549	0.60481	0.1668	0.57493	0.17845	2.39E-03	2.48E-05	5.97E-06	2.35E-05	6.13E-06	2.4500E-03
520365.67	4259002.82	52077.93488	0.53737	0.16171	0.51118	0.17242	2.39E-03	2.20E-05	5.78E-06	2.09E-05	5.92E-06	2.4439E-03
520034.75	4258878.34	52059.04821	3.69518	0.48221	4.86576	0.46908	2.39E-03	1.51E-04	1.72E-05	1.99E-04	1.61E-05	2.7722E-03
520546.97	4258726.4	52046.27685	0.20442	0.15946	0.1958	0.16649	2.39E-03	8.37E-06	5.70E-06	8.02E-06	5.72E-06	2.4156E-03
520020.34	4258842.42	52037.74906	2.5567	0.54539	3.15349	0.53178	2.39E-03	1.05E-04	1.95E-05	1.29E-04	1.83E-05	2.6590E-03
520237.01	4259033.03	52027.95404	1.32402	0.22943	1.23738	0.23813	2.39E-03	5.42E-05	8.21E-06	5.07E-05	8.18E-06	2.5082E-03
520128.85	4258362.47	52024.00474	0.38325	5.92358	0.40067	7.02607	2.39E-03	1.57E-05	2.12E-04	1.64E-05	2.41E-04	2.8719E-03
520530.6	4258361.28	51965.60785	0.17651	0.22109	0.17608	0.23341	2.38E-03	7.23E-06	7.91E-06	7.21E-06	8.01E-06	2.4144E-03
520451.47	4258237.29	51960.31983	0.19014	0.33347	0.19395	0.35623	2.38E-03	7.79E-06	1.19E-05	7.94E-06	1.22E-05	2.4237E-03
520276.61	4259032.97	51959.98386	0.96259	0.19884	0.90928	0.21094	2.38E-03	3.94E-05	7.11E-06	3.72E-05	7.24E-06	2.4748E-03
520158.68	4259009.44	51954.89706	3.17876	0.31851	2.83875	0.30509	2.38E-03	1.30E-04	1.14E-05	1.16E-04	1.05E-05	2.6518E-03
520413.16	4258223.36	51938.97954	0.20068	0.41164	0.20641	0.44032	2.38E-03	8.22E-06	1.47E-05	8.45E-06	1.51E-05	2.4294E-03
520503.84	4258289.75	51937.56694	0.17777	0.25747	0.17738	0.27163	2.38E-03	7.28E-06	9.21E-06	7.26E-06	9.33E-06	2.4159E-03
520447.13	4258931.31	51935.67111	0.34331	0.15129	0.32681	0.15918	2.38E-03	1.41E-05	5.41E-06	1.34E-05	5.46E-06	2.4210E-03
520494.59	4258275.78	51930.65186	0.17954	0.26867	0.17968	0.28452	2.38E-03	7.35E-06	9.61E-06	7.36E-06	9.77E-06	2.4166E-03
520094.46	4258962.95	51925.37528	13.68566	0.39444	12.14811	0.36641	2.38E-03	5.60E-04	1.41E-05	4.97E-04	1.26E-05	3.4667E-03
520479.72	4258887.79	51889.70253	0.29201	0.14953	0.27916	0.15731	2.38E-03	1.20E-05	5.35E-06	1.14E-05	5.40E-06	2.4147E-03
520019.93	4258628.11	51863.93831	1.32087	2.24134	1.70421	1.94819	2.38E-03	5.41E-05	8.02E-05	6.98E-05	6.69E-05	2.6503E-03
520344.64	4258223.15	51860.30452	0.22294	0.61948	0.22897	0.66789	2.38E-03	9.13E-06	2.22E-05	9.37E-06	2.29E-05	2.4428E-03
520187.49	4259023.12	51854.65768	2.18105	0.2817	1.99037	0.27846	2.38E-03	8.93E-05	1.01E-05	8.15E-05	9.56E-06	2.5694E-03
520420.85	4258962.2	51829.59005	0.39513	0.15333	0.37623	0.16164	2.38E-03	1.62E-05	5.48E-06	1.54E-05	5.55E-06	2.4205E-03
520113.27	4258980.7	51821.79389	7.89723	0.37383	6.66998	0.34655	2.38E-03	3.23E-04	1.34E-05	2.73E-04	1.19E-05	2.9992E-03
520197.59	4258292.69	51804.50569	0.30468	2.07052	0.32281	2.33741	2.38E-03	1.25E-05	7.41E-05	1.32E-05	8.02E-05	2.5567E-03
520007.12	4258683.15	51795.19095	1.37204	1.32904	1.6948	1.21691	2.38E-03	5.62E-05	4.75E-05	6.94E-05	4.18E-05	2.5911E-03
520525.4	4258801.87	51774.07296	0.23236	0.15207	0.22269	0.15879	2.38E-03	9.51E-06	5.44E-06	9.12E-06	5.45E-06	2.4048E-03
520227.11	4259033.05	51773.26276	1.44734	0.23812	1.3476	0.24511	2.38E-03	5.93E-05	8.52E-06	5.52E-05	8.41E-06	2.5066E-03
520470.69	4258901.54	51771.97826	0.3054	0.14951	0.29135	0.15734	2.38E-03	1.25E-05	5.35E-06	1.19E-05	5.40E-06	2.4104E-03
520305.45	4258233.02	51756.46872	0.23922	0.80275	0.24669	0.8747	2.37E-03	9.79E-06	2.87E-05	1.01E-05	3.00E-05	2.4531E-03
520534.32	4258382.9	51728.63554	0.17759	0.2147	0.17634	0.22687	2.37E-03	7.27E-06	7.68E-06	7.22E-06	7.79E-06	2.4032E-03
520528.93	4258793.43	51719.30066	0.22807	0.15266	0.21857	0.15929	2.37E-03	9.34E-06	5.46E-06	8.95E-06	5.47E-06	2.4020E-03
520149.69	4259005.73	51684.17746	3.65988	0.32897	3.24065	0.31221	2.37E-03	1.50E-04	1.18E-05	1.33E-04	1.07E-05	2.6762E-03
520286.51	4259032.95	51649.89643	0.89537	0.19214	0.84701	0.20452	2.37E-03	3.67E-05	6.87E-06	3.47E-05	7.02E-06	2.4548E-03
520003.14	4258745.9	51643.42803	1.54648	0.86765	1.88355	0.82097	2.37E-03	6.33E-05	3.10E-05	7.71E-05	2.82E-05	2.5690E-03
520488.97	4258873.96	51642.74893	0.27914	0.14893	0.26693	0.15663	2.37E-03	1.14E-05	5.33E-06	1.09E-05	5.38E-06	2.4023E-03
520460.45	4258241.14	51603.4084	0.18738	0.31853	0.19063	0.33991	2.37E-03	7.67E-06	1.14E-05	7.81E-06	1.17E-05	2.4060E-03
520011.5	4258814.28	51587.76101	2.06004	0.61102	2.50103	0.59283	2.37E-03	8.43E-05	2.19E-05	1.02E-04	2.04E-05	2.5957E-03
520532.46	4258785	51585.3233	0.22385	0.1533	0.21455	0.15983	2.37E-03	9.17E-06	5.48E-06	8.78E-06	5.49E-06	2.3956E-03
520326.1	4259022.89	51546.71655	0.68439	0.17253	0.6495	0.18491	2.36E-03	2.80E-05	6.17E-06	2.66E-05	6.35E-06	2.4320E-03
520529.45	4258350.78	51534.27337	0.17559	0.22377	0.1754	0.23595	2.36E-03	7.19E-06	8.00E-06	7.18E-06	8.10E-06	2.3948E-03
520385.46	4258992.79	51522.71008	0.47982	0.15705	0.45662	0.16687	2.36E-03	1.96E-05	5.62E-06	1.87E-05	5.73E-06	2.4135E-03
520551.22	4258692.32	51497.93615	0.19717	0.16419	0.18933	0.17151	2.36E-03	8.07E-06	5.87E-06	7.75E-06	5.89E-06	2.3902E-03
520017.12	4258636.77	51496.34068	1.31954	2.02975	1.68549	1.78629	2.36E-03	5.40E-05	7.26E-05	6.90E-05	6.13E-05	2.6195E-03
520022.72	4258853.39	51493.17727	2.71947	0.5215	3.3783	0.50893	2.36E-03	1.11E-04	1.87E-05	1.38E-04	1.75E-05	2.6482E-03
520511.13	4258834.76	51485.41954	0.2502	0.14979	0.23979	0.15692	2.36E-03	1.02E-05	5.36E-06	9.82E-06	5.39E-06	2.3929E-03
520485.55	4258261.89	51427.13856	0.181	0.28097	0.1821	0.29846	2.36E-03	7.41E-06	1.00E-05	7.46E-06	1.02E-05	2.3945E-03
520217.21	4259033.07	51411.27756	1.58964	0.24714	1.47397	0.252	2.36E-03	6.51E-05	8.84E-06	6.04E-05	8.65E-06	2.5016E-03
520403.79	4258979.27	51410.35652	0.43352	0.15425	0.41242	0.16329	2.36E-03	1.78E-05	5.52E-06	1.69E-05	5.61E-06	2.4044E-03
520256.44	4258252.87	51393.36114	0.26375	1.16754	0.27629	1.29228	2.36E-03	1.08E-05	4.18E-05	1.13E-05	4.44E-05	2.4661E-03
520513.34	4258303.83	51390.38429	0.1758	0.24625	0.17533	0.25902	2.36E-03	7.20E-06	8.81E-06	7.18E-06	8.89E-06	2.3898E-03
520422.94	4258223.39	51389.70531	0.19714	0.39028	0.20259	0.41718	2.36E-03	8.07E-06	1.40E-05	8.29E-06	1.43E-05	2.4023E-03
520140.71	4259002.02	51382.53332	4.29441	0.33894	3.76041	0.31895	2.36E-03	1.76E-04	1.21E-05	1.54E-04	1.09E-05	2.7102E-03
520535.99	4258776.56	51368.47685	0.21971	0.1539	0.21058	0.16032	2.36E-03	9.00E-06	5.50E-06	8.62E-06	5.50E-06	2.3853E-03
520438.16	4258945.03	51356.61052	0.36031	0.15123	0.34285	0.15913	2.36E-03	1.48E-05	5.41E-06	1.40E-05	5.46E-06	2.3958E-03
520334.85	4258223.12	51355.84737	0.22573	0.66005	0.23186	0.71333	2.36E-03	9.24E-06	2.36E-05	9.49E-06	2.45E-05	2.4229E-03
520004.25	4258700.34	51337.42457	1.38572	1.16109	1.69441	1.07433	2.36E-03	5.67E-05	4.15E-05	6.94E-05	3.69E-05	2.5598E-03
520276.05	4258242.93	51285.56373	0.25264	0.99701	0.26282	1.09652	2.35E-03	1.03E-05	3.57E-05	1.08E-05	3.76E-05	2.4473E-03
520296.42	4259032.93	51231.94341	0.83473	0.18577	0.79036	0.19827	2.35E-03	3.42E-05	6.64E-06	3.24E-05	6.81E-06	2.4304E-03
520498.46	4258860.02	51218.71692	0.26657	0.14867	0.25531	0.15615	2.35E-03	1.09E-05	5.32E-06	1.05E-05	5.36E-06	2.3819E-03
520003.81	4258771.61	51181.73719	1.66241	0.7483	2.002	0.71654	2.35E-03	6.81E-05	2.68E-05	8.20E-05	2.46E-05	2.5495E-03
520534.69	4258468.95	51082.91247	0.18702	0.20315	0.18388	0.21469	2.34E-03	7.66E-06	7.27E-06	7.53E-06	7.37E-06	2.3734E-03
520539.52	4258768.13	51058.555	0.21567	0.15432	0.20665	0.16068	2.34E-03	8.83E-06	5.52E-06	8.46E-06	5.52E-06	2.3708E-03
520469.42	4258244.98	51005.71469	0.18445	0.30487	0.18718	0.32481	2.34E-03	7.55E-06	1.09E-05	7.66E-06	1.12E-05	2.3773E-03
520131.72	4258998.31	51000.95362	5.12534	0.34782	4.43578	0.32503	2.34E-03	2.10E-04	1.24E-05	1.82E-04	1.12E-05	2.7549E-03
520236.84	4258262.81	50997.38356	0.2744	1.38833	0.28947	1.54556	2.34E-03	1.12E-05	4.97E-05	1.19E-05	5.31E-05	2.4655E-03
520355.79	4259012.84	50985.97097	0.57001	0.16247	0.54187	0.17358	2.34E-03	2.33E-05	5.81E-06	2.22E-05	5.96E-06	2.3964E-03
520177.59	4259023.13	50985.23408	2.46169	0.29091	2.23212	0.28413	2.34E-03	1.01E-04	1.04E-05	9.14E-05	9.75E-06	2.5514E-03
520550.54	4258717.87	50982.09096	0.20068	0.15932	0.19229	0.16645	2.34E-03	8.22E-06	5.70E-06	7.87E-06	5.71E-06	2.3665E-03
520002.21	4258719.55	50951.11547	1.41943	1.01423	1.72308	0.948	2.34E-03	5.81E-05	3.63E-05	7.05E-05	3.25E-05	2.5350E-03
520207.41	4258282.72	50946.26659	0.29413	1.86056	0.3118	2.09034	2.34E-03	1.20E-05	6.65E-05	1.28E-05	7.18E-05	2.5004E-03
520207.31	4259033.08	50931.01458	1.75525	0.25635	1.62009	0.25868	2.34E-03	7.19E-05	9.17E-06	6.63E-05	8.88E-06	2.4929E-03
520104.2	4258976.96	50879.93197	10.15584	0.37771	8.60388	0.35017	2.33E-03	4.16E-04	1.35E-05	3.52E-04	1.20E-05	3.1279E-03
520060.45	4258928.92	50876.54644	8.68165	0.42011	18.28267	0.40053	2.33E-03	3.55E-04	1.50E-05	7.49E-04	1.38E-05	3.4669E-03
520528.46	4258340.34	50868.85699	0.17451	0.22658	0.17447	0.23851	2.33E-03	7.15E-06	8.10E-06	7.14E-06	8.19E-06	2.3643E-03
520036.03	4258888.86	50812.04349	3.84751	0.46245	5.11585	0.44975	2.33E-03	1.58E-04	1.65E-05	2.09E-04	1.54E-05	2.7301E-03
520295.66	4258232.99	50801.78433	0.24159	0.86207	0.24989	0.94223	2.33E-03	9.89E-06	3.08E-05	1.02E-05	3.23E-05	2.4140E-03
520432.73	4258223.42	50785.78509	0.19363	0.37033	0.19868	0.39572	2.33E-03	7.93E-06	1.32E-05	8.13E-06	1.36E-05	2.3728E-03
520007.88	4258805.54	50772.22612	1.895	0.6321	2.28886	0.61175	2.33E-03	7.76E-05	2.26E-05	9.37E-05	2.10E-05	2.5442E-03
520336	4259022.87	50755.06502	0.64323	0.16772	0.61057	0.1797	2.33E-03	2.63E-05	6.00E-06	2.50E-05	6.17E-06	2.3920E-03
520465.01	4258913.9	50754.70828	0.31438	0.14867	0.29967	0.15641	2.33E-03	1.29E-05	5.32E-06	1.23E-05	5.37E-06	2.3644E-03
520050.41	4258914.79	50732.39467	5.98973	0.43244	9.58671	0.41613	2.33E-03	2.45E-04	1.55E-05	3.93E-04	1.43E-05	2.9950E-03
520375.57	4259002.8	50725.74798	0.50783	0.15768	0.48306	0.16788	2.33E-03	2.08E-05	5.64E-06	1.98E-05	5.76E-06	2.3792E-03
520306.32	4259032.92	50710.03475	0.77997	0.17985	0.73906	0.19234	2.33E-03	3.19E-05	6.43E-06	3.03E-05	6.60E-06	2.4017E-03
520325.06	4258223.08	50708.18529	0.22833	0.70447	0.23479	0.76321	2.33E-03	9.35E-06	2.52E-05	9.61E-06	2.62E-05	2.3968E-03
520429.35	4258958.68	50692.09557	0.37819	0.15091	0.35986	0.15893	2.33E-03	1.55E-05	5.40E-06	1.47E-05	5.46E-06	2.3667E-03
520119.03	4258372.44	50645.79008	0.39385	7.47085	0.41255	8.95863	2.32E-03	1.61E-05	2.67E-04	1.69E-05	3.08E-04	2.9313E-03
520024.39	4258864.07	50634.30232	2.84704	0.49902	3.55801	0.48729	2.32E-03	1.17E-04	1.78E-05	1.46E-04	1.67E-05	2.6198E-03
520538.28	4258426.62	50580.58641	0.18076	0.20621	0.17843	0.21746	2.32E-03	7.40E-06	7.38E-06	7.31E-06	7.47E-06	2.3501E-03
520412.24	4258975.77	50565.47634	0.41437	0.15229	0.39435	0.16092	2.32E-03	1.70E-05	5.45E-06	1.61E-05	5.52E-06	2.3639E-03
520520.56	4258820.85	50519.3658	0.2392	0.14946	0.22932	0.15628	2.32E-03	9.79E-06	5.35E-06	9.39E-06	5.37E-06	2.3476E-03
520508.25	4258845.96	50495.80425	0.25443	0.14816	0.24379	0.15536	2.32E-03	1.04E-05	5.30E-06	9.98E-06	5.33E-06	2.3477E-03
520503.29	4258279.5	50486.8132	0.17635	0.25889	0.17616	0.27348	2.32E-03	7.22E-06	9.26E-06	7.21E-06	9.39E-06	2.3493E-03
520007.12	4258673.87	50432.43184	1.31288	1.4118	1.62182	1.28637	2.31E-03	5.38E-05	5.05E-05	6.64E-05	4.42E-05	2.5286E-03
520122.73	4258994.6	50405.58852	6.23603	0.355	5.33205	0.33013	2.31E-03	2.55E-04	1.27E-05	2.18E-04	1.13E-05	2.8102E-03
520494.17	4258265.58	50317.30013	0.17798	0.2701	0.17854	0.28635	2.31E-03	7.29E-06	9.66E-06	7.31E-06	9.83E-06	2.3426E-03
520383.82	4258213.27	50315.93701	0.2067	0.49024	0.2126	0.52484	2.31E-03	8.46E-06	1.75E-05	8.70E-06	1.80E-05	2.3611E-03
520455.77	4258927.73	50295.1927	0.32896	0.1487	0.31327	0.15641	2.31E-03	1.35E-05	5.32E-06	1.28E-05	5.37E-06	2.3444E-03
520538.77	4258402.04	50278.75524	0.17771	0.2088	0.17581	0.22035	2.31E-03	7.28E-06	7.47E-06	7.20E-06	7.56E-06	2.3362E-03
520478.4	4258248.82	50276.40009	0.18148	0.29202	0.18362	0.31063	2.31E-03	7.43E-06	1.04E-05	7.52E-06	1.07E-05	2.3426E-03
520523.13	4258318.03	50241.17613	0.17363	0.23488	0.17338	0.24676	2.30E-03	7.11E-06	8.40E-06	7.10E-06	8.47E-06	2.3360E-03
520197.41	4259033.1	50232.71609	1.94833	0.26537	1.7888	0.26483	2.30E-03	7.98E-05	9.49E-06	7.32E-05	9.09E-06	2.4762E-03
520393.61	4258213.3	50224.46815	0.20362	0.46308	0.20956	0.49526	2.30E-03	8.34E-06	1.66E-05	8.58E-06	1.70E-05	2.3547E-03
520374.03	4258213.24	50219.84578	0.2096	0.5197	0.21548	0.5569	2.30E-03	8.58E-06	1.86E-05	8.82E-06	1.91E-05	2.3591E-03

520040.1	4258900.54	50186.90411	4.32893	0.44531	5.9603	0.43208	2.30E-03	1.77E-04	1.59E-05	2.44E-04	1.48E-05	2.7545E-03
520546.59	4258751.26	50135.92322	0.20782	0.15494	0.19907	0.16132	2.30E-03	8.51E-06	5.54E-06	8.15E-06	5.54E-06	2.3279E-03
520364.24	4258213.21	50124.80387	0.21259	0.55128	0.21832	0.59191	2.30E-03	8.70E-06	1.97E-05	8.94E-06	2.03E-05	2.3573E-03
520512.62	4258293.51	50087.11755	0.17445	0.24812	0.174	0.26111	2.30E-03	7.14E-06	8.87E-06	7.12E-06	8.96E-06	2.3300E-03
520316.22	4259032.9	50052.05277	0.73016	0.17428	0.69214	0.18663	2.30E-03	2.99E-05	6.23E-06	2.83E-05	6.41E-06	2.3672E-03
520217.23	4258272.75	50047.74357	0.28405	1.68176	0.30095	1.8825	2.30E-03	1.16E-05	6.02E-05	1.23E-05	6.46E-05	2.4448E-03
520442.52	4258223.45	50027.51265	0.19005	0.35187	0.19467	0.37578	2.30E-03	7.78E-06	1.26E-05	7.97E-06	1.29E-05	2.3364E-03
520479.07	4258898.07	50024.81409	0.29389	0.14726	0.28074	0.15488	2.30E-03	1.20E-05	5.27E-06	1.15E-05	5.32E-06	2.3292E-03
520403.4	4258213.33	50020.49217	0.20047	0.43788	0.20636	0.46796	2.29E-03	8.21E-06	1.57E-05	8.45E-06	1.61E-05	2.3432E-03
520167.69	4259023.15	50019.17754	2.80632	0.29947	2.52645	0.2891	2.29E-03	1.15E-04	1.07E-05	1.03E-04	9.93E-06	2.5338E-03
520451.41	4258227.26	49978.86458	0.18772	0.33537	0.19182	0.3581	2.29E-03	7.69E-06	1.20E-05	7.85E-06	1.23E-05	2.3328E-03
520266.26	4258242.9	49978.74312	0.25435	1.07993	0.26585	1.19131	2.29E-03	1.04E-05	3.86E-05	1.09E-05	4.09E-05	2.3938E-03
520315.27	4258223.05	49969.18471	0.23081	0.75318	0.23779	0.81824	2.29E-03	9.45E-06	2.69E-05	9.74E-06	2.81E-05	2.3667E-03
520099.36	4258402.38	49956.11732	0.44004	14.01788	0.46876	15.73276	2.29E-03	1.80E-05	5.01E-04	1.92E-05	5.40E-04	3.3706E-03
520095.14	4258973.22	49932.56186	13.38111	0.37983	11.83297	0.35309	2.29E-03	5.48E-04	1.36E-05	4.84E-04	1.21E-05	3.3489E-03
520488.17	4258884.29	49923.47747	0.28108	0.14693	0.26883	0.15449	2.29E-03	1.15E-05	5.26E-06	1.10E-05	5.30E-06	2.3235E-03
520266.73	4259042.98	49887.79774	1.03819	0.20173	0.97811	0.21279	2.29E-03	4.25E-05	7.22E-06	4.00E-05	7.31E-06	2.3858E-03
520395.36	4258992.77	49884.01248	0.45465	0.15313	0.43236	0.1625	2.29E-03	1.86E-05	5.48E-06	1.77E-05	5.58E-06	2.3360E-03
520554.12	4258709.33	49855.29915	0.19708	0.15927	0.18896	0.16642	2.29E-03	8.07E-06	5.70E-06	7.74E-06	5.71E-06	2.3145E-03
520158.77	4259019.47	49841.20528	3.18862	0.30963	2.84869	0.29611	2.29E-03	1.31E-04	1.11E-05	1.17E-04	1.02E-05	2.5551E-03
520354.46	4258213.18	49835.52557	0.21536	0.5856	0.22107	0.62994	2.29E-03	8.82E-06	2.09E-05	9.05E-06	2.16E-05	2.3468E-03
520246.93	4259043.02	49834.12762	1.21655	0.21646	1.14023	0.22582	2.29E-03	4.98E-05	7.74E-06	4.67E-05	7.75E-06	2.3983E-03
520256.83	4259043	49822.00083	1.12107	0.20875	1.05353	0.21911	2.29E-03	4.59E-05	7.47E-06	4.31E-05	7.52E-06	2.3898E-03
520345.9	4259022.85	49814.4603	0.6054	0.16324	0.57474	0.17474	2.29E-03	2.48E-05	5.84E-06	2.35E-05	6.00E-06	2.3455E-03
520004.25	4258796.8	49803.90937	1.74678	0.65376	2.09638	0.63103	2.28E-03	7.15E-05	2.34E-05	8.58E-05	2.17E-05	2.4873E-03
520365.69	4259012.82	49802.85003	0.53797	0.15836	0.5114	0.16895	2.28E-03	2.20E-05	5.66E-06	2.09E-05	5.80E-06	2.3393E-03
520246.66	4258252.84	49796.45581	0.26476	1.27394	0.27867	1.41373	2.28E-03	1.08E-05	4.56E-05	1.14E-05	4.85E-05	2.4009E-03
520237.03	4259043.03	49778.72409	1.32514	0.22463	1.23836	0.23262	2.28E-03	5.43E-05	8.03E-06	5.07E-05	7.99E-06	2.4047E-03
520446.73	4258941.48	49777.30603	0.34463	0.14864	0.32798	0.15634	2.28E-03	1.41E-05	5.32E-06	1.34E-05	5.37E-06	2.3219E-03
520285.87	4258232.96	49715.23902	0.24365	0.92823	0.25303	1.01746	2.28E-03	9.98E-06	3.32E-05	1.04E-05	3.49E-05	2.3693E-03
520276.63	4259042.97	49700.08087	0.96315	0.1949	0.90916	0.20646	2.28E-03	3.94E-05	6.97E-06	3.72E-05	7.09E-06	2.3709E-03
520460.31	4258231.06	49688.35545	0.18516	0.32037	0.18877	0.3418	2.28E-03	7.58E-06	1.15E-05	7.73E-06	1.17E-05	2.3181E-03
520413.19	4258213.36	49681.83144	0.19724	0.41455	0.203	0.44274	2.28E-03	8.08E-06	1.48E-05	8.31E-06	1.52E-05	2.3257E-03
520025.9	4258874.69	49671.07449	2.97054	0.478	3.73421	0.46695	2.28E-03	1.22E-04	1.71E-05	1.53E-04	1.60E-05	2.5865E-03
520168.16	4258312.6	49669.10503	0.32169	3.01447	0.33777	3.44665	2.28E-03	1.32E-05	1.08E-04	1.38E-05	1.18E-04	2.5319E-03
520420.69	4258972.28	49635.33393	0.39637	0.15032	0.37739	0.15858	2.28E-03	1.62E-05	5.38E-06	1.55E-05	5.44E-06	2.3197E-03
520497.49	4258870.43	49589.53069	0.26876	0.14647	0.25723	0.1539	2.28E-03	1.10E-05	5.24E-06	1.05E-05	5.28E-06	2.3071E-03
520149.85	4259015.79	49578.11913	3.66539	0.31928	3.24685	0.30267	2.27E-03	1.50E-04	1.14E-05	1.33E-04	1.04E-05	2.5794E-03
520158.34	4258322.56	49575.84239	0.33155	3.48488	0.34726	3.99903	2.27E-03	1.36E-05	1.25E-04	1.42E-05	1.37E-04	2.5642E-03
520227.13	4259043.05	49557.11074	1.44862	0.23309	1.34917	0.23934	2.27E-03	5.93E-05	8.34E-06	5.52E-05	8.22E-06	2.4047E-03
520000.14	4258762.77	49512.7052	1.51737	0.77591	1.82693	0.73932	2.27E-03	6.21E-05	2.78E-05	7.48E-05	2.54E-05	2.4616E-03
520550.12	4258742.83	49510.13172	0.20404	0.15508	0.19546	0.16156	2.27E-03	8.35E-06	5.55E-06	8.00E-06	5.55E-06	2.2989E-03
520487.38	4258252.66	49492.95819	0.17858	0.27941	0.18	0.29694	2.27E-03	7.31E-06	9.99E-06	7.37E-06	1.02E-05	2.3055E-03
520187.51	4259033.12	49480.79549	2.17737	0.27429	1.98822	0.2706	2.27E-03	8.92E-05	9.81E-06	8.14E-05	9.29E-06	2.4597E-03
520177.98	4258302.63	49446.00498	0.31167	2.64031	0.32825	3.00201	2.27E-03	1.28E-05	9.44E-05	1.34E-05	1.03E-04	2.4922E-03
519999.42	4258736.93	49444.58686	1.40886	0.89888	1.70178	0.8466	2.27E-03	5.77E-05	3.22E-05	6.97E-05	2.91E-05	2.4570E-03
520344.67	4258213.15	49384.24692	0.21796	0.62301	0.2238	0.67146	2.27E-03	8.92E-06	2.23E-05	9.16E-06	2.31E-05	2.3291E-03
520326.12	4259032.89	49377.9411	0.68499	0.16918	0.64958	0.18128	2.27E-03	2.80E-05	6.05E-06	2.66E-05	6.22E-06	2.3323E-03
520286.53	4259042.95	49323.81678	0.89539	0.18821	0.84601	0.20009	2.26E-03	3.67E-05	6.73E-06	3.46E-05	6.87E-06	2.3478E-03
520437.86	4258955.16	49313.96182	0.36195	0.14858	0.34439	0.15633	2.26E-03	1.48E-05	5.31E-06	1.41E-05	5.37E-06	2.3020E-03
520522.21	4258307.63	49293.71335	0.17249	0.23699	0.17205	0.24895	2.26E-03	7.06E-06	8.48E-06	7.04E-06	8.55E-06	2.2926E-03
520385.47	4259002.79	49285.24123	0.48054	0.1538	0.45705	0.16353	2.26E-03	1.97E-05	5.50E-06	1.87E-05	5.61E-06	2.3106E-03
520140.93	4259012.11	49256.28601	4.2789	0.32828	3.75292	0.30877	2.26E-03	1.75E-04	1.17E-05	1.54E-04	1.06E-05	2.6110E-03
520061.39	4258939.3	49247.53632	9.06667	0.40428	19.47478	0.38534	2.26E-03	3.71E-04	1.45E-05	7.97E-04	1.32E-05	3.4557E-03
520051.52	4258925.24	49241.67015	6.24871	0.41594	10.25635	0.40004	2.26E-03	2.56E-04	1.49E-05	4.20E-04	1.37E-05	2.9635E-03
520422.98	4258213.39	49210.04238	0.19393	0.39295	0.19948	0.41939	2.26E-03	7.94E-06	1.41E-05	8.17E-06	1.44E-05	2.3022E-03
520217.23	4259043.07	49203.63464	1.59085	0.24173	1.47568	0.24586	2.26E-03	6.51E-05	8.65E-06	6.04E-05	8.44E-06	2.4000E-03
520469.2	4258234.87	49177.75301	0.18242	0.30666	0.18557	0.3267	2.26E-03	7.47E-06	1.10E-05	7.60E-06	1.12E-05	2.2934E-03
520473.72	4258910.29	49173.11027	0.30212	0.14624	0.28823	0.1538	2.26E-03	1.24E-05	5.23E-06	1.18E-05	5.28E-06	2.2907E-03
520404.09	4258989.16	49167.46623	0.43367	0.15092	0.41233	0.1599	2.26E-03	1.78E-05	5.40E-06	1.69E-05	5.49E-06	2.3012E-03
520305.48	4258223.02	49150.71808	0.23316	0.80684	0.24084	0.87923	2.25E-03	9.55E-06	2.89E-05	9.86E-06	3.02E-05	2.3334E-03
520227.05	4258262.78	49084.97638	0.27436	1.52854	0.29036	1.70522	2.25E-03	1.12E-05	5.47E-05	1.19E-05	5.85E-05	2.3883E-03
520538.16	4258478.07	49075.74495	0.18586	0.19953	0.18235	0.21084	2.25E-03	7.61E-06	7.14E-06	7.47E-06	7.24E-06	2.2810E-03
520507.07	4258856.46	49051.0903	0.25678	0.14608	0.246	0.15327	2.25E-03	1.05E-05	5.23E-06	1.01E-05	5.26E-06	2.2814E-03
520086.07	4258969.48	49050.76739	14.12102	0.38064	18.36207	0.35556	2.25E-03	5.78E-04	1.36E-05	7.52E-04	1.22E-05	3.6062E-03
520502.79	4258269.27	49046.58877	0.17491	0.26023	0.17504	0.27525	2.25E-03	7.16E-06	9.31E-06	7.17E-06	9.45E-06	2.2832E-03
520029.77	4258589.27	49037.22162	1.17454	3.3659	1.54052	2.76174	2.25E-03	4.81E-05	1.20E-04	6.31E-05	9.48E-05	2.5761E-03
520187.8	4258292.66	49022.26699	0.30174	2.3358	0.31865	2.64153	2.25E-03	1.24E-05	8.35E-05	1.30E-05	9.07E-05	2.4487E-03
520138.7	4258342.5	49006.32667	0.35212	4.86375	0.36653	5.72042	2.25E-03	1.44E-05	1.74E-04	1.50E-05	1.96E-04	2.6481E-03
520132.02	4259008.43	48892.27455	5.09011	0.33638	4.41394	0.31434	2.24E-03	2.08E-04	1.20E-05	1.81E-04	1.08E-05	2.6550E-03
520296.43	4259042.93	48887.23938	0.83443	0.18199	0.78915	0.19404	2.24E-03	3.42E-05	6.51E-06	3.23E-05	6.66E-06	2.3225E-03
520041.4	4258911.07	48878.88804	4.51393	0.42801	6.30897	0.41506	2.24E-03	1.85E-04	1.53E-05	2.58E-04	1.42E-05	2.7152E-03
520334.88	4258213.12	48842.46983	0.22046	0.6637	0.22658	0.71696	2.24E-03	9.03E-06	2.37E-05	9.28E-06	2.46E-05	2.3075E-03
520511.98	4258283.22	48832.89653	0.17314	0.24963	0.17277	0.26301	2.24E-03	7.09E-06	8.93E-06	7.07E-06	9.03E-06	2.2725E-03
520542.05	4258410.67	48829.29932	0.17703	0.20518	0.17489	0.21635	2.24E-03	7.25E-06	7.34E-06	7.16E-06	7.43E-06	2.2694E-03
520019.89	4258618.41	48821.82738	1.21338	2.36728	1.55596	2.04395	2.24E-03	4.97E-05	8.47E-05	6.37E-05	7.02E-05	2.5081E-03
520464.41	4258924.15	48795.56843	0.31602	0.14634	0.30115	0.15388	2.24E-03	1.29E-05	5.23E-06	1.23E-05	5.28E-06	2.2744E-03
520007.12	4258664.6	48794.9619	1.24983	1.49798	1.54488	1.35767	2.24E-03	5.12E-05	5.36E-05	6.33E-05	4.66E-05	2.4532E-03
520355.8	4259022.84	48779.54041	0.5706	0.15898	0.54167	0.16998	2.24E-03	2.34E-05	5.69E-06	2.22E-05	5.84E-06	2.2950E-03
520541.61	4258435.38	48768.84093	0.17992	0.2026	0.17741	0.21358	2.24E-03	7.37E-06	7.25E-06	7.26E-06	7.33E-06	2.2666E-03
520553.65	4258734.39	48768.36828	0.20039	0.15503	0.19195	0.16164	2.24E-03	8.20E-06	5.55E-06	7.86E-06	5.55E-06	2.2646E-03
520207.32	4259043.08	48744.07634	1.75653	0.25049	1.6219	0.25214	2.24E-03	7.19E-05	8.96E-06	6.64E-05	8.66E-06	2.3922E-03
520177.6	4259033.13	48709.51663	2.45858	0.28306	2.23125	0.27598	2.23E-03	1.01E-04	1.01E-05	9.14E-05	9.47E-06	2.4463E-03
520432.76	4258213.42	48673.55608	0.19063	0.37283	0.19587	0.39779	2.23E-03	7.81E-06	1.33E-05	8.02E-06	1.37E-05	2.2759E-03
520000.62	4258788.06	48667.10484	1.61024	0.67614	1.92163	0.65062	2.23E-03	6.59E-05	2.42E-05	7.87E-05	2.23E-05	2.4239E-03
520109.21	4258382.41	48663.60889	0.40343	9.86327	0.42459	11.85859	2.23E-03	1.65E-05	3.53E-04	1.74E-05	4.07E-04	3.0264E-03
520013.67	4258849.66	48637.59529	2.23652	0.51788	2.71056	0.50576	2.23E-03	9.16E-05	1.85E-05	1.11E-04	1.74E-05	2.4698E-03
520027.27	4258885.25	48631.13569	3.08733	0.45838	3.90798	0.44787	2.23E-03	1.26E-04	1.64E-05	1.60E-04	1.54E-05	2.5493E-03
520539.44	4258365.07	48627.52332	0.17282	0.21289	0.17207	0.2247	2.23E-03	7.08E-06	7.61E-06	7.05E-06	7.71E-06	2.2604E-03
520008.1	4258830.19	48601.46538	1.96654	0.55895	2.35671	0.54413	2.23E-03	8.05E-05	2.00E-05	9.65E-05	1.87E-05	2.4454E-03
520557.69	4258700.8	48598.35108	0.1936	0.15932	0.18577	0.16639	2.23E-03	7.93E-06	5.70E-06	7.61E-06	5.71E-06	2.2565E-03
520429.13	4258968.78	48595.17174	0.37956	0.14814	0.36122	0.15607	2.23E-03	1.55E-05	5.30E-06	1.48E-05	5.36E-06	2.2704E-03
520276.08	4258232.93	48581.26838	0.24548	1.00212	0.25603	1.10198	2.23E-03	1.01E-05	3.58E-05	1.05E-05	3.78E-05	2.3230E-03
520336.02	4259032.87	48576.61227	0.64365	0.16444	0.61053	0.17619	2.23E-03	2.64E-05	5.88E-06	2.50E-05	6.05E-06	2.2919E-03
520256.48	4258242.87	48565.65748	0.25559	1.17375	0.26841	1.29839	2.23E-03	1.05E-05	4.20E-05	1.10E-05	4.46E-05	2.3361E-03
520478.09	4258238.67	48558.12968	0.17963	0.2937	0.18223	0.3125	2.23E-03	7.35E-06	1.05E-05	7.46E-06	1.07E-05	2.2638E-03
520375.59	4259012.8	48544.57112	0.50838	0.15446	0.48339	0.16455	2.23E-03	2.08E-05	5.52E-06	1.98E-05	5.65E-06	2.2789E-03
520540.93	4258375.72	48539.10895	0.17346	0.21015	0.1723	0.22189	2.23E-03	7.10E-06	7.52E-06	7.05E-06	7.62E-06	2.2562E-03
520197.62	4258282.69	48516.19038	0.29214	2.08264	0.30899	2.3465	2.23E-03	1.20E-05	7.45E-05	1.27E-05	8.06E-05	2.4055E-03
520538.17	4258354.51	48474.97245	0.17204	0.2154	0.17161	0.22716	2.22E-03	7.04E-06	7.70E-06	7.03E-06	7.80E-06	2.2535E-03
520306.33	4259042.92	48470.92257	0.78014	0.17631	0.73842	0.1884	2.22E-03	3.19E-05	6.31E-06	3.02E-05	6.47E-06	2.2987E-03
520039.65	4258560.14	48467.78435	1.07981	5.00718	1.37521	3.83459	2.22E-03	4.42E-05	1.79E-04	5.63E-05	1.32E-04	2.6349E-03
520496.36	4258256.51	48432.04771	0.17551	0.26842	0.17638	0.28466	2.22E-03	7.19E-06	9.60E-06	7.22E-06	9.77E-06	2.2558E-03
520412.82	4258985.54	48355.64303	0.41396	0.14896	0.39376	0.15754	2.22E-03	1.69E-05	5.33E-06	1.61E-05	5.41E-06	2.2623E-03
520455.3	4258937.93	48323.80362	0.33048	0.14626	0.31466	0.15377	2.22E-03	1.35E-05	5.23E-06	1.29E-05	5.28E-06	2.2539E-03
520123.1	4259004.75	48286.17482	6.14886	0.34272	5.27964	0.31889	2.22E-03	2.52E-04	1.23E-05	2.16E-04	1.09E-05	2.7064E-03
520487.45	4258894.6	48274.65997	0.28282	0.14496	0.27064	0.15233	2.21E-03	1.16E-05	5.19E-06	1.11E-05	5.23E-06	2.2478E-03
520516.95	4258842.36	48255.50498	0.24515	0.14552	0.23493	0.15242	2.21E-03	1.00E-05	5.21E-06	9.62E-06	5.23E-06	2.2440E-03
520325.09	4258213.08	48217.00653	0.22287	0.70815	0.22942	0.76702	2.21E-03	9.13E-06	2.53E-05	9.39E-06	2.63E-05	2.2823E-03
520295.69	4258222.99	48209.34018	0.23524	0.86639	0.24387	0.9469	2.21E-03	9.63E-06	3.10E-05	9.99E-06	3.25E-05	2.2949E-03
520095.76	4258983.47	48207.4656	13.14477	0.36665	11.61083	0.34096	2.21E-03	5.38E-04	1.31E-05	4.75E-04	1.17E-05	3.2501E-03
520532.42	4258809.04	48203.07305	0.2268	0.1474	0.2174	0.15385	2.21E-03	9.29E-06	5.27E-06	8.90E-06	5.28E-06	2.2402E-03
520521.4	4258297.26	48189.59233	0.17123	0.23901	0.17074	0.25108	2.21E-03	7.01E-06	8.55E-06	6.99E-06	8.62E-06	2.2420E-03
520537.07	4258344.03	48129.181	0.17114	0.218	0.17092	0.22959	2.21E-03	7.01E-06	7.80E-06	7.00E-06	7.88E-06	2.2378E-03
520383.85	4258203.27	48123.85701	0.20274	0.49326	0.2083	0.52768	2.21E-03	8.30E-06	1.76E-05	8.53E-06	1.81E-05	2.2604E-03
520197.42	4259043.1	48110.94338	1.95026	0.25912	1.79156	0.25798	2.21E-03	7.99E-05	9.27E-06	7.34E-05	8.86E-06	2.3786E-03
520030.99	4258896.78	48106.04437	3.39741	0.44111	4.38643	0.43048	2.21E-03	1.39E-04	1.58E-05	1.80E-04	1.48E-05	2.5563E-03
520236.87	4258252.81	48093.07945	0.26512	1.39599	0.2801	1.55277	2.21E-03	1.09E-05	4.99E-05	1.15E-05	5.33E-05	2.3320E-03
520128.88	4258352.47	48084.69957	0.36166	5.9459	0.37667	7.0405	2.21E-03	1.48E-05	2.13E-04	1.54E-05	2.42E-04	2.6906E-03
520393.64	4258203.3	48065.48918	0.19986	0.46604	0.20551	0.49793	2.21E-03	8.18E-06	1.67E-05	8.41E-06	1.71E-05	2.2555E-03
520451.37	4258217.22	48061.98886	0.18522	0.33746	0.18958	0.36004	2.20E-03	7.58E-06	1.21E-05	7.76E-06	1.24E-05	2.2448E-03
520539.41	4258792.35	48054.70003	0.21877	0.14863	0.20972	0.1549	2.20E-03	8.96E-06	5.32E-06	8.59E-06	5.32E-06	2.2328E-03
520442.55	4258213.45	48033.77982	0.1873	0.35409	0.19215	0.37771	2.20E-03	7.67E-06	1.27E-05	7.87E-06	1.30E-05	2.2449E-03
520015.45	4258860.38	48019.32612	2.34085	0.49556	2.84744	0.48459	2.20E-03	9.58E-05	1.77E-05	1.17E-04	1.66E-05	2.4498E-03
520496.62	4258880.8	48007.09571	0.27075	0.14436	0.25904	0.15169	2.20E-03	1.11E-05	5.16E-06	1.06E-05	5.21E-06	2.2345E-03
520541.44	4258460.8	47989.63247	0.18249	0.19959	0.17951	0.21061	2.20E-03	7.47E-06	7.14E-06	7.35E-06	7.23E-06	2.2309E-03
520374.06	4258203.24	47985.81695	0.20541	0.52281	0.21096	0.55988	2.20E-03	8.41E-06	1.87E-05	8.64E-06	1.92E-05	2.2565E-03
520004.51	4258821.54	47958.07566	1.81746	0.57709	2.16814	0.56058	2.20E-03	7.44E-05	2.06E-05	8.88E-05	1.92E-05	2.4033E-03
520316.23	4259042.9	47953.00638	0.73062	0.17102	0.69206	0.18301	2.20E-03	2.99E-05	6.12E-06	2.83E-05	6.28E-06	2.2706E-03
519998.44	4258710.45	47935.97572	1.27751	1.04715	1.53823	0.97458	2.20E-03	5.23E-05	3.75E-05	6.30E-05	3.35E-05	2.3854E-03
520486.98	4258242.48	47890.98654	0.17691	0.28068	0.17879	0.29851	2.20E-03	7.24E-06	1.00E-05	7.32E-06	1.02E-05	2.2320E-03
520542.9	4258784	47882.31686	0.21483	0.14931	0.20599	0.15547	2.20E-03	8.80E-06	5.34E-06	8.43E-06	5.34E-06	2.2247E-03
520557.18	4258725.96	47879.43494	0.19681	0.15476	0.18851	0.16151	2.20E-03	8.06E-06	5.54E-06	7.72E-06	5.54E-06	2.2235E-03
520460.18	4258221	47868.81736	0.1829	0.32224	0.1868	0.34364	2.20E-03	7.49E-06	1.15E-05	7.65E-06	1.18E-05	2.2346E-03
520403.43	4258203.33	47864.39259	0.19686	0.44082	0.20257	0.47045	2.20E-03	8.06E-06	1.58E-05	8.29E-06	1.62E-05	2.2442E-03
520364.28	4258203.21	47863.65092	0.20819	0.55436	0.21362	0.59498	2.20E-03	8.52E-06	1.98E-05	8.75E-06	2.04E-05	2.2534E-03
520446.37	4258951.64	47842.2585	0.34629	0.14614	0.32956	0.15367	2.19E-03	1.42E-05	5.23E-06	1.35E-05	5.28E-06	2.2331E-03
520207.44	4258272.72	47829.42337	0.28265	1.8711	0.29931	2.09894	2.19E-03	1.16E-05	6.69E-05	1.23E-05	7.21E-05	2.3571E-03
520000.68	4258691.74	47826.4751	1.24269	1.19268	1.50741	1.09953	2.19E-03	5.09E-05	4.27E-05	6.17E-05	3.77E-05	2.3872E-03
520167.7	4259033.15	47822.2248	2.80102	0.29107	2.52489	0.28061	2.19E-03	1.15E-04	1.04E-05	1.03E-04	9.63E-06	2.4321E-03
520052.54	4258935.65	47765.75931	6.4978	0.40043	10.91474	0.38494	2.19E-03	2.66E-04	1.43E-05	4.47E-04	1.32E-05	2.9319E-03
520395.37	4259002.77	47762.24981	0.45531	0.15005	0.43291	0.15932	2.19E-03	1.86E-05	5.37E-06	1.77E-05	5.47E-06	2.2384E-03
520158.85	4259029.5	47727.57021	3.1827	0.30072	2.84762	0.28726	2.19E-03	1.30E-04	1.08E-05	1.17E-04	9.86E-06	2.4572E-03
520246.94	4259053.02	47696.97813	1.2172	0.21206	1.14053	0.22077	2.19E-03	4.98E-05	7.59E-06	4.67E-05	7.58E-06	2.2999E-03
520345.92	4259032.85	47689.04333	0.60573	0.15996	0.5746	0.17129	2.19E-03	2.48E-05	5.72E-06	2.35E-05	5.88E-06	2.2478E-03
520266.75	4259052.98	47687.18866	1.03825	0.19766	0.97741	0.20817	2.19E-03	4.25E-05	7.07E-06	4.00E-05	7.15E-06	2.2845E-03
520114.18	4259001.06	47673.7991	7.64154	0.34781	6.5048	0.3229	2.19E-03	3.13E-04	1.24E-05	2.66E-04	1.11E-05	2.7899E-03
520256.85	4259053	47665.86643	1.12114	0.20452	1.05313	0.21428	2.19E-03	4.59E-05	7.32E-06	4.31E-05	7.36E-06	2.2905E-03
520365.7	4259022.82	47665.68431	0.53853	0.155	0.5113	0.16548	2.19E-03	2.20E-05	5.54E-06	2.09E-05	5.68E-06	2.2410E-03
520237.04	4259053.03	47660.96786	1.326	0.22	1.23907	0.22731	2.19E-03	5.43E-05	7.87E-06	5.07E-05	7.80E-06	2.3073E-03
519996.47	4258753.92	47645.45905	1.38461	0.80341	1.66394	0.76163	2.19E-03	5.67E-05	2.87E-05	6.81E-05	2.61E-05	2.3656E-03
520413.22	4258203.36	47615.5076	0.19389	0.41727	0.19952	0.44508	2.18E-03	7.94E-06	1.49E-05	8.17E-06	1.53E-05	2.2308E-03
520506.02	4258866.9	47603.57741	0.25893	0.14404	0.24801	0.15119	2.18E-03	1.06E-05	5.15E-06	1.02E-05	5.19E-06	2.2151E-03
520276.65	4259052.97	47582.03571	0.96343	0.19108	0.90865	0.2021	2.18E-03	3.94E-05	6.83E-06	3.72E-05	6.94E-06	2.2734E-03
520511.41	4258272.96	47580.52658	0.17181	0.25097	0.17165	0.26477	2.18E-03	7.03E-06	8.98E-06	7.03E-06	9.09E-06	2.2150E-03
520150	4259025.84	47557.24639	3.65947	0.30987	3.24619	0.2935	2.18E-03	1.50E-04	1.11E-05	1.33E-04	1.01E-05	2.4857E-03
520042.59	4258921.55	47540.13183	4.69109	0.41167	6.65115	0.39901	2.18E-03	1.92E-04	1.47E-05	2.72E-04	1.37E-05	2.6739E-03
520354.49	4258203.18	47530.3932	0.21072	0.58881	0.21623	0.63316	2.18E-03	8.63E-06	2.11E-05	8.85E-06	2.17E-05	2.2409E-03
520315.3	4258213.05	47513.57669	0.22517	0.75691	0.23233	0.82227	2.18E-03	9.22E-06	2.71E-05	9.51E-06	2.82E-05	2.2539E-03
520482.44	4258906.68	47483.40161	0.29026	0.14405	0.27745	0.15138	2.18E-03	1.19E-05	5.15E-06	1.14E-05	5.20E-06	2.2120E-03
520437.58	4258965.28	47477.54981	0.3636	0.146	0.34605	0.15364	2.18E-03	1.49E-05	5.22E-06	1.42E-05	5.27E-06	2.2177E-03
520469	4258224.77	47457.1328	0.18037	0.30839	0.18385	0.32852	2.18E-03	7.39E-06	1.10E-05	7.53E-06	1.13E-05	2.2145E-03
520059.44	4258511.57	47456.8268	0.84276	13.16372	0.97736	7.88119	2.18E-03	3.45E-05	4.71E-04	4.00E-05	2.71E-04	2.9932E-03
520421.55	4258981.93	47456.455	0.39544	0.14711	0.37644	0.15528	2.18E-03	1.62E-05	5.26E-06	1.54E-05	5.33E-06	2.2194E-03
520227.14	4259053.05	47442.03964	1.44947	0.22809	1.34986	0.23367	2.18E-03	5.93E-05	8.16E-06	5.53E-05	8.02E-06	2.3073E-03
519997	4258779.31	47369.16839	1.48461	0.69908	1.76203	0.6704	2.17E-03	6.08E-05	2.50E-05	7.21E-05	2.30E-05	2.3542E-03
520473.05	4258920.57	47353.35896	0.30386	0.14403	0.2898	0.15141	2.17E-03	1.24E-05	5.15E-06	1.19E-05	5.20E-06	2.2071E-03
520266.3	4258232.9	47337.34069	0.24689	1.08527	0.25868	1.19695	2.17E-03	1.01E-05	3.88E-05	1.06E-05	4.11E-05	2.2724E-03
520187.52	4259043.12	47334.91683	2.17347	0.2673	1.98655	0.26319	2.17E-03	8.90E-05	9.56E-06	8.13E-05	9.04E-06	2.3606E-03
520549.89	4258767.31	47302.94385	0.20719	0.15022	0.19862	0.15625	2.17E-03	8.48E-06	5.37E-06	8.13E-06	5.36E-06	2.1975E-03
520545.34	4258419.3	47296.70806	0.17629	0.20181	0.17397	0.21263	2.17E-03	7.22E-06	7.22E-06	7.12E-06	7.30E-06	2.1987E-03
520326.13	4259042.89	47283.17902	0.68528	0.16592	0.64926	0.17773	2.17E-03	2.81E-05	5.93E-06	2.66E-05	6.10E-06	2.2359E-03
520086.77	4258979.76	47282.44965	15.64038	0.36697	17.6955	0.34296	2.17E-03	6.40E-04	1.31E-05	7.25E-04	1.18E-05	3.5590E-03
520141.15	4259022.19	47276.79051	4.26484	0.31821	3.74668	0.29917	2.17E-03	1.75E-04	1.14E-05	1.53E-04	1.03E-05	2.5186E-03
520017.05	4258871.04	47274.11061	2.44107	0.47464	2.97943	0.4646	2.17E-03	9.99E-05	1.70E-05	1.22E-04	1.60E-05	2.4237E-03
520561.26	4258692.26	47247.31771	0.1902	0.15933	0.18261	0.16626	2.17E-03	7.79E-06	5.70E-06	7.48E-06	5.71E-06	2.1943E-03
520286.55	4259052.95	47230.21974	0.89566	0.18461	0.84558	0.196	2.17E-03	3.67E-05	6.60E-06	3.46E-05	6.73E-06	2.2515E-03
520423.01	4258203.39	47207.58221	0.19078	0.39549	0.19631	0.42157	2.17E-03	7.81E-06	1.41E-05	8.04E-06	1.45E-05	2.2103E-03
520505.33	4258260.35	47206.11038	0.17242	0.25814	0.1728	0.27315	2.17E-03	7.06E-06	9.23E-06	7.08E-06	9.38E-06	2.1985E-03
520385.49	4259012.79	47193.54807	0.48109	0.15068	0.45739	0.1603	2.17E-03	1.97E-05	5.39E-06	1.87E-05	5.50E-06	2.2145E-03
520285.9	4258222.96	47179.29656	0.23706	0.93275	0.24678	1.02241	2.16E-03	9.71E-06	3.34E-05	1.01E-05	3.51E-05	2.2528E-03
520000.93	4258812.89	47175.57473	1.68102	0.59594	1.99777	0.57743	2.16E-03	6.88E-05	2.13E-05	8.18E-05	1.98E-05	2.3561E-03
520520.67	4258286.94	47136.20059	0.17001	0.24061	0.16951	0.25298	2.16E-03	6.96E-06	8.61E-06	6.94E-06	8.69E-06	2.1937E-03
520531.08	4258311.42	47116.42507	0.16921	0.22808	0.16884	0.2394	2.16E-03	6.93E-06	8.16E-06	6.91E-06	8.22E-06	2.1918E-03
520217.26	4258262.75	47109.55263	0.27357	1.69083	0.28971	1.89082	2.16E-03	1.12E-05	6.05E-05	1.19E-05	6.49E-05	2.3098E-03
520217.24	4259053.07	47104.65721	1.59171	0.23638	1.47656	0.23986	2.16E-03	6.52E-05	8.45E-06	6.05E-05	8.23E-06	2.3034E-03
520404.04	4258999.18	47100.01645	0.43449	0.14791	0.41307	0.15683	2.16E-03	1.78E-05	5.29E-06	1.69E-05	5.38E-06	2.2062E-03
520105.26	4258997.38	47056.59023	9.84359	0.35157	8.35219	0.32636	2.16E-03	4.03E-04	1.26E-05	3.42E-04	1.12E-05	2.9277E-03
520344.7	4258203.15	47054.8082	0.21308	0.62631	0.21886	0.67477	2.16E-03	8.72E-06	2.24E-05	8.96E-06	2.32E-05	2.2220E-03
520527.7	4258827.9	47052.61473	0.23323	0.14495	0.22367	0.15149	2.16E-03	9.55E-06	5.18E-06	9.16E-06	5.20E-06	2.1878E-03

520246.69	4258242.84	47033.02363	0.25622	1.28084	0.27021	1.42013	2.16E-03	1.05E-05	4.58E-05	1.11E-05	4.88E-05	2.2739E-03
519995.71	4258727.97	47019.30662	1.28073	0.92882	1.53493	0.87093	2.16E-03	5.24E-05	3.32E-05	6.28E-05	2.99E-05	2.3356E-03
520057.87	4258947.84	46991.21862	7.93632	0.38763	16.08399	0.37096	2.16E-03	3.25E-04	1.39E-05	6.59E-04	1.27E-05	3.1660E-03
520463.87	4258934.38	46985.18364	0.3177	0.14407	0.3027	0.15141	2.16E-03	1.30E-05	5.15E-06	1.24E-05	5.20E-06	2.1913E-03
520032.39	4258907.35	46985.10108	3.5356	0.424	4.60874	0.41365	2.16E-03	1.45E-04	1.52E-05	1.89E-04	1.42E-05	2.5184E-03
520545.94	4258395	46980.01792	0.17331	0.20406	0.17146	0.2152	2.16E-03	7.10E-06	7.30E-06	7.02E-06	7.39E-06	2.1842E-03
520515.67	4258852.89	46978.33134	0.2475	0.14356	0.23719	0.15045	2.16E-03	1.01E-05	5.13E-06	9.71E-06	5.17E-06	2.1854E-03
520495.87	4258246.29	46967.39185	0.17398	0.26982	0.17533	0.2864	2.15E-03	7.12E-06	9.65E-06	7.18E-06	9.83E-06	2.1886E-03
520007.12	4258655.32	46921.22565	1.18387	1.58573	1.46321	1.42981	2.15E-03	4.85E-05	5.67E-05	5.99E-05	4.91E-05	2.3668E-03
520477.81	4258228.54	46913.04199	0.17774	0.2954	0.18075	0.31431	2.15E-03	7.28E-06	1.06E-05	7.40E-06	1.08E-05	2.1883E-03
520132.29	4259018.53	46905.24451	5.05659	0.32557	4.39435	0.30425	2.15E-03	2.07E-04	1.16E-05	1.80E-04	1.04E-05	2.5610E-03
520560.71	4258717.52	46900.47111	0.19334	0.15466	0.18528	0.16148	2.15E-03	7.92E-06	5.53E-06	7.59E-06	5.54E-06	2.1783E-03
520553.39	4258758.96	46882.29875	0.2035	0.1505	0.19503	0.15654	2.15E-03	8.33E-06	5.38E-06	7.99E-06	5.37E-06	2.1779E-03
520296.45	4259052.93	46829.93844	0.83473	0.17856	0.78872	0.19016	2.15E-03	3.42E-05	6.39E-06	3.23E-05	6.53E-06	2.2279E-03
520119.06	4258362.44	46794.34148	0.37086	7.49483	0.38709	8.9918	2.15E-03	1.52E-05	2.68E-04	1.58E-05	3.09E-04	2.7546E-03
520432.8	4258203.42	46730.99499	0.18767	0.37518	0.19297	0.39978	2.14E-03	7.68E-06	1.34E-05	7.90E-06	1.37E-05	2.1867E-03
520355.82	4259032.84	46718.38461	0.57091	0.15577	0.54159	0.16664	2.14E-03	2.34E-05	5.57E-06	2.22E-05	5.72E-06	2.2002E-03
520305.51	4258213.02	46704.60593	0.22725	0.81075	0.23524	0.88338	2.14E-03	9.30E-06	2.90E-05	9.63E-06	3.03E-05	2.2210E-03
520207.34	4259053.08	46691.53866	1.75726	0.24489	1.62363	0.2459	2.14E-03	7.19E-05	8.76E-06	6.65E-05	8.44E-06	2.2977E-03
520177.62	4259043.13	46616.80627	2.45314	0.27555	2.22903	0.26823	2.14E-03	1.00E-04	9.86E-06	9.13E-05	9.21E-06	2.3495E-03
520336.04	4259042.87	46529.95037	0.64379	0.16116	0.61003	0.17268	2.13E-03	2.64E-05	5.76E-06	2.50E-05	5.93E-06	2.1977E-03
520454.87	4258948.11	46513.36926	0.33217	0.14391	0.31627	0.15124	2.13E-03	1.36E-05	5.15E-06	1.29E-05	5.19E-06	2.1708E-03
520334.91	4258203.12	46497.69188	0.21535	0.66708	0.22154	0.72034	2.13E-03	8.82E-06	2.39E-05	9.07E-06	2.47E-05	2.1997E-03
520306.35	4259052.92	46489.15909	0.78047	0.17307	0.73813	0.18473	2.13E-03	3.20E-05	6.19E-06	3.02E-05	6.34E-06	2.2075E-03
520375.61	4259022.8	46484.56089	0.50886	0.15129	0.48344	0.16127	2.13E-03	2.08E-05	5.41E-06	1.98E-05	5.54E-06	2.1842E-03
520495.83	4258891.13	46471.2192	0.27256	0.14241	0.2608	0.14961	2.13E-03	1.12E-05	5.09E-06	1.07E-05	5.14E-06	2.1641E-03
520430.28	4258978.31	46458.89721	0.37811	0.1451	0.36	0.15291	2.13E-03	1.55E-05	5.19E-06	1.47E-05	5.25E-06	2.1721E-03
520049.52	4258531.01	46437.26878	0.91467	7.68277	1.09101	5.4396	2.13E-03	3.75E-05	2.75E-04	4.47E-05	1.87E-04	2.6741E-03
520018.5	4258881.63	46432.9775	2.53585	0.45507	3.10831	0.44579	2.13E-03	1.04E-04	1.63E-05	1.27E-04	1.53E-05	2.3929E-03
520096.34	4258993.7	46419.55057	12.92071	0.35371	11.36419	0.32915	2.13E-03	5.29E-04	1.27E-05	4.65E-04	1.13E-05	3.1479E-03
520123.44	4259014.88	46416.66381	6.11391	0.3316	5.25431	0.3086	2.13E-03	2.50E-04	1.19E-05	2.15E-04	1.06E-05	2.6174E-03
520168.19	4258302.6	46400.22745	0.30687	3.02833	0.32086	3.45857	2.13E-03	1.26E-05	1.08E-04	1.31E-05	1.19E-04	2.3815E-03
520412.7	4258995.59	46353.44842	0.41495	0.14598	0.39464	0.15451	2.13E-03	1.70E-05	5.22E-06	1.62E-05	5.30E-06	2.1703E-03
520486.62	4258232.31	46330.01876	0.17514	0.28292	0.17753	0.30083	2.13E-03	7.17E-06	1.01E-05	7.27E-06	1.03E-05	2.1604E-03
520158.37	4258312.56	46301.40595	0.31576	3.49818	0.32913	4.01805	2.12E-03	1.29E-05	1.25E-04	1.35E-05	1.38E-04	2.4137E-03
520227.08	4258252.78	46296.22679	0.26475	1.53659	0.28024	1.71283	2.12E-03	1.08E-05	5.50E-05	1.15E-05	5.88E-05	2.2601E-03
520530.18	4258301.02	46259.81665	0.16808	0.23018	0.16759	0.24153	2.12E-03	6.88E-06	8.23E-06	6.86E-06	8.29E-06	2.1526E-03
520178.01	4258292.63	46258.54603	0.29789	2.6535	0.31258	3.01216	2.12E-03	1.22E-05	9.49E-05	1.28E-05	1.03E-04	2.3456E-03
519997.34	4258804.24	46248.95423	1.55594	0.61529	1.84158	0.59452	2.12E-03	6.37E-05	2.20E-05	7.54E-05	2.04E-05	2.3033E-03
520451.33	4258207.19	46246.10443	0.18268	0.33956	0.18724	0.36193	2.12E-03	7.48E-06	1.21E-05	7.67E-06	1.24E-05	2.1614E-03
520043.69	4258932	46232.53328	4.86554	0.39648	6.98828	0.38408	2.12E-03	1.99E-04	1.42E-05	2.86E-04	1.32E-05	2.6338E-03
520197.44	4259053.1	46172.3601	1.95188	0.25321	1.7946	0.25149	2.12E-03	7.99E-05	9.06E-06	7.35E-05	8.63E-06	2.2894E-03
520505.07	4258877.3	46171.85931	0.26091	0.14205	0.24988	0.14912	2.12E-03	1.07E-05	5.08E-06	1.02E-05	5.12E-06	2.1494E-03
520442.58	4258203.45	46139.91286	0.18451	0.35632	0.18952	0.37956	2.12E-03	7.55E-06	1.27E-05	7.76E-06	1.30E-05	2.1579E-03
520460.07	4258210.94	46113.36375	0.18056	0.32425	0.18473	0.34552	2.12E-03	7.39E-06	1.16E-05	7.56E-06	1.19E-05	2.1540E-03
520525.64	4258838.76	46109.2233	0.23632	0.14307	0.22658	0.14966	2.12E-03	9.68E-06	5.12E-06	9.28E-06	5.14E-06	2.1446E-03
520446.03	4258961.78	46091.00252	0.34817	0.14374	0.3314	0.15113	2.11E-03	1.43E-05	5.14E-06	1.36E-05	5.19E-06	2.1527E-03
520276.12	4258222.93	46071.15663	0.23857	1.00696	0.24946	1.10697	2.11E-03	9.77E-06	3.60E-05	1.02E-05	3.80E-05	2.2077E-03
520099.39	4258392.38	46043.67426	0.41128	14.04458	0.43642	15.98746	2.11E-03	1.68E-05	5.02E-04	1.79E-05	5.49E-04	3.1983E-03
520520.02	4258276.65	46033.74578	0.16876	0.24204	0.16837	0.25476	2.11E-03	6.91E-06	8.66E-06	6.89E-06	8.75E-06	2.1431E-03
520544.84	4258469.73	46028.37022	0.18136	0.19584	0.17804	0.20671	2.11E-03	7.43E-06	7.00E-06	7.29E-06	7.10E-06	2.1405E-03
520383.88	4258193.27	46014.89522	0.19876	0.49617	0.20405	0.53031	2.11E-03	8.14E-06	1.77E-05	8.35E-06	1.82E-05	2.1635E-03
520021.89	4258893.02	46001.96692	2.74625	0.43757	3.40713	0.42861	2.11E-03	1.12E-04	1.57E-05	1.40E-04	1.47E-05	2.3928E-03
520187.83	4258282.66	45999.84514	0.28912	2.3468	0.30424	2.65257	2.11E-03	1.18E-05	8.39E-05	1.25E-05	9.11E-05	2.3097E-03
520256.51	4258232.87	45998.63801	0.24783	1.17948	0.26076	1.30449	2.11E-03	1.01E-05	4.22E-05	1.07E-05	4.48E-05	2.2181E-03
520393.67	4258193.3	45980.03973	0.19606	0.46893	0.20145	0.50042	2.11E-03	8.03E-06	1.68E-05	8.25E-06	1.72E-05	2.1597E-03
520148.55	4258322.53	45949.02218	0.32455	4.10004	0.33752	4.73413	2.11E-03	1.33E-05	1.47E-04	1.38E-05	1.63E-04	2.4443E-03
520316.25	4259052.9	45946.99358	0.7307	0.16783	0.69155	0.17946	2.11E-03	2.99E-05	6.00E-06	2.83E-05	6.16E-06	2.1784E-03
520325.12	4258203.08	45942.89557	0.21767	0.71144	0.22434	0.77072	2.11E-03	8.91E-06	2.54E-05	9.19E-06	2.65E-05	2.1778E-03
520504.77	4258250.09	45891.84475	0.17103	0.25937	0.17184	0.27479	2.11E-03	7.00E-06	9.28E-06	7.04E-06	9.43E-06	2.1382E-03
520564.24	4258709.09	45875.82464	0.19003	0.15471	0.18225	0.16152	2.10E-03	7.78E-06	5.53E-06	7.46E-06	5.55E-06	2.1310E-03
520374.09	4258193.24	45866.47611	0.20127	0.52572	0.20654	0.56264	2.10E-03	8.24E-06	1.88E-05	8.46E-06	1.93E-05	2.1591E-03
519993.37	4258770.57	45865.02237	1.36513	0.7228	1.61716	0.69015	2.10E-03	5.59E-05	2.59E-05	6.62E-05	2.37E-05	2.2759E-03
520114.59	4259011.23	45852.35496	7.57345	0.33622	6.4512	0.31228	2.10E-03	3.10E-04	1.20E-05	2.64E-04	1.07E-05	2.7006E-03
520481.69	4258917	45848.83848	0.29214	0.14193	0.27908	0.1491	2.10E-03	1.20E-05	5.08E-06	1.14E-05	5.12E-06	2.1370E-03
520403.46	4258193.33	45838.79544	0.19328	0.44359	0.19877	0.4728	2.10E-03	7.91E-06	1.59E-05	8.14E-06	1.62E-05	2.1511E-03
520468.81	4258214.68	45829.01081	0.17829	0.31005	0.18203	0.33023	2.10E-03	7.30E-06	1.11E-05	7.45E-06	1.13E-05	2.1397E-03
520514.31	4258264.19	45815.97619	0.16931	0.24849	0.1693	0.26231	2.10E-03	6.93E-06	8.89E-06	6.93E-06	9.01E-06	2.1337E-03
520295.72	4258212.99	45797.56087	0.2291	0.87051	0.23807	0.95125	2.10E-03	9.38E-06	3.11E-05	9.75E-06	3.27E-05	2.1840E-03
520033.66	4258917.87	45793.77192	3.66725	0.40789	4.82587	0.39779	2.10E-03	1.50E-04	1.46E-05	1.98E-04	1.37E-05	2.4769E-03
520395.39	4259012.77	45779.07468	0.45581	0.14707	0.43339	0.15625	2.10E-03	1.87E-05	5.26E-06	1.77E-05	5.36E-06	2.1473E-03
520167.72	4259043.15	45766.30067	2.78795	0.28291	2.51791	0.27243	2.10E-03	1.14E-04	1.01E-05	1.03E-04	9.35E-06	2.3364E-03
520560.37	4258742.27	45757.36632	0.1964	0.1507	0.18818	0.15691	2.10E-03	8.04E-06	5.39E-06	7.70E-06	5.39E-06	2.1258E-03
520491.16	4258903.07	45744.36247	0.27911	0.14155	0.26696	0.14869	2.10E-03	1.14E-05	5.06E-06	1.09E-05	5.10E-06	2.1312E-03
520548.62	4258427.92	45710.73578	0.17547	0.19859	0.17301	0.2091	2.10E-03	7.18E-06	7.10E-06	7.08E-06	7.18E-06	2.1257E-03
520364.31	4258193.21	45708.89872	0.20384	0.55731	0.20908	0.59786	2.10E-03	8.35E-06	1.99E-05	8.56E-06	2.05E-05	2.1544E-03
519992.8	4258745.07	45699.97222	1.27081	0.82979	1.51444	0.78351	2.10E-03	5.20E-05	2.97E-05	6.20E-05	2.69E-05	2.2672E-03
520345.94	4259042.85	45697.00917	0.60588	0.15677	0.57421	0.16792	2.10E-03	2.48E-05	5.61E-06	2.35E-05	5.76E-06	2.1562E-03
520549.18	4258403.52	45696.69264	0.17265	0.20086	0.17057	0.21161	2.10E-03	7.07E-06	7.18E-06	6.98E-06	7.26E-06	2.1250E-03
520158.62	4259039.39	45695.80986	3.18126	0.2923	2.85178	0.27891	2.10E-03	1.30E-04	1.05E-05	1.17E-04	9.58E-06	2.3635E-03
520514.54	4258863.37	45678.13895	0.24964	0.1416	0.23924	0.14848	2.10E-03	1.02E-05	5.06E-06	9.80E-06	5.10E-06	2.1258E-03
520365.72	4259032.82	45674.07409	0.53879	0.15194	0.5114	0.16232	2.10E-03	2.21E-05	5.43E-06	2.09E-05	5.57E-06	2.1494E-03
520019.85	4258608.71	45670.31437	1.11387	2.47692	1.41583	2.13126	2.10E-03	4.56E-05	8.86E-05	5.80E-05	7.32E-05	2.3606E-03
520472.44	4258930.83	45664.24811	0.30555	0.14188	0.29138	0.14907	2.09E-03	1.25E-05	5.07E-06	1.19E-05	5.12E-06	2.1296E-03
520413.25	4258193.36	45629.97083	0.19049	0.41995	0.19598	0.44729	2.09E-03	7.80E-06	1.50E-05	8.02E-06	1.54E-05	2.1396E-03
520149.51	4259035.63	45561.67673	3.68193	0.30123	3.27054	0.285	2.09E-03	1.51E-04	1.08E-05	1.34E-04	9.78E-06	2.3955E-03
520048.72	4258944.07	45560.65093	5.72072	0.38382	8.82508	0.37039	2.09E-03	2.34E-04	1.37E-05	3.61E-04	1.27E-05	2.7122E-03
520495.44	4258236.09	45540.7672	0.1724	0.27141	0.17422	0.28824	2.09E-03	7.06E-06	9.71E-06	7.13E-06	9.90E-06	2.1231E-03
520197.65	4258272.69	45539.25315	0.28033	2.09386	0.29581	2.35472	2.09E-03	1.15E-05	7.49E-05	1.21E-05	8.08E-05	2.2686E-03
520058.88	4258958.25	45528.20491	8.27544	0.37379	17.55504	0.35757	2.09E-03	3.39E-04	1.34E-05	7.19E-04	1.23E-05	3.1720E-03
520421.37	4258992.01	45522.12071	0.39654	0.1442	0.37745	0.15234	2.09E-03	1.62E-05	5.16E-06	1.55E-05	5.23E-06	2.1305E-03
520546.89	4258358.24	45478.4513	0.16852	0.20764	0.1678	0.21894	2.09E-03	6.90E-06	7.43E-06	6.87E-06	7.52E-06	2.1152E-03
520187.54	4259053.12	45448.93292	2.18082	0.26107	1.99417	0.25646	2.09E-03	8.93E-05	9.34E-06	8.16E-05	8.80E-06	2.2742E-03
520236.9	4258242.81	45440.3477	0.25628	1.40316	0.27098	1.55962	2.08E-03	1.05E-05	5.02E-05	1.11E-05	5.35E-05	2.2100E-03
520006.5	4258856.69	45411.40276	1.95821	0.49253	2.33648	0.48151	2.08E-03	8.02E-05	1.76E-05	9.57E-05	1.65E-05	2.2934E-03
520548.28	4258368.85	45400.27747	0.16917	0.20517	0.16807	0.21644	2.08E-03	6.93E-06	7.34E-06	6.88E-06	7.43E-06	2.1115E-03
520439.01	4258974.7	45392.93424	0.36184	0.14299	0.34451	0.15049	2.08E-03	1.48E-05	5.11E-06	1.41E-05	5.17E-06	2.1217E-03
520140.41	4259031.87	45381.68064	4.32278	0.30943	3.80084	0.2906	2.08E-03	1.77E-04	1.11E-05	1.56E-04	9.98E-06	2.4357E-03
520354.52	4258193.18	45368.34963	0.20619	0.59177	0.2116	0.63616	2.08E-03	8.44E-06	2.12E-05	8.66E-06	2.18E-05	2.1415E-03
520545.69	4258347.72	45361.24917	0.16776	0.21004	0.16732	0.22125	2.08E-03	6.87E-06	7.51E-06	6.85E-06	7.60E-06	2.1099E-03
520477.56	4258218.42	45354.10667	0.17583	0.29705	0.17916	0.31604	2.08E-03	7.20E-06	1.06E-05	7.34E-06	1.08E-05	2.1168E-03
520529.37	4258290.66	45335.04669	0.16691	0.232	0.16636	0.24348	2.08E-03	6.83E-06	8.30E-06	6.81E-06	8.36E-06	2.1102E-03
520423.04	4258193.39	45311.48642	0.18763	0.39797	0.19305	0.42365	2.08E-03	7.68E-06	1.42E-05	7.90E-06	1.45E-05	2.1232E-03
520326.15	4259052.89	45291.08203	0.68524	0.16272	0.64852	0.17422	2.08E-03	2.81E-05	5.82E-06	2.66E-05	5.98E-06	2.1443E-03
520000.87	4258836.88	45281.99286	1.73243	0.53087	2.04649	0.51718	2.08E-03	7.09E-05	1.90E-05	8.38E-05	1.78E-05	2.2689E-03
520463.38	4258944.59	45269.0306	0.31931	0.14182	0.30423	0.14897	2.08E-03	1.31E-05	5.07E-06	1.25E-05	5.11E-06	2.1126E-03
520315.33	4258203.05	45245.27783	0.21974	0.76033	0.22713	0.8261	2.08E-03	9.00E-06	2.72E-05	9.30E-06	2.84E-05	2.1496E-03
520385.51	4259022.79	45226.50174	0.48152	0.14764	0.45758	0.15716	2.07E-03	1.97E-05	5.28E-06	1.87E-05	5.40E-06	2.1240E-03
520105.74	4259007.57	45214.51213	9.63853	0.33933	8.21902	0.31528	2.07E-03	3.95E-04	1.21E-05	3.37E-04	1.08E-05	2.8285E-03
520029.73	4258579.58	45184.57512	1.06684	3.50678	1.37951	2.85376	2.07E-03	4.37E-05	1.25E-04	5.65E-05	9.80E-05	2.3965E-03
519993.75	4258795.6	45176.53091	1.44047	0.63512	1.69834	0.61177	2.07E-03	5.90E-05	2.27E-05	6.95E-05	2.10E-05	2.2448E-03
520404	4259009.21	45160.43639	0.43514	0.14507	0.4138	0.15391	2.07E-03	1.78E-05	5.19E-06	1.69E-05	5.28E-06	2.1171E-03
520023.37	4258903.63	45059.07353	2.85401	0.4206	3.56423	0.41203	2.07E-03	1.17E-04	1.50E-05	1.46E-04	1.41E-05	2.3592E-03
520563.87	4258733.92	45041.99074	0.19299	0.15063	0.18493	0.15697	2.07E-03	7.90E-06	5.39E-06	7.57E-06	5.39E-06	2.0927E-03
520207.47	4258262.72	45033.68652	0.27188	1.88042	0.28734	2.10766	2.07E-03	1.11E-05	6.73E-05	1.18E-05	7.24E-05	2.2286E-03
520544.65	4258337.25	45020.58419	0.16681	0.21269	0.16662	0.22365	2.07E-03	6.83E-06	7.61E-06	6.82E-06	7.68E-06	2.0944E-03
520109.24	4258372.41	45004.95271	0.37893	9.90479	0.3978	11.75688	2.06E-03	1.55E-05	3.54E-04	1.63E-05	4.04E-04	2.8544E-03
520131.3	4259028.12	44985.50449	5.15428	0.31622	4.48208	0.29531	2.06E-03	2.11E-04	1.13E-05	1.84E-04	1.01E-05	2.4798E-03
520524.28	4258849.33	44981.84535	0.23865	0.14123	0.22887	0.14782	2.06E-03	9.77E-06	5.05E-06	9.37E-06	5.07E-06	2.0929E-03
520542.9	4258807.93	44962.77372	0.21759	0.14362	0.20868	0.14973	2.06E-03	8.91E-06	5.14E-06	8.54E-06	5.14E-06	2.0905E-03
520432.83	4258193.42	44904.78968	0.18473	0.37747	0.19	0.40172	2.06E-03	7.56E-06	1.35E-05	7.78E-06	1.38E-05	2.1028E-03
520539.96	4258315.22	44883.51872	0.16597	0.2195	0.16564	0.23033	2.06E-03	6.80E-06	7.85E-06	6.78E-06	7.91E-06	2.0885E-03
520008.2	4258867.38	44879.44107	2.04235	0.47184	2.44132	0.46199	2.06E-03	8.36E-05	1.69E-05	1.00E-04	1.59E-05	2.2753E-03
520266.33	4258222.9	44875.75463	0.23967	1.09058	0.2517	1.20223	2.06E-03	9.81E-06	3.90E-05	1.03E-05	4.13E-05	2.1592E-03
520344.73	4258193.15	44861.69872	0.20831	0.62937	0.21413	0.67781	2.06E-03	8.53E-06	2.25E-05	8.77E-06	2.33E-05	2.1212E-03
520007.12	4258646.05	44860.43692	1.11586	1.67301	1.37777	1.50099	2.06E-03	4.57E-05	5.98E-05	5.64E-05	5.15E-05	2.2716E-03
520454.48	4258958.28	44854.61793	0.33401	0.14163	0.31808	0.14881	2.06E-03	1.37E-05	5.07E-06	1.30E-05	5.11E-06	2.0947E-03
520486.3	4258222.16	44823.73124	0.17335	0.2846	0.17616	0.3026	2.06E-03	7.10E-06	1.02E-05	7.21E-06	1.04E-05	2.0913E-03
520285.94	4258212.96	44789.15551	0.23062	0.93715	0.24072	1.02678	2.05E-03	9.44E-06	3.35E-05	9.86E-06	3.53E-05	2.1429E-03
520355.84	4259042.84	44786.3403	0.57106	0.15272	0.54142	0.16344	2.05E-03	2.34E-05	5.46E-06	2.22E-05	5.61E-06	2.1113E-03
520504.21	4258887.66	44753.37941	0.26275	0.14006	0.25159	0.14704	2.05E-03	1.08E-05	5.01E-06	1.03E-05	5.05E-06	2.0843E-03
520549.83	4258791.4	44733.7599	0.21007	0.1449	0.20152	0.15081	2.05E-03	8.60E-06	5.18E-06	8.25E-06	5.18E-06	2.0795E-03
520177.64	4259053.13	44725.51135	2.45632	0.26864	2.23365	0.26103	2.05E-03	1.01E-04	9.61E-06	9.15E-05	8.96E-06	2.2625E-03
520567.77	4258700.65	44719.77513	0.18676	0.15475	0.17924	0.16145	2.05E-03	7.65E-06	5.54E-06	7.34E-06	5.54E-06	2.0777E-03
519994.67	4258701.35	44712.17524	1.14729	1.0749	1.36884	0.99778	2.05E-03	4.70E-05	3.84E-05	5.60E-05	3.43E-05	2.2270E-03
520513.66	4258253.9	44677.15029	0.16806	0.24971	0.1684	0.26397	2.05E-03	6.88E-06	8.93E-06	6.89E-06	9.06E-06	2.0815E-03
520128.91	4258342.47	44675.79317	0.34212	5.96518	0.35503	7.06255	2.05E-03	1.40E-05	2.13E-04	1.45E-05	2.42E-04	2.5340E-03
520034.84	4258928.34	44637.37277	3.79666	0.39291	5.03889	0.38301	2.05E-03	1.55E-04	1.41E-05	2.06E-04	1.31E-05	2.4368E-03
519997.12	4258827.83	44617.50799	1.60372	0.54803	1.88516	0.53273	2.05E-03	6.57E-05	1.96E-05	7.72E-05	1.83E-05	2.2277E-03
520430.03	4258988.42	44615.53326	0.3793	0.14235	0.36121	0.15012	2.05E-03	1.55E-05	5.09E-06	1.48E-05	5.15E-06	2.0874E-03
520504.25	4258239.86	44596.12301	0.1696	0.26082	0.17088	0.27655	2.05E-03	6.94E-06	9.33E-06	7.00E-06	9.49E-06	2.0787E-03
520096.89	4259003.92	44591.30776	12.66601	0.34126	11.11196	0.31783	2.05E-03	5.19E-04	1.22E-05	4.55E-04	1.09E-05	3.0424E-03
520375.62	4259032.8	44573.51379	0.50916	0.1483	0.48363	0.15818	2.04E-03	2.08E-05	5.30E-06	1.98E-05	5.43E-06	2.0963E-03
520122.19	4259024.36	44549.55333	6.29143	0.32188	5.40753	0.29948	2.04E-03	2.58E-04	1.15E-05	2.21E-04	1.03E-05	2.5446E-03
520246.72	4258232.84	44540.07371	0.24813	1.28698	0.26197	1.42652	2.04E-03	1.02E-05	4.60E-05	1.07E-05	4.90E-05	2.1593E-03
520336.05	4259052.87	44539.78821	0.64364	0.15801	0.60925	0.16928	2.04E-03	2.64E-05	5.65E-06	2.49E-05	5.81E-06	2.1062E-03
520451.29	4258197.17	44523.57769	0.18012	0.34165	0.18481	0.36376	2.04E-03	7.37E-06	1.22E-05	7.57E-06	1.25E-05	2.0823E-03
520459.97	4258200.88	44475.11007	0.17823	0.32601	0.18256	0.34716	2.04E-03	7.30E-06	1.17E-05	7.47E-06	1.19E-05	2.0788E-03
520412.6	4259005.64	44468.16657	0.41578	0.1431	0.39542	0.15158	2.04E-03	1.70E-05	5.12E-06	1.62E-05	5.20E-06	2.0837E-03
520528.64	4258280.34	44449.28874	0.16579	0.23342	0.16522	0.24524	2.04E-03	6.79E-06	8.35E-06	6.76E-06	8.42E-06	2.0696E-03
520217.29	4258252.75	44430.81326	0.26363	1.69927	0.27885	1.89865	2.04E-03	1.08E-05	6.08E-05	1.14E-05	6.52E-05	2.1866E-03
520305.54	4258203.02	44430.42562	0.22155	0.81444	0.22986	0.88727	2.04E-03	9.07E-06	2.91E-05	9.41E-06	3.05E-05	2.1165E-03
520442.62	4258193.45	44402.89895	0.18178	0.35837	0.18681	0.38133	2.04E-03	7.44E-06	1.28E-05	7.65E-06	1.31E-05	2.0781E-03
520513.52	4258873.8	44384.03462	0.2516	0.13972	0.24115	0.14654	2.04E-03	1.03E-05	5.00E-06	9.87E-06	5.03E-06	2.0665E-03
519991.99	4258719.01	44377.50479	1.16121	0.95628	1.38185	0.89323	2.04E-03	4.75E-05	3.42E-05	5.66E-05	3.07E-05	2.2049E-03
520334.94	4258193.12	44340.06513	0.21045	0.67013	0.21676	0.72358	2.03E-03	8.62E-06	2.40E-05	8.88E-06	2.48E-05	2.1005E-03
520552.42	4258412.04	44339.58619	0.17193	0.19766	0.16967	0.20805	2.03E-03	7.04E-06	7.07E-06	6.95E-06	7.14E-06	2.0624E-03
520523.29	4258268.03	44304.41758	0.16621	0.23936	0.1659	0.25205	2.03E-03	6.81E-06	8.56E-06	6.79E-06	8.65E-06	2.0634E-03
520548.24	4258478.65	44282.4595	0.1802	0.19263	0.17654	0.20328	2.03E-03	7.38E-06	6.89E-06	7.23E-06	6.98E-06	2.0601E-03
520481.02	4258927.28	44280.72049	0.29383	0.13986	0.28065	0.14686	2.03E-03	1.20E-05	5.00E-06	1.15E-05	5.04E-06	2.0651E-03
520490.33	4258913.42	44267.62411	0.28094	0.13961	0.2687	0.14659	2.03E-03	1.15E-05	4.99E-06	1.10E-05	5.03E-06	2.0634E-03
520538.95	4258304.78	44264.93556	0.16498	0.22165	0.1645	0.23243	2.03E-03	6.75E-06	7.93E-06	6.74E-06	7.98E-06	2.0602E-03
520556.75	4258774.86	44259.04044	0.20282	0.14576	0.19448	0.15153	2.03E-03	8.30E-06	5.21E-06	7.96E-06	5.20E-06	2.0572E-03
520468.65	4258204.59	44242.24202	0.17612	0.3118	0.1801	0.3319	2.03E-03	7.21E-06	1.12E-05	7.37E-06	1.14E-05	2.0669E-03
520447.74	4258971.08	44236.95256	0.34645	0.1409	0.32994	0.14812	2.03E-03	1.42E-05	5.04E-06	1.35E-05	5.09E-06	2.0673E-03
520567.36	4258725.58	44231.02007	0.1897	0.15046	0.1818	0.15691	2.03E-03	7.77E-06	5.38E-06	7.44E-06	5.39E-06	2.0552E-03
520049.81	4258954.51	44230.13967	5.94919	0.37029	9.33885	0.35713	2.03E-03	2.44E-04	1.32E-05	3.82E-04	1.23E-05	2.6807E-03
520009.73	4258878.01	44229.47521	2.12217	0.45234	2.54198	0.44349	2.03E-03	8.69E-05	1.62E-05	1.04E-04	1.52E-05	2.2515E-03
519997.12	4258683.15	44188.18245	1.11183	1.21803	1.34011	1.11973	2.03E-03	4.55E-05	4.36E-05	5.49E-05	3.84E-05	2.2097E-03
519989.75	4258761.83	44169.64682	1.25248	0.74663	1.48273	0.70943	2.03E-03	5.13E-05	2.67E-05	6.07E-05	2.44E-05	2.1895E-03
520495.04	4258225.9	44140.88147	0.17077	0.27303	0.17304	0.29001	2.03E-03	6.99E-06	9.77E-06	7.08E-06	9.96E-06	2.0589E-03
520059.81	4258968.63	44096.89016	8.61049	0.36067	19.14181	0.34492	2.02E-03	3.53E-04	1.29E-05	7.84E-04	1.18E-05	3.1841E-03
520551.91	4258436.55	44073.65597	0.17459	0.19529	0.17198	0.20556	2.02E-03	7.15E-06	6.99E-06	7.04E-06	7.06E-06	2.0502E-03
520024.74	4258914.18	44061.30659	2.95841	0.40469	3.71912	0.39641	2.02E-03	1.21E-04	1.45E-05	1.52E-04	1.36E-05	2.3229E-03
520113.09	4259020.6	44056.06877	7.89529	0.32617	6.72091	0.30301	2.02E-03	3.23E-04	1.17E-05	2.75E-04	1.04E-05	2.6417E-03
520534.34	4258835.16	44048.22714	0.2279	0.14084	0.2187	0.14712	2.02E-03	9.33E-06	5.04E-06	8.95E-06	5.05E-06	2.0492E-03
520039.57	4258940.29	44046.32601	4.3305	0.38008	5.95892	0.36943	2.02E-03	1.77E-04	1.36E-05	2.44E-04	1.27E-05	2.4683E-03
520499.87	4258899.46	44045.80116	0.26859	0.1391	0.25706	0.14604	2.02E-03	1.10E-05	4.98E-06	1.05E-05	5.01E-06	2.0522E-03
520471.89	4258941.07	44031.61613	0.3071	0.13972	0.29285	0.14672	2.02E-03	1.26E-05	5.00E-06	1.20E-05	5.04E-06	2.0547E-03
520393.7	4258183.3	44010.88565	0.19231	0.47162	0.19745	0.50273	2.02E-03	7.87E-06	1.69E-05	8.08E-06	1.73E-05	2.0692E-03
520383.91	4258183.27	43997.50577	0.19481	0.49894	0.19988	0.53273	2.02E-03	7.98E-06	1.78E-05	8.18E-06	1.83E-05	2.0708E-03
519990.16	4258786.95	43966.35222	1.33404	0.65526	1.56582	0.62906	2.02E-03	5.46E-05	2.34E-05	6.41E-05	2.16E-05	2.1809E-03
520088.03	4259000.27	43960.55497	15.19593	0.34186	16.58513	0.31983	2.02E-03	6.22E-04	1.22E-05	6.79E-04	1.10E-05	3.3413E-03
520167.74	4259053.15	43954.44918	2.7955	0.27566	2.52631	0.26502	2.02E-03	1.14E-04	9.86E-06	1.03E-04	9.10E-06	2.2534E-03
520403.49	4258183.33	43933.45482	0.18975	0.44618	0.19498	0.47503	2.02E-03	7.77E-06	1.60E-05	7.98E-06	1.63E-05	2.0636E-03
520395.41	4259022.77	43908.08442	0.45621	0.14416	0.4337	0.15324	2.01E-03	1.87E-05	5.16E-06	1.78E-05	5.26E-06	2.0613E-03
520012.78	4258889.26	43879.60178	2.26967	0.43465	2.73907	0.4265	2.01E-03	9.29E-05	1.55E-05	1.12E-04	1.46E-05	2.2484E-03
520477.33	4258208.31	43861.15241	0.17387	0.29867	0.17747	0.3177	2.01E-03	7.12E-06	1.07E-05	7.27E-06	1.09E-05	2.0482E-03
520158.7	4259049.42	43856.29214	3.17784	0.28423	2.85235	0.27093	2.01E-03	1.30E-04	1.02E-05	1.17E-04	9.30E-06	2.2784E-03
520374.13	4258183.24	43834.65043	0.19715	0.52844	0.20225	0.56512	2.01E-03	8.07E-06	1.89E-05	8.28E-06	1.94E-05	2.0657E-03

520345.95	4259052.85	43829.11067	0.60591	0.15375	0.57379	0.16471	2.01E-03	2.48E-05	5.50E-06	2.35E-05	5.65E-06	2.0703E-03
520523.06	4258859.84	43824.55305	0.2408	0.13931	0.23094	0.1459	2.01E-03	9.86E-06	4.98E-06	9.46E-06	5.01E-06	2.0399E-03
520365.74	4259042.82	43811.23539	0.53892	0.149	0.51142	0.15925	2.01E-03	2.21E-05	5.33E-06	2.09E-05	5.47E-06	2.0638E-03
520039.6	4258550.44	43811.13413	0.96424	5.12003	1.19247	3.93196	2.01E-03	3.95E-05	1.83E-04	4.88E-05	1.35E-04	2.4164E-03
519993.37	4258818.79	43805.35337	1.48408	0.56592	1.73957	0.54863	2.01E-03	6.08E-05	2.02E-05	7.12E-05	1.88E-05	2.1808E-03
520325.15	4258193.08	43769.52347	0.21253	0.71466	0.21945	0.77402	2.01E-03	8.70E-06	2.56E-05	8.99E-06	2.66E-05	2.0779E-03
520413.28	4258183.36	43764.81041	0.18714	0.42247	0.19241	0.44939	2.01E-03	7.66E-06	1.51E-05	7.88E-06	1.54E-05	2.0539E-03
520149.67	4259045.69	43760.08544	3.67367	0.2926	3.2681	0.27664	2.01E-03	1.50E-04	1.05E-05	1.34E-04	9.50E-06	2.3118E-03
520227.11	4258242.78	43729.61364	0.25556	1.54428	0.2704	1.7198	2.01E-03	1.05E-05	5.52E-05	1.11E-05	5.90E-05	2.1420E-03
520553.38	4258388.69	43717.67121	0.16885	0.19823	0.16697	0.20901	2.01E-03	6.91E-06	7.09E-06	6.84E-06	7.18E-06	2.0337E-03
520276.15	4258212.93	43713.40859	0.23183	1.01184	0.24305	1.11154	2.01E-03	9.49E-06	3.62E-05	9.95E-06	3.82E-05	2.0993E-03
520421.21	4259002.08	43701.05373	0.3975	0.14136	0.37836	0.14948	2.00E-03	1.63E-05	5.06E-06	1.55E-05	5.13E-06	2.0469E-03
520462.93	4258954.79	43648.58865	0.32087	0.13958	0.30576	0.14657	2.00E-03	1.31E-05	4.99E-06	1.25E-05	5.03E-06	2.0382E-03
520140.63	4259041.96	43639.77713	4.30205	0.30032	3.79211	0.28193	2.00E-03	1.76E-04	1.07E-05	1.55E-04	9.68E-06	2.3539E-03
520438.7	4258984.83	43633.34527	0.36311	0.1404	0.34583	0.14784	2.00E-03	1.49E-05	5.02E-06	1.42E-05	5.08E-06	2.0409E-03
520364.34	4258183.21	43617.12571	0.19948	0.56021	0.20468	0.60043	2.00E-03	8.17E-06	2.00E-05	8.38E-06	2.06E-05	2.0583E-03
520256.54	4258222.87	43583.90698	0.24027	1.18531	0.25327	1.30989	2.00E-03	9.84E-06	4.24E-05	1.04E-05	4.50E-05	2.1071E-03
520295.75	4258202.99	43559.71203	0.22317	0.8744	0.23249	0.95532	2.00E-03	9.14E-06	3.13E-05	9.52E-06	3.28E-05	2.0812E-03
519989.13	4258736.23	43544.73491	1.16242	0.85495	1.37544	0.80413	2.00E-03	4.76E-05	3.06E-05	5.63E-05	2.76E-05	2.1598E-03
520513.07	4258243.63	43517.16072	0.16675	0.25098	0.16752	0.26562	2.00E-03	6.83E-06	8.98E-06	6.86E-06	9.12E-06	2.0283E-03
520423.07	4258183.39	43504.38046	0.18447	0.40037	0.18974	0.42563	2.00E-03	7.55E-06	1.43E-05	7.77E-06	1.46E-05	2.0402E-03
520563.68	4258758.32	43490.76792	0.19584	0.14633	0.18772	0.15212	2.00E-03	8.02E-06	5.23E-06	7.69E-06	5.22E-06	2.0214E-03
520571.31	4258692.22	43481.18206	0.1836	0.15467	0.17627	0.16124	1.99E-03	7.52E-06	5.53E-06	7.22E-06	5.54E-06	2.0206E-03
520538.06	4258294.38	43469.89892	0.16384	0.22374	0.16333	0.23448	1.99E-03	6.71E-06	8.00E-06	6.69E-06	8.05E-06	2.0238E-03
520119.09	4258352.44	43452.12641	0.35001	7.52194	0.36431	8.97237	1.99E-03	1.43E-05	2.69E-04	1.49E-05	3.08E-04	2.5998E-03
520103.98	4259016.84	43449.68644	10.19813	0.32883	8.70507	0.30578	1.99E-03	4.18E-04	1.18E-05	3.56E-04	1.05E-05	2.7896E-03
520168.22	4258292.6	43443.60929	0.29304	3.04177	0.30519	3.46802	1.99E-03	1.20E-05	1.09E-04	1.25E-05	1.19E-04	2.2455E-03
520178.04	4258282.63	43409.91815	0.28509	2.66505	0.29794	3.02255	1.99E-03	1.17E-05	9.53E-05	1.22E-05	1.04E-04	2.2145E-03
520385.52	4259032.79	43389.79048	0.48183	0.14473	0.4578	0.15416	1.99E-03	1.97E-05	5.18E-06	1.87E-05	5.29E-06	2.0396E-03
520486.01	4258212.02	43365.98544	0.17151	0.2863	0.17468	0.30431	1.99E-03	7.02E-06	1.02E-05	7.15E-06	1.04E-05	2.0244E-03
520403.96	4259019.23	43344.44813	0.43569	0.14225	0.41439	0.151	1.99E-03	1.78E-05	5.09E-06	1.70E-05	5.18E-06	2.0336E-03
520522.55	4258257.7	43325.5833	0.16507	0.2406	0.16503	0.25375	1.99E-03	6.76E-06	8.61E-06	6.76E-06	8.71E-06	2.0185E-03
520158.4	4258302.56	43304.74833	0.30099	3.51223	0.31246	4.0294	1.99E-03	1.23E-05	1.26E-04	1.28E-05	1.38E-04	2.2758E-03
520503.79	4258229.65	43304.1313	0.16811	0.26235	0.16986	0.27829	1.99E-03	6.88E-06	9.38E-06	6.95E-06	9.55E-06	2.0195E-03
520551.62	4258461.66	43289.0779	0.17697	0.19239	0.17382	0.20277	1.99E-03	7.25E-06	6.88E-06	7.12E-06	6.96E-06	2.0142E-03
520354.55	4258183.18	43276.10992	0.20167	0.59467	0.20714	0.63881	1.99E-03	8.26E-06	2.13E-05	8.48E-06	2.19E-05	2.0454E-03
520131.6	4259038.23	43256.93824	5.11861	0.3065	4.46134	0.28625	1.98E-03	2.10E-04	1.10E-05	1.83E-04	9.83E-06	2.3976E-03
520187.86	4258272.66	43191.60023	0.2771	2.35838	0.29065	2.66042	1.98E-03	1.13E-05	8.44E-05	1.19E-05	9.13E-05	2.1805E-03
520432.86	4258183.42	43144.68326	0.18174	0.37977	0.18694	0.40356	1.98E-03	7.44E-06	1.36E-05	7.65E-06	1.39E-05	2.0219E-03
520014.36	4258899.91	43114.96265	2.35795	0.41779	2.8591	0.4102	1.98E-03	9.65E-05	1.49E-05	1.17E-04	1.41E-05	2.2207E-03
520512.6	4258884.19	43102.44892	0.25341	0.13784	0.24291	0.14459	1.98E-03	1.04E-05	4.93E-06	9.95E-06	4.96E-06	2.0077E-03
520315.36	4258193.05	43070.07669	0.21436	0.76376	0.2221	0.82946	1.98E-03	8.78E-06	2.73E-05	9.09E-06	2.85E-05	2.0496E-03
520532.88	4258845.77	43068.62452	0.23023	0.13902	0.22099	0.14531	1.98E-03	9.43E-06	4.97E-06	9.05E-06	4.99E-06	2.0043E-03
520025.98	4258924.69	43026.58045	3.05766	0.38975	3.86782	0.38172	1.97E-03	1.25E-04	1.39E-05	1.58E-04	1.31E-05	2.2846E-03
520236.93	4258232.81	43020.85899	0.24786	1.40969	0.26208	1.56622	1.97E-03	1.01E-05	5.04E-05	1.07E-05	5.38E-05	2.0988E-03
520456.47	4258967.47	42981.15873	0.3319	0.1388	0.31622	0.14579	1.97E-03	1.36E-05	4.96E-06	1.29E-05	5.01E-06	2.0084E-03
520355.85	4259052.84	42973.71176	0.57108	0.14983	0.54124	0.1604	1.97E-03	2.34E-05	5.36E-06	2.22E-05	5.51E-06	2.0280E-03
520148.58	4258312.53	42939.95114	0.30883	4.11485	0.31988	4.74919	1.97E-03	1.26E-05	1.47E-04	1.31E-05	1.63E-04	2.3060E-03
520555.67	4258420.56	42930.4835	0.17117	0.19441	0.16873	0.20451	1.97E-03	7.01E-06	6.95E-06	6.91E-06	7.02E-06	1.9975E-03
520050.82	4258964.92	42918.25962	6.17462	0.35739	9.85291	0.34453	1.97E-03	2.53E-04	1.28E-05	4.03E-04	1.18E-05	2.6499E-03
520451.62	4258187.29	42887.1976	0.17746	0.34303	0.18221	0.3648	1.97E-03	7.27E-06	1.23E-05	7.46E-06	1.25E-05	2.0071E-03
520040.75	4258950.77	42884.96843	4.4938	0.36681	6.24023	0.35632	1.97E-03	1.84E-04	1.31E-05	2.56E-04	1.22E-05	2.4323E-03
520460.6	4258191.14	42880.82189	0.17568	0.32669	0.18011	0.34756	1.97E-03	7.19E-06	1.17E-05	7.37E-06	1.19E-05	2.0055E-03
520197.68	4258262.69	42878.35119	0.26929	2.10351	0.28329	2.3634	1.97E-03	1.10E-05	7.52E-05	1.16E-05	8.11E-05	2.1462E-03
520429.81	4258998.52	42864.16567	0.38036	0.1396	0.36225	0.14735	1.97E-03	1.56E-05	4.99E-06	1.48E-05	5.06E-06	2.0070E-03
519989.62	4258809.75	42855.98699	1.37431	0.58419	1.6053	0.56469	1.97E-03	5.63E-05	2.09E-05	6.57E-05	1.94E-05	2.1284E-03
519997.12	4258673.87	42822.60632	1.06341	1.28263	1.28075	1.17508	1.96E-03	4.35E-05	4.59E-05	5.24E-05	4.03E-05	2.1468E-03
520489.59	4258923.74	42820.33751	0.28263	0.13765	0.2703	0.14447	1.96E-03	1.16E-05	4.92E-06	1.11E-05	4.96E-06	1.9970E-03
520094.88	4259013.08	42814.87941	13.46122	0.33011	12.04709	0.30797	1.96E-03	5.51E-04	1.18E-05	4.93E-04	1.06E-05	3.0311E-03
520344.76	4258183.15	42806.24584	0.20368	0.6322	0.20962	0.6806	1.96E-03	8.34E-06	2.26E-05	8.58E-06	2.34E-05	2.0268E-03
520122.56	4259034.5	42785.73089	6.20198	0.31142	5.35437	0.28993	1.96E-03	2.54E-04	1.11E-05	2.19E-04	9.95E-06	2.4572E-03
520494.68	4258215.74	42778.1914	0.1691	0.27465	0.17178	0.29171	1.96E-03	6.92E-06	9.82E-06	7.03E-06	1.00E-05	1.9964E-03
520375.64	4259042.8	42771.97732	0.50931	0.14539	0.48363	0.15517	1.96E-03	2.09E-05	5.20E-06	1.98E-05	5.33E-06	2.0135E-03
520480.39	4258937.55	42769.17986	0.29543	0.13779	0.28215	0.14462	1.96E-03	1.21E-05	4.93E-06	1.16E-05	4.96E-06	1.9957E-03
520537.26	4258284.03	42731.80778	0.16279	0.22529	0.16218	0.23625	1.96E-03	6.67E-06	8.06E-06	6.64E-06	8.11E-06	1.9899E-03
520532.26	4258271.87	42703.26947	0.16313	0.23068	0.16263	0.24235	1.96E-03	6.68E-06	8.25E-06	6.66E-06	8.32E-06	1.9891E-03
520060.67	4258978.98	42702.92462	8.9141	0.34835	17.06479	0.33305	1.96E-03	3.65E-04	1.25E-05	6.99E-04	1.14E-05	3.0467E-03
520099.42	4258382.38	42695.03816	0.38577	14.08928	0.40806	16.00012	1.96E-03	1.58E-05	5.04E-04	1.67E-05	5.49E-04	3.0445E-03
520009.93	4258628.15	42693.51905	1.04484	1.90931	1.29384	1.69202	1.96E-03	4.28E-05	6.83E-05	5.30E-05	5.81E-05	2.1808E-03
520412.51	4259015.69	42692.72657	0.41648	0.14028	0.39607	0.14871	1.96E-03	1.71E-05	5.02E-06	1.62E-05	5.11E-06	2.0021E-03
520498.98	4258909.84	42685.49962	0.2704	0.13723	0.25879	0.14404	1.96E-03	1.11E-05	4.91E-06	1.06E-05	4.95E-06	1.9898E-03
520469.58	4258194.98	42684.93567	0.17366	0.31191	0.17779	0.33175	1.96E-03	7.11E-06	1.12E-05	7.28E-06	1.14E-05	1.9952E-03
520442.65	4258183.45	42682.331	0.17893	0.36057	0.184	0.38304	1.96E-03	7.33E-06	1.29E-05	7.53E-06	1.32E-05	1.9991E-03
520556.86	4258397.81	42672.93957	0.16836	0.19564	0.16624	0.20599	1.96E-03	6.89E-06	7.00E-06	6.81E-06	7.07E-06	1.9855E-03
520554.31	4258351.4	42656.17471	0.16439	0.2027	0.16371	0.2135	1.96E-03	6.73E-06	7.25E-06	6.70E-06	7.33E-06	1.9850E-03
520007.12	4258636.77	42654.40538	1.04702	1.75721	1.28953	1.56951	1.96E-03	4.29E-05	6.29E-05	5.28E-05	5.39E-05	2.1693E-03
520521.97	4258870.3	42651.57735	0.24278	0.13739	0.23282	0.14396	1.96E-03	9.94E-06	4.91E-06	9.53E-06	4.94E-06	1.9861E-03
519986.58	4258778.3	42608.06108	1.23437	0.67572	1.44379	0.64625	1.95E-03	5.05E-05	2.42E-05	5.91E-05	2.22E-05	2.1108E-03
520447.36	4258981.24	42600.01479	0.34785	0.13846	0.33141	0.14561	1.95E-03	1.42E-05	4.95E-06	1.36E-05	5.00E-06	1.9922E-03
520285.97	4258202.96	42597.55318	0.22447	0.94128	0.23486	1.03107	1.95E-03	9.19E-06	3.37E-05	9.62E-06	3.54E-05	2.0422E-03
520548.83	4258319.02	42587.4077	0.16273	0.21149	0.16246	0.22188	1.95E-03	6.66E-06	7.56E-06	6.65E-06	7.62E-06	1.9823E-03
520555.61	4258361.97	42585.58433	0.16504	0.20039	0.16401	0.2112	1.95E-03	6.76E-06	7.17E-06	6.72E-06	7.25E-06	1.9816E-03
520030.43	4258936.52	42563.13077	3.41153	0.37685	4.41023	0.36838	1.95E-03	1.40E-04	1.35E-05	1.81E-04	1.26E-05	2.2991E-03
520266.36	4258212.9	42559.53769	0.23263	1.09594	0.24486	1.20692	1.95E-03	9.52E-06	3.92E-05	1.00E-05	4.14E-05	2.0527E-03
520471.38	4258951.29	42555.8058	0.30868	0.13763	0.29443	0.14446	1.95E-03	1.26E-05	4.92E-06	1.21E-05	4.96E-06	1.9870E-03
520553.17	4258340.9	42523.12538	0.16359	0.20512	0.16321	0.21576	1.95E-03	6.70E-06	7.34E-06	6.68E-06	7.41E-06	1.9790E-03
519999.34	4258863.73	42491.90552	1.73319	0.46913	2.03908	0.459	1.95E-03	7.10E-05	1.68E-05	8.35E-05	1.58E-05	2.1364E-03
520207.5	4258252.72	42483.30854	0.26168	1.88899	0.27586	2.11581	1.95E-03	1.07E-05	6.76E-05	1.13E-05	7.26E-05	2.1113E-03
520019.81	4258599.01	42460.31741	1.02424	2.57719	1.2939	2.2103	1.95E-03	4.19E-05	9.22E-05	5.30E-05	7.59E-05	2.2110E-03
520138.76	4258322.5	42417.4221	0.31668	4.90542	0.32754	5.71974	1.95E-03	1.30E-05	1.75E-04	1.34E-05	1.96E-04	2.3442E-03
520508.59	4258895.85	42409.62596	0.25861	0.13677	0.24776	0.14351	1.95E-03	1.06E-05	4.89E-06	1.01E-05	4.93E-06	1.9762E-03
520570.6	4258741.78	42391.0287	0.18923	0.14637	0.18133	0.15236	1.94E-03	7.75E-06	5.24E-06	7.42E-06	5.23E-06	1.9705E-03
519986.12	4258753.09	42361.63704	1.1516	0.76942	1.35706	0.72804	1.94E-03	4.72E-05	2.75E-05	5.56E-05	2.50E-05	2.0987E-03
520478.56	4258198.82	42353.21008	0.17149	0.29818	0.17526	0.31701	1.94E-03	7.02E-06	1.07E-05	7.18E-06	1.09E-05	1.9788E-03
520113.52	4259030.77	42344.27309	7.76523	0.31542	6.63683	0.29323	1.94E-03	3.18E-04	1.13E-05	2.72E-04	1.01E-05	2.5537E-03
520574.35	4258708.88	42337.91911	0.18333	0.1504	0.17593	0.15686	1.94E-03	7.51E-06	5.38E-06	7.20E-06	5.39E-06	1.9679E-03
520512.53	4258233.39	42336.45448	0.16538	0.25243	0.16663	0.26733	1.94E-03	6.77E-06	9.03E-06	6.82E-06	9.18E-06	1.9741E-03
520521.88	4258247.4	42314.15139	0.16389	0.2418	0.16421	0.25537	1.94E-03	6.71E-06	8.65E-06	6.72E-06	8.77E-06	1.9721E-03
519993.85	4258844.06	42314.04217	1.54587	0.50425	1.80564	0.49156	1.94E-03	6.33E-05	1.80E-05	7.39E-05	1.69E-05	2.1134E-03
520334.97	4258183.12	42312.66726	0.20569	0.67299	0.21219	0.72656	1.94E-03	8.42E-06	2.41E-05	8.69E-06	2.49E-05	2.0073E-03
520305.57	4258193.02	42297.16935	0.21599	0.818	0.22466	0.89083	1.94E-03	8.84E-06	2.93E-05	9.20E-06	3.06E-05	2.0184E-03
520015.81	4258910.5	42288.20087	2.44266	0.40196	2.9759	0.3948	1.94E-03	1.00E-04	1.44E-05	1.22E-04	1.36E-05	2.1899E-03
520246.75	4258222.84	42204.82442	0.2403	1.29311	0.2539	1.43219	1.94E-03	9.84E-06	4.63E-05	1.04E-05	4.92E-05	2.0519E-03
520547.73	4258308.53	42196.52638	0.16188	0.21354	0.16145	0.22385	1.94E-03	6.63E-06	7.64E-06	6.61E-06	7.68E-06	1.9645E-03
520393.73	4258173.3	42195.00555	0.18869	0.47401	0.19356	0.50494	1.94E-03	7.73E-06	1.70E-05	7.93E-06	1.73E-05	1.9858E-03
520085.77	4259009.33	42173.64889	15.97974	0.33019	18.86667	0.30964	1.93E-03	6.54E-04	1.18E-05	7.72E-04	1.06E-05	3.3840E-03
520403.52	4258173.33	42151.86957	0.18629	0.44855	0.19124	0.47713	1.93E-03	7.63E-06	1.60E-05	7.83E-06	1.64E-05	1.9817E-03
520395.42	4259032.77	42151.31641	0.45651	0.14134	0.43396	0.15033	1.93E-03	1.87E-05	5.06E-06	1.78E-05	5.16E-06	1.9805E-03
520383.95	4258173.27	42129.03275	0.19098	0.50137	0.19585	0.53497	1.93E-03	7.82E-06	1.79E-05	8.02E-06	1.84E-05	1.9849E-03
520546.67	4258822.87	42094.27877	0.21601	0.13909	0.20739	0.14501	1.93E-03	8.84E-06	4.98E-06	8.49E-06	4.98E-06	1.9585E-03
520550.31	4258814.19	42064.0913	0.21215	0.13965	0.20366	0.1455	1.93E-03	8.69E-06	5.00E-06	8.34E-06	5.00E-06	1.9568E-03
520503.36	4258219.45	42063.51431	0.1666	0.26375	0.16877	0.27987	1.93E-03	6.82E-06	9.43E-06	6.91E-06	9.61E-06	1.9626E-03
520365.75	4259052.82	42061.92073	0.53894	0.14615	0.51132	0.15628	1.93E-03	2.21E-05	5.23E-06	2.09E-05	5.37E-06	1.9833E-03
520413.31	4258173.36	42061.45411	0.18391	0.42472	0.18889	0.45142	1.93E-03	7.53E-06	1.52E-05	7.73E-06	1.55E-05	1.9757E-03
520531.58	4258856.31	42043.34571	0.23238	0.13716	0.22308	0.14347	1.93E-03	9.51E-06	4.91E-06	9.13E-06	4.93E-06	1.9573E-03
520000.96	4258874.39	42029.99576	1.80198	0.44992	2.12131	0.44095	1.93E-03	7.38E-05	1.61E-05	8.69E-05	1.51E-05	2.1201E-03
520421.05	4259012.15	41986.19263	0.39834	0.13862	0.3792	0.1467	1.93E-03	1.63E-05	4.96E-06	1.55E-05	5.04E-06	1.9681E-03
520553.94	4258805.51	41984.57825	0.20835	0.14018	0.19998	0.14594	1.93E-03	8.53E-06	5.01E-06	8.19E-06	5.01E-06	1.9529E-03
520217.32	4258242.75	41967.98386	0.25416	1.70725	0.26837	1.90579	1.93E-03	1.04E-05	6.11E-05	1.10E-05	6.54E-05	2.0733E-03
520438.41	4258994.96	41964.44888	0.36424	0.13782	0.34705	0.14522	1.93E-03	1.49E-05	4.93E-06	1.42E-05	4.99E-06	1.9643E-03
520374.16	4258173.24	41940.20992	0.19315	0.53091	0.19815	0.56747	1.92E-03	7.91E-06	1.90E-05	8.11E-06	1.95E-05	1.9786E-03
520487.53	4258202.66	41909.89434	0.16921	0.2853	0.17256	0.30316	1.92E-03	6.93E-06	1.02E-05	7.07E-06	1.04E-05	1.9574E-03
520531.44	4258261.51	41899.47847	0.16212	0.23191	0.16175	0.24404	1.92E-03	6.64E-06	8.30E-06	6.62E-06	8.38E-06	1.9522E-03
520423.1	4258173.39	41885.53884	0.18147	0.40244	0.18644	0.42754	1.92E-03	7.43E-06	1.44E-05	7.63E-06	1.47E-05	1.9658E-03
520104.49	4259027.04	41865.32827	10.02281	0.3181	8.56897	0.29597	1.92E-03	4.10E-04	1.14E-05	3.51E-04	1.02E-05	2.7035E-03
520557.58	4258796.83	41847.9946	0.20461	0.14069	0.19636	0.14637	1.92E-03	8.38E-06	5.03E-06	8.04E-06	5.03E-06	1.9464E-03
520109.27	4258362.41	41827.92221	0.35706	9.93389	0.37374	11.78621	1.92E-03	1.46E-05	3.55E-04	1.53E-05	4.05E-04	2.7089E-03
520465.2	4258963.85	41801.94968	0.31839	0.13677	0.30357	0.14356	1.92E-03	1.30E-05	4.89E-06	1.24E-05	4.93E-06	1.9531E-03
519985.87	4258800.71	41765.02319	1.2726	0.60285	1.48146	0.58082	1.92E-03	5.21E-05	2.16E-05	6.07E-05	1.99E-05	2.0704E-03
520003.68	4258885.5	41754.95011	1.90885	0.4322	2.25712	0.4242	1.92E-03	7.82E-05	1.55E-05	9.24E-05	1.46E-05	2.1162E-03
520325.18	4258183.08	41741.42386	0.20756	0.71765	0.21477	0.77708	1.92E-03	8.50E-06	2.57E-05	8.79E-06	2.67E-05	1.9847E-03
520059.4	4258501.87	41712.54558	0.75297	13.19356	0.85982	7.96512	1.91E-03	3.08E-05	4.72E-04	3.52E-05	2.73E-04	2.7251E-03
520574.06	4258733.51	41710.59665	0.18604	0.14633	0.17833	0.15243	1.91E-03	7.62E-06	5.23E-06	7.30E-06	5.23E-06	1.9390E-03
520364.37	4258173.21	41704.0436	0.19531	0.56271	0.20051	0.60286	1.91E-03	8.00E-06	2.01E-05	8.21E-06	2.07E-05	1.9703E-03
520041.83	4258961.21	41693.11792	4.65112	0.35423	6.51307	0.3439	1.91E-03	1.90E-04	1.27E-05	2.67E-04	1.18E-05	2.3944E-03
519990.14	4258835.12	41675.40822	1.43809	0.51958	1.67193	0.50544	1.91E-03	5.89E-05	1.86E-05	6.85E-05	1.74E-05	2.0753E-03
520385.54	4259042.79	41661.38367	0.48198	0.14192	0.4579	0.15125	1.91E-03	1.97E-05	5.08E-06	1.87E-05	5.19E-06	1.9601E-03
520546.76	4258298.1	41630.84835	0.16089	0.21565	0.16036	0.22589	1.91E-03	6.59E-06	7.71E-06	6.57E-06	7.76E-06	1.9386E-03
520051.75	4258975.3	41630.7529	6.39395	0.34525	10.37462	0.33269	1.91E-03	2.62E-04	1.23E-05	4.25E-04	1.14E-05	2.6203E-03
520403.92	4259029.25	41627.70588	0.43614	0.13949	0.41484	0.14816	1.91E-03	1.79E-05	4.99E-06	1.70E-05	5.09E-06	1.9547E-03
520561.21	4258788.15	41625.82791	0.20089	0.14107	0.19273	0.14668	1.91E-03	8.23E-06	5.05E-06	7.89E-06	5.04E-06	1.9359E-03
520554.95	4258470.43	41620.72111	0.17588	0.18906	0.1724	0.19929	1.91E-03	7.20E-06	6.76E-06	7.06E-06	6.84E-06	1.9373E-03
519988.27	4258710.04	41583.77319	1.05141	0.97989	1.24161	0.91295	1.91E-03	4.30E-05	3.50E-05	5.08E-05	3.13E-05	2.0681E-03
520276.18	4258202.93	41559.35072	0.22541	1.01631	0.23682	1.11599	1.91E-03	9.23E-06	3.64E-05	9.70E-06	3.83E-05	2.0003E-03
520432.89	4258173.42	41556.72296	0.17887	0.38178	0.18386	0.40534	1.91E-03	7.32E-06	1.37E-05	7.53E-06	1.39E-05	1.9490E-03
520456.03	4258977.66	41518.47371	0.33344	0.13653	0.31784	0.14341	1.90E-03	1.37E-05	4.88E-06	1.30E-05	4.92E-06	1.9413E-03
520520.98	4258880.72	41495.82151	0.24456	0.13566	0.23464	0.14217	1.90E-03	1.00E-05	4.85E-06	9.61E-06	4.88E-06	1.9331E-03
520558.91	4258429.07	41491.55093	0.17037	0.19119	0.16776	0.20106	1.90E-03	6.98E-06	6.84E-06	6.87E-06	6.90E-06	1.9311E-03
520031.68	4258947.03	41469.97853	3.53135	0.36359	4.59422	0.35526	1.90E-03	1.45E-04	1.30E-05	1.88E-04	1.22E-05	2.2605E-03
520295.79	4258192.99	41454.71819	0.21739	0.87816	0.22705	0.95894	1.90E-03	8.90E-06	3.14E-05	9.30E-06	3.29E-05	1.9844E-03
520488.9	4258934.03	41425.24325	0.2842	0.13571	0.27183	0.14237	1.90E-03	1.16E-05	4.85E-06	1.11E-05	4.89E-06	1.9330E-03
520227.14	4258232.78	41373.46908	0.2468	1.55145	0.26086	1.72631	1.90E-03	1.01E-05	5.55E-05	1.07E-05	5.93E-05	2.0337E-03
520029.69	4258569.88	41369.99292	0.97141	3.62166	1.22564	2.94412	1.90E-03	3.98E-05	1.30E-04	5.02E-05	1.01E-04	2.2185E-03
520560.33	4258406.94	41357.44159	0.16761	0.19241	0.16528	0.20238	1.90E-03	6.86E-06	6.88E-06	6.77E-06	6.95E-06	1.9249E-03
520460.49	4258181.07	41357.4098	0.17325	0.32875	0.17778	0.34934	1.90E-03	7.09E-06	1.18E-05	7.28E-06	1.20E-05	1.9355E-03
520017.13	4258921.04	41355.50558	2.52212	0.38702	3.0873	0.38021	1.90E-03	1.03E-04	1.38E-05	1.26E-04	1.31E-05	2.1539E-03
520061.48	4258989.3	41350.52192	9.22683	0.33664	17.88657	0.3218	1.90E-03	3.78E-04	1.20E-05	7.32E-04	1.10E-05	3.0303E-03
519990.89	4258692.25	41349.9396	1.02802	1.09862	1.2199	1.01684	1.90E-03	4.21E-05	3.93E-05	4.99E-05	3.49E-05	2.0633E-03
520498.16	4258920.19	41348.28204	0.27211	0.13533	0.26038	0.142	1.90E-03	1.11E-05	4.84E-06	1.07E-05	4.87E-06	1.9285E-03
520354.58	4258173.18	41347.51692	0.19732	0.59722	0.2029	0.6413	1.90E-03	8.08E-06	2.14E-05	8.31E-06	2.20E-05	1.9567E-03
520496.51	4258206.51	41344.70121	0.16683	0.27326	0.16971	0.29018	1.90E-03	6.83E-06	9.77E-06	6.95E-06	9.96E-06	1.9303E-03
520564.85	4258779.46	41334.85846	0.19725	0.14147	0.18918	0.14701	1.90E-03	8.08E-06	5.06E-06	7.75E-06	5.05E-06	1.9223E-03
520095.45	4259023.31	41333.80452	13.2003	0.31939	11.77953	0.29811	1.90E-03	5.40E-04	1.14E-05	4.82E-04	1.02E-05	2.9408E-03
520256.57	4258212.87	41317.9534	0.23293	1.19117	0.24591	1.31466	1.90E-03	9.54E-06	4.26E-05	1.01E-05	4.51E-05	2.0029E-03
520479.82	4258947.79	41315.06533	0.29689	0.13576	0.28359	0.14242	1.90E-03	1.22E-05	4.86E-06	1.16E-05	4.89E-06	1.9290E-03
520521.27	4258237.13	41279.46132	0.16265	0.24305	0.1634	0.25695	1.89E-03	6.66E-06	8.69E-06	6.69E-06	8.82E-06	1.9247E-03
520577.85	4258700.54	41269.70862	0.18029	0.15033	0.17309	0.15669	1.89E-03	7.38E-06	5.38E-06	7.09E-06	5.38E-06	1.9186E-03
520451.58	4258177.26	41268.66687	0.17477	0.34527	0.1796	0.36656	1.89E-03	7.16E-06	1.23E-05	7.35E-06	1.26E-05	1.9328E-03
519997.12	4258664.6	41261.72075	1.01285	1.34793	1.21923	1.23075	1.89E-03	4.15E-05	4.82E-05	4.99E-05	4.23E-05	2.0749E-03
519985.46	4258727.38	41224.95594	1.06131	0.87791	1.24693	0.82313	1.89E-03	4.35E-05	3.14E-05	5.11E-05	2.83E-05	2.0455E-03
520469.39	4258184.89	41223.57698	0.17143	0.31386	0.17571	0.33351	1.89E-03	7.02E-06	1.12E-05	7.19E-06	1.14E-05	1.9281E-03
520541.49	4258842.21	41214.40314	0.22225	0.13675	0.21345	0.14278	1.89E-03	9.10E-06	4.89E-06	8.74E-06	4.90E-06	1.9185E-03
520429.6	4259008.61	41213.02244	0.3813	0.13691	0.3632	0.14464	1.89E-03	1.56E-05	4.90E-06	1.49E-05	4.97E-06	1.9311E-03
520512.04	4258223.17	41209.881	0.16401	0.25369	0.16569	0.26883	1.89E-03	6.72E-06	9.07E-06	6.78E-06	9.23E-06	1.9224E-03
520560.54	4258381.62	41195.92749	0.16492	0.19405	0.16309	0.20449	1.89E-03	6.75E-06	6.94E-06	6.68E-06	7.02E-06	1.9174E-03
520507.62	4258906.26	41159.93115	0.26043	0.13496	0.24948	0.14158	1.89E-03	1.07E-05	4.83E-06	1.02E-05	4.86E-06	1.9189E-03
520005.35	4258896.19	41159.23512	1.9829	0.41542	2.35263	0.40817	1.89E-03	8.12E-05	1.49E-05	9.63E-05	1.40E-05	2.0947E-03
520442.68	4258173.45	41118.2656	0.17619	0.36253	0.18115	0.38468	1.89E-03	7.21E-06	1.30E-05	7.42E-06	1.32E-05	1.9272E-03
520375.66	4259052.8	41076.99781	0.50934	0.14257	0.48352	0.15226	1.88E-03	2.09E-05	5.10E-06	1.98E-05	5.23E-06	1.9355E-03
519982.99	4258769.65	41073.91283	1.13897	0.69631	1.33055	0.66302	1.88E-03	4.66E-05	2.49E-05	5.45E-05	2.28E-05	2.0332E-03
520568.48	4258770.78	41072.51253	0.19379	0.14191	0.18584	0.14741	1.88E-03	7.93E-06	5.08E-06	7.61E-06	5.06E-06	1.9100E-03
520541.24	4258275.72	41066.97321	0.16013	0.22234	0.15949	0.23314	1.88E-03	6.56E-06	7.95E-06	6.53E-06	8.00E-06	1.9131E-03
520315.39	4258183.05	41058.17415	0.20919	0.76692	0.21726	0.83263	1.88E-03	8.57E-06	2.74E-05	8.90E-06	2.86E-05	1.9571E-03
520530.69	4258251.18	41047.57733	0.16105	0.233	0.16095	0.24558	1.88E-03	6.59E-06	8.33E-06	6.59E-06	8.43E-06	1.9131E-03
520412.42	4259025.73	41022.34123	0.41706	0.13754	0.39662	0.1459	1.88E-03	1.71E-05	4.92E-06	1.62E-05	5.01E-06	1.9253E-03
520447.02	4258991.39	41012.09173	0.34904	0.13603	0.33272	0.14312	1.88E-03	1.43E-05	4.87E-06	1.36E-05	4.91E-06	1.9192E-03
520530.41	4258866.8	40986.25642	0.23438	0.13523	0.22495	0.14154	1.88E-03	9.60E-06	4.84E-06	9.21E-06	4.86E-06	1.9089E-03
520545.88	4258287.72	40985.07222	0.15985	0.21745	0.15925	0.2277	1.88E-03	6.54E-06	7.78E-06	6.52E-06	7.82E-06	1.9090E-03
520478.3	4258188.7	40981.84086	0.16947	0.29984	0.17342	0.3186	1.88E-03	6.94E-06	1.07E-05	7.10E-06	1.09E-05	1.9159E-03
520021.28	4258932.74	40968.10955	2.76688	0.37392	3.43647	0.36701	1.88E-03	1.13E-04	1.34E-05	1.41E-04	1.26E-05	2.1595E-03

520049.48	4258521.31	40959.43353	0.81503	7.72475	0.95063	5.52178	1.88E-03	3.34E-05	2.76E-04	3.89E-05	1.90E-04	2.4173E-03
519986.43	4258826.18	40911.2484	1.33766	0.53542	1.54972	0.51958	1.88E-03	5.48E-05	1.92E-05	6.35E-05	1.78E-05	2.0321E-03
520344.79	4258173.15	40898.93969	0.19921	0.63476	0.20533	0.68323	1.88E-03	8.16E-06	2.27E-05	8.41E-06	2.35E-05	1.9391E-03
520517.31	4258892.25	40821.45872	0.24915	0.13452	0.23895	0.14103	1.87E-03	1.02E-05	4.81E-06	9.78E-06	4.84E-06	1.9024E-03
520178.07	4258272.63	40807.29882	0.27305	2.67629	0.28428	3.03088	1.87E-03	1.12E-05	9.57E-05	1.16E-05	1.04E-04	2.0948E-03
520168.25	4258282.6	40803.04554	0.28023	3.05343	0.29067	3.47826	1.87E-03	1.15E-05	1.09E-04	1.19E-05	1.19E-04	2.1240E-03
520236.96	4258222.81	40745.51455	0.23971	1.41635	0.2534	1.5719	1.87E-03	9.81E-06	5.07E-05	1.04E-05	5.40E-05	1.9941E-03
520086.42	4259019.59	40713.91338	15.69544	0.31936	18.13915	0.29961	1.87E-03	6.43E-04	1.14E-05	7.43E-04	1.03E-05	3.2749E-03
520187.89	4258262.66	40680.51168	0.26592	2.36821	0.27788	2.66899	1.87E-03	1.09E-05	8.47E-05	1.14E-05	9.16E-05	2.0649E-03
520572.12	4258762.1	40668.39376	0.19034	0.14216	0.18249	0.14769	1.87E-03	7.79E-06	5.08E-06	7.47E-06	5.07E-06	1.8912E-03
520158.43	4258292.56	40618.27312	0.28732	3.52511	0.29711	4.04013	1.86E-03	1.18E-05	1.26E-04	1.22E-05	1.39E-04	2.1522E-03
520505.49	4258210.35	40612.49689	0.1643	0.26225	0.16675	0.27815	1.86E-03	6.73E-06	9.38E-06	6.83E-06	9.55E-06	1.8957E-03
520487.21	4258192.51	40605.42822	0.16736	0.2869	0.17095	0.30475	1.86E-03	6.85E-06	1.03E-05	7.00E-06	1.05E-05	1.8975E-03
519982.12	4258791.66	40535.44661	1.17812	0.62175	1.36659	0.59687	1.86E-03	4.82E-05	2.22E-05	5.60E-05	2.05E-05	2.0066E-03
520286	4258192.96	40528.44019	0.21845	0.94539	0.22912	1.03491	1.86E-03	8.94E-06	3.38E-05	9.38E-06	3.55E-05	1.9470E-03
520042.84	4258971.62	40515.78958	4.8046	0.34232	6.78364	0.33217	1.86E-03	1.97E-04	1.22E-05	2.78E-04	1.14E-05	2.3569E-03
520119.12	4258342.44	40515.68692	0.33119	7.54537	0.34375	8.98191	1.86E-03	1.36E-05	2.70E-04	1.41E-05	3.08E-04	2.4647E-03
520395.44	4259042.77	40497.34957	0.45666	0.13861	0.43412	0.14751	1.86E-03	1.87E-05	4.96E-06	1.78E-05	5.06E-06	1.9044E-03
520006.88	4258906.81	40488.3594	2.05375	0.39969	2.44511	0.39302	1.86E-03	8.41E-05	1.43E-05	1.00E-04	1.35E-05	2.0695E-03
520393.77	4258163.3	40471.11143	0.18512	0.47618	0.18978	0.50694	1.86E-03	7.58E-06	1.70E-05	7.77E-06	1.74E-05	1.9065E-03
520197.71	4258252.69	40470.22217	0.25894	2.11199	0.27143	2.37202	1.86E-03	1.06E-05	7.55E-05	1.11E-05	8.14E-05	2.0354E-03
520403.55	4258163.33	40469.4465	0.1829	0.45072	0.18758	0.47908	1.86E-03	7.49E-06	1.61E-05	7.68E-06	1.64E-05	1.9044E-03
519982.5	4258744.34	40457.30199	1.06046	0.79075	1.24024	0.74582	1.86E-03	4.34E-05	2.83E-05	5.08E-05	2.56E-05	2.0042E-03
520335	4258173.12	40453.8013	0.20114	0.67553	0.20784	0.72945	1.86E-03	8.24E-06	2.42E-05	8.51E-06	2.50E-05	1.9219E-03
520413.34	4258163.36	40423.03986	0.18068	0.42683	0.18538	0.45328	1.85E-03	7.40E-06	1.53E-05	7.59E-06	1.56E-05	1.9003E-03
520266.39	4258202.9	40416.59914	0.22586	1.10102	0.23816	1.21128	1.85E-03	9.25E-06	3.94E-05	9.75E-06	4.16E-05	1.9542E-03
520464.69	4258974.07	40409.25496	0.31994	0.13464	0.30519	0.1413	1.85E-03	1.31E-05	4.82E-06	1.25E-05	4.85E-06	1.8892E-03
520032.84	4258957.5	40396.98045	3.64843	0.35112	4.77189	0.34291	1.85E-03	1.49E-04	1.26E-05	1.95E-04	1.18E-05	2.2224E-03
520540.33	4258265.31	40391.1348	0.15918	0.22367	0.1586	0.23486	1.85E-03	6.52E-06	8.00E-06	6.49E-06	8.06E-06	1.8821E-03
520438.15	4259005.07	40382.73363	0.36524	0.13524	0.34813	0.14263	1.85E-03	1.50E-05	4.84E-06	1.43E-05	4.90E-06	1.8916E-03
520383.98	4258163.27	40380.2316	0.18726	0.50357	0.19199	0.53707	1.85E-03	7.67E-06	1.80E-05	7.86E-06	1.84E-05	1.9045E-03
520052.62	4258985.65	40373.96967	6.60144	0.33383	10.91077	0.32156	1.85E-03	2.70E-04	1.19E-05	4.47E-04	1.10E-05	2.5923E-03
520420.91	4259022.22	40366.31466	0.39905	0.13594	0.37991	0.14397	1.85E-03	1.63E-05	4.86E-06	1.56E-05	4.94E-06	1.8936E-03
520540.11	4258852.78	40320.53528	0.22438	0.13501	0.21557	0.14105	1.85E-03	9.19E-06	4.83E-06	8.83E-06	4.84E-06	1.8775E-03
520423.13	4258163.39	40302.79239	0.17842	0.40444	0.18312	0.42931	1.85E-03	7.31E-06	1.45E-05	7.50E-06	1.47E-05	1.8930E-03
520305.61	4258183.02	40300.06263	0.2106	0.82135	0.21962	0.89401	1.85E-03	8.62E-06	2.94E-05	8.99E-06	3.07E-05	1.9266E-03
520148.61	4258302.53	40233.25463	0.29429	4.12913	0.30374	4.76045	1.85E-03	1.20E-05	1.48E-04	1.24E-05	1.63E-04	2.1814E-03
520520.72	4258226.88	40228.473	0.16136	0.24435	0.16258	0.25847	1.85E-03	6.61E-06	8.74E-06	6.66E-06	8.87E-06	1.8765E-03
520575.75	4258753.42	40182.79666	0.18696	0.1422	0.1792	0.14782	1.84E-03	7.65E-06	5.09E-06	7.34E-06	5.07E-06	1.8687E-03
520374.19	4258163.24	40172.16088	0.18928	0.53312	0.19422	0.56965	1.84E-03	7.75E-06	1.91E-05	7.95E-06	1.96E-05	1.8973E-03
520530.02	4258240.87	40138.93303	0.15992	0.23418	0.1602	0.24713	1.84E-03	6.55E-06	8.38E-06	6.56E-06	8.48E-06	1.8715E-03
520581.34	4258692.19	40137.92405	0.17736	0.15018	0.17028	0.15641	1.84E-03	7.26E-06	5.37E-06	6.97E-06	5.37E-06	1.8664E-03
520207.53	4258242.72	40137.49448	0.252	1.89707	0.2649	2.12313	1.84E-03	1.03E-05	6.79E-05	1.08E-05	7.29E-05	2.0033E-03
520496.11	4258196.32	40128.75426	0.16516	0.27467	0.16832	0.29165	1.84E-03	6.76E-06	9.82E-06	6.89E-06	1.00E-05	1.8745E-03
520558.29	4258479.19	40114.26465	0.17474	0.18577	0.17088	0.19583	1.84E-03	7.15E-06	6.64E-06	7.00E-06	6.72E-06	1.8679E-03
520556.51	4258312.29	40107.92628	0.1588	0.20577	0.1584	0.21571	1.84E-03	6.50E-06	7.36E-06	6.49E-06	7.41E-06	1.8678E-03
520580.99	4258716.98	40096.97801	0.17992	0.14623	0.17265	0.15242	1.84E-03	7.37E-06	5.23E-06	7.07E-06	5.23E-06	1.8645E-03
520561.7	4258344.55	40095.31178	0.16042	0.19789	0.15977	0.20821	1.84E-03	6.57E-06	7.08E-06	6.54E-06	7.15E-06	1.8668E-03
520488.27	4258944.29	40070.2866	0.28567	0.13377	0.27326	0.14026	1.84E-03	1.17E-05	4.78E-06	1.12E-05	4.82E-06	1.8708E-03
520009.89	4258618.45	40065.43	0.96947	1.99029	1.19408	1.75881	1.84E-03	3.97E-05	7.12E-05	4.89E-05	6.04E-05	2.0583E-03
520497.41	4258930.5	40048.47901	0.27368	0.13345	0.26187	0.13997	1.84E-03	1.12E-05	4.77E-06	1.07E-05	4.81E-06	1.8689E-03
520562.93	4258355.09	40045.88354	0.16108	0.19566	0.16009	0.20604	1.84E-03	6.60E-06	7.00E-06	6.55E-06	7.07E-06	1.8645E-03
520385.56	4259052.79	40034.11417	0.482	0.13919	0.4579	0.14843	1.84E-03	1.97E-05	4.98E-06	1.87E-05	5.10E-06	1.8852E-03
520432.92	4258163.42	40030.06677	0.176	0.38369	0.18074	0.40699	1.84E-03	7.21E-06	1.37E-05	7.40E-06	1.40E-05	1.8788E-03
520562.15	4258437.59	40027.61481	0.16951	0.18802	0.16671	0.19771	1.84E-03	6.94E-06	6.73E-06	6.83E-06	6.79E-06	1.8637E-03
519982.73	4258817.24	40019.02391	1.24365	0.55181	1.43772	0.5339	1.84E-03	5.09E-05	1.97E-05	5.89E-05	1.83E-05	1.9838E-03
520455.62	4258987.83	40017.41284	0.33474	0.13423	0.31925	0.14104	1.84E-03	1.37E-05	4.80E-06	1.31E-05	4.84E-06	1.8723E-03
520022.62	4258943.29	40010.20203	2.86096	0.36076	3.57112	0.35402	1.84E-03	1.17E-04	1.29E-05	1.46E-04	1.22E-05	2.1240E-03
520094.69	4259031.31	40005.31464	13.47248	0.31077	12.13057	0.29039	1.84E-03	5.52E-04	1.11E-05	4.97E-04	9.97E-06	2.9047E-03
520246.78	4258212.84	40005.07615	0.23268	1.29938	0.24599	1.43706	1.84E-03	9.53E-06	4.65E-05	1.01E-05	4.93E-05	1.9508E-03
520563.96	4258390.6	39995.01208	0.16419	0.19055	0.16206	0.20063	1.83E-03	6.72E-06	6.82E-06	6.64E-06	6.89E-06	1.8620E-03
520404.18	4259039.15	39992.08767	0.43578	0.13676	0.41455	0.14533	1.83E-03	1.78E-05	4.89E-06	1.70E-05	4.99E-06	1.8795E-03
520563.81	4258416.06	39989.08215	0.16681	0.18914	0.16429	0.1988	1.83E-03	6.83E-06	6.77E-06	6.73E-06	6.82E-06	1.8618E-03
520506.73	4258916.64	39926.20279	0.26213	0.13313	0.25107	0.13963	1.83E-03	1.07E-05	4.76E-06	1.03E-05	4.79E-06	1.8623E-03
520364.4	4258163.21	39918.15973	0.19128	0.56495	0.19653	0.60511	1.83E-03	7.83E-06	2.02E-05	8.05E-06	2.08E-05	1.8882E-03
520325.21	4258173.08	39892.23918	0.20284	0.72029	0.21029	0.78008	1.83E-03	8.31E-06	2.58E-05	8.61E-06	2.68E-05	1.8996E-03
519992.19	4258870.77	39842.27542	1.54782	0.44745	1.7981	0.43809	1.83E-03	6.34E-05	1.60E-05	7.36E-05	1.50E-05	1.9959E-03
520099.45	4258372.38	39788.57443	0.36281	14.14659	0.3829	15.72817	1.83E-03	1.49E-05	5.06E-04	1.57E-05	5.40E-04	2.9019E-03
520460.39	4258171.02	39781.43764	0.17063	0.33126	0.17534	0.35121	1.83E-03	6.99E-06	1.18E-05	7.18E-06	1.21E-05	1.8632E-03
520469.23	4258174.8	39771.6649	0.1691	0.31603	0.17353	0.33532	1.82E-03	6.92E-06	1.13E-05	7.11E-06	1.15E-05	1.8615E-03
520514.47	4258214.19	39769.54111	0.1617	0.2519	0.16369	0.26681	1.82E-03	6.62E-06	9.01E-06	6.70E-06	9.16E-06	1.8560E-03
520555.45	4258301.82	39757.91779	0.15795	0.2078	0.15743	0.21764	1.82E-03	6.47E-06	7.43E-06	6.45E-06	7.47E-06	1.8518E-03
520008.28	4258917.38	39746.54742	2.12129	0.38488	2.53432	0.3787	1.82E-03	8.69E-05	1.38E-05	1.04E-04	1.30E-05	2.0409E-03
520451.55	4258167.23	39727.10776	0.17207	0.34737	0.1769	0.36814	1.82E-03	7.05E-06	1.24E-05	7.24E-06	1.26E-05	1.8620E-03
520217.35	4258232.75	39701.44388	0.24514	1.71473	0.25829	1.91231	1.82E-03	1.00E-05	6.13E-05	1.06E-05	6.57E-05	1.9690E-03
520539.51	4258254.95	39686.08037	0.15821	0.22475	0.15779	0.23638	1.82E-03	6.48E-06	8.04E-06	6.46E-06	8.12E-06	1.8498E-03
520516.26	4258902.69	39673.68854	0.25098	0.13273	0.24065	0.13916	1.82E-03	1.03E-05	4.75E-06	9.85E-06	4.78E-06	1.8498E-03
520138.79	4258312.5	39672.38932	0.30117	4.92349	0.31061	5.72023	1.82E-03	1.23E-05	1.76E-04	1.27E-05	1.96E-04	2.2176E-03
520058.46	4258998.05	39661.11851	8.23962	0.32434	16.70518	0.31104	1.82E-03	3.37E-04	1.16E-05	6.84E-04	1.07E-05	2.8632E-03
520429.41	4259018.7	39650.47072	0.3821	0.13428	0.36403	0.14199	1.82E-03	1.56E-05	4.80E-06	1.49E-05	4.87E-06	1.8593E-03
520442.71	4258163.45	39637.77768	0.17346	0.36438	0.17824	0.38623	1.82E-03	7.10E-06	1.30E-05	7.30E-06	1.33E-05	1.8592E-03
519994.57	4258881.74	39632.31051	1.62697	0.42991	1.89366	0.42166	1.82E-03	6.66E-05	1.54E-05	7.75E-05	1.45E-05	1.9923E-03
519986.82	4258851.23	39619.41226	1.38887	0.47977	1.60753	0.46792	1.82E-03	5.69E-05	1.72E-05	6.58E-05	1.61E-05	1.9736E-03
520478.07	4258178.58	39619.0082	0.16736	0.30181	0.17149	0.32036	1.82E-03	6.85E-06	1.08E-05	7.02E-06	1.10E-05	1.8533E-03
520579.39	4258744.73	39558.10242	0.18365	0.14214	0.17601	0.14789	1.81E-03	7.52E-06	5.08E-06	7.21E-06	5.08E-06	1.8397E-03
520354.61	4258163.18	39546.88841	0.19312	0.59954	0.19885	0.6436	1.81E-03	7.91E-06	2.14E-05	8.14E-06	2.21E-05	1.8739E-03
519997.12	4258655.32	39527.39305	0.96057	1.41316	1.15572	1.28576	1.81E-03	3.93E-05	5.05E-05	4.73E-05	4.41E-05	1.9948E-03
520276.21	4258192.93	39522.89179	0.21913	1.0208	0.2307	1.11991	1.81E-03	8.97E-06	3.65E-05	9.45E-06	3.84E-05	1.9066E-03
520446.7	4259001.53	39503.00478	0.35011	0.13359	0.33392	0.14064	1.81E-03	1.43E-05	4.78E-06	1.37E-05	4.83E-06	1.8499E-03
520295.82	4258182.99	39484.00621	0.21177	0.88184	0.22176	0.9623	1.81E-03	8.67E-06	3.15E-05	9.08E-06	3.30E-05	1.8938E-03
520505.02	4258200.13	39474.69351	0.16277	0.26372	0.16556	0.27971	1.81E-03	6.66E-06	9.43E-06	6.78E-06	9.60E-06	1.8435E-03
520553.69	4258830.05	39463.8569	0.21096	0.13509	0.20269	0.14078	1.81E-03	8.64E-06	4.83E-06	8.30E-06	4.83E-06	1.8371E-03
520557.29	4258821.46	39442.21759	0.20729	0.13566	0.19917	0.14128	1.81E-03	8.49E-06	4.85E-06	8.15E-06	4.85E-06	1.8359E-03
519979.4	4258761	39407.78779	1.05021	0.71611	1.22391	0.67903	1.81E-03	4.30E-05	2.56E-05	5.01E-05	2.33E-05	1.9500E-03
520412.92	4259035.53	39406.5527	0.41625	0.13481	0.39595	0.14308	1.81E-03	1.70E-05	4.82E-06	1.62E-05	4.91E-06	1.8509E-03
520012.13	4258928.96	39404.40082	2.29563	0.37155	2.77029	0.36559	1.81E-03	9.40E-05	1.33E-05	1.13E-04	1.26E-05	2.0411E-03
520039.56	4258540.74	39386.33469	0.86413	5.20603	1.04037	4.01639	1.81E-03	3.54E-05	1.86E-04	4.26E-05	1.38E-04	2.2090E-03
520560.88	4258812.87	39379.08865	0.2037	0.13618	0.19569	0.14172	1.81E-03	8.34E-06	4.87E-06	8.01E-06	4.87E-06	1.8327E-03
520538.86	4258863.31	39373.81139	0.22637	0.13317	0.21747	0.13923	1.81E-03	9.27E-06	4.76E-06	8.90E-06	4.78E-06	1.8341E-03
520550.22	4258279.56	39368.76248	0.15714	0.21437	0.15647	0.22442	1.81E-03	6.43E-06	7.67E-06	6.41E-06	7.70E-06	1.8344E-03
520033.92	4258967.94	39357.84353	3.76285	0.33945	4.94539	0.33135	1.81E-03	1.54E-04	1.21E-05	2.02E-04	1.14E-05	2.1857E-03
520043.77	4258982	39355.30591	4.95041	0.33103	7.04842	0.32106	1.81E-03	2.03E-04	1.18E-05	2.89E-04	1.10E-05	2.3197E-03
520486.91	4258182.37	39327.97055	0.16545	0.28864	0.16924	0.30638	1.80E-03	6.77E-06	1.03E-05	6.93E-06	1.05E-05	1.8388E-03
520526.02	4258888.64	39287.5519	0.24019	0.13233	0.2306	0.13862	1.80E-03	9.83E-06	4.73E-06	9.44E-06	4.76E-06	1.8312E-03
520473.36	4258970.48	39279.21853	0.30718	0.1328	0.29333	0.13927	1.80E-03	1.26E-05	4.75E-06	1.20E-05	4.78E-06	1.8362E-03
520564.48	4258804.28	39267.95341	0.20015	0.13666	0.19224	0.14212	1.80E-03	8.19E-06	4.89E-06	7.87E-06	4.88E-06	1.8274E-03
520554.5	4258291.4	39258.62397	0.15699	0.20981	0.15639	0.21956	1.80E-03	6.43E-06	7.50E-06	6.40E-06	7.54E-06	1.8290E-03
520561.76	4258462.44	39257.58313	0.17169	0.18544	0.16835	0.19527	1.80E-03	7.03E-06	6.63E-06	6.89E-06	6.70E-06	1.8283E-03
520019.77	4258589.32	39250.58963	0.94386	2.67571	1.1862	2.28182	1.80E-03	3.86E-05	9.57E-05	4.86E-05	7.83E-05	2.0620E-03
520256.6	4258202.87	39223.083	0.22587	1.19669	0.23871	1.31906	1.80E-03	9.25E-06	4.28E-05	9.77E-06	4.53E-05	1.9066E-03
520315.43	4258173.05	39216.48298	0.20427	0.76972	0.21261	0.83566	1.80E-03	8.36E-06	2.75E-05	8.71E-06	2.87E-05	1.8725E-03
520529.4	4258230.59	39215.30576	0.15875	0.23538	0.15946	0.24862	1.80E-03	6.50E-06	8.42E-06	6.53E-06	8.54E-06	1.8291E-03
520227.17	4258222.78	39210.01456	0.23846	1.55801	0.25163	1.73243	1.80E-03	9.76E-06	5.57E-05	1.03E-05	5.95E-05	1.9342E-03
519996.34	4258892.47	39200.63374	1.69092	0.41327	1.97271	0.40592	1.80E-03	6.92E-05	1.48E-05	8.08E-05	1.39E-05	1.9772E-03
519978.37	4258782.62	39168.54224	1.08995	0.64058	1.25975	0.61261	1.80E-03	4.46E-05	2.29E-05	5.16E-05	2.10E-05	1.9371E-03
520344.82	4258163.15	39121.76994	0.1949	0.6371	0.20123	0.68569	1.79E-03	7.98E-06	2.28E-05	8.24E-06	2.35E-05	1.8574E-03
520568.08	4258795.69	39108.07238	0.19664	0.13709	0.18882	0.14248	1.79E-03	8.05E-06	4.90E-06	7.73E-06	4.89E-06	1.8198E-03
520023.85	4258953.79	39054.76647	2.95164	0.34837	3.70021	0.34178	1.79E-03	1.21E-04	1.25E-05	1.52E-04	1.17E-05	2.0883E-03
520109.3	4258352.41	39047.02963	0.33731	9.96295	0.35215	11.79272	1.79E-03	1.38E-05	3.56E-04	1.44E-05	4.05E-04	2.5808E-03
519983.15	4258842.38	39006.83023	1.29729	0.49359	1.49569	0.48042	1.79E-03	5.31E-05	1.77E-05	6.12E-05	1.65E-05	1.9381E-03
519979.02	4258808.3	39001.70129	1.15614	0.56839	1.33299	0.54817	1.79E-03	4.73E-05	2.03E-05	5.46E-05	1.88E-05	1.9304E-03
520464.23	4258984.27	38989.70893	0.32122	0.13241	0.30654	0.13898	1.79E-03	1.32E-05	4.74E-06	1.26E-05	4.77E-06	1.8240E-03
520567.38	4258399.59	38984.95814	0.16363	0.18816	0.1613	0.19783	1.79E-03	6.70E-06	6.73E-06	6.60E-06	6.79E-06	1.8154E-03
520583.02	4258736.05	38955.92287	0.18052	0.14219	0.17308	0.14804	1.79E-03	7.39E-06	5.09E-06	7.09E-06	5.08E-06	1.8119E-03
520395.46	4259052.77	38937.56038	0.4567	0.13596	0.43418	0.14478	1.79E-03	1.87E-05	4.86E-06	1.78E-05	4.97E-06	1.8327E-03
520495.74	4258186.15	38921.34536	0.1634	0.27639	0.16683	0.29331	1.79E-03	6.69E-06	9.89E-06	6.83E-06	1.01E-05	1.8191E-03
520538.76	4258244.61	38914.50589	0.15718	0.22586	0.15705	0.23788	1.79E-03	6.44E-06	8.08E-06	6.43E-06	8.17E-06	1.8144E-03
520393.8	4258153.3	38895.63801	0.18172	0.47801	0.18617	0.50886	1.78E-03	7.44E-06	1.71E-05	7.62E-06	1.75E-05	1.8341E-03
520437.91	4259015.18	38881.90904	0.36611	0.1327	0.34908	0.14007	1.78E-03	1.50E-05	4.75E-06	1.43E-05	4.81E-06	1.8227E-03
520403.59	4258153.33	38877.29144	0.17956	0.45265	0.18402	0.48084	1.78E-03	7.35E-06	1.62E-05	7.53E-06	1.65E-05	1.8312E-03
520567.71	4258374.57	38870.99606	0.16103	0.1903	0.15933	0.20032	1.78E-03	6.59E-06	6.81E-06	6.52E-06	6.88E-06	1.8101E-03
520523.44	4258218.03	38853.0012	0.15908	0.24217	0.16058	0.25614	1.78E-03	6.51E-06	8.66E-06	6.57E-06	8.79E-06	1.8130E-03
520413.37	4258153.36	38851.35997	0.17747	0.42881	0.18193	0.45498	1.78E-03	7.27E-06	1.53E-05	7.45E-06	1.56E-05	1.8281E-03
520549.22	4258269.12	38842.36126	0.15628	0.21578	0.15557	0.22615	1.78E-03	6.40E-06	7.72E-06	6.37E-06	7.76E-06	1.8103E-03
520128.97	4258322.47	38834.1716	0.30762	6.01225	0.31778	7.01049	1.78E-03	1.26E-05	2.15E-04	1.30E-05	2.41E-04	2.2630E-03
520084.79	4259031.32	38824.14846	14.49393	0.30653	19.95932	0.28818	1.78E-03	5.93E-04	1.10E-05	8.17E-04	9.89E-06	3.2127E-03
520571.67	4258787.1	38809.70012	0.19312	0.13741	0.18537	0.14273	1.78E-03	7.91E-06	4.91E-06	7.59E-06	4.90E-06	1.8058E-03
520496.72	4258940.8	38787.28299	0.27515	0.13158	0.26328	0.13794	1.78E-03	1.13E-05	4.71E-06	1.08E-05	4.74E-06	1.8110E-03
520384.01	4258153.27	38775.36665	0.18372	0.50542	0.18832	0.53908	1.78E-03	7.52E-06	1.81E-05	7.71E-06	1.85E-05	1.8308E-03
520421.66	4259031.91	38771.46908	0.39782	0.13317	0.37884	0.14112	1.78E-03	1.63E-05	4.76E-06	1.55E-05	4.84E-06	1.8202E-03
519981.79	4258718.53	38762.96747	0.96707	0.89782	1.12901	0.83992	1.78E-03	3.96E-05	3.21E-05	4.62E-05	2.88E-05	1.9251E-03
520423.16	4258153.39	38752.83883	0.17533	0.40644	0.1798	0.43092	1.78E-03	7.18E-06	1.45E-05	7.36E-06	1.48E-05	1.8218E-03
520505.92	4258926.98	38725.1791	0.26369	0.1313	0.25254	0.13767	1.78E-03	1.08E-05	4.70E-06	1.03E-05	4.73E-06	1.8072E-03
520049.35	4258994.29	38720.80873	5.92973	0.32156	9.0923	0.31069	1.78E-03	2.43E-04	1.15E-05	3.72E-04	1.07E-05	2.4137E-03
520513.92	4258203.94	38708.3466	0.16029	0.25334	0.16268	0.26835	1.78E-03	6.56E-06	9.06E-06	6.66E-06	9.21E-06	1.8074E-03
520335.03	4258163.12	38691.55196	0.1967	0.67793	0.20364	0.73204	1.78E-03	8.05E-06	2.42E-05	8.34E-06	2.51E-05	1.8409E-03
519997.95	4258903.12	38679.6867	1.75158	0.39768	2.04868	0.39106	1.77E-03	7.17E-05	1.42E-05	8.39E-05	1.34E-05	1.9578E-03
519984.55	4258701.08	38664.77567	0.94998	0.99898	1.11479	0.92922	1.77E-03	3.89E-05	3.57E-05	4.56E-05	3.19E-05	1.9260E-03
520548.63	4258849.26	38657.48888	0.21677	0.13289	0.2084	0.13867	1.77E-03	8.88E-06	4.75E-06	8.53E-06	4.76E-06	1.8005E-03
520236.99	4258212.81	38622.10907	0.23185	1.42292	0.24494	1.57686	1.77E-03	9.49E-06	5.09E-05	1.00E-05	5.41E-05	1.8965E-03
520286.03	4258182.96	38597.92616	0.21263	0.94933	0.22351	1.03844	1.77E-03	8.71E-06	3.40E-05	9.15E-06	3.57E-05	1.8583E-03
520567.28	4258425.19	38587.70937	0.16596	0.18587	0.16327	0.1953	1.77E-03	6.80E-06	6.65E-06	6.68E-06	6.70E-06	1.7972E-03
520455.25	4258997.99	38583.23564	0.33584	0.13192	0.32051	0.13867	1.77E-03	1.38E-05	4.72E-06	1.31E-05	4.76E-06	1.8065E-03
520575.27	4258778.51	38551.0871	0.18977	0.13779	0.1821	0.14306	1.77E-03	7.77E-06	4.93E-06	7.46E-06	4.91E-06	1.7937E-03
520013.55	4258939.54	38544.58323	2.36994	0.3584	2.87202	0.35269	1.77E-03	9.70E-05	1.28E-05	1.18E-04	1.21E-05	2.0079E-03
520515.3	4258913.09	38543.62035	0.25268	0.13095	0.24223	0.13727	1.77E-03	1.03E-05	4.68E-06	9.92E-06	4.71E-06	1.7980E-03
520432.95	4258153.42	38527.62402	0.17306	0.38562	0.1776	0.40853	1.77E-03	7.09E-06	1.38E-05	7.27E-06	1.40E-05	1.8097E-03
520374.22	4258153.24	38515.61572	0.18553	0.53509	0.19048	0.57166	1.77E-03	7.60E-06	1.91E-05	7.80E-06	1.96E-05	1.8212E-03
520178.1	4258262.63	38461.91739	0.26183	2.68611	0.27154	3.03946	1.76E-03	1.07E-05	9.61E-05	1.11E-05	1.04E-04	1.9868E-03
520404.14	4259049.17	38458.0622	0.43602	0.13412	0.41471	0.14262	1.76E-03	1.79E-05	4.80E-06	1.70E-05	4.90E-06	1.8089E-03
520305.64	4258173.02	38455.52033	0.20542	0.82451	0.21474	0.89711	1.76E-03	8.41E-06	2.95E-05	8.79E-06	3.08E-05	1.8418E-03
520266.42	4258192.9	38428.27237	0.21933	1.10585	0.2316	1.21529	1.76E-03	8.98E-06	3.96E-05	9.48E-06	4.17E-05	1.8628E-03
520187.92	4258252.66	38422.52915	0.25549	2.37638	0.2659	2.67823	1.76E-03	1.05E-05	8.50E-05	1.09E-05	9.19E-05	1.9610E-03
520537.74	4258873.78	38417.24379	0.22818	0.1314	0.21923	0.13745	1.76E-03	9.34E-06	4.70E-06	8.98E-06	4.72E-06	1.7902E-03
520059.31	4259008.4	38414.70477	8.54876	0.31385	18.05581	0.30092	1.76E-03	3.50E-04	1.12E-05	7.39E-04	1.03E-05	2.8732E-03
520168.28	4258272.6	38404.64816	0.26826	3.06444	0.27722	3.48699	1.76E-03	1.10E-05	1.10E-04	1.14E-05	1.20E-04	2.0136E-03
519978.87	4258735.6	38396.94986	0.97385	0.8101	1.13132	0.76206	1.76E-03	3.99E-05	2.90E-05	4.63E-05	2.62E-05	1.9029E-03
520504.58	4258189.93	38381.97786	0.16122	0.26512	0.16427	0.28118	1.76E-03	6.60E-06	9.48E-06	6.73E-06	9.65E-06	1.7934E-03
520460.3	4258160.97	38365.82975	0.16812	0.33322	0.17282	0.35275	1.76E-03	6.88E-06	1.19E-05	7.08E-06	1.21E-05	1.7981E-03
520469.07	4258164.72	38364.35308	0.1667	0.3181	0.17125	0.33693	1.76E-03	6.83E-06	1.14E-05	7.01E-06	1.16E-05	1.7969E-03
520059.36	4258492.17	38352.48537	0.68007	13.29831	0.76721	7.9772	1.76E-03	2.78E-05	4.76E-04	3.14E-05	2.74E-04	2.5683E-03
520451.52	4258157.21	38317.81348	0.16946	0.34924	0.17417	0.36965	1.76E-03	6.94E-06	1.25E-05	7.13E-06	1.27E-05	1.7972E-03
520034.92	4258978.34	38298.14453	3.87087	0.32835	5.11374	0.32035	1.76E-03	1.58E-04	1.17E-05	2.09E-04	1.10E-05	2.1477E-03
520578.87	4258769.92	38294.82086	0.18655	0.13818	0.179	0.14344	1.76E-03	7.64E-06	4.94E-06	7.33E-06	4.92E-06	1.7817E-03
519979.49	4258833.54	38287.31753	1.2118	0.50778	1.39257	0.49306	1.76E-03	4.96E-05	1.82E-05	5.70E-05	1.69E-05	1.8983E-03
520477.85	4258168.48	38286.36297	0.16517	0.30382	0.16946	0.32204	1.76E-03	6.76E-06	1.09E-05	6.94E-06	1.11E-05	1.7921E-03
520197.74	4258242.69	38260.61335	0.24915	2.11977	0.26021	2.37981	1.76E-03	1.02E-05	7.58E-05	1.07E-05	8.17E-05	1.9337E-03
520548.32	4258258.72	38259.37628	0.15539	0.21696	0.15474	0.22771	1.76E-03	6.36E-06	7.76E-06	6.34E-06	7.82E-06	1.7835E-03
520364.43	4258153.21	38246.86859	0.18738	0.56697	0.19273	0.60719	1.75E-03	7.67E-06	2.03E-05	7.89E-06	2.08E-05	1.8114E-03
520524.9	4258899.11	38238.74772	0.24202	0.13059	0.2323	0.13682	1.75E-03	9.91E-06	4.67E-06	9.51E-06	4.70E-06	1.7831E-03
520491.39	4258953.01	38224.45048	0.28232	0.13088	0.27011	0.13716	1.75E-03	1.16E-05	4.68E-06	1.11E-05	4.71E-06	1.7857E-03
520586.66	4258727.37	38215.58559	0.17742	0.14223	0.17023	0.14814	1.75E-03	7.26E-06	5.09E-06	6.97E-06	5.09E-06	1.7777E-03
520158.46	4258282.56	38209.31285	0.27467	3.53645	0.28297	4.05165	1.75E-03	1.12E-05	1.26E-04	1.16E-05	1.39E-04	2.0414E-03
520587.91	4258700.44	38193.33045	0.17418	0.14605	0.16727	0.15209	1.75E-03	7.13E-06	5.22E-06	6.85E-06	5.22E-06	1.7767E-03
520442.74	4258153.45	38180.00012	0.17067	0.36625	0.17529	0.38767	1.75E-03	6.99E-06	1.31E-05	7.18E-06	1.33E-05	1.7922E-03
520482.02	4258966.89	38164.61451	0.29509	0.13101	0.28223	0.13728	1.75E-03	1.21E-05	4.69E-06	1.16E-05	4.71E-06	1.7840E-03
520025	4258964.26	38136.96407	3.04125	0.33675	3.82451	0.33026	1.75E-03	1.25E-04	1.20E-05	1.57E-04	1.13E-05	2.0541E-03
520325.25	4258163.08	38135.06581	0.19821	0.7228	0.20595	0.78269	1.75E-03	8.12E-06	2.59E-05	8.43E-06	2.69E-05	1.8188E-03
520538.08	4258234.31	38113.90831	0.15611	0.22696	0.15636	0.23932	1.75E-03	6.39E-06	8.12E-06	6.40E-06	8.22E-06	1.7777E-03
520093.33	4259043.57	38113.57179	13.97094	0.2983	12.81594	0.27922	1.75E-03	5.72E-04	1.07E-05	5.25E-04	9.59E-06	2.8656E-03

520486.63	4258172.24	38092.19219	0.16348	0.2904	0.16744	0.30798	1.75E-03	6.69E-06	1.04E-05	6.86E-06	1.06E-05	1.7821E-03
519999.43	4258913.73	38084.07074	1.80954	0.38295	2.12193	0.37694	1.75E-03	7.41E-05	1.37E-05	8.69E-05	1.29E-05	1.9348E-03
520430.4	4259028.3	38076.54978	0.38052	0.13152	0.36266	0.13915	1.75E-03	1.56E-05	4.70E-06	1.48E-05	4.78E-06	1.7868E-03
520446.41	4259011.66	38067.20209	0.35106	0.1311	0.33493	0.13814	1.75E-03	1.44E-05	4.69E-06	1.37E-05	4.74E-06	1.7840E-03
520568.02	4258337.24	38037.34622	0.15697	0.19406	0.15638	0.20395	1.75E-03	6.43E-06	6.94E-06	6.40E-06	7.00E-06	1.7719E-03
520565.29	4258316.05	38001.62798	0.15572	0.19855	0.15534	0.20814	1.74E-03	6.38E-06	7.10E-06	6.36E-06	7.15E-06	1.7704E-03
520207.56	4258232.72	37984.84869	0.24283	1.90446	0.25445	2.12989	1.74E-03	9.94E-06	6.81E-05	1.04E-05	7.31E-05	1.9043E-03
520246.81	4258202.84	37970.36235	0.22538	1.30526	0.23826	1.4415	1.74E-03	9.23E-06	4.67E-05	9.76E-06	4.95E-05	1.8572E-03
520472.83	4258980.71	37944.49661	0.30849	0.13064	0.29465	0.137	1.74E-03	1.26E-05	4.67E-06	1.21E-05	4.70E-06	1.7749E-03
520412.82	4259045.58	37923.47428	0.41662	0.13229	0.39641	0.14048	1.74E-03	1.71E-05	4.73E-06	1.62E-05	4.82E-06	1.7827E-03
519987.12	4258683.15	37918.47876	0.91914	1.11524	1.08577	1.03049	1.74E-03	3.76E-05	3.99E-05	4.45E-05	3.54E-05	1.8970E-03
520522.83	4258207.76	37891.40378	0.15781	0.2435	0.15973	0.25763	1.74E-03	6.46E-06	8.71E-06	6.54E-06	8.84E-06	1.7689E-03
520532.42	4258221.88	37881.07897	0.15648	0.23297	0.15744	0.24608	1.74E-03	6.41E-06	8.33E-06	6.45E-06	8.45E-06	1.7675E-03
520582.47	4258761.33	37880.50228	0.18331	0.13828	0.17583	0.1436	1.74E-03	7.51E-06	4.95E-06	7.20E-06	4.93E-06	1.7625E-03
519975.31	4258799.36	37875.21781	1.07534	0.58491	1.23465	0.56226	1.74E-03	4.40E-05	2.09E-05	5.06E-05	1.93E-05	1.8724E-03
520354.64	4258153.18	37859.45642	0.18905	0.60164	0.19498	0.6457	1.74E-03	7.74E-06	2.15E-05	7.98E-06	2.22E-05	1.7963E-03
520148.64	4258292.53	37832.61276	0.28094	4.14101	0.28892	4.77688	1.74E-03	1.15E-05	1.48E-04	1.18E-05	1.64E-04	2.0711E-03
520547.31	4258859.81	37825.09363	0.21874	0.13116	0.21033	0.13696	1.74E-03	8.96E-06	4.69E-06	8.61E-06	4.70E-06	1.7623E-03
520564.14	4258305.55	37819.12907	0.15499	0.20053	0.15452	0.20999	1.74E-03	6.35E-06	7.17E-06	6.33E-06	7.21E-06	1.7621E-03
520565.05	4258471.07	37812.9771	0.17061	0.18233	0.16694	0.19202	1.73E-03	6.99E-06	6.52E-06	6.84E-06	6.59E-06	1.7617E-03
520534.74	4258885.03	37800.94639	0.23168	0.13022	0.22266	0.13627	1.73E-03	9.49E-06	4.66E-06	9.12E-06	4.68E-06	1.7622E-03
520002.98	4258925.19	37789.73882	1.93743	0.36951	2.28789	0.36397	1.73E-03	7.93E-05	1.32E-05	9.37E-05	1.25E-05	1.9324E-03
520570.81	4258408.58	37767.65948	0.16286	0.18512	0.16035	0.19447	1.73E-03	6.67E-06	6.62E-06	6.57E-06	6.68E-06	1.7592E-03
520495.41	4258175.99	37747.65884	0.16159	0.27806	0.16524	0.29487	1.73E-03	6.62E-06	9.95E-06	6.77E-06	1.01E-05	1.7652E-03
520040.25	4258990.54	37737.96897	4.489	0.31886	6.1445	0.31012	1.73E-03	1.84E-04	1.14E-05	2.52E-04	1.06E-05	2.1888E-03
520014.87	4258950.08	37716.69445	2.44483	0.34608	2.97336	0.34058	1.73E-03	1.00E-04	1.24E-05	1.22E-04	1.17E-05	1.9763E-03
520513.42	4258193.72	37691.30541	0.15887	0.25472	0.16159	0.26982	1.73E-03	6.50E-06	9.11E-06	6.62E-06	9.26E-06	1.7607E-03
519975.82	4258752.35	37674.07665	0.97052	0.73448	1.12468	0.6943	1.73E-03	3.97E-05	2.63E-05	4.60E-05	2.38E-05	1.8643E-03
519997.12	4258646.05	37670.77618	0.90804	1.47593	1.0903	1.33901	1.73E-03	3.72E-05	5.28E-05	4.46E-05	4.60E-05	1.9088E-03
520029.65	4258560.18	37664.87291	0.88365	3.71682	1.08974	3.02367	1.73E-03	3.62E-05	1.33E-04	4.46E-05	1.04E-04	2.0455E-03
520295.85	4258172.99	37653.6389	0.20636	0.8853	0.21659	0.96544	1.73E-03	8.45E-06	3.17E-05	8.87E-06	3.31E-05	1.8096E-03
519974.62	4258773.58	37646.11176	1.00602	0.65922	1.16047	0.62782	1.73E-03	4.12E-05	2.36E-05	4.75E-05	2.16E-05	1.8610E-03
520559.2	4258283.4	37639.78333	0.15419	0.20672	0.15354	0.21615	1.73E-03	6.31E-06	7.39E-06	6.29E-06	7.42E-06	1.7543E-03
520463.8	4258994.45	37633.35988	0.32238	0.13023	0.30785	0.13671	1.73E-03	1.32E-05	4.66E-06	1.26E-05	4.69E-06	1.7617E-03
520217.38	4258222.75	37629.37098	0.23661	1.72136	0.24862	1.91857	1.73E-03	9.69E-06	6.16E-05	1.02E-05	6.59E-05	1.8737E-03
520276.24	4258182.93	37624.43587	0.21305	1.0251	0.22469	1.12349	1.73E-03	8.72E-06	3.67E-05	9.20E-06	3.86E-05	1.8193E-03
520547.5	4258248.36	37619.84578	0.15445	0.21804	0.154	0.22916	1.73E-03	6.32E-06	7.80E-06	6.31E-06	7.87E-06	1.7542E-03
520505.17	4258937.3	37554.66005	0.26515	0.12949	0.25393	0.13572	1.72E-03	1.09E-05	4.63E-06	1.04E-05	4.66E-06	1.7535E-03
520050.28	4259004.67	37552.07346	6.13684	0.31126	9.53998	0.30062	1.72E-03	2.51E-04	1.11E-05	3.91E-04	1.03E-05	2.3861E-03
520062.25	4258475.37	37545.72844	0.59768	16.78882	0.66597	8.8469	1.72E-03	2.45E-05	6.01E-04	2.73E-05	3.04E-04	2.6785E-03
519985.47	4258877.99	37525.38714	1.40187	0.42743	1.61166	0.41878	1.72E-03	5.74E-05	1.53E-05	6.60E-05	1.44E-05	1.8746E-03
520563.12	4258295.09	37497.81958	0.15415	0.20247	0.15358	0.21181	1.72E-03	6.31E-06	7.24E-06	6.29E-06	7.27E-06	1.7474E-03
520315.46	4258163.05	37492.93392	0.1995	0.77236	0.2081	0.83851	1.72E-03	8.17E-06	2.76E-05	8.52E-06	2.88E-05	1.7932E-03
519975.82	4258824.69	37453.49251	1.13136	0.52231	1.29654	0.50577	1.72E-03	4.63E-05	1.87E-05	5.31E-05	1.74E-05	1.8537E-03
520344.85	4258153.15	37440.5907	0.19069	0.63929	0.19727	0.68788	1.72E-03	7.81E-06	2.29E-05	8.08E-06	2.36E-05	1.7801E-03
520514.42	4258923.46	37436.22402	0.25424	0.12918	0.2437	0.13539	1.72E-03	1.04E-05	4.62E-06	9.98E-06	4.65E-06	1.7472E-03
520590.3	4258718.69	37394.10021	0.17441	0.14214	0.16744	0.14807	1.72E-03	7.14E-06	5.08E-06	6.86E-06	5.08E-06	1.7397E-03
520009.85	4258608.75	37378.97896	0.90013	2.06276	1.10405	1.81954	1.71E-03	3.69E-05	7.38E-05	4.52E-05	6.25E-05	1.9332E-03
520413.41	4258143.36	37346.16876	0.17429	0.4306	0.17855	0.45649	1.71E-03	7.14E-06	1.54E-05	7.31E-06	1.57E-05	1.7589E-03
520393.83	4258143.3	37343.84389	0.17829	0.47981	0.18267	0.51053	1.71E-03	7.30E-06	1.72E-05	7.48E-06	1.75E-05	1.7627E-03
520403.62	4258143.33	37335.16456	0.17623	0.45448	0.18056	0.48241	1.71E-03	7.22E-06	1.63E-05	7.39E-06	1.66E-05	1.7603E-03
520421.51	4259041.98	37332.24407	0.39834	0.13062	0.37933	0.13851	1.71E-03	1.63E-05	4.67E-06	1.55E-05	4.76E-06	1.7540E-03
520439.14	4259024.68	37331.61377	0.36423	0.12993	0.34743	0.13723	1.71E-03	1.49E-05	4.65E-06	1.42E-05	4.71E-06	1.7512E-03
520586.06	4258752.74	37318.74602	0.1801	0.13824	0.17271	0.14367	1.71E-03	7.37E-06	4.94E-06	7.07E-06	4.93E-06	1.7364E-03
520504.19	4258179.75	37296.05973	0.15958	0.26658	0.16288	0.28262	1.71E-03	6.53E-06	9.54E-06	6.67E-06	9.70E-06	1.7435E-03
520256.63	4258192.87	37280.95946	0.21909	1.20189	0.23164	1.32307	1.71E-03	8.97E-06	4.30E-05	9.48E-06	4.54E-05	1.8172E-03
520138.82	4258302.5	37258.42225	0.287	4.9384	0.29512	5.73274	1.71E-03	1.18E-05	1.77E-04	1.21E-05	1.97E-04	2.1066E-03
520558.12	4258272.93	37248.62788	0.15341	0.20823	0.15264	0.21788	1.71E-03	6.28E-06	7.45E-06	6.25E-06	7.48E-06	1.7364E-03
519987.32	4258888.75	37245.49185	1.45789	0.41106	1.67806	0.40342	1.71E-03	5.97E-05	1.47E-05	6.87E-05	1.38E-05	1.8657E-03
520423.19	4258143.39	37244.51713	0.17222	0.40836	0.17652	0.43237	1.71E-03	7.05E-06	1.46E-05	7.23E-06	1.48E-05	1.7524E-03
520384.04	4258143.27	37236.77884	0.18022	0.50711	0.18479	0.54085	1.71E-03	7.38E-06	1.81E-05	7.57E-06	1.86E-05	1.7600E-03
520099.48	4258362.38	37230.91037	0.34229	14.18533	0.36026	15.79597	1.71E-03	1.40E-05	5.07E-04	1.48E-05	5.42E-04	2.7865E-03
520454.9	4259008.14	37216.5438	0.33685	0.12954	0.3216	0.13627	1.71E-03	1.38E-05	4.63E-06	1.32E-05	4.68E-06	1.7437E-03
520026.07	4258974.69	37204.43612	3.12707	0.32583	3.94511	0.31942	1.71E-03	1.28E-04	1.17E-05	1.62E-04	1.10E-05	2.0191E-03
520523.87	4258909.54	37202.07261	0.24371	0.12883	0.23386	0.13497	1.71E-03	9.98E-06	4.61E-06	9.58E-06	4.63E-06	1.7356E-03
519979.79	4258858.39	37177.70756	1.25695	0.45699	1.44149	0.44599	1.71E-03	5.15E-05	1.63E-05	5.90E-05	1.53E-05	1.8478E-03
520570.76	4258434.32	37160.63871	0.16504	0.18264	0.16217	0.19188	1.70E-03	6.76E-06	6.53E-06	6.64E-06	6.59E-06	1.7314E-03
520227.2	4258212.78	37152.37825	0.23035	1.56504	0.24268	1.73711	1.70E-03	9.43E-06	5.60E-05	9.94E-06	5.96E-05	1.8395E-03
520591.37	4258692.17	37151.56989	0.17143	0.14589	0.16463	0.1518	1.70E-03	7.02E-06	5.22E-06	6.74E-06	5.21E-06	1.7286E-03
520568.64	4258454.63	37129.91221	0.16763	0.18181	0.16438	0.19125	1.70E-03	6.86E-06	6.50E-06	6.73E-06	6.57E-06	1.7301E-03
520004.49	4258935.8	37107.55027	2.00189	0.35649	2.37177	0.35133	1.70E-03	8.20E-05	1.28E-05	9.71E-05	1.21E-05	1.9063E-03
520560.71	4258837.22	37072.11137	0.20604	0.13118	0.1981	0.13667	1.70E-03	8.44E-06	4.69E-06	8.11E-06	4.69E-06	1.7267E-03
520374.25	4258143.24	37072.04989	0.18211	0.53643	0.18697	0.57369	1.70E-03	7.46E-06	1.92E-05	7.66E-06	1.97E-05	1.7548E-03
520432.98	4258143.42	37066.70948	0.1701	0.38749	0.17446	0.40992	1.70E-03	6.96E-06	1.39E-05	7.14E-06	1.41E-05	1.7426E-03
520468.93	4258154.65	37066.04003	0.16436	0.31993	0.1689	0.3384	1.70E-03	6.73E-06	1.14E-05	6.92E-06	1.16E-05	1.7372E-03
520460.21	4258150.92	37058.83867	0.16567	0.33501	0.17026	0.35422	1.70E-03	6.78E-06	1.20E-05	6.97E-06	1.22E-05	1.7381E-03
520564.28	4258828.71	37056.2589	0.20257	0.13181	0.19479	0.13721	1.70E-03	8.29E-06	4.71E-06	7.98E-06	4.71E-06	1.7258E-03
520083.42	4259043.59	37018.32714	14.37839	0.2941	21.73969	0.27703	1.70E-03	5.89E-04	1.05E-05	8.90E-04	9.51E-06	3.1972E-03
520490.69	4258963.31	37013.9385	0.28375	0.129	0.27154	0.13514	1.70E-03	1.16E-05	4.61E-06	1.11E-05	4.64E-06	1.7301E-03
520335.07	4258153.12	37011.50578	0.19232	0.68021	0.19957	0.73427	1.70E-03	7.87E-06	2.43E-05	8.17E-06	2.52E-05	1.7636E-03
520500.12	4258949.4	37009.24783	0.27162	0.12874	0.26004	0.13489	1.70E-03	1.11E-05	4.60E-06	1.06E-05	4.63E-06	1.7289E-03
520567.84	4258820.2	37004.67434	0.19915	0.13231	0.19148	0.13764	1.70E-03	8.15E-06	4.73E-06	7.84E-06	4.73E-06	1.7232E-03
520477.66	4258158.38	37003.09354	0.16294	0.3057	0.16732	0.32354	1.70E-03	6.67E-06	1.09E-05	6.85E-06	1.11E-05	1.7332E-03
520531.73	4258211.57	36966.38478	0.15526	0.23434	0.15672	0.24756	1.70E-03	6.36E-06	8.38E-06	6.42E-06	8.50E-06	1.7256E-03
520522.26	4258197.5	36960.95306	0.15652	0.24479	0.1588	0.25905	1.70E-03	6.41E-06	8.76E-06	6.50E-06	8.89E-06	1.7263E-03
520546.12	4258870.31	36960.54334	0.22056	0.12935	0.21206	0.13516	1.70E-03	9.03E-06	4.63E-06	8.68E-06	4.64E-06	1.7227E-03
520053.78	4259013.71	36960.15181	6.95352	0.3046	11.70104	0.29347	1.70E-03	2.85E-04	1.09E-05	4.79E-04	1.01E-05	2.4804E-03
520451.49	4258147.18	36946.50794	0.16681	0.35106	0.17138	0.37105	1.70E-03	6.83E-06	1.26E-05	7.02E-06	1.27E-05	1.7342E-03
520546.75	4258238.02	36931.83013	0.15347	0.21912	0.15333	0.23059	1.69E-03	6.28E-06	7.84E-06	6.28E-06	7.92E-06	1.7227E-03
520571.4	4258811.69	36914.58753	0.19578	0.13276	0.1882	0.13803	1.69E-03	8.02E-06	4.75E-06	7.71E-06	4.74E-06	1.7188E-03
520481.44	4258977.14	36905.35144	0.29641	0.12898	0.28355	0.13514	1.69E-03	1.21E-05	4.61E-06	1.16E-05	4.64E-06	1.7261E-03
520486.38	4258162.11	36901.42144	0.16147	0.29209	0.16554	0.30946	1.69E-03	6.61E-06	1.04E-05	6.78E-06	1.06E-05	1.7274E-03
520016.08	4258960.58	36896.12842	2.5177	0.33449	3.07033	0.32915	1.69E-03	1.03E-04	1.20E-05	1.26E-04	1.13E-05	1.9448E-03
519989.02	4258899.44	36869.66475	1.51106	0.39573	1.74263	0.38891	1.69E-03	6.19E-05	1.42E-05	7.14E-05	1.34E-05	1.8522E-03
520533.54	4258895.53	36853.69395	0.2335	0.12854	0.22438	0.13455	1.69E-03	9.56E-06	4.60E-06	9.19E-06	4.62E-06	1.7187E-03
520541.4	4258225.72	36830.06956	0.15387	0.22428	0.1543	0.23656	1.69E-03	6.30E-06	8.02E-06	6.32E-06	8.12E-06	1.7185E-03
520286.06	4258172.96	36798.92487	0.20699	0.95308	0.21801	1.04168	1.69E-03	8.48E-06	3.41E-05	8.93E-06	3.58E-05	1.7755E-03
520093.34	4259053.57	36798.13068	13.89992	0.28916	12.78968	0.27086	1.69E-03	5.69E-04	1.03E-05	5.24E-04	9.30E-06	2.8007E-03
520557.14	4258262.49	36794.70173	0.1526	0.20949	0.1518	0.21945	1.69E-03	6.25E-06	7.49E-06	6.22E-06	7.53E-06	1.7156E-03
520574.96	4258803.19	36783.59665	0.19245	0.13322	0.18496	0.1384	1.69E-03	7.88E-06	4.77E-06	7.57E-06	4.75E-06	1.7125E-03
520442.77	4258143.45	36768.9607	0.16786	0.36803	0.17231	0.38897	1.69E-03	6.87E-06	1.32E-05	7.06E-06	1.34E-05	1.7273E-03
520589.66	4258744.15	36763.15981	0.17705	0.1382	0.1698	0.14375	1.69E-03	7.25E-06	4.94E-06	6.95E-06	4.94E-06	1.7107E-03
520305.67	4258163.02	36733.65246	0.20041	0.82749	0.20998	0.89998	1.69E-03	8.21E-06	2.96E-05	8.60E-06	3.09E-05	1.7626E-03
520512.96	4258183.51	36719.95302	0.15743	0.25601	0.16039	0.2712	1.68E-03	6.45E-06	9.16E-06	6.57E-06	9.31E-06	1.7161E-03
520031.14	4258986.78	36715.96918	3.53573	0.31636	4.55676	0.30938	1.68E-03	1.45E-04	1.13E-05	1.87E-04	1.06E-05	2.0377E-03
520430.19	4259038.39	36687.67501	0.38115	0.12906	0.36335	0.13665	1.68E-03	1.56E-05	4.62E-06	1.49E-05	4.69E-06	1.7230E-03
520364.46	4258143.21	36666.25703	0.18357	0.56881	0.18909	0.60904	1.68E-03	7.52E-06	2.03E-05	7.74E-06	2.09E-05	1.7387E-03
520472.35	4258990.91	36663.35954	0.30966	0.12853	0.29592	0.13479	1.68E-03	1.27E-05	4.60E-06	1.21E-05	4.63E-06	1.7161E-03
520041.24	4259000.94	36662.78451	4.63228	0.30871	6.37893	0.30011	1.68E-03	1.90E-04	1.10E-05	2.61E-04	1.03E-05	2.1542E-03
520237.02	4258202.81	36654.70058	0.22432	1.4291	0.23672	1.58129	1.68E-03	9.18E-06	5.11E-05	9.69E-06	5.43E-05	1.8059E-03
520495.1	4258165.85	36627.48183	0.15976	0.2796	0.16355	0.29628	1.68E-03	6.54E-06	1.00E-05	6.70E-06	1.02E-05	1.7138E-03
519987.12	4258673.87	36621.50038	0.88026	1.16534	1.03724	1.07484	1.68E-03	3.60E-05	4.17E-05	4.25E-05	3.69E-05	1.8372E-03
519971.61	4258790.42	36619.50343	0.99867	0.60154	1.14354	0.57611	1.68E-03	4.09E-05	2.15E-05	4.68E-05	1.98E-05	1.8090E-03
520578.53	4258794.68	36607.76583	0.18918	0.13367	0.18179	0.13878	1.68E-03	7.75E-06	4.78E-06	7.44E-06	4.76E-06	1.7042E-03
520109.33	4258342.41	36590.57424	0.31945	9.98845	0.33266	11.84693	1.68E-03	1.31E-05	3.57E-04	1.36E-05	4.07E-04	2.4694E-03
519976.16	4258849.63	36589.43558	1.17784	0.46952	1.34702	0.45727	1.68E-03	4.82E-05	1.68E-05	5.52E-05	1.57E-05	1.8145E-03
520266.45	4258182.9	36580.33458	0.21304	1.11042	0.22515	1.21897	1.68E-03	8.72E-06	3.97E-05	9.22E-06	4.18E-05	1.7777E-03
520447.88	4259021.06	36542.18831	0.3489	0.12835	0.33302	0.13532	1.68E-03	1.43E-05	4.59E-06	1.36E-05	4.65E-06	1.7136E-03
520129.01	4258312.47	36520.58074	0.29287	6.02615	0.3016	7.05287	1.68E-03	1.20E-05	2.16E-04	1.23E-05	2.42E-04	2.1575E-03
520568.33	4258479.69	36517.38266	0.16948	0.17925	0.16543	0.18876	1.68E-03	6.94E-06	6.41E-06	6.77E-06	6.48E-06	1.7020E-03
519972.15	4258815.84	36512.44585	1.05607	0.53702	1.20671	0.51844	1.68E-03	4.32E-05	1.92E-05	4.94E-05	1.78E-05	1.8048E-03
520593.93	4258710	36501.77592	0.17151	0.142	0.16471	0.14788	1.67E-03	7.02E-06	5.08E-06	6.74E-06	5.08E-06	1.6986E-03
520325.28	4258153.08	36469.21349	0.19368	0.72527	0.20172	0.78507	1.67E-03	7.93E-06	2.59E-05	8.26E-06	2.70E-05	1.7422E-03
519990.57	4258910.07	36410.27648	1.56148	0.38113	1.80398	0.37502	1.67E-03	6.39E-05	1.36E-05	7.39E-05	1.29E-05	1.8347E-03
520582.09	4258786.17	36386.11647	0.18597	0.13409	0.17868	0.13913	1.67E-03	7.61E-06	4.80E-06	7.32E-06	4.78E-06	1.6938E-03
520005.88	4258946.37	36385.09125	2.06374	0.3442	2.45218	0.33934	1.67E-03	8.45E-05	1.23E-05	1.00E-04	1.16E-05	1.8781E-03
520049.44	4258511.61	36364.17505	0.73225	7.76912	0.83922	5.59261	1.67E-03	3.00E-05	2.78E-04	3.44E-05	1.92E-04	2.2026E-03
520543.46	4258881.42	36360.81749	0.2236	0.12816	0.2151	0.13398	1.67E-03	9.16E-06	4.58E-06	8.81E-06	4.60E-06	1.6953E-03
520513.62	4258933.8	36349.13744	0.25566	0.12742	0.24504	0.1335	1.67E-03	1.05E-05	4.56E-06	1.00E-05	4.58E-06	1.6973E-03
520178.14	4258252.63	36339.57069	0.25137	2.69428	0.25967	3.04777	1.67E-03	1.03E-05	9.64E-05	1.06E-05	1.05E-04	1.8891E-03
520187.96	4258242.66	36335.29894	0.24562	2.38407	0.25465	2.68541	1.67E-03	1.01E-05	8.53E-05	1.04E-05	9.22E-05	1.8649E-03
520463.4	4259004.63	36334.20089	0.32342	0.128	0.30902	0.13444	1.67E-03	1.32E-05	4.58E-06	1.27E-05	4.62E-06	1.7020E-03
520555.76	4258856.31	36317.91984	0.21148	0.12912	0.20348	0.13468	1.67E-03	8.66E-06	4.62E-06	8.33E-06	4.62E-06	1.6924E-03
520556.25	4258252.1	36273.72237	0.15173	0.21061	0.15104	0.2209	1.66E-03	6.21E-06	7.53E-06	6.18E-06	7.58E-06	1.6917E-03
520354.67	4258143.18	36263.23952	0.18507	0.60358	0.19125	0.64755	1.66E-03	7.58E-06	2.16E-05	7.83E-06	2.22E-05	1.7229E-03
520503.82	4258169.58	36239.96143	0.1579	0.26805	0.16139	0.28401	1.66E-03	6.47E-06	9.59E-06	6.61E-06	9.75E-06	1.6950E-03
520168.32	4258262.6	36237.90039	0.25713	3.07377	0.26475	3.49526	1.66E-03	1.05E-05	1.10E-04	1.08E-05	1.20E-04	1.9138E-03
520593.26	4258735.56	36235.28018	0.17418	0.13829	0.16713	0.14392	1.66E-03	7.13E-06	4.95E-06	6.84E-06	4.94E-06	1.6863E-03
519975.25	4258726.86	36224.10129	0.89293	0.82688	1.03096	0.77652	1.66E-03	3.66E-05	2.96E-05	4.22E-05	2.67E-05	1.7969E-03
520197.78	4258232.69	36217.72564	0.23987	2.12702	0.24961	2.38616	1.66E-03	9.82E-06	7.61E-05	1.02E-05	8.19E-05	1.8396E-03
519978.13	4258709.69	36209.52903	0.88018	0.91397	1.02157	0.85402	1.66E-03	3.60E-05	3.27E-05	4.18E-05	2.93E-05	1.8011E-03
520522.93	4258919.94	36180.3681	0.24525	0.12712	0.23532	0.13316	1.66E-03	1.00E-05	4.55E-06	9.63E-06	4.57E-06	1.6887E-03
519993.84	4258921.41	36178.52297	1.65809	0.36773	1.92496	0.36223	1.66E-03	6.79E-05	1.32E-05	7.88E-05	1.24E-05	1.8321E-03
520531.1	4258201.28	36158.26239	0.15414	0.23546	0.15594	0.24894	1.66E-03	6.31E-06	8.42E-06	6.38E-06	8.55E-06	1.6885E-03
520585.65	4258777.66	36110.91993	0.18283	0.13444	0.17562	0.13945	1.66E-03	7.49E-06	4.81E-06	7.19E-06	4.79E-06	1.6810E-03
520019.73	4258579.62	36088.65605	0.87023	2.76919	1.08263	2.34707	1.66E-03	3.56E-05	9.91E-05	4.43E-05	8.06E-05	1.9153E-03
520246.84	4258192.84	36080.60981	0.21835	1.3108	0.23071	1.44547	1.66E-03	8.94E-06	4.69E-05	9.45E-06	4.96E-05	1.7702E-03
520017.21	4258971.04	36078.09097	2.58713	0.32358	3.16187	0.31836	1.66E-03	1.06E-04	1.16E-05	1.29E-04	1.09E-05	1.9131E-03
520521.74	4258187.26	36037.80293	0.15518	0.24608	0.15778	0.26042	1.65E-03	6.35E-06	8.80E-06	6.46E-06	8.94E-06	1.6839E-03
520540.64	4258215.38	36028.84644	0.15277	0.22562	0.15369	0.23807	1.65E-03	6.26E-06	8.07E-06	6.29E-06	8.17E-06	1.6817E-03
520158.5	4258272.56	36021.86501	0.26289	3.5467	0.26993	4.06069	1.65E-03	1.08E-05	1.27E-04	1.11E-05	1.39E-04	1.9407E-03
520207.59	4258222.72	36016.76785	0.23417	1.91088	0.24452	2.13639	1.65E-03	9.59E-06	6.83E-05	1.00E-05	7.33E-05	1.8137E-03
519970.87	4258764.54	35996.95028	0.92738	0.67682	1.06702	0.64213	1.65E-03	3.80E-05	2.42E-05	4.37E-05	2.20E-05	1.7794E-03
520438.87	4259034.79	35996.71584	0.36497	0.12754	0.34826	0.13481	1.65E-03	1.49E-05	4.56E-06	1.43E-05	4.63E-06	1.6899E-03
520574.07	4258319.81	35947.66848	0.1527	0.19153	0.15223	0.20084	1.65E-03	6.25E-06	6.85E-06	6.23E-06	6.90E-06	1.6754E-03
520295.88	4258162.99	35940.34052	0.2011	0.88861	0.21152	0.96829	1.65E-03	8.23E-06	3.18E-05	8.66E-06	3.32E-05	1.7308E-03
520568.17	4258287.24	35932.09354	0.15132	0.19932	0.15069	0.20829	1.65E-03	6.20E-06	7.13E-06	6.17E-06	7.15E-06	1.6751E-03
520413.44	4258133.36	35905.90353	0.17114	0.43224	0.17527	0.45783	1.65E-03	7.01E-06	1.55E-05	7.18E-06	1.57E-05	1.6927E-03
520532.44	4258905.99	35900.91635	0.23519	0.12684	0.22594	0.13279	1.65E-03	9.63E-06	4.54E-06	9.25E-06	4.56E-06	1.6750E-03
519972.52	4258840.87	35900.84839	1.10336	0.48234	1.25879	0.46862	1.65E-03	4.52E-05	1.73E-05	5.15E-05	1.61E-05	1.7771E-03
520499.35	4258959.72	35883.43833	0.27305	0.12697	0.26146	0.13297	1.65E-03	1.12E-05	4.54E-06	1.07E-05	4.56E-06	1.6773E-03
520572.84	4258309.27	35870.64313	0.15202	0.19362	0.15159	0.20273	1.65E-03	6.22E-06	6.93E-06	6.21E-06	6.96E-06	1.6720E-03
520403.65	4258133.33	35869.20453	0.17295	0.4561	0.17722	0.48378	1.65E-03	7.08E-06	1.63E-05	7.26E-06	1.66E-05	1.6929E-03
520344.89	4258143.15	35856.22009	0.18659	0.64128	0.19344	0.68979	1.65E-03	7.64E-06	2.29E-05	7.92E-06	2.37E-05	1.7072E-03
520276.27	4258172.93	35854.43384	0.20718	1.02919	0.21879	1.12673	1.64E-03	8.48E-06	3.68E-05	8.96E-06	3.87E-05	1.7379E-03
520469.73	4258144.98	35851.26256	0.16191	0.32005	0.16635	0.33817	1.64E-03	6.63E-06	1.14E-05	6.81E-06	1.16E-05	1.6813E-03
520490.04	4258973.58	35845.70358	0.28507	0.12712	0.2729	0.13313	1.64E-03	1.17E-05	4.55E-06	1.12E-05	4.57E-06	1.6765E-03
520315.49	4258153.05	35843.23007	0.19479	0.77503	0.20368	0.84097	1.64E-03	7.98E-06	2.77E-05	8.34E-06	2.89E-05	1.7173E-03
520423.23	4258133.39	35843.05081	0.16921	0.40996	0.17333	0.43366	1.64E-03	6.93E-06	1.47E-05	7.10E-06	1.49E-05	1.6880E-03
519972.23	4258743.7	35840.91702	0.89634	0.75093	1.03173	0.70835	1.64E-03	3.67E-05	2.69E-05	4.22E-05	2.43E-05	1.7744E-03
520508.85	4258945.78	35825.41495	0.26147	0.12664	0.25053	0.13266	1.64E-03	1.07E-05	4.53E-06	1.03E-05	4.55E-06	1.6736E-03
520393.86	4258133.3	35816.48946	0.17482	0.48156	0.17926	0.5119	1.64E-03	7.16E-06	1.72E-05	7.34E-06	1.76E-05	1.6925E-03
520460.76	4258141.14	35806.60332	0.16312	0.33559	0.16756	0.35441	1.64E-03	6.68E-06	1.20E-05	6.86E-06	1.22E-05	1.6804E-03
520478.71	4258148.82	35783.79551	0.16053	0.30549	0.1649	0.32291	1.64E-03	6.57E-06	1.09E-05	6.75E-06	1.11E-05	1.6770E-03
520589.21	4258769.15	35776.66224	0.17975	0.13468	0.17262	0.13971	1.64E-03	7.36E-06	4.82E-06	7.07E-06	4.80E-06	1.6654E-03
520053.8	4259023.71	35775.96672	6.98724	0.29497	11.74093	0.28429	1.64E-03	2.86E-04	1.06E-05	4.81E-04	9.76E-06	2.4285E-03
520571.88	4258463.14	35771.13416	0.16662	0.17887	0.16308	0.18818	1.64E-03	6.82E-06	6.40E-06	6.68E-06	6.46E-06	1.6675E-03
520083.44	4259053.59	35757.00821	16.44289	0.28508	21.61832	0.26872	1.64E-03	6.73E-04	1.02E-05	8.85E-04	9.23E-06	3.2183E-03
520512.54	4258173.31	35749.88844	0.15592	0.25731	0.15909	0.27251	1.64E-03	6.38E-06	9.20E-06	6.51E-06	9.36E-06	1.6716E-03
520384.07	4258133.27	35743.76439	0.17673	0.50876	0.18139	0.54238	1.64E-03	7.24E-06	1.82E-05	7.43E-06	1.86E-05	1.6913E-03
520032.21	4258997.21	35736.95246	3.64312	0.3063	4.70944	0.29942	1.64E-03	1.49E-04	1.10E-05	1.93E-04	1.03E-05	2.0028E-03
519980.84	4258692.11	35727.78477	0.85862	1.01263	0.99991	0.94177	1.64E-03	3.52E-05	3.62E-05	4.09E-05	3.23E-05	1.7838E-03
520487.69	4258152.66	35722.18044	0.15916	0.29145	0.16325	0.30847	1.64E-03	6.52E-06	1.04E-05	6.68E-06	1.06E-05	1.6731E-03
519997.12	4258636.77	35720.88891	0.8561	1.53462	1.02438	1.38951	1.64E-03	3.51E-05	5.49E-05	4.19E-05	4.77E-05	1.8184E-03
520456.62	4259017.44	35716.506	0.33443	0.1268	0.31945	0.13345	1.64E-03	1.37E-05	4.54E-06	1.31E-05	4.58E-06	1.6745E-03
520433.01	4258133.42	35714.30056	0.16725	0.38907	0.17138	0.41119	1.64E-03	6.85E-06	1.39E-05	7.02E-06	1.41E-05	1.6804E-03
520571.73	4258298.78	35701.66813	0.15129	0.19553	0.15078	0.20449	1.64E-03	6.19E-06	6.99E-06	6.17E-06	7.02E-06	1.6643E-03
520480.9	4258987.37	35691.4056	0.29762	0.12694	0.28478	0.13299	1.64E-03	1.22E-05	4.54E-06	1.17E-05	4.57E-06	1.6704E-03
520555.43	4258241.74	35690.4536	0.15082	0.21172	0.15037	0.22233	1.64E-03	6.18E-06	7.57E-06	6.16E-06	7.63E-06	1.6649E-03
520550.38	4258229.56	35671.9277	0.15119	0.2163	0.15121	0.22768	1.64E-03	6.19E-06	7.74E-06	6.19E-06	7.82E-06	1.6645E-03

520217.41	4258212.75	35661.03782	0.22834	1.72856	0.23934	1.92314	1.64E-03	9.35E-06	6.18E-05	9.80E-06	6.60E-05	1.7831E-03
520022.04	4258983.02	35660.93825	2.8712	0.31413	3.56282	0.30853	1.64E-03	1.18E-04	1.12E-05	1.46E-04	1.06E-05	1.9213E-03
520451.78	4258137.29	35656.2261	0.16416	0.35213	0.16855	0.37171	1.64E-03	6.72E-06	1.26E-05	6.90E-06	1.28E-05	1.6748E-03
520007.17	4258956.89	35655.82157	2.12382	0.33263	2.53022	0.328	1.64E-03	8.70E-05	1.19E-05	1.04E-04	1.13E-05	1.8495E-03
520148.68	4258282.53	35650.21635	0.26854	4.15199	0.27531	4.7883	1.64E-03	1.10E-05	1.49E-04	1.13E-05	1.64E-04	1.9707E-03
520567.01	4258276.73	35628.2362	0.15056	0.20101	0.14981	0.21004	1.63E-03	6.16E-06	7.19E-06	6.13E-06	7.21E-06	1.6613E-03
519995.42	4258932.06	35614.21961	1.71291	0.35478	1.99369	0.34977	1.63E-03	7.01E-05	1.27E-05	8.16E-05	1.20E-05	1.8104E-03
520043.88	4259013.73	35588.45923	5.02612	0.29792	7.08623	0.28918	1.63E-03	2.06E-04	1.07E-05	2.90E-04	9.93E-06	2.1492E-03
520119.19	4258322.44	35581.80445	0.29834	7.59149	0.30829	8.959	1.63E-03	1.22E-05	2.72E-04	1.26E-05	3.08E-04	2.2364E-03
519999.93	4258628.19	35572.95385	0.85311	1.64747	1.02443	1.48419	1.63E-03	3.49E-05	5.89E-05	4.19E-05	5.10E-05	1.8188E-03
520554.5	4258866.84	35552.52068	0.21329	0.12741	0.20524	0.13299	1.63E-03	8.73E-06	4.56E-06	8.40E-06	4.57E-06	1.6573E-03
520597.57	4258701.32	35542.86902	0.16868	0.14192	0.16205	0.14768	1.63E-03	6.91E-06	5.08E-06	6.63E-06	5.07E-06	1.6543E-03
520596.85	4258726.96	35537.25388	0.1713	0.13824	0.16446	0.14392	1.63E-03	7.01E-06	4.94E-06	6.73E-06	4.94E-06	1.6540E-03
520542.18	4258891.95	35516.12541	0.22539	0.12657	0.21686	0.13236	1.63E-03	9.23E-06	4.53E-06	8.88E-06	4.54E-06	1.6566E-03
520374.28	4258133.24	35501.76525	0.17836	0.53839	0.18349	0.57518	1.63E-03	7.30E-06	1.93E-05	7.51E-06	1.97E-05	1.6826E-03
520093.77	4259064.4	35489.46738	13.63833	0.27993	12.53511	0.26236	1.63E-03	5.58E-04	1.00E-05	5.13E-04	9.01E-06	2.7189E-03
520496.67	4258156.51	35486.91654	0.15753	0.27845	0.16136	0.29484	1.63E-03	6.45E-06	9.96E-06	6.61E-06	1.01E-05	1.6612E-03
519968.48	4258807	35486.2011	0.98676	0.55136	1.1211	0.53081	1.63E-03	4.04E-05	1.97E-05	4.59E-05	1.82E-05	1.7523E-03
520256.66	4258182.87	35479.25287	0.21257	1.20675	0.22473	1.32675	1.63E-03	8.70E-06	4.32E-05	9.20E-06	4.55E-05	1.7343E-03
520442.8	4258133.45	35471.57332	0.16515	0.36955	0.16938	0.39018	1.63E-03	6.76E-06	1.32E-05	6.94E-06	1.34E-05	1.6677E-03
520471.9	4259001.11	35433.15533	0.31073	0.12643	0.29712	0.13261	1.63E-03	1.27E-05	4.52E-06	1.22E-05	4.55E-06	1.6596E-03
520335.1	4258143.12	35426.79034	0.18805	0.6824	0.19561	0.73629	1.63E-03	7.70E-06	2.44E-05	8.01E-06	2.53E-05	1.6907E-03
520592.77	4258760.64	35377.72191	0.17675	0.13471	0.16968	0.13982	1.62E-03	7.24E-06	4.82E-06	6.95E-06	4.80E-06	1.6469E-03
520039.52	4258531.05	35349.10545	0.7784	5.2708	0.91542	4.08555	1.62E-03	3.19E-05	1.89E-04	3.75E-05	1.40E-04	2.0199E-03
519978.31	4258885.03	35307.23942	1.26855	0.40862	1.44431	0.40061	1.62E-03	5.19E-05	1.46E-05	5.91E-05	1.38E-05	1.7593E-03
520530.52	4258191.02	35288.73782	0.15287	0.23673	0.15507	0.25026	1.62E-03	6.26E-06	8.47E-06	6.35E-06	8.59E-06	1.6486E-03
520227.23	4258202.78	35275.71592	0.22268	1.57116	0.23408	1.74173	1.62E-03	9.12E-06	5.62E-05	9.58E-06	5.98E-05	1.7531E-03
520565.95	4258266.27	35273.31495	0.1498	0.20243	0.14898	0.21165	1.62E-03	6.13E-06	7.24E-06	6.10E-06	7.27E-06	1.6450E-03
520447.56	4259031.2	35261.50799	0.3497	0.12602	0.33396	0.13298	1.62E-03	1.43E-05	4.51E-06	1.37E-05	4.57E-06	1.6548E-03
520539.94	4258205.07	35245.61877	0.15166	0.22681	0.15303	0.23942	1.62E-03	6.21E-06	8.11E-06	6.27E-06	8.22E-06	1.6458E-03
519967.9	4258781.48	35226.05062	0.9253	0.61784	1.05795	0.5894	1.62E-03	3.79E-05	2.21E-05	4.33E-05	2.02E-05	1.7396E-03
520522.07	4258930.3	35174.58071	0.24664	0.12543	0.23664	0.13136	1.61E-03	1.01E-05	4.49E-06	9.69E-06	4.51E-06	1.6425E-03
520364.49	4258133.21	35170.36814	0.17986	0.57049	0.18558	0.61067	1.61E-03	7.36E-06	2.04E-05	7.60E-06	2.10E-05	1.6699E-03
520521.26	4258177.04	35168.43631	0.15384	0.24725	0.15666	0.2617	1.61E-03	6.30E-06	8.84E-06	6.41E-06	8.98E-06	1.6440E-03
519987.12	4258664.6	35154.70199	0.83913	1.21556	0.98833	1.11838	1.61E-03	3.44E-05	4.35E-05	4.05E-05	3.84E-05	1.7695E-03
520505.64	4258160.35	35125.64432	0.15573	0.26663	0.1593	0.28231	1.61E-03	6.38E-06	9.54E-06	6.52E-06	9.69E-06	1.6436E-03
519968.89	4258832.1	35119.68409	1.03361	0.4954	1.1763	0.48	1.61E-03	4.23E-05	1.77E-05	4.82E-05	1.65E-05	1.7359E-03
520286.09	4258162.96	35111.56714	0.20152	0.95668	0.21259	1.04457	1.61E-03	8.25E-06	3.42E-05	8.70E-06	3.59E-05	1.6979E-03
520305.7	4258153.02	35109.72263	0.19553	0.83037	0.20531	0.90253	1.61E-03	8.01E-06	2.97E-05	8.41E-06	3.10E-05	1.6879E-03
520138.86	4258292.5	35106.08594	0.27398	4.95029	0.28093	5.74981	1.61E-03	1.12E-05	1.77E-04	1.15E-05	1.97E-04	2.0078E-03
519980.09	4258895.75	35066.73686	1.31575	0.39356	1.49988	0.38645	1.61E-03	5.39E-05	1.41E-05	6.14E-05	1.33E-05	1.7514E-03
520549.55	4258219.19	35030.8955	0.15026	0.21735	0.15067	0.22906	1.61E-03	6.15E-06	7.77E-06	6.17E-06	7.86E-06	1.6351E-03
519996.89	4258942.66	35027.68928	1.76652	0.34258	2.06134	0.33797	1.61E-03	7.23E-05	1.23E-05	8.44E-05	1.16E-05	1.7876E-03
520099.51	4258352.38	34964.48815	0.32378	14.21948	0.33988	15.96441	1.60E-03	1.33E-05	5.09E-04	1.39E-05	5.48E-04	2.6880E-03
520552.17	4258877.81	34964.33822	0.21592	0.12614	0.20788	0.13174	1.60E-03	8.84E-06	4.51E-06	8.51E-06	4.52E-06	1.6305E-03
520531.44	4258916.42	34960.78408	0.23672	0.12515	0.22738	0.13102	1.60E-03	9.69E-06	4.48E-06	9.31E-06	4.50E-06	1.6319E-03
519972.59	4258865.13	34939.73014	1.14218	0.43619	1.29637	0.42605	1.60E-03	4.68E-05	1.56E-05	5.31E-05	1.46E-05	1.7330E-03
520008.36	4258967.38	34928.5309	2.18133	0.32173	2.60394	0.31729	1.60E-03	8.93E-05	1.15E-05	1.07E-04	1.09E-05	1.8208E-03
520596.34	4258752.14	34910.48656	0.17382	0.1347	0.16686	0.13992	1.60E-03	7.12E-06	4.82E-06	6.83E-06	4.80E-06	1.6252E-03
520325.31	4258143.08	34893.68678	0.18925	0.72766	0.1976	0.78717	1.60E-03	7.75E-06	2.60E-05	8.09E-06	2.70E-05	1.6697E-03
520567.74	4258844.38	34890.65845	0.20123	0.12752	0.19366	0.1328	1.60E-03	8.24E-06	4.56E-06	7.93E-06	4.56E-06	1.6260E-03
520571.27	4258835.94	34880.5251	0.19795	0.12807	0.19051	0.13328	1.60E-03	8.10E-06	4.58E-06	7.80E-06	4.58E-06	1.6253E-03
520564.99	4258255.84	34864.43396	0.149	0.20364	0.1482	0.21312	1.60E-03	6.10E-06	7.28E-06	6.07E-06	7.32E-06	1.6263E-03
520465.36	4259013.82	34864.05565	0.32079	0.12533	0.3067	0.13167	1.60E-03	1.31E-05	4.48E-06	1.26E-05	4.52E-06	1.6342E-03
520266.48	4258172.9	34858.05149	0.20697	1.11473	0.21882	1.2223	1.60E-03	8.47E-06	3.99E-05	8.96E-06	4.20E-05	1.6985E-03
520574.8	4258827.51	34839.02641	0.1947	0.12866	0.18741	0.13379	1.60E-03	7.97E-06	4.60E-06	7.67E-06	4.59E-06	1.6232E-03
520237.05	4258192.81	34826.56462	0.2171	1.43488	0.22874	1.58516	1.60E-03	8.89E-06	5.13E-05	9.37E-06	5.44E-05	1.7218E-03
520354.71	4258133.18	34820.99095	0.18134	0.60518	0.18771	0.64941	1.60E-03	7.42E-06	2.16E-05	7.69E-06	2.23E-05	1.6566E-03
520498.65	4258970.02	34786.56512	0.27435	0.12516	0.26277	0.13103	1.60E-03	1.12E-05	4.48E-06	1.08E-05	4.50E-06	1.6269E-03
520023.17	4258993.48	34778.22622	2.9549	0.30414	3.67183	0.29863	1.60E-03	1.21E-04	1.09E-05	1.50E-04	1.03E-05	1.8880E-03
520508.02	4258956.13	34777.05519	0.26288	0.12493	0.2519	0.13081	1.60E-03	1.08E-05	4.47E-06	1.03E-05	4.49E-06	1.6255E-03
520578.33	4258819.08	34763.4806	0.19149	0.12904	0.18426	0.13412	1.59E-03	7.84E-06	4.62E-06	7.54E-06	4.60E-06	1.6195E-03
519981.72	4258906.42	34735.82745	1.36061	0.37925	1.55312	0.37291	1.59E-03	5.57E-05	1.36E-05	6.36E-05	1.28E-05	1.7393E-03
520054.23	4259033.71	34715.59983	7.13321	0.28614	12.12279	0.27579	1.59E-03	2.92E-04	1.02E-05	4.96E-04	9.47E-06	2.4008E-03
520489.45	4258983.84	34708.16886	0.28627	0.12521	0.27415	0.13109	1.59E-03	1.17E-05	4.48E-06	1.12E-05	4.50E-06	1.6243E-03
520600.45	4258718.37	34686.27353	0.16841	0.13798	0.16173	0.14368	1.59E-03	6.90E-06	4.94E-06	6.62E-06	4.93E-06	1.6147E-03
520009.81	4258599.06	34680.56553	0.83797	2.13145	1.02482	1.87578	1.59E-03	3.43E-05	7.62E-05	4.20E-05	6.44E-05	1.8080E-03
520469.58	4258134.9	34671.47207	0.15959	0.32175	0.16391	0.33952	1.59E-03	6.53E-06	1.15E-05	6.71E-06	1.17E-05	1.6271E-03
520514.62	4258164.19	34671.36908	0.15382	0.25555	0.15707	0.27053	1.59E-03	6.30E-06	9.14E-06	6.43E-06	9.29E-06	1.6218E-03
520478.5	4258138.72	34642.18421	0.15834	0.3072	0.16266	0.32429	1.59E-03	6.48E-06	1.10E-05	6.66E-06	1.11E-05	1.6246E-03
520541.01	4258902.44	34640.47266	0.22708	0.12491	0.21841	0.13066	1.59E-03	9.30E-06	4.47E-06	8.94E-06	4.49E-06	1.6164E-03
520487.41	4258142.53	34606.63606	0.1571	0.29326	0.16122	0.30995	1.59E-03	6.43E-06	1.05E-05	6.60E-06	1.06E-05	1.6218E-03
520581.86	4258810.64	34592.64048	0.18826	0.12942	0.1811	0.13443	1.59E-03	7.71E-06	4.63E-06	7.41E-06	4.62E-06	1.6114E-03
519984.69	4258917.64	34589.21604	1.43502	0.36598	1.64352	0.36034	1.59E-03	5.88E-05	1.31E-05	6.73E-05	1.24E-05	1.7384E-03
520460.66	4258131.08	34582.06525	0.16064	0.33727	0.16492	0.3557	1.59E-03	6.58E-06	1.21E-05	6.75E-06	1.22E-05	1.6242E-03
520012.93	4258979.26	34573.43177	2.38653	0.31215	2.88087	0.30755	1.59E-03	9.77E-05	1.12E-05	1.18E-04	1.06E-05	1.8236E-03
520423.26	4258123.39	34552.6581	0.16634	0.41128	0.17026	0.43487	1.59E-03	6.81E-06	1.47E-05	6.97E-06	1.49E-05	1.6286E-03
520413.47	4258123.36	34549.10452	0.16807	0.43365	0.17212	0.45902	1.59E-03	6.88E-06	1.55E-05	7.05E-06	1.58E-05	1.6302E-03
520601.2	4258692.64	34531.60767	0.16595	0.14184	0.15943	0.14744	1.58E-03	6.79E-06	5.07E-06	6.53E-06	5.06E-06	1.6077E-03
520480.39	4258997.59	34529.93402	0.29872	0.12491	0.28596	0.13088	1.58E-03	1.22E-05	4.47E-06	1.17E-05	4.49E-06	1.6171E-03
520575.13	4258471.66	34515.14608	0.16556	0.17597	0.16169	0.18515	1.58E-03	6.78E-06	6.29E-06	6.62E-06	6.36E-06	1.6095E-03
520529.98	4258180.78	34513.32992	0.15169	0.23779	0.15413	0.2515	1.58E-03	6.21E-06	8.51E-06	6.31E-06	8.63E-06	1.6131E-03
520403.68	4258123.33	34508.28209	0.16981	0.45747	0.17405	0.48505	1.58E-03	6.95E-06	1.64E-05	7.13E-06	1.67E-05	1.6303E-03
520083.87	4259064.41	34497.15997	14.75429	0.27595	20.90457	0.26026	1.58E-03	6.04E-04	9.87E-06	8.56E-04	8.93E-06	3.0615E-03
520456.24	4259027.6	34494.96511	0.33532	0.12455	0.32047	0.13119	1.58E-03	1.37E-05	4.45E-06	1.31E-05	4.50E-06	1.6184E-03
520043.9	4259023.73	34493.42178	5.04856	0.28863	7.10193	0.28022	1.58E-03	2.07E-04	1.03E-05	2.91E-04	9.62E-06	2.0999E-03
520539.3	4258194.78	34492.67649	0.15056	0.22791	0.15231	0.24069	1.58E-03	6.16E-06	8.15E-06	6.24E-06	8.26E-06	1.6113E-03
520433.05	4258123.42	34455.35009	0.16449	0.39037	0.16839	0.41232	1.58E-03	6.73E-06	1.40E-05	6.89E-06	1.42E-05	1.6225E-03
520496.33	4258146.35	34441.52645	0.15565	0.28005	0.15955	0.29623	1.58E-03	6.37E-06	1.00E-05	6.53E-06	1.02E-05	1.6132E-03
520451.75	4258127.27	34437.32017	0.1616	0.35364	0.16577	0.37291	1.58E-03	6.62E-06	1.26E-05	6.79E-06	1.28E-05	1.6188E-03
520187.99	4258232.66	34415.9991	0.23632	2.3914	0.2441	2.69216	1.58E-03	9.68E-06	8.55E-05	9.99E-06	9.24E-05	1.7766E-03
520564.11	4258245.45	34406.75445	0.14819	0.20469	0.1475	0.21449	1.58E-03	6.07E-06	7.32E-06	6.04E-06	7.36E-06	1.6053E-03
520393.89	4258123.3	34401.60782	0.17149	0.483	0.17602	0.5131	1.58E-03	7.02E-06	1.73E-05	7.21E-06	1.76E-05	1.6274E-03
520344.92	4258133.15	34397.77248	0.18268	0.64306	0.18978	0.69169	1.58E-03	7.48E-06	2.30E-05	7.77E-06	2.37E-05	1.6401E-03
520178.17	4258242.63	34397.09198	0.24155	2.70194	0.2486	3.05586	1.58E-03	9.89E-06	9.66E-05	1.02E-05	1.05E-04	1.7997E-03
519998.25	4258953.21	34388.83808	1.81754	0.33103	2.12565	0.32675	1.58E-03	7.44E-05	1.18E-05	8.70E-05	1.12E-05	1.7622E-03
520129.04	4258302.47	34388.44548	0.27916	6.04277	0.28681	7.06575	1.58E-03	1.14E-05	2.16E-04	1.17E-05	2.43E-04	2.0596E-03
520599.9	4258743.63	34379.97448	0.17097	0.13472	0.16417	0.14003	1.58E-03	7.00E-06	4.82E-06	6.72E-06	4.81E-06	1.6006E-03
520197.81	4258222.69	34342.25139	0.23111	2.13369	0.23962	2.39238	1.58E-03	9.46E-06	7.63E-05	9.81E-06	8.21E-05	1.7533E-03
519968.81	4258856.03	34337.45934	1.06956	0.44823	1.21251	0.43679	1.58E-03	4.38E-05	1.60E-05	4.96E-05	1.50E-05	1.6998E-03
519964.81	4258798.15	34335.24087	0.91996	0.56598	1.04223	0.54303	1.58E-03	3.77E-05	2.02E-05	4.27E-05	1.86E-05	1.6945E-03
520295.91	4258152.99	34328.11068	0.19599	0.89179	0.20653	0.9708	1.57E-03	8.02E-06	3.19E-05	8.46E-06	3.33E-05	1.6566E-03
520246.87	4258182.84	34326.72262	0.21162	1.31594	0.22336	1.44902	1.57E-03	8.66E-06	4.71E-05	9.15E-06	4.97E-05	1.6895E-03
520588.93	4258793.77	34324.52412	0.18215	0.13036	0.17518	0.13521	1.57E-03	7.46E-06	4.66E-06	7.17E-06	4.64E-06	1.5987E-03
520548.78	4258208.85	34301.10759	0.1492	0.21862	0.1501	0.23045	1.57E-03	6.11E-06	7.82E-06	6.15E-06	7.91E-06	1.6017E-03
520093.79	4259074.4	34277.5253	13.54486	0.27165	12.4973	0.25478	1.57E-03	5.55E-04	9.72E-06	5.12E-04	8.75E-06	2.6573E-03
520384.1	4258123.27	34273.71355	0.1732	0.51037	0.17808	0.54355	1.57E-03	7.09E-06	1.83E-05	7.29E-06	1.87E-05	1.6237E-03
520168.35	4258252.6	34272.57464	0.24676	3.08215	0.25317	3.50454	1.57E-03	1.01E-05	1.10E-04	1.04E-05	1.20E-04	1.8234E-03
520315.52	4258143.05	34270.54781	0.19015	0.77769	0.19933	0.84307	1.57E-03	7.79E-06	2.78E-05	8.16E-06	2.89E-05	1.6450E-03
519967.12	4258755.49	34268.68906	0.85556	0.69275	0.9797	0.65548	1.57E-03	3.50E-05	2.48E-05	4.01E-05	2.25E-05	1.6946E-03
519965.26	4258823.34	34261.05871	0.96936	0.50834	1.09827	0.49125	1.57E-03	3.97E-05	1.82E-05	4.50E-05	1.69E-05	1.6915E-03
520442.83	4258123.45	34257.20785	0.16252	0.37085	0.16649	0.39129	1.57E-03	6.65E-06	1.33E-05	6.82E-06	1.34E-05	1.6118E-03
520577.15	4258291.09	34208.79956	0.14846	0.19222	0.14786	0.20082	1.57E-03	6.08E-06	6.88E-06	6.05E-06	6.89E-06	1.5953E-03
520276.3	4258162.93	34205.82558	0.20152	1.03303	0.21299	1.12969	1.57E-03	8.25E-06	3.70E-05	8.72E-06	3.88E-05	1.6620E-03
520550.82	4258888.38	34200.62453	0.21771	0.12457	0.20963	0.13016	1.57E-03	8.91E-06	4.46E-06	8.58E-06	4.47E-06	1.5955E-03
520562.88	4258863.37	34192.35613	0.20635	0.12547	0.1987	0.13083	1.57E-03	8.45E-06	4.49E-06	8.14E-06	4.49E-06	1.5942E-03
520029.6	4258550.48	34145.60819	0.80449	3.79827	0.97158	3.09311	1.57E-03	3.29E-05	1.36E-04	3.98E-05	1.06E-04	1.8813E-03
520207.63	4258212.72	34143.93513	0.22581	1.91803	0.23509	2.14055	1.57E-03	9.25E-06	6.86E-05	9.63E-06	7.35E-05	1.7274E-03
520505.24	4258150.16	34137.76433	0.154	0.26818	0.15769	0.2837	1.57E-03	6.31E-06	9.59E-06	6.46E-06	9.74E-06	1.5983E-03
519986.36	4258928.32	34133.56662	1.48307	0.35318	1.70185	0.3481	1.57E-03	6.07E-05	1.26E-05	6.97E-05	1.20E-05	1.7210E-03
520523.6	4258168.03	34110.39649	0.15178	0.24532	0.1547	0.25956	1.56E-03	6.21E-06	8.77E-06	6.33E-06	8.91E-06	1.5952E-03
520592.46	4258785.34	34095.4183	0.17915	0.13079	0.17229	0.13559	1.56E-03	7.34E-06	4.68E-06	7.05E-06	4.65E-06	1.5880E-03
520374.31	4258123.24	34035.77436	0.17474	0.53999	0.18013	0.57638	1.56E-03	7.15E-06	1.93E-05	7.38E-06	1.98E-05	1.6151E-03
520530.51	4258926.8	34034.01388	0.23811	0.12352	0.22871	0.12929	1.56E-03	9.75E-06	4.42E-06	9.36E-06	4.44E-06	1.5894E-03
520158.53	4258262.56	34028.75283	0.25192	3.5568	0.25786	4.06928	1.56E-03	1.03E-05	1.27E-04	1.06E-05	1.40E-04	1.8490E-03
520575.9	4258280.54	34025.79737	0.14778	0.194	0.14706	0.20257	1.56E-03	6.05E-06	6.94E-06	6.02E-06	6.95E-06	1.5870E-03
520581.53	4258312.99	33996.86927	0.14914	0.18688	0.14863	0.19575	1.56E-03	6.11E-06	6.68E-06	6.09E-06	6.72E-06	1.5853E-03
520474.1	4259010.2	33992.77608	0.30789	0.12386	0.29467	0.12992	1.56E-03	1.26E-05	4.43E-06	1.21E-05	4.46E-06	1.5931E-03
519971.62	4258718.12	33955.11386	0.81729	0.8406	0.93885	0.78869	1.56E-03	3.35E-05	3.01E-05	3.84E-05	2.71E-05	1.6868E-03
520558.45	4258223	33946.72451	0.14772	0.20965	0.14767	0.22055	1.56E-03	6.05E-06	7.50E-06	6.05E-06	7.57E-06	1.5846E-03
520335.13	4258133.12	33942.76126	0.18392	0.68442	0.19177	0.73812	1.56E-03	7.53E-06	2.45E-05	7.85E-06	2.53E-05	1.6224E-03
520580.35	4258302.47	33935.39188	0.14848	0.18882	0.14798	0.19749	1.56E-03	6.08E-06	6.75E-06	6.06E-06	6.78E-06	1.5826E-03
520604.05	4258709.78	33925.00415	0.16575	0.13801	0.15927	0.14361	1.56E-03	6.79E-06	4.94E-06	6.52E-06	4.93E-06	1.5796E-03
519968.64	4258735.05	33906.92706	0.82638	0.76513	0.94532	0.72085	1.56E-03	3.38E-05	2.74E-05	3.87E-05	2.47E-05	1.6802E-03
520585.36	4258369.19	33869.98038	0.15308	0.17871	0.15111	0.18786	1.55E-03	6.27E-06	6.39E-06	6.19E-06	6.45E-06	1.5792E-03
520217.45	4258202.75	33867.98077	0.22054	1.73453	0.23049	1.92751	1.55E-03	9.03E-06	6.20E-05	9.44E-06	6.62E-05	1.7005E-03
520595.99	4258776.9	33816.15415	0.17621	0.13107	0.16941	0.13586	1.55E-03	7.21E-06	4.69E-06	6.94E-06	4.66E-06	1.5749E-03
520256.69	4258172.87	33805.59689	0.2063	1.21128	0.21798	1.3301	1.55E-03	8.45E-06	4.33E-05	8.92E-06	4.57E-05	1.6573E-03
520364.52	4258123.21	33802.63428	0.17634	0.57188	0.18225	0.61226	1.55E-03	7.22E-06	2.05E-05	7.46E-06	2.10E-05	1.6070E-03
520603.46	4258735.12	33782.45153	0.16819	0.13467	0.16157	0.14006	1.55E-03	6.89E-06	4.82E-06	6.62E-06	4.81E-06	1.5730E-03
520538.7	4258184.51	33781.18872	0.14947	0.22893	0.15152	0.24191	1.55E-03	6.12E-06	8.19E-06	6.20E-06	8.30E-06	1.5786E-03
520539.94	4258912.89	33779.60874	0.22862	0.12326	0.21985	0.12896	1.55E-03	9.36E-06	4.41E-06	9.00E-06	4.43E-06	1.5769E-03
520014.13	4258989.75	33778.83036	2.4537	0.30224	2.96556	0.29775	1.55E-03	1.00E-04	1.08E-05	1.21E-04	1.02E-05	1.7926E-03
519964.19	4258772.54	33769.01993	0.8588	0.63287	0.97715	0.60201	1.55E-03	3.52E-05	2.26E-05	4.00E-05	2.07E-05	1.6677E-03
520062.83	4258443.35	33768.29501	0.46183	18.04345	0.50472	9.2422	1.55E-03	1.89E-05	6.45E-04	2.07E-05	3.17E-04	2.5515E-03
520574.77	4258270.04	33763.46233	0.14706	0.19556	0.14624	0.20418	1.55E-03	6.02E-06	6.99E-06	5.99E-06	7.01E-06	1.5750E-03
520514.16	4258153.98	33754.57384	0.15226	0.2568	0.15566	0.27171	1.55E-03	6.23E-06	9.19E-06	6.37E-06	9.33E-06	1.5797E-03
520507.25	4258966.46	33749.66877	0.26417	0.12322	0.25319	0.12896	1.55E-03	1.08E-05	4.41E-06	1.04E-05	4.43E-06	1.5784E-03
519999.51	4258963.73	33736.79197	1.86669	0.32011	2.18727	0.3161	1.55E-03	7.64E-05	1.14E-05	8.96E-05	1.09E-05	1.7361E-03
520497.99	4258980.3	33724.03205	0.27557	0.12333	0.26399	0.12908	1.55E-03	1.13E-05	4.41E-06	1.08E-05	4.43E-06	1.5781E-03
520464.92	4259024.01	33701.21413	0.32173	0.12313	0.30775	0.12946	1.55E-03	1.32E-05	4.40E-06	1.26E-05	4.44E-06	1.5808E-03
520148.71	4258272.53	33667.94546	0.25702	4.16281	0.26275	4.79977	1.54E-03	1.05E-05	1.49E-04	1.08E-05	1.65E-04	1.8796E-03
519965.04	4258846.93	33652.99072	1.00254	0.46035	1.13344	0.4475	1.54E-03	4.10E-05	1.65E-05	4.64E-05	1.54E-05	1.6632E-03
519987.9	4258938.95	33644.75699	1.52939	0.34107	1.75855	0.33647	1.54E-03	6.26E-05	1.22E-05	7.20E-05	1.16E-05	1.7019E-03
520516.68	4258952.54	33626.90036	0.25317	0.12295	0.24282	0.1287	1.54E-03	1.04E-05	4.40E-06	9.94E-06	4.42E-06	1.5719E-03
520548.08	4258198.54	33624.22733	0.14819	0.21966	0.14949	0.23168	1.54E-03	6.07E-06	7.86E-06	6.12E-06	7.95E-06	1.5706E-03
520488.89	4258994.07	33617.10341	0.28737	0.12331	0.27533	0.12908	1.54E-03	1.18E-05	4.41E-06	1.13E-05	4.43E-06	1.5742E-03
519974.46	4258700.84	33614.18833	0.80075	0.92585	0.92365	0.86503	1.54E-03	3.28E-05	3.31E-05	3.78E-05	2.97E-05	1.6756E-03
520560.89	4258874.2	33606.16564	0.20862	0.12414	0.20097	0.12952	1.54E-03	8.54E-06	4.44E-06	8.23E-06	4.45E-06	1.5674E-03
520053.72	4259043.64	33584.97671	7.04303	0.27724	11.77757	0.2674	1.54E-03	2.88E-04	9.92E-06	4.82E-04	9.18E-06	2.3305E-03
519987.12	4258655.32	33580.84032	0.79771	1.26428	0.93826	1.16076	1.54E-03	3.27E-05	4.52E-05	3.84E-05	3.98E-05	1.6968E-03
520305.73	4258143.02	33568.90827	0.19073	0.83318	0.2007	0.90469	1.54E-03	7.81E-06	2.98E-05	8.22E-06	3.11E-05	1.6170E-03
520286.12	4258152.96	33544.96678	0.19626	0.96002	0.20727	1.04728	1.54E-03	8.04E-06	3.43E-05	8.49E-06	3.60E-05	1.6258E-03
520227.27	4258192.78	33541.89303	0.21537	1.57659	0.22581	1.74577	1.54E-03	8.82E-06	5.64E-05	9.25E-06	5.99E-05	1.6732E-03
520478.3	4258128.62	33522.23634	0.15611	0.30888	0.16035	0.32557	1.54E-03	6.39E-06	1.10E-05	6.57E-06	1.12E-05	1.5731E-03
520044.33	4259033.73	33521.37011	5.13695	0.28013	7.24645	0.27194	1.54E-03	2.10E-04	1.00E-05	2.97E-04	9.34E-06	2.0643E-03
520487.15	4258132.41	33516.91597	0.15499	0.29503	0.15912	0.31133	1.54E-03	6.35E-06	1.06E-05	6.52E-06	1.07E-05	1.5718E-03
520469.44	4258124.83	33515.78755	0.15722	0.32339	0.16141	0.34074	1.54E-03	6.44E-06	1.16E-05	6.61E-06	1.17E-05	1.5740E-03
520526.31	4258938.55	33491.47279	0.2427	0.12263	0.23302	0.12836	1.54E-03	9.94E-06	4.39E-06	9.54E-06	4.41E-06	1.5648E-03
520599.52	4258768.47	33481.84563	0.17333	0.13123	0.1666	0.13606	1.54E-03	7.10E-06	4.69E-06	6.82E-06	4.67E-06	1.5594E-03
520532.58	4258171.88	33477.2947	0.14966	0.23567	0.15222	0.24918	1.54E-03	6.13E-06	8.43E-06	6.23E-06	8.55E-06	1.5652E-03
520354.74	4258123.18	33474.55223	0.17775	0.60656	0.1843	0.65115	1.54E-03	7.28E-06	2.17E-05	7.55E-06	2.24E-05	1.5946E-03
520119.22	4258312.44	33474.37609	0.2839	7.6162	0.2929	8.91623	1.54E-03	1.16E-05	2.72E-04	1.20E-05	3.06E-04	2.1379E-03
520003.83	4258975.5	33460.70894	2.02051	0.31038	2.3865	0.30644	1.54E-03	8.27E-05	1.11E-05	9.77E-05	1.05E-05	1.7372E-03
520573.73	4258259.58	33446.04991	0.14631	0.19689	0.14545	0.20568	1.53E-03	5.99E-06	7.04E-06	5.96E-06	7.06E-06	1.5605E-03
520549.58	4258898.9	33419.30885	0.21937	0.12301	0.21123	0.12857	1.53E-03	8.98E-06	4.40E-06	8.65E-06	4.41E-06	1.5597E-03
520460.58	4258121.03	33414.82387	0.15817	0.33879	0.16227	0.35685	1.53E-03	6.48E-06	1.21E-05	6.64E-06	1.23E-05	1.5705E-03
520578.37	4258480.18	33392.73087	0.16446	0.17322	0.16025	0.18221	1.53E-03	6.73E-06	6.20E-06	6.56E-06	6.26E-06	1.5577E-03
520325.34	4258133.09	33386.27435	0.18487	0.73	0.19354	0.78886	1.53E-03	7.57E-06	2.61E-05	7.92E-06	2.71E-05	1.6004E-03
520496.01	4258136.2	33382.44785	0.15367	0.28207	0.15766	0.29786	1.53E-03	6.29E-06	1.01E-05	6.46E-06	1.02E-05	1.5646E-03
520083.89	4259074.41	33348.62491	14.6463	0.26779	20.78701	0.25275	1.53E-03	6.00E-04	9.58E-06	8.51E-04	8.68E-06	2.9990E-03
519999.89	4258618.49	33312.79328	0.79882	1.70222	0.95529	1.53287	1.53E-03	3.27E-05	6.09E-05	3.91E-05	5.26E-05	1.7137E-03
519961.62	4258814.58	33309.64697	0.90858	0.52094	1.0236	0.50215	1.53E-03	3.72E-05	1.86E-05	4.19E-05	1.72E-05	1.6432E-03
520557.62	4258212.63	33304.31557	0.14674	0.21093	0.14717	0.22199	1.53E-03	6.01E-06	7.54E-06	6.03E-06	7.62E-06	1.5551E-03
520423.29	4258113.39	33294.74458	0.16346	0.41249	0.16728	0.43589	1.53E-03	6.69E-06	1.48E-05	6.85E-06	1.50E-05	1.5708E-03
520413.5	4258113.36	33283.10683	0.16512	0.43481	0.16911	0.46009	1.53E-03	6.76E-06	1.56E-05	6.92E-06	1.58E-05	1.5720E-03
520523.07	4258157.79	33278.81333	0.15037	0.2465	0.15348	0.26073	1.53E-03	6.16E-06	8.82E-06	6.28E-06	8.95E-06	1.5570E-03
519971.16	4258892.07	33277.73752	1.15451	0.3911	1.30356	0.38369	1.53E-03	4.73E-05	1.40E-05	5.34E-05	1.32E-05	1.6545E-03
520451.72	4258117.24	33269.03735	0.15906	0.355	0.163	0.374	1.53E-03	6.51E-06	1.27E-05	6.67E-06	1.28E-05	1.5650E-03
520266.51	4258162.9	33252.5359	0.20112	1.11878	0.21262	1.22532	1.53E-03	8.23E-06	4.00E-05	8.71E-06	4.21E-05	1.6246E-03

520403.71	4258113.33	33238.16089	0.16678	0.45861	0.17102	0.48619	1.52E-03	6.83E-06	1.64E-05	7.00E-06	1.67E-05	1.5718E-03
520433.08	4258113.42	33225.68413	0.16172	0.39159	0.16546	0.41331	1.52E-03	6.62E-06	1.40E-05	6.77E-06	1.42E-05	1.5659E-03
520568.33	4258237.24	33196.56255	0.14584	0.20172	0.14524	0.21137	1.52E-03	5.97E-06	7.22E-06	5.95E-06	7.26E-06	1.5494E-03
520138.89	4258282.5	33154.37817	0.26193	4.96207	0.26787	5.76707	1.52E-03	1.07E-05	1.77E-04	1.10E-05	1.98E-04	1.9182E-03
520504.87	4258139.99	33148.70165	0.15219	0.26995	0.156	0.28519	1.52E-03	6.23E-06	9.66E-06	6.39E-06	9.79E-06	1.5529E-03
520237.09	4258182.81	33142.34965	0.21022	1.43995	0.22105	1.58863	1.52E-03	8.61E-06	5.15E-05	9.05E-06	5.45E-05	1.6442E-03
519989.33	4258949.53	33135.8498	1.57406	0.32965	1.81347	0.32545	1.52E-03	6.44E-05	1.18E-05	7.43E-05	1.12E-05	1.6819E-03
520482.84	4259006.58	33127.4013	0.2957	0.1224	0.28336	0.12822	1.52E-03	1.21E-05	4.38E-06	1.16E-05	4.40E-06	1.5523E-03
520607.02	4258726.61	33120.50022	0.1655	0.13456	0.15905	0.13999	1.52E-03	6.78E-06	4.81E-06	6.51E-06	4.81E-06	1.5424E-03
520393.92	4258113.3	33098.82539	0.16832	0.48419	0.17294	0.51423	1.52E-03	6.89E-06	1.73E-05	7.08E-06	1.77E-05	1.5675E-03
520603.05	4258760.03	33090.22545	0.17053	0.13126	0.16387	0.13618	1.52E-03	6.98E-06	4.69E-06	6.71E-06	4.68E-06	1.5412E-03
520572.79	4258249.17	33083.33663	0.14555	0.19801	0.14473	0.20704	1.52E-03	5.96E-06	7.08E-06	5.93E-06	7.11E-06	1.5439E-03
519961.14	4258789.3	33078.23198	0.85658	0.58024	0.96832	0.5548	1.52E-03	3.51E-05	2.08E-05	3.96E-05	1.90E-05	1.6321E-03
519972.87	4258902.77	33068.49957	1.19487	0.37707	1.35028	0.3705	1.52E-03	4.89E-05	1.35E-05	5.53E-05	1.27E-05	1.6475E-03
520442.86	4258113.45	33067.26202	0.15987	0.37206	0.16365	0.39225	1.52E-03	6.55E-06	1.33E-05	6.70E-06	1.35E-05	1.5571E-03
520607.64	4258701.19	33051.19666	0.16313	0.13811	0.15684	0.14356	1.52E-03	6.68E-06	4.94E-06	6.42E-06	4.93E-06	1.5393E-03
520344.95	4258123.15	33034.57235	0.1789	0.64464	0.18623	0.69343	1.52E-03	7.32E-06	2.31E-05	7.63E-06	2.38E-05	1.5774E-03
520019.69	4258569.92	33028.88897	0.80331	2.84712	0.98169	2.41052	1.52E-03	3.29E-05	1.02E-04	4.02E-05	8.28E-05	1.7730E-03
520581.18	4258461.69	33026.14329	0.162	0.17331	0.15835	0.18218	1.52E-03	6.63E-06	6.20E-06	6.48E-06	6.25E-06	1.5407E-03
520588.66	4258377.86	33009.68514	0.15248	0.17592	0.1502	0.18479	1.51E-03	6.24E-06	6.29E-06	6.15E-06	6.34E-06	1.5395E-03
520063.93	4258432.91	33001.85004	0.43209	19.86185	0.47051	9.65784	1.51E-03	1.77E-05	7.10E-04	1.93E-05	3.32E-04	2.5930E-03
520049.4	4258501.91	32999.41635	0.66306	7.82166	0.74933	5.64922	1.51E-03	2.71E-05	2.80E-04	3.07E-05	1.94E-04	2.0455E-03
520547.42	4258188.24	32982.101	0.1472	0.22062	0.14883	0.23287	1.51E-03	6.03E-06	7.89E-06	6.09E-06	7.99E-06	1.5412E-03
520099.55	4258342.38	32945.5858	0.30696	14.25294	0.32149	15.95838	1.51E-03	1.26E-05	5.10E-04	1.32E-05	5.48E-04	2.5949E-03
519975.54	4258913.86	32943.15602	1.25224	0.36398	1.41802	0.35814	1.51E-03	5.13E-05	1.30E-05	5.81E-05	1.23E-05	1.6460E-03
520559.46	4258884.8	32936.57666	0.21038	0.12268	0.20277	0.12805	1.51E-03	8.61E-06	4.39E-06	8.30E-06	4.40E-06	1.5368E-03
520538.96	4258923.31	32922.6255	0.23	0.12165	0.22115	0.12727	1.51E-03	9.42E-06	4.35E-06	9.05E-06	4.37E-06	1.5376E-03
519965.56	4258872.3	32913.50494	1.04575	0.41632	1.17678	0.40699	1.51E-03	4.28E-05	1.49E-05	4.82E-05	1.40E-05	1.6299E-03
520384.13	4258113.27	32901.62792	0.16979	0.51169	0.1749	0.54451	1.51E-03	6.95E-06	1.83E-05	7.16E-06	1.87E-05	1.5606E-03
520574.77	4258851.53	32896.689	0.19655	0.12405	0.18936	0.12913	1.51E-03	8.05E-06	4.44E-06	7.75E-06	4.43E-06	1.5339E-03
520473.6	4259020.41	32890.61152	0.30888	0.12178	0.29578	0.12782	1.51E-03	1.26E-05	4.36E-06	1.21E-05	4.39E-06	1.5425E-03
519961.27	4258837.83	32881.34844	0.93991	0.47254	1.05885	0.45815	1.51E-03	3.85E-05	1.69E-05	4.34E-05	1.57E-05	1.6230E-03
520092.5	4259085.69	32860.31542	13.99496	0.2623	13.16474	0.2464	1.51E-03	5.73E-04	9.38E-06	5.39E-04	8.46E-06	2.6374E-03
520581.78	4258834.8	32854.27931	0.19034	0.12517	0.18343	0.13011	1.51E-03	7.79E-06	4.48E-06	7.51E-06	4.47E-06	1.5315E-03
520588.23	4258402.59	32851.08815	0.15465	0.17444	0.15194	0.18296	1.51E-03	6.33E-06	6.24E-06	6.22E-06	6.28E-06	1.5322E-03
520513.73	4258143.78	32844.6106	0.15061	0.25844	0.15415	0.27316	1.51E-03	6.17E-06	9.24E-06	6.31E-06	9.38E-06	1.5379E-03
520589.45	4258354.05	32826.55231	0.1501	0.17728	0.14849	0.18639	1.51E-03	6.15E-06	6.34E-06	6.08E-06	6.40E-06	1.5310E-03
520295.94	4258142.99	32823.42032	0.19104	0.89476	0.20163	0.97308	1.51E-03	7.82E-06	3.20E-05	8.26E-06	3.34E-05	1.5874E-03
520585.28	4258826.43	32793.13729	0.1873	0.12562	0.18047	0.1305	1.50E-03	7.67E-06	4.49E-06	7.39E-06	4.48E-06	1.5285E-03
520541.55	4258175.72	32778.14398	0.14748	0.22659	0.14964	0.23941	1.50E-03	6.04E-06	8.10E-06	6.13E-06	8.22E-06	1.5323E-03
520315.55	4258133.05	32774.58458	0.18559	0.78025	0.19503	0.84475	1.50E-03	7.60E-06	2.79E-05	7.99E-06	2.90E-05	1.5761E-03
520005.1	4258986.02	32754.29659	2.07543	0.30062	2.45611	0.29681	1.50E-03	8.50E-05	1.08E-05	1.01E-04	1.02E-05	1.7092E-03
520567.36	4258226.81	32754.21223	0.14508	0.20272	0.14474	0.21271	1.50E-03	5.94E-06	7.25E-06	5.93E-06	7.30E-06	1.5291E-03
520374.34	4258113.24	32741.87632	0.17141	0.54119	0.17698	0.5777	1.50E-03	7.02E-06	1.94E-05	7.25E-06	1.98E-05	1.5556E-03
519977.12	4258683.15	32741.09058	0.77385	1.02154	0.89796	0.94941	1.50E-03	3.17E-05	3.65E-05	3.68E-05	3.26E-05	1.6397E-03
520058.1	4258461.19	32738.39523	0.50816	12.63619	0.55853	7.66387	1.50E-03	2.08E-05	4.52E-04	2.29E-05	2.63E-04	2.2607E-03
520506.54	4258976.76	32731.79435	0.26534	0.1215	0.25437	0.12711	1.50E-03	1.09E-05	4.35E-06	1.04E-05	4.36E-06	1.5317E-03
520531.99	4258161.61	32713.23906	0.14839	0.23682	0.15117	0.25038	1.50E-03	6.08E-06	8.47E-06	6.19E-06	8.60E-06	1.5302E-03
520246.91	4258172.84	32709.68868	0.20519	1.32046	0.21624	1.45226	1.50E-03	8.40E-06	4.72E-05	8.85E-06	4.99E-05	1.6150E-03
520556.85	4258202.29	32695.71133	0.1458	0.21194	0.14665	0.2232	1.50E-03	5.97E-06	7.58E-06	6.00E-06	7.66E-06	1.5272E-03
520497.39	4258990.55	32694.07824	0.27665	0.12152	0.26513	0.12715	1.50E-03	1.13E-05	4.35E-06	1.09E-05	4.37E-06	1.5308E-03
520276.33	4258152.93	32687.27995	0.19611	1.03649	0.20731	1.1326	1.50E-03	8.03E-06	3.71E-05	8.49E-06	3.89E-05	1.5921E-03
520188.02	4258222.66	32663.1605	0.22759	2.39755	0.23421	2.69893	1.50E-03	9.32E-06	8.58E-05	9.59E-06	9.27E-05	1.6958E-03
520515.86	4258962.89	32653.16147	0.25442	0.12132	0.24405	0.12693	1.50E-03	1.04E-05	4.34E-06	9.99E-06	4.36E-06	1.5272E-03
520588.78	4258818.06	32643.84059	0.18422	0.12587	0.17741	0.13071	1.50E-03	7.54E-06	4.50E-06	7.26E-06	4.49E-06	1.5214E-03
520606.58	4258751.6	32638.75295	0.16779	0.13125	0.16124	0.13627	1.50E-03	6.87E-06	4.69E-06	6.60E-06	4.68E-06	1.5202E-03
520548.45	4258909.37	32629.56327	0.22089	0.12142	0.21266	0.12694	1.50E-03	9.04E-06	4.34E-06	8.71E-06	4.36E-06	1.5234E-03
520178.2	4258232.63	32626.78859	0.23236	2.70823	0.23826	3.06413	1.50E-03	9.51E-06	9.69E-05	9.76E-06	1.05E-04	1.7182E-03
519977.29	4258924.58	32609.04867	1.2946	0.35141	1.46809	0.34617	1.50E-03	5.30E-05	1.26E-05	6.01E-05	1.19E-05	1.6336E-03
520197.84	4258212.69	32589.05939	0.22276	2.14049	0.23019	2.39715	1.50E-03	9.12E-06	7.66E-05	9.42E-06	8.23E-05	1.6725E-03
520525.35	4258948.96	32559.66817	0.24404	0.12106	0.23432	0.12667	1.49E-03	9.99E-06	4.33E-06	9.59E-06	4.35E-06	1.5220E-03
519990.66	4258960.07	32552.76768	1.61672	0.31875	1.86574	0.3149	1.49E-03	6.62E-05	1.14E-05	7.64E-05	1.08E-05	1.6583E-03
520335.16	4258123.12	32545.83285	0.1799	0.68629	0.18802	0.73972	1.49E-03	7.37E-06	2.45E-05	7.70E-06	2.54E-05	1.5581E-03
520053.74	4259053.64	32542.44544	7.08229	0.26904	11.85116	0.25957	1.49E-03	2.90E-04	9.62E-06	4.85E-04	8.91E-06	2.2867E-03
520586.13	4258294.93	32511.30218	0.14565	0.18537	0.14504	0.19371	1.49E-03	5.96E-06	6.63E-06	5.94E-06	6.65E-06	1.5167E-03
520364.56	4258113.21	32494.73252	0.17287	0.57311	0.179	0.61356	1.49E-03	7.08E-06	2.05E-05	7.33E-06	2.11E-05	1.5468E-03
519963.37	4258746.45	32481.24864	0.79004	0.70647	0.89865	0.66762	1.49E-03	3.23E-05	2.53E-05	3.68E-05	2.29E-05	1.6075E-03
520168.38	4258242.6	32471.40524	0.23705	3.08983	0.2424	3.51282	1.49E-03	9.71E-06	1.11E-04	9.92E-06	1.21E-04	1.7405E-03
520129.07	4258292.47	32470.72519	0.26654	6.05791	0.27323	7.08338	1.49E-03	1.09E-05	2.17E-04	1.12E-05	2.43E-04	1.9717E-03
520043.82	4259043.65	32454.85322	5.08094	0.27154	7.11513	0.26374	1.49E-03	2.08E-04	9.71E-06	2.91E-04	9.05E-06	2.0071E-03
520109.4	4258322.41	32446.66255	0.28827	10.04247	0.29897	11.82327	1.49E-03	1.18E-05	3.59E-04	1.22E-05	4.06E-04	2.2777E-03
520522.58	4258147.57	32437.09263	0.14889	0.24786	0.15216	0.262	1.49E-03	6.10E-06	8.87E-06	6.23E-06	8.99E-06	1.5183E-03
520207.66	4258202.72	32433.04942	0.21793	1.92423	0.22614	2.14493	1.49E-03	8.92E-06	6.88E-05	9.26E-06	7.36E-05	1.6486E-03
520584.79	4258284.34	32428.20931	0.14504	0.18726	0.14434	0.19547	1.49E-03	5.94E-06	6.70E-06	5.91E-06	6.71E-06	1.5130E-03
520535.04	4258934.94	32397.85056	0.23408	0.12072	0.22499	0.1263	1.49E-03	9.58E-06	4.32E-06	9.21E-06	4.34E-06	1.5138E-03
520610.59	4258718.1	32371.18091	0.16285	0.13434	0.15654	0.13976	1.49E-03	6.67E-06	4.81E-06	6.41E-06	4.80E-06	1.5078E-03
520595.79	4258801.33	32356.25933	0.17832	0.12669	0.17166	0.13138	1.48E-03	7.30E-06	4.53E-06	7.03E-06	4.51E-06	1.5078E-03
519961.82	4258863.29	32351.42892	0.98312	0.42712	1.10382	0.41666	1.48E-03	4.03E-05	1.53E-05	4.52E-05	1.43E-05	1.5993E-03
519994.72	4258971.74	32324.60661	1.73404	0.30891	2.01348	0.3053	1.48E-03	7.10E-05	1.10E-05	8.24E-05	1.05E-05	1.6580E-03
520569.61	4258870.59	32305.87407	0.20164	0.12218	0.19439	0.12735	1.48E-03	8.26E-06	4.37E-06	7.96E-06	4.37E-06	1.5071E-03
520566.46	4258216.42	32265.69377	0.14427	0.20369	0.14428	0.21398	1.48E-03	5.91E-06	7.29E-06	5.91E-06	7.35E-06	1.5067E-03
519978.91	4258935.24	32264.74106	1.33665	0.33956	1.51855	0.33484	1.48E-03	5.47E-05	1.21E-05	6.22E-05	1.15E-05	1.6208E-03
520583.58	4258273.81	32264.55492	0.14438	0.18892	0.14357	0.19708	1.48E-03	5.91E-06	6.76E-06	5.88E-06	6.77E-06	1.5055E-03
519957.99	4258805.82	32255.06124	0.85013	0.53373	0.95462	0.51293	1.48E-03	3.48E-05	1.91E-05	3.91E-05	1.76E-05	1.5904E-03
520588.97	4258306.16	32252.37029	0.14577	0.18224	0.14515	0.19076	1.48E-03	5.97E-06	6.52E-06	5.94E-06	6.55E-06	1.5047E-03
520256.73	4258162.87	32241.22881	0.20026	1.21542	0.21139	1.33291	1.48E-03	8.20E-06	4.35E-05	8.66E-06	4.58E-05	1.5853E-03
520558.15	4258895.35	32231.56585	0.21202	0.12116	0.20436	0.12652	1.48E-03	8.68E-06	4.33E-06	8.37E-06	4.34E-06	1.5044E-03
520491.58	4259002.97	32226.13509	0.28424	0.12072	0.27244	0.12635	1.48E-03	1.16E-05	4.32E-06	1.12E-05	4.34E-06	1.5099E-03
520590.23	4258316.71	32224.54009	0.14636	0.18024	0.14563	0.18897	1.48E-03	5.99E-06	6.45E-06	5.96E-06	6.49E-06	1.5033E-03
520158.56	4258252.57	32223.71944	0.24172	3.56535	0.24668	4.07895	1.48E-03	9.90E-06	1.28E-04	1.01E-05	1.40E-04	1.7659E-03
520599.29	4258792.96	32221.33439	0.17552	0.12712	0.16893	0.13174	1.48E-03	7.19E-06	4.55E-06	6.92E-06	4.52E-06	1.5014E-03
520217.48	4258192.75	32215.15415	0.21315	1.73998	0.22205	1.93184	1.48E-03	8.73E-06	6.22E-05	9.09E-06	6.63E-05	1.6243E-03
519960.48	4258763.6	32194.06734	0.79502	0.64671	0.90144	0.61361	1.48E-03	3.26E-05	2.31E-05	3.69E-05	2.11E-05	1.5907E-03
520354.77	4258113.18	32140.77593	0.1741	0.60803	0.18093	0.65245	1.47E-03	7.13E-06	2.17E-05	7.41E-06	2.24E-05	1.5332E-03
520305.76	4258133.02	32128.48256	0.1861	0.83579	0.19617	0.90664	1.47E-03	7.62E-06	2.99E-05	8.03E-06	3.11E-05	1.5507E-03
520556.14	4258191.98	32126.732	0.1449	0.21283	0.1461	0.22434	1.47E-03	5.93E-06	7.61E-06	5.98E-06	7.70E-06	1.5011E-03
520591.96	4258386.53	32126.37063	0.15183	0.17333	0.14932	0.18188	1.47E-03	6.22E-06	6.20E-06	6.11E-06	6.24E-06	1.4987E-03
520610.12	4258743.17	32125.26936	0.16512	0.13119	0.15872	0.1363	1.47E-03	6.76E-06	4.69E-06	6.50E-06	4.68E-06	1.4965E-03
520611.24	4258692.6	32117.66086	0.16054	0.13808	0.15438	0.14336	1.47E-03	6.57E-06	4.94E-06	6.32E-06	4.92E-06	1.4963E-03
520540.9	4258165.43	32081.95113	0.14633	0.22769	0.14876	0.2406	1.47E-03	5.99E-06	8.14E-06	6.09E-06	8.26E-06	1.5003E-03
520482.29	4259016.82	32081.43552	0.29671	0.12041	0.28447	0.12618	1.47E-03	1.21E-05	4.31E-06	1.16E-05	4.33E-06	1.5043E-03
520286.15	4258142.96	32067.56982	0.19113	0.96322	0.20202	1.04961	1.47E-03	7.83E-06	3.45E-05	8.27E-06	3.60E-05	1.5578E-03
520582.48	4258263.33	32050.59516	0.1437	0.19032	0.1428	0.19856	1.47E-03	5.88E-06	6.81E-06	5.85E-06	6.82E-06	1.4958E-03
520592.92	4258363.18	32019.37044	0.14953	0.17438	0.14755	0.18324	1.47E-03	6.12E-06	6.24E-06	6.04E-06	6.29E-06	1.4937E-03
520009.77	4258589.36	32014.54136	0.78119	2.20028	0.95204	1.92767	1.47E-03	3.20E-05	7.87E-05	3.90E-05	6.62E-05	1.6846E-03
519957.49	4258828.73	32009.46943	0.88024	0.48485	0.98874	0.46868	1.47E-03	3.60E-05	1.73E-05	4.05E-05	1.61E-05	1.5785E-03
520550.53	4258179.56	32008.92671	0.14523	0.2181	0.14699	0.23022	1.47E-03	5.95E-06	7.80E-06	6.02E-06	7.90E-06	1.4962E-03
520082.6	4259085.7	31994.17233	14.69285	0.25847	22.56179	0.24438	1.47E-03	6.02E-04	9.25E-06	9.24E-04	8.39E-06	3.0108E-03
520602.8	4258784.59	31989.46305	0.17271	0.1274	0.16617	0.132	1.47E-03	7.07E-06	4.56E-06	6.80E-06	4.53E-06	1.4906E-03
520325.37	4258123.09	31972.43202	0.18062	0.73213	0.18956	0.79031	1.47E-03	7.40E-06	2.62E-05	7.76E-06	2.71E-05	1.5353E-03
520531.44	4258151.36	31937.51567	0.14704	0.23809	0.15003	0.2516	1.47E-03	6.02E-06	8.52E-06	6.14E-06	8.64E-06	1.4945E-03
520064.67	4258422.61	31935.28788	0.40487	21.21994	0.43947	9.91515	1.47E-03	1.66E-05	7.59E-04	1.80E-05	3.40E-04	2.5991E-03
519987.12	4258646.05	31929.97772	0.75698	1.30981	0.88771	1.20129	1.46E-03	3.10E-05	4.69E-05	3.63E-05	4.12E-05	1.6203E-03
520227.3	4258182.78	31928.9116	0.20839	1.58174	0.21789	1.74948	1.46E-03	8.53E-06	5.66E-05	8.92E-06	6.01E-05	1.5989E-03
520577.31	4258241.09	31915.76491	0.14319	0.19495	0.1424	0.20382	1.46E-03	5.86E-06	6.97E-06	5.83E-06	7.00E-06	1.4899E-03
519965.06	4258726.4	31899.80057	0.76094	0.77682	0.86586	0.73155	1.46E-03	3.12E-05	2.78E-05	3.55E-05	2.51E-05	1.5830E-03
520148.74	4258262.53	31855.61639	0.24629	4.17347	0.25114	4.80852	1.46E-03	1.01E-05	1.49E-04	1.03E-05	1.65E-04	1.7962E-03
520039.48	4258521.35	31854.61498	0.70501	5.32347	0.8131	4.14493	1.46E-03	2.89E-05	1.90E-04	3.33E-05	1.42E-04	1.8563E-03
520547.41	4258919.81	31843.13576	0.22228	0.11985	0.21397	0.12531	1.46E-03	9.10E-06	4.29E-06	8.76E-06	4.30E-06	1.4874E-03
519980.41	4258945.85	31838.57757	1.37607	0.32825	1.56584	0.32399	1.46E-03	5.63E-05	1.17E-05	6.41E-05	1.11E-05	1.6040E-03
520591.56	4258411.35	31829.52838	0.15389	0.17172	0.15101	0.18003	1.46E-03	6.30E-06	6.14E-06	6.18E-06	6.18E-06	1.4851E-03
520584.66	4258470.82	31814.54817	0.16088	0.17043	0.1569	0.17915	1.46E-03	6.59E-06	6.10E-06	6.42E-06	6.15E-06	1.4848E-03
520581.47	4258252.88	31767.8999	0.14297	0.19155	0.14207	0.19993	1.46E-03	5.85E-06	6.85E-06	5.82E-06	6.86E-06	1.4828E-03
520092.52	4259095.69	31764.86042	13.92233	0.25481	13.11874	0.23955	1.46E-03	5.70E-04	9.11E-06	5.37E-04	8.22E-06	2.5818E-03
520266.55	4258152.9	31762.23995	0.1955	1.1224	0.20655	1.22803	1.46E-03	8.00E-06	4.01E-05	8.46E-06	4.22E-05	1.5560E-03
519957.47	4258780.46	31747.74165	0.7977	0.59335	0.89795	0.56586	1.46E-03	3.27E-05	2.12E-05	3.68E-05	1.94E-05	1.5666E-03
520565.63	4258206.05	31740.88508	0.14341	0.20464	0.14382	0.21517	1.46E-03	5.87E-06	7.32E-06	5.89E-06	7.39E-06	1.4827E-03
520505.88	4258987.04	31739.74378	0.26639	0.11976	0.25545	0.12525	1.46E-03	1.09E-05	4.28E-06	1.05E-05	4.30E-06	1.4861E-03
520344.98	4258113.15	31715.66721	0.17514	0.64619	0.18273	0.69481	1.46E-03	7.17E-06	2.31E-05	7.48E-06	2.39E-05	1.5167E-03
520568.1	4258881.22	31712.53887	0.20338	0.12084	0.19621	0.126	1.45E-03	8.33E-06	4.32E-06	8.03E-06	4.33E-06	1.4799E-03
519958.09	4258854.28	31706.7313	0.92404	0.43815	1.03555	0.42636	1.45E-03	3.78E-05	1.57E-05	4.24E-05	1.46E-05	1.5652E-03
519996.06	4258982.29	31705.13852	1.78063	0.29923	2.07202	0.29581	1.45E-03	7.29E-05	1.07E-05	8.48E-05	1.02E-05	1.6332E-03
520515.09	4258973.22	31704.2651	0.25556	0.11968	0.2452	0.12516	1.45E-03	1.05E-05	4.28E-06	1.00E-05	4.30E-06	1.4836E-03
519968	4258709.38	31650.04219	0.74783	0.851	0.8549	0.79838	1.45E-03	3.06E-05	3.04E-05	3.50E-05	2.74E-05	1.5755E-03
520524.46	4258959.33	31646.80486	0.24526	0.1195	0.23551	0.12498	1.45E-03	1.00E-05	4.27E-06	9.64E-06	4.29E-06	1.4801E-03
520614.15	4258709.59	31621.31942	0.16033	0.13433	0.15419	0.13965	1.45E-03	6.56E-06	4.80E-06	6.31E-06	4.79E-06	1.4732E-03
520119.25	4258302.44	31619.70295	0.27075	7.6361	0.27879	8.93373	1.45E-03	1.11E-05	2.73E-04	1.14E-05	3.07E-04	2.0530E-03
520237.12	4258172.81	31583.94638	0.20366	1.44462	0.21364	1.59203	1.45E-03	8.34E-06	5.17E-05	8.75E-06	5.47E-05	1.5724E-03
520054.17	4259063.64	31582.28473	7.21075	0.26145	12.25302	0.25224	1.45E-03	2.95E-04	9.35E-06	5.02E-04	8.66E-06	2.2639E-03
520576.26	4258230.63	31562.40375	0.1425	0.19598	0.1419	0.20517	1.45E-03	5.83E-06	7.01E-06	5.81E-06	7.04E-06	1.4737E-03
520534.01	4258945.37	31515.63945	0.23537	0.1192	0.22623	0.12467	1.45E-03	9.64E-06	4.26E-06	9.26E-06	4.28E-06	1.4733E-03
520556.96	4258905.85	31512.34601	0.21353	0.11963	0.2058	0.12497	1.45E-03	8.74E-06	4.28E-06	8.43E-06	4.29E-06	1.4715E-03
519977.12	4258673.87	31495.96201	0.74121	1.06119	0.85902	0.98478	1.44E-03	3.03E-05	3.80E-05	3.52E-05	3.38E-05	1.5823E-03
520043.84	4259053.65	31481.61187	5.10533	0.26359	7.14471	0.25607	1.44E-03	2.09E-04	9.43E-06	2.93E-04	8.79E-06	1.9641E-03
520295.97	4258132.99	31427.93502	0.18629	0.89749	0.19681	0.97525	1.44E-03	7.63E-06	3.21E-05	8.06E-06	3.35E-05	1.5231E-03
520315.58	4258123.05	31419.84279	0.1813	0.78243	0.19087	0.84655	1.44E-03	7.42E-06	2.80E-05	7.82E-06	2.91E-05	1.5138E-03
519964.02	4258899.11	31416.81936	1.05613	0.37474	1.18381	0.36788	1.44E-03	4.32E-05	1.34E-05	4.85E-05	1.26E-05	1.5591E-03
520609.8	4258767.86	31387.2034	0.16728	0.1278	0.16089	0.13246	1.44E-03	6.85E-06	4.57E-06	6.59E-06	4.55E-06	1.4625E-03
520540.3	4258155.15	31381.80987	0.14513	0.22878	0.14778	0.2417	1.44E-03	5.94E-06	8.18E-06	6.05E-06	8.30E-06	1.4682E-03
520138.92	4258272.5	31377.7961	0.25076	4.97316	0.25583	5.78257	1.44E-03	1.03E-05	1.78E-04	1.05E-05	1.99E-04	1.8367E-03
520549.82	4258169.24	31374.51428	0.14419	0.21918	0.14625	0.23141	1.44E-03	5.90E-06	7.84E-06	5.99E-06	7.94E-06	1.4671E-03
519981.81	4258956.42	31362.51426	1.41395	0.3175	1.61138	0.31363	1.44E-03	5.79E-05	1.14E-05	6.60E-05	1.08E-05	1.5848E-03
520500.32	4258999.35	31333.05873	0.27333	0.11898	0.26209	0.12445	1.44E-03	1.12E-05	4.26E-06	1.07E-05	4.27E-06	1.4680E-03
520543.77	4258931.32	31327.55692	0.22589	0.11885	0.21735	0.12428	1.44E-03	9.25E-06	4.25E-06	8.90E-06	4.27E-06	1.4639E-03
519966.39	4258910.09	31318.00888	1.10074	0.36172	1.23486	0.35568	1.44E-03	4.51E-05	1.29E-05	5.06E-05	1.22E-05	1.5576E-03
520490.97	4259013.22	31241.41052	0.28527	0.11885	0.27357	0.12442	1.43E-03	1.17E-05	4.25E-06	1.12E-05	4.27E-06	1.4647E-03
520564.86	4258195.71	31228.59453	0.14257	0.20549	0.14335	0.21628	1.43E-03	5.84E-06	7.35E-06	5.87E-06	7.43E-06	1.4592E-03
520276.36	4258142.93	31228.06758	0.19077	1.03997	0.20168	1.13476	1.43E-03	7.81E-06	3.72E-05	8.26E-06	3.90E-05	1.5249E-03
520335.19	4258113.12	31220.79746	0.17596	0.68804	0.18434	0.74106	1.43E-03	7.20E-06	2.46E-05	7.55E-06	2.54E-05	1.4972E-03
520595.27	4258395.2	31220.12456	0.15113	0.17072	0.14842	0.179	1.43E-03	6.19E-06	6.11E-06	6.08E-06	6.15E-06	1.4568E-03
520246.94	4258162.84	31206.53256	0.19904	1.3247	0.20934	1.45537	1.43E-03	8.15E-06	4.74E-05	8.57E-06	5.00E-05	1.5458E-03
520596.4	4258372.31	31182.00059	0.1489	0.17158	0.14661	0.18014	1.43E-03	6.10E-06	6.14E-06	6.00E-06	6.18E-06	1.4550E-03
520559.51	4258183.4	31176.31814	0.14294	0.21017	0.14427	0.22159	1.43E-03	5.85E-06	7.52E-06	5.91E-06	7.61E-06	1.4572E-03
520575.3	4258220.2	31174.40693	0.14178	0.19689	0.14144	0.20641	1.43E-03	5.81E-06	7.04E-06	5.79E-06	7.09E-06	1.4559E-03
519985.62	4258967.99	31171.96545	1.50532	0.30762	1.72374	0.30409	1.43E-03	6.16E-05	1.10E-05	7.06E-05	1.04E-05	1.5838E-03
520591.34	4258436.63	31167.89581	0.15573	0.16968	0.1525	0.17799	1.43E-03	6.38E-06	6.07E-06	6.24E-06	6.11E-06	1.4547E-03
520596.62	4258347.02	31156.0985	0.14672	0.17329	0.14515	0.1821	1.43E-03	6.01E-06	6.20E-06	5.94E-06	6.25E-06	1.4538E-03
519968.23	4258920.84	31154.28214	1.14045	0.34959	1.28131	0.34418	1.43E-03	4.67E-05	1.25E-05	5.25E-05	1.18E-05	1.5528E-03
519954.36	4258797.06	31113.23476	0.79465	0.54636	0.89	0.52341	1.43E-03	3.25E-05	1.95E-05	3.64E-05	1.80E-05	1.5339E-03
520566.72	4258891.8	31080.32205	0.20502	0.11936	0.19781	0.12453	1.43E-03	8.39E-06	4.27E-06	8.10E-06	4.28E-06	1.4509E-03
520581.97	4258858.28	31069.59369	0.19184	0.12088	0.1851	0.12576	1.43E-03	7.85E-06	4.32E-06	7.58E-06	4.32E-06	1.4495E-03
519953.72	4258819.63	31062.04939	0.82459	0.49675	0.92182	0.47888	1.43E-03	3.38E-05	1.78E-05	3.77E-05	1.64E-05	1.5308E-03
520585.61	4258849.58	31061.21186	0.18875	0.12129	0.18207	0.12612	1.43E-03	7.73E-06	4.34E-06	7.45E-06	4.33E-06	1.4489E-03
519958.53	4258879.46	31054.88308	0.96144	0.39792	1.07441	0.38929	1.42E-03	3.94E-05	1.42E-05	4.40E-05	1.34E-05	1.5357E-03
519999.85	4258608.79	31034.71824	0.74881	1.75384	0.89451	1.57714	1.42E-03	3.07E-05	6.27E-05	3.66E-05	5.41E-05	1.6080E-03
520589.25	4258840.88	31029.38857	0.18567	0.12187	0.17913	0.12662	1.42E-03	7.60E-06	4.36E-06	7.33E-06	4.35E-06	1.4472E-03
519970.79	4258692	31025.01047	0.72853	0.93336	0.83507	0.87257	1.42E-03	2.98E-05	3.34E-05	3.42E-05	3.00E-05	1.5507E-03
520188.05	4258212.66	31022.83081	0.2193	2.40407	0.22493	2.70385	1.42E-03	8.98E-06	8.60E-05	9.21E-06	9.28E-05	1.6203E-03
520613.31	4258759.49	31002.55702	0.16464	0.12786	0.15835	0.13259	1.42E-03	6.74E-06	4.57E-06	6.48E-06	4.55E-06	1.4447E-03
520049.36	4258492.22	30988.29517	0.60538	7.88068	0.6765	5.67725	1.42E-03	2.48E-05	2.82E-04	2.77E-05	1.95E-04	1.9510E-03
520178.23	4258222.63	30981.3012	0.22368	2.71463	0.2286	3.07054	1.42E-03	9.16E-06	9.71E-05	9.36E-06	1.05E-04	1.6424E-03
519954.35	4258845.28	30975.28595	0.86806	0.44927	0.97096	0.43596	1.42E-03	3.55E-05	1.61E-05	3.98E-05	1.50E-05	1.5274E-03
520197.87	4258202.69	30975.20199	0.21488	2.14652	0.22131	2.40153	1.42E-03	8.80E-06	7.68E-05	9.06E-06	8.24E-05	1.5982E-03
520592.9	4258832.17	30970.54652	0.18263	0.12236	0.17619	0.12705	1.42E-03	7.48E-06	4.38E-06	7.21E-06	4.36E-06	1.4443E-03
520082.62	4259095.7	30954.8127	14.59472	0.25113	22.42507	0.2376	1.42E-03	5.98E-04	8.98E-06	9.18E-04	8.16E-06	2.9530E-03
520617.18	4258726.3	30930.02034	0.16	0.13102	0.15393	0.1362	1.42E-03	6.55E-06	4.69E-06	6.30E-06	4.68E-06	1.4412E-03
520029.56	4258540.79	30924.54814	0.73396	3.8691	0.86901	3.15498	1.42E-03	3.01E-05	1.38E-04	3.56E-05	1.08E-04	1.7311E-03
520593.68	4258288.15	30888.30243	0.14239	0.18063	0.14164	0.18864	1.42E-03	5.83E-06	6.46E-06	5.80E-06	6.48E-06	1.4417E-03
520596.54	4258823.47	30885.67939	0.17966	0.12274	0.17326	0.12737	1.42E-03	7.36E-06	4.39E-06	7.09E-06	4.37E-06	1.4402E-03
520595.11	4258298.77	30875.8885	0.14291	0.17865	0.1422	0.18684	1.42E-03	5.85E-06	6.39E-06	5.82E-06	6.41E-06	1.4410E-03

519969.92	4258931.53	30860.23905	1.17707	0.33783	1.32387	0.33298	1.42E-03	4.82E-05	1.21E-05	5.42E-05	1.14E-05	1.5417E-03
520207.69	4258192.72	30856.11684	0.21047	1.92969	0.21768	2.14903	1.42E-03	8.62E-06	6.90E-05	8.91E-06	7.38E-05	1.5760E-03
520168.41	4258232.6	30832.86998	0.22799	3.09585	0.23237	3.52199	1.41E-03	9.33E-06	1.11E-04	9.51E-06	1.21E-04	1.6650E-03
520592.39	4258277.58	30824.58883	0.1418	0.18238	0.14096	0.19027	1.41E-03	5.81E-06	6.52E-06	5.77E-06	6.53E-06	1.4388E-03
520305.79	4258123.02	30811.33793	0.18169	0.83807	0.19175	0.90866	1.41E-03	7.44E-06	3.00E-05	7.85E-06	3.12E-05	1.4900E-03
520617.71	4258701.09	30801.21817	0.15785	0.13437	0.15188	0.13954	1.41E-03	6.46E-06	4.81E-06	6.22E-06	4.79E-06	1.4354E-03
520256.76	4258152.87	30797.56408	0.1945	1.21921	0.20499	1.33579	1.41E-03	7.96E-06	4.36E-05	8.39E-06	4.59E-05	1.5188E-03
520555.86	4258916.31	30793.62712	0.21491	0.1181	0.20711	0.12339	1.41E-03	8.80E-06	4.22E-06	8.48E-06	4.24E-06	1.4385E-03
520594.9	4258420.11	30788.66838	0.15308	0.16901	0.15004	0.17715	1.41E-03	6.27E-06	6.05E-06	6.14E-06	6.08E-06	1.4371E-03
520514.38	4258983.52	30776.1757	0.25658	0.11803	0.24623	0.12339	1.41E-03	1.05E-05	4.22E-06	1.01E-05	4.24E-06	1.4410E-03
520523.64	4258969.68	30760.06364	0.24638	0.11793	0.23663	0.12329	1.41E-03	1.01E-05	4.22E-06	9.69E-06	4.23E-06	1.4394E-03
520549.16	4258158.95	30749.78604	0.14312	0.22016	0.14543	0.23248	1.41E-03	5.86E-06	7.87E-06	5.95E-06	7.98E-06	1.4384E-03
520574.41	4258209.81	30748.08572	0.14102	0.19775	0.14102	0.20757	1.41E-03	5.77E-06	7.07E-06	5.77E-06	7.13E-06	1.4364E-03
520129.1	4258282.47	30738.19044	0.2549	6.07117	0.26074	7.10685	1.41E-03	1.04E-05	2.17E-04	1.07E-05	2.44E-04	1.8925E-03
520588.13	4258479.95	30737.68809	0.15972	0.16765	0.15539	0.17618	1.41E-03	6.54E-06	6.00E-06	6.36E-06	6.05E-06	1.4351E-03
520600.18	4258814.77	30732.76992	0.17666	0.12304	0.17029	0.12761	1.41E-03	7.23E-06	4.40E-06	6.97E-06	4.38E-06	1.4329E-03
520286.18	4258132.96	30695.77106	0.18621	0.96613	0.19687	1.0518	1.41E-03	7.62E-06	3.46E-05	8.06E-06	3.61E-05	1.4946E-03
520591.22	4258267.07	30693.47424	0.14117	0.1839	0.14023	0.19177	1.41E-03	5.78E-06	6.58E-06	5.74E-06	6.58E-06	1.4328E-03
520217.51	4258182.75	30679.15479	0.20611	1.74496	0.21402	1.93564	1.41E-03	8.44E-06	6.24E-05	8.76E-06	6.65E-05	1.5536E-03
520533.07	4258955.77	30673.40377	0.23659	0.1177	0.22742	0.12306	1.41E-03	9.69E-06	4.21E-06	9.31E-06	4.22E-06	1.4347E-03
520092.95	4259106.51	30670.84015	13.6661	0.24724	12.84313	0.23256	1.41E-03	5.60E-04	8.84E-06	5.26E-04	7.98E-06	2.5093E-03
520325.4	4258113.09	30666.78816	0.17655	0.73403	0.18567	0.7917	1.41E-03	7.23E-06	2.63E-05	7.60E-06	2.72E-05	1.4752E-03
520586.29	4258244.93	30654.73088	0.14063	0.1884	0.13968	0.19664	1.41E-03	5.76E-06	6.74E-06	5.72E-06	6.75E-06	1.4313E-03
519987.03	4258978.56	30637.52506	1.54638	0.29786	1.77303	0.29461	1.41E-03	6.33E-05	1.07E-05	7.26E-05	1.01E-05	1.5623E-03
520558.74	4258173.06	30619.89608	0.14201	0.21114	0.14367	0.22272	1.40E-03	5.81E-06	7.55E-06	5.88E-06	7.65E-06	1.4317E-03
520054.19	4259073.64	30617.15219	7.26964	0.25393	12.32973	0.24508	1.40E-03	2.98E-04	9.08E-06	5.05E-04	8.41E-06	2.2246E-03
519959.62	4258737.41	30612.00119	0.7284	0.71781	0.82353	0.67811	1.40E-03	2.98E-05	2.57E-05	3.37E-05	2.33E-05	1.5169E-03
520109.43	4258312.41	30608.24031	0.27444	10.07957	0.28436	11.60779	1.40E-03	1.12E-05	3.61E-04	1.16E-05	3.99E-04	2.1862E-03
520597.59	4258309.85	30596.69156	0.14309	0.17586	0.14229	0.18423	1.40E-03	5.86E-06	6.29E-06	5.83E-06	6.32E-06	1.4280E-03
520044.27	4259063.65	30585.63122	5.19516	0.25622	7.29918	0.24889	1.40E-03	2.13E-04	9.16E-06	2.99E-04	8.54E-06	1.9325E-03
520158.59	4258242.57	30565.13552	0.23218	3.57342	0.2363	4.08724	1.40E-03	9.51E-06	1.28E-04	9.68E-06	1.40E-04	1.6896E-03
520603.83	4258806.07	30552.04285	0.17371	0.1234	0.1674	0.1279	1.40E-03	7.11E-06	4.41E-06	6.85E-06	4.39E-06	1.4244E-03
519971.49	4258942.17	30535.43802	1.21249	0.32673	1.36552	0.32236	1.40E-03	4.96E-05	1.17E-05	5.59E-05	1.11E-05	1.5292E-03
519956.78	4258754.66	30535.33731	0.73503	0.65879	0.83063	0.62401	1.40E-03	3.01E-05	2.36E-05	3.40E-05	2.14E-05	1.5100E-03
519954.83	4258870.54	30524.50358	0.90651	0.40769	1.01069	0.39803	1.40E-03	3.71E-05	1.46E-05	4.14E-05	1.37E-05	1.5072E-03
520576.74	4258877.65	30523.4699	0.19672	0.11902	0.18992	0.12398	1.40E-03	8.05E-06	4.26E-06	7.78E-06	4.26E-06	1.4247E-03
520052.25	4258475.41	30515.15909	0.53939	9.10304	0.5953	6.26001	1.40E-03	2.21E-05	3.26E-04	2.44E-05	2.15E-04	1.9870E-03
520542.68	4258941.78	30503.6001	0.22714	0.11737	0.21855	0.1227	1.40E-03	9.30E-06	4.20E-06	8.95E-06	4.21E-06	1.4261E-03
520590.14	4258256.59	30502.96004	0.14051	0.18522	0.13951	0.19315	1.40E-03	5.75E-06	6.63E-06	5.71E-06	6.63E-06	1.4241E-03
520598.92	4258320.43	30472.73617	0.14355	0.17409	0.14261	0.18261	1.40E-03	5.88E-06	6.23E-06	5.84E-06	6.27E-06	1.4222E-03
520227.33	4258172.78	30442.84493	0.20176	1.58622	0.21031	1.75311	1.40E-03	8.26E-06	5.67E-05	8.61E-06	6.02E-05	1.5305E-03
520565.46	4258902.33	30430.93096	0.20651	0.11789	0.19926	0.12305	1.40E-03	8.46E-06	4.22E-06	8.16E-06	4.22E-06	1.4212E-03
520600.05	4258356.04	30418.15247	0.14617	0.17048	0.14424	0.17908	1.40E-03	5.98E-06	6.10E-06	5.91E-06	6.15E-06	1.4197E-03
520499.65	4259009.63	30417.18262	0.27439	0.11722	0.26322	0.12261	1.40E-03	1.12E-05	4.19E-06	1.08E-05	4.21E-06	1.4259E-03
520607.47	4258797.37	30415.33493	0.17092	0.12383	0.16468	0.12826	1.40E-03	7.00E-06	4.43E-06	6.74E-06	4.40E-06	1.4180E-03
520585.17	4258234.44	30382.81778	0.13998	0.18948	0.13915	0.19798	1.39E-03	5.73E-06	6.78E-06	5.70E-06	6.80E-06	1.4189E-03
520509.06	4258995.73	30360.36059	0.26283	0.11726	0.2522	0.12258	1.39E-03	1.08E-05	4.19E-06	1.03E-05	4.21E-06	1.4224E-03
519953.81	4258771.61	30337.46751	0.74219	0.60534	0.83205	0.57615	1.39E-03	3.04E-05	2.17E-05	3.41E-05	1.98E-05	1.4977E-03
520266.58	4258142.9	30326.54785	0.18996	1.12609	0.20056	1.22988	1.39E-03	7.78E-06	4.03E-05	8.21E-06	4.22E-05	1.4898E-03
520599.87	4258381.43	30326.09101	0.14824	0.16891	0.14568	0.17717	1.39E-03	6.07E-06	6.04E-06	5.96E-06	6.08E-06	1.4155E-03
520552.5	4258927.71	30318.18825	0.21814	0.11706	0.21013	0.12233	1.39E-03	8.93E-06	4.19E-06	8.60E-06	4.20E-06	1.4169E-03
520591.33	4258462.49	30315.10218	0.15729	0.16733	0.15347	0.17575	1.39E-03	6.44E-06	5.99E-06	6.28E-06	6.03E-06	1.4155E-03
520598.57	4258403.87	30297.38456	0.15041	0.16815	0.14753	0.1762	1.39E-03	6.16E-06	6.01E-06	6.04E-06	6.05E-06	1.4142E-03
520573.59	4258199.44	30296.99871	0.14024	0.19857	0.14061	0.20865	1.39E-03	5.74E-06	7.10E-06	5.76E-06	7.16E-06	1.4157E-03
520568.49	4258187.24	30283.54534	0.14058	0.20276	0.14151	0.21345	1.39E-03	5.76E-06	7.25E-06	5.79E-06	7.33E-06	1.4155E-03
520620.71	4258717.86	30251.49003	0.15754	0.13083	0.1516	0.13598	1.39E-03	6.45E-06	4.68E-06	6.21E-06	4.67E-06	1.4099E-03
520148.77	4258252.53	30222.6557	0.23636	4.18129	0.24039	4.82252	1.39E-03	9.68E-06	1.50E-04	9.84E-06	1.66E-04	1.7212E-03
519987.12	4258636.77	30218.75801	0.71727	1.35169	0.83822	1.23935	1.39E-03	2.94E-05	4.83E-05	3.43E-05	4.25E-05	1.5410E-03
519950.62	4258836.27	30170.00035	0.81552	0.46031	0.90954	0.44539	1.38E-03	3.34E-05	1.65E-05	3.72E-05	1.53E-05	1.4865E-03
519977.12	4258664.6	30164.16001	0.70839	1.09964	0.81929	1.01926	1.38E-03	2.90E-05	3.93E-05	3.35E-05	3.50E-05	1.5207E-03
520315.61	4258113.05	30155.39261	0.17715	0.78441	0.18677	0.84821	1.38E-03	7.25E-06	2.81E-05	7.65E-06	2.91E-05	1.4555E-03
520237.15	4258162.81	30148.99683	0.19744	1.44869	0.20653	1.59543	1.38E-03	8.08E-06	5.18E-05	8.46E-06	5.48E-05	1.5063E-03
519972.95	4258952.77	30148.38168	1.24635	0.31613	1.40542	0.31218	1.38E-03	5.10E-05	1.13E-05	5.75E-05	1.07E-05	1.5137E-03
520296	4258122.99	30137.57729	0.18174	0.89991	0.19209	0.97737	1.38E-03	7.44E-06	3.22E-05	7.86E-06	3.36E-05	1.4637E-03
520019.65	4258560.22	30132.39171	0.74116	2.91354	0.89039	2.46801	1.38E-03	3.03E-05	1.04E-04	3.65E-05	8.47E-05	1.6382E-03
520611.11	4258788.66	30106.58231	0.168	0.12399	0.16179	0.1284	1.38E-03	6.88E-06	4.43E-06	6.62E-06	4.41E-06	1.4036E-03
520620.31	4258742.75	30075.77263	0.15958	0.12775	0.15355	0.13267	1.38E-03	6.53E-06	4.57E-06	6.29E-06	4.55E-06	1.4018E-03
520584.14	4258223.98	30062.73988	0.13931	0.19044	0.13868	0.19922	1.38E-03	5.70E-06	6.81E-06	5.68E-06	6.84E-06	1.4043E-03
520558.02	4258162.74	30062.37317	0.14105	0.21205	0.14299	0.22377	1.38E-03	5.78E-06	7.58E-06	5.85E-06	7.68E-06	1.4061E-03
519949.95	4258810.54	30018.36199	0.77142	0.50845	0.85933	0.48876	1.38E-03	3.16E-05	1.82E-05	3.52E-05	1.68E-05	1.4789E-03
519976.51	4258964.23	30005.55781	1.31869	0.30637	1.49266	0.30281	1.38E-03	5.40E-05	1.10E-05	6.11E-05	1.04E-05	1.5131E-03
519989.93	4258628.23	29971.5234	0.71459	1.43795	0.83758	1.31416	1.38E-03	2.93E-05	5.14E-05	3.43E-05	4.51E-05	1.5351E-03
520575.29	4258888.25	29966.06145	0.19833	0.11762	0.19154	0.12259	1.37E-03	8.12E-06	4.21E-06	7.84E-06	4.21E-06	1.3992E-03
520119.28	4258292.44	29950.23357	0.25867	7.65376	0.26582	8.97114	1.37E-03	1.06E-05	2.74E-04	1.09E-05	3.08E-04	1.9773E-03
520621.27	4258692.58	29940.50118	0.15543	0.13437	0.14957	0.13937	1.37E-03	6.36E-06	4.81E-06	6.12E-06	4.78E-06	1.3957E-03
519951.13	4258861.61	29918.10723	0.85428	0.41773	0.95082	0.40681	1.37E-03	3.50E-05	1.49E-05	3.89E-05	1.40E-05	1.4754E-03
520083.05	4259106.53	29908.15166	16.4484	0.24371	21.66329	0.23068	1.37E-03	6.73E-04	8.72E-06	8.87E-04	7.92E-06	2.9492E-03
520522.88	4258980	29890.10105	0.24738	0.11636	0.23763	0.1216	1.37E-03	1.01E-05	4.16E-06	9.73E-06	4.17E-06	1.3995E-03
519950.72	4258788.29	29885.57995	0.742	0.55807	0.82879	0.53323	1.37E-03	3.04E-05	2.00E-05	3.39E-05	1.83E-05	1.4737E-03
520276.4	4258132.93	29885.52907	0.18568	1.04297	0.19619	1.13684	1.37E-03	7.60E-06	3.73E-05	8.03E-06	3.90E-05	1.4631E-03
520614.76	4258779.96	29877.46678	0.16532	0.12425	0.15916	0.12867	1.37E-03	6.77E-06	4.44E-06	6.52E-06	4.42E-06	1.3929E-03
520532.19	4258966.14	29850.63075	0.2377	0.11621	0.22852	0.12146	1.37E-03	9.73E-06	4.16E-06	9.36E-06	4.17E-06	1.3969E-03
519961.47	4258717.75	29841.8968	0.69994	0.78579	0.79296	0.7401	1.37E-03	2.87E-05	2.81E-05	3.25E-05	2.54E-05	1.4837E-03
520246.97	4258152.84	29818.0898	0.19318	1.32843	0.20268	1.45842	1.37E-03	7.91E-06	4.75E-05	8.30E-06	5.01E-05	1.4818E-03
520567.65	4258176.87	29799.73794	0.13976	0.20367	0.14104	0.21457	1.37E-03	5.72E-06	7.28E-06	5.77E-06	7.37E-06	1.3933E-03
520564.31	4258912.81	29772.73555	0.20788	0.11641	0.20056	0.12153	1.37E-03	8.51E-06	4.16E-06	8.21E-06	4.17E-06	1.3910E-03
519957.25	4258906.31	29764.15638	0.97511	0.35929	1.08573	0.35302	1.37E-03	3.99E-05	1.29E-05	4.45E-05	1.21E-05	1.4749E-03
520138.95	4258262.5	29751.17817	0.24035	4.98416	0.2447	5.7949	1.36E-03	9.84E-06	1.78E-04	1.00E-05	1.99E-04	1.7620E-03
520598.23	4258428.87	29743.27097	0.15223	0.16637	0.14903	0.17438	1.36E-03	6.23E-06	5.95E-06	6.10E-06	5.99E-06	1.3888E-03
520583.19	4258213.56	29716.0298	0.13862	0.19127	0.13827	0.20036	1.36E-03	5.68E-06	6.84E-06	5.66E-06	6.88E-06	1.3884E-03
520541.67	4258952.2	29694.63264	0.22826	0.1159	0.21964	0.12113	1.36E-03	9.35E-06	4.15E-06	8.99E-06	4.16E-06	1.3890E-03
520044.28	4259073.65	29679.73824	5.23124	0.24893	7.32551	0.24186	1.36E-03	2.14E-04	8.90E-06	3.00E-04	8.30E-06	1.8930E-03
520092.96	4259116.51	29678.54192	13.58657	0.24045	12.80452	0.22633	1.36E-03	5.56E-04	8.60E-06	5.24E-04	7.77E-06	2.4585E-03
519959.16	4258917.1	29659.89015	1.01005	0.34735	1.12566	0.34178	1.36E-03	4.14E-05	1.24E-05	4.61E-05	1.17E-05	1.4723E-03
520603.49	4258365.06	29653.60479	0.14558	0.16758	0.1433	0.17595	1.36E-03	5.96E-06	5.99E-06	5.87E-06	6.04E-06	1.3843E-03
520603.8	4258340	29614.43984	0.14345	0.16943	0.14192	0.17794	1.36E-03	5.87E-06	6.06E-06	5.81E-06	6.11E-06	1.3825E-03
520618.4	4258771.26	29596.68579	0.16269	0.12441	0.1566	0.12888	1.36E-03	6.66E-06	4.45E-06	6.41E-06	4.42E-06	1.3798E-03
520305.82	4258113.02	29563.1387	0.17739	0.84021	0.18738	0.91035	1.36E-03	7.26E-06	3.01E-05	7.67E-06	3.13E-05	1.4325E-03
519977.99	4258974.83	29555.105	1.35489	0.29677	1.53587	0.29352	1.36E-03	5.55E-05	1.06E-05	6.29E-05	1.01E-05	1.4950E-03
520551.34	4258938.19	29543.76146	0.21937	0.11561	0.21131	0.12081	1.36E-03	8.98E-06	4.14E-06	8.65E-06	4.15E-06	1.3813E-03
520623.82	4258734.39	29531.60268	0.15715	0.12764	0.15127	0.13261	1.35E-03	6.43E-06	4.57E-06	6.19E-06	4.55E-06	1.3766E-03
520065.62	4258402.25	29530.95626	0.35818	23.24203	0.38646	10.34739	1.35E-03	1.47E-05	8.31E-04	1.58E-05	3.55E-04	2.5719E-03
520624.24	4258709.43	29502.75622	0.15513	0.1307	0.14932	0.13577	1.35E-03	6.35E-06	4.67E-06	6.11E-06	4.66E-06	1.3753E-03
520508.34	4259006.03	29497.6433	0.2639	0.1156	0.2533	0.12083	1.35E-03	1.08E-05	4.13E-06	1.04E-05	4.15E-06	1.3828E-03
520188.08	4258202.66	29492.04914	0.21142	2.41065	0.21623	2.7072	1.35E-03	8.66E-06	8.62E-05	8.85E-06	9.29E-05	1.5497E-03
520099.61	4258322.38	29483.01474	0.27754	14.34204	0.2896	15.74337	1.35E-03	1.14E-05	5.13E-04	1.19E-05	5.40E-04	2.4293E-03
520197.9	4258192.69	29481.31525	0.20742	2.15197	0.21294	2.40538	1.35E-03	8.49E-06	7.70E-05	8.72E-06	8.26E-05	1.5293E-03
519960.94	4258927.82	29479.74552	1.04359	0.33595	1.16411	0.33097	1.35E-03	4.27E-05	1.20E-05	4.77E-05	1.14E-05	1.4662E-03
520517.8	4258992.11	29460.68813	0.25295	0.11558	0.24291	0.12077	1.35E-03	1.04E-05	4.13E-06	9.95E-06	4.15E-06	1.3802E-03
520603.35	4258390.56	29449.06011	0.14752	0.16631	0.14476	0.17428	1.35E-03	6.04E-06	5.95E-06	5.93E-06	5.98E-06	1.3750E-03
520178.26	4258212.63	29448.61668	0.21547	2.72122	0.21958	3.07519	1.35E-03	8.82E-06	9.73E-05	8.99E-06	1.06E-04	1.5718E-03
520009.73	4258579.66	29423.37035	0.72809	2.26632	0.88089	1.97516	1.35E-03	2.98E-05	8.11E-05	3.61E-05	6.78E-05	1.5646E-03
520256.79	4258142.87	29420.22081	0.18888	1.22288	0.19873	1.33782	1.35E-03	7.73E-06	4.37E-05	8.14E-06	4.59E-05	1.4553E-03
520595.26	4258248.77	29419.45348	0.13814	0.18202	0.13705	0.18978	1.35E-03	5.66E-06	6.51E-06	5.61E-06	6.52E-06	1.3740E-03
520286.22	4258122.96	29417.13699	0.18147	0.96868	0.19181	1.05373	1.35E-03	7.43E-06	3.46E-05	7.85E-06	3.62E-05	1.4357E-03
520207.72	4258182.72	29401.4435	0.20342	1.93439	0.20968	2.15295	1.35E-03	8.33E-06	6.92E-05	8.59E-06	7.39E-05	1.5089E-03
520588.99	4258865.44	29397.64856	0.18737	0.11776	0.18105	0.12246	1.35E-03	7.67E-06	4.21E-06	7.41E-06	4.20E-06	1.3722E-03
520052.9	4259085.75	29383.67035	6.97461	0.24471	11.40432	0.23647	1.35E-03	2.86E-04	8.75E-06	4.67E-04	8.12E-06	2.1174E-03
520592.6	4258856.82	29383.4287	0.18445	0.11816	0.17817	0.1228	1.35E-03	7.55E-06	4.23E-06	7.30E-06	4.22E-06	1.3713E-03
520573.97	4258898.8	29378.97059	0.19981	0.11619	0.19298	0.12116	1.35E-03	8.18E-06	4.16E-06	7.90E-06	4.16E-06	1.3722E-03
520601.21	4258281.36	29370.46162	0.13921	0.17611	0.13836	0.18376	1.35E-03	5.70E-06	6.30E-06	5.67E-06	6.31E-06	1.3714E-03
520601.87	4258412.54	29358.62034	0.14964	0.16561	0.1466	0.17348	1.35E-03	6.13E-06	5.92E-06	6.00E-06	5.96E-06	1.3709E-03
520577.46	4258191.09	29357.795	0.13822	0.1958	0.13875	0.20575	1.35E-03	5.66E-06	7.00E-06	5.68E-06	7.06E-06	1.3723E-03
520596.21	4258848.19	29355.35933	0.18155	0.11851	0.17529	0.12311	1.35E-03	7.43E-06	4.24E-06	7.18E-06	4.23E-06	1.3698E-03
520602.58	4258291.96	29350.57298	0.13973	0.17427	0.13892	0.18209	1.35E-03	5.72E-06	6.23E-06	5.69E-06	6.25E-06	1.3704E-03
519951.5	4258886.61	29347.9946	0.88734	0.38086	0.98587	0.37282	1.35E-03	3.63E-05	1.36E-05	4.04E-05	1.28E-05	1.4495E-03
519964.37	4258700.63	29347.31749	0.68451	0.85785	0.77825	0.80535	1.35E-03	2.80E-05	3.07E-05	3.19E-05	2.76E-05	1.4646E-03
520582.31	4258203.17	29340.82602	0.13791	0.19205	0.13789	0.20143	1.35E-03	5.65E-06	6.87E-06	5.65E-06	6.92E-06	1.3712E-03
520561.23	4258924.1	29339.01898	0.21076	0.11532	0.20325	0.12043	1.35E-03	8.63E-06	4.12E-06	8.32E-06	4.13E-06	1.3712E-03
520599.96	4258270.81	29329.30853	0.13866	0.1777	0.1377	0.18526	1.35E-03	5.68E-06	6.36E-06	5.64E-06	6.36E-06	1.3696E-03
520599.83	4258839.56	29306.02753	0.17867	0.11904	0.17253	0.12357	1.34E-03	7.32E-06	4.26E-06	7.06E-06	4.24E-06	1.3674E-03
520566.87	4258166.53	29300.67302	0.13889	0.20458	0.14049	0.21563	1.34E-03	5.69E-06	7.32E-06	5.75E-06	7.40E-06	1.3704E-03
520168.44	4258222.6	29294.07765	0.2194	3.10316	0.22303	3.52711	1.34E-03	8.98E-06	1.11E-04	9.13E-06	1.21E-04	1.5942E-03
519946.88	4258827.26	29284.18096	0.76567	0.47115	0.85116	0.45457	1.34E-03	3.13E-05	1.69E-05	3.48E-05	1.56E-05	1.4422E-03
520594.75	4258471.48	29260.49266	0.1562	0.1647	0.15207	0.17297	1.34E-03	6.40E-06	5.89E-06	6.23E-06	5.94E-06	1.3669E-03
520217.54	4258172.75	29252.7208	0.19941	1.74942	0.20639	1.93903	1.34E-03	8.16E-06	6.26E-05	8.45E-06	6.66E-05	1.4878E-03
520604.08	4258302.61	29246.65554	0.14019	0.17215	0.13933	0.18019	1.34E-03	5.74E-06	6.16E-06	5.70E-06	6.19E-06	1.3656E-03
520622.04	4258762.56	29242.38329	0.1601	0.12445	0.15409	0.129	1.34E-03	6.56E-06	4.45E-06	6.31E-06	4.43E-06	1.3633E-03
520603.44	4258830.94	29234.93289	0.17581	0.11954	0.16979	0.12401	1.34E-03	7.20E-06	4.28E-06	6.95E-06	4.26E-06	1.3639E-03
519947.43	4258852.69	29234.07246	0.8046	0.42785	0.89429	0.41549	1.34E-03	3.29E-05	1.53E-05	3.66E-05	1.43E-05	1.4403E-03
519962.58	4258938.49	29233.36053	1.07559	0.32504	1.20094	0.32057	1.34E-03	4.40E-05	1.16E-05	4.92E-05	1.10E-05	1.4570E-03
520598.82	4258260.31	29228.69255	0.13807	0.17907	0.13701	0.18663	1.34E-03	5.65E-06	6.41E-06	5.61E-06	6.41E-06	1.3650E-03
520594.07	4258238.25	29223.46303	0.13755	0.18318	0.1365	0.19113	1.34E-03	5.63E-06	6.55E-06	5.59E-06	6.56E-06	1.3651E-03
520129.13	4258272.47	29153.08279	0.2441	6.08444	0.24922	7.12524	1.34E-03	9.99E-06	2.18E-04	1.02E-05	2.45E-04	1.8199E-03
520607.05	4258822.31	29139.53497	0.17302	0.11993	0.16704	0.12433	1.34E-03	7.08E-06	4.29E-06	6.84E-06	4.27E-06	1.3593E-03
520158.62	4258232.57	29058.60602	0.2233	3.57944	0.22663	4.09779	1.33E-03	9.14E-06	1.28E-04	9.28E-06	1.41E-04	1.6203E-03
520227.36	4258162.78	29057.64762	0.19544	1.59025	0.20308	1.7563	1.33E-03	8.00E-06	5.69E-05	8.31E-06	6.03E-05	1.4666E-03
520531.37	4258976.48	29048.00529	0.23873	0.11473	0.22955	0.11985	1.33E-03	9.77E-06	4.10E-06	9.40E-06	4.11E-06	1.3601E-03
520039.44	4258511.65	29019.39447	0.64214	5.37061	0.72914	4.19689	1.33E-03	2.63E-05	1.92E-04	2.99E-05	1.44E-04	1.7237E-03
520610.66	4258813.69	29016.18715	0.17026	0.12027	0.16431	0.1246	1.33E-03	6.97E-06	4.30E-06	6.73E-06	4.28E-06	1.3535E-03
520109.46	4258302.41	29009.13892	0.26191	10.10691	0.27092	11.62608	1.33E-03	1.07E-05	3.62E-04	1.11E-05	3.99E-04	2.1133E-03
520266.61	4258132.9	29002.78723	0.18468	1.12933	0.19474	1.23172	1.33E-03	7.56E-06	4.04E-05	7.97E-06	4.23E-05	1.4288E-03
520592.98	4258227.77	28986.01123	0.13694	0.18416	0.13602	0.19236	1.33E-03	5.61E-06	6.59E-06	5.57E-06	6.60E-06	1.3542E-03
520606.21	4258313.54	28977.89824	0.1404	0.1698	0.13939	0.178	1.33E-03	5.75E-06	6.07E-06	5.71E-06	6.11E-06	1.3531E-03
520083.06	4259116.53	28967.40832	16.33531	0.23706	21.55386	0.22453	1.33E-03	6.69E-04	8.48E-06	8.83E-04	7.71E-06	2.8965E-03
520627.32	4258726.02	28940.04019	0.15478	0.12748	0.14903	0.13245	1.33E-03	6.34E-06	4.56E-06	6.10E-06	4.55E-06	1.3493E-03
520607.19	4258348.92	28935.58028	0.14292	0.16679	0.14104	0.17512	1.33E-03	5.85E-06	5.97E-06	5.77E-06	6.01E-06	1.3511E-03
519964.1	4258949.11	28932.39317	1.10618	0.31462	1.23628	0.31059	1.33E-03	4.53E-05	1.13E-05	5.06E-05	1.07E-05	1.4452E-03
520576.57	4258180.69	28922.74549	0.13745	0.19667	0.13836	0.20684	1.33E-03	5.63E-06	7.03E-06	5.67E-06	7.10E-06	1.3523E-03
520540.74	4258962.6	28921.49215	0.22932	0.11445	0.22067	0.11958	1.33E-03	9.39E-06	4.09E-06	9.04E-06	4.11E-06	1.3535E-03
520296.04	4258112.99	28897.20856	0.17725	0.90222	0.1874	0.97889	1.33E-03	7.26E-06	3.23E-05	7.67E-06	3.36E-05	1.4066E-03
519946.17	4258801.44	28893.55938	0.72093	0.51974	0.80046	0.49826	1.33E-03	2.95E-05	1.86E-05	3.28E-05	1.71E-05	1.4236E-03
520583.87	4258884.7	28885.58714	0.19192	0.11593	0.18553	0.1207	1.33E-03	7.86E-06	4.15E-06	7.60E-06	4.14E-06	1.3490E-03
520606.92	4258374.08	28877.14645	0.14495	0.16519	0.1424	0.17325	1.32E-03	5.93E-06	5.91E-06	5.83E-06	5.95E-06	1.3484E-03
519953.07	4258745.73	28864.5328	0.68119	0.6686	0.76523	0.63326	1.32E-03	2.79E-05	2.39E-05	3.13E-05	2.17E-05	1.4291E-03
519947.83	4258877.77	28845.80534	0.83886	0.38967	0.92957	0.3807	1.32E-03	3.43E-05	1.39E-05	3.81E-05	1.31E-05	1.4228E-03
520614.27	4258805.06	28841.99709	0.16751	0.12056	0.16159	0.12483	1.32E-03	6.86E-06	4.31E-06	6.62E-06	4.29E-06	1.3453E-03
520625.69	4258753.86	28840.64258	0.15758	0.12448	0.1517	0.12913	1.32E-03	6.45E-06	4.45E-06	6.21E-06	4.43E-06	1.3447E-03
519950.14	4258762.77	28837.07037	0.6891	0.61595	0.77055	0.58537	1.32E-03	2.82E-05	2.20E-05	3.15E-05	2.01E-05	1.4249E-03
519967.41	4258960.47	28831.85946	1.1643	0.30501	1.30499	0.30138	1.32E-03	4.77E-05	1.09E-05	5.34E-05	1.03E-05	1.4451E-03
520237.18	4258152.81	28809.71837	0.19148	1.45231	0.1997	1.59845	1.32E-03	7.84E-06	5.19E-05	8.18E-06	5.49E-05	1.4446E-03
520094.86	4259127.17	28787.90651	12.75847	0.23408	11.81464	0.22027	1.32E-03	5.22E-04	8.37E-06	4.84E-04	7.56E-06	2.3428E-03
520550.28	4258948.64	28781.49519	0.22044	0.11417	0.21234	0.11928	1.32E-03	9.03E-06	4.08E-06	8.69E-06	4.09E-06	1.3463E-03
520572.76	4258909.31	28779.2717	0.20117	0.11475	0.19428	0.1197	1.32E-03	8.24E-06	4.10E-06	7.95E-06	4.11E-06	1.3447E-03
519999.81	4258599.1	28774.77115	0.70345	1.80416	0.83963	1.61848	1.32E-03	2.88E-05	6.45E-05	3.44E-05	5.56E-05	1.5034E-03
520627.77	4258700.99	28765.41899	0.15284	0.13073	0.14715	0.13564	1.32E-03	6.26E-06	4.68E-06	6.02E-06	4.66E-06	1.3413E-03
519977.12	4258655.32	28756.28996	0.67561	1.13623	0.7794	1.05236	1.32E-03	2.77E-05	4.06E-05	3.19E-05	3.61E-05	1.4556E-03
520055.4	4258436.43	28750.06725	0.41385	10.83102	0.44849	7.09331	1.32E-03	1.69E-05	3.87E-04	1.84E-05	2.44E-04	1.9852E-03
520148.8	4258242.53	28718.59763	0.22708	4.1891	0.2304	4.83399	1.32E-03	9.30E-06	1.50E-04	9.43E-06	1.66E-04	1.6521E-03
520591.97	4258217.32	28717.18287	0.13632	0.18498	0.1356	0.19349	1.32E-03	5.58E-06	6.62E-06	5.55E-06	6.64E-06	1.3419E-03
520601.57	4258437.63	28702.60098	0.15134	0.16376	0.14795	0.17166	1.32E-03	6.20E-06	5.86E-06	6.06E-06	5.89E-06	1.3408E-03
519955.87	4258728.36	28688.81598	0.67091	0.72668	0.75449	0.68678	1.32E-03	2.75E-05	2.60E-05	3.09E-05	2.36E-05	1.4241E-03
520517.02	4259002.44	28683.16101	0.25412	0.11406	0.24412	0.11914	1.32E-03	1.04E-05	4.08E-06	1.00E-05	4.09E-06	1.3445E-03
520617.88	4258796.43	28634.69433	0.16481	0.12085	0.15893	0.12508	1.31E-03	6.75E-06	4.32E-06	6.51E-06	4.29E-06	1.3356E-03
520276.43	4258122.93	28628.7912	0.18077	1.04576	0.19081	1.13877	1.31E-03	7.40E-06	3.74E-05	7.81E-06	3.91E-05	1.4051E-03
520526.54	4258988.49	28624.73371	0.24372	0.11396	0.23427	0.11902	1.31E-03	9.98E-06	4.08E-06	9.59E-06	4.09E-06	1.3410E-03
520560.01	4258934.61	28617.53577	0.21199	0.1139	0.20442	0.11896	1.31E-03	8.68E-06	4.07E-06	8.37E-06	4.08E-06	1.3381E-03
519947.09	4258779.53	28605.11767	0.69296	0.56842	0.77061	0.54228	1.31E-03	2.84E-05	2.03E-05	3.16E-05	1.86E-05	1.4112E-03
520606.82	4258399.69	28556.56477	0.14677	0.16376	0.14383	0.17149	1.31E-03	6.01E-06	5.86E-06	5.89E-06	5.89E-06	1.3338E-03
520043	4259085.77	28514.32982	5.0542	0.24002	6.9801	0.23343	1.31E-03	2.07E-04	8.59E-06	2.86E-04	8.01E-06	1.8175E-03

520052.91	4259095.75	28506.06325	7.03898	0.23793	11.46657	0.23001	1.31E-03	2.88E-04	8.51E-06	4.69E-04	7.90E-06	2.0819E-03
520247	4258142.84	28499.1456	0.18749	1.33201	0.19623	1.46067	1.31E-03	7.68E-06	4.76E-05	8.03E-06	5.01E-05	1.4210E-03
519943.73	4258843.77	28481.80603	0.75773	0.43783	0.84016	0.42397	1.31E-03	3.10E-05	1.57E-05	3.44E-05	1.46E-05	1.4023E-03
520575.73	4258170.32	28481.16013	0.13666	0.19752	0.13792	0.20788	1.31E-03	5.60E-06	7.07E-06	5.65E-06	7.14E-06	1.3321E-03
519968.96	4258971.1	28462.60928	1.19671	0.29556	1.34319	0.29226	1.31E-03	4.90E-05	1.06E-05	5.50E-05	1.00E-05	1.4304E-03
520621.5	4258787.81	28444.66187	0.16222	0.12114	0.15639	0.12534	1.30E-03	6.64E-06	4.33E-06	6.40E-06	4.30E-06	1.3267E-03
520586.44	4258194.93	28432.6273	0.1359	0.18918	0.136	0.19847	1.30E-03	5.56E-06	6.77E-06	5.57E-06	6.81E-06	1.3291E-03
519967.12	4258683.15	28430.92084	0.66159	0.93715	0.75594	0.87606	1.30E-03	2.71E-05	3.35E-05	3.10E-05	3.01E-05	1.4260E-03
520119.31	4258282.44	28417.51476	0.24746	7.67211	0.25389	8.99117	1.30E-03	1.01E-05	2.74E-04	1.04E-05	3.09E-04	1.9074E-03
520605.17	4258421.21	28408.84953	0.14884	0.16306	0.14564	0.17079	1.30E-03	6.09E-06	5.83E-06	5.96E-06	5.86E-06	1.3271E-03
520591.03	4258206.91	28403.96514	0.13565	0.18577	0.13523	0.19457	1.30E-03	5.55E-06	6.64E-06	5.54E-06	6.68E-06	1.3275E-03
520582.48	4258895.28	28362.25321	0.1934	0.11455	0.18699	0.11933	1.30E-03	7.92E-06	4.10E-06	7.66E-06	4.10E-06	1.3250E-03
520569.96	4258920.48	28360.18034	0.20372	0.11362	0.19668	0.11858	1.30E-03	8.34E-06	4.06E-06	8.05E-06	4.07E-06	1.3256E-03
519943.15	4258818.26	28329.46027	0.71866	0.48146	0.79565	0.46335	1.30E-03	2.94E-05	1.72E-05	3.26E-05	1.59E-05	1.3948E-03
520629.33	4258745.15	28322.19506	0.15505	0.1243	0.14929	0.12904	1.30E-03	6.35E-06	4.45E-06	6.11E-06	4.43E-06	1.3207E-03
520598.18	4258480.46	28318.75977	0.15507	0.16216	0.15061	0.17023	1.30E-03	6.35E-06	5.80E-06	6.17E-06	5.84E-06	1.3234E-03
519944.16	4258868.92	28276.81311	0.79249	0.39879	0.87663	0.38865	1.30E-03	3.24E-05	1.43E-05	3.59E-05	1.33E-05	1.3932E-03
520138.98	4258252.5	28242.72671	0.23061	4.9968	0.2344	5.7973	1.30E-03	9.44E-06	1.79E-04	9.60E-06	1.99E-04	1.6925E-03
520610.59	4258357.85	28242.26534	0.14235	0.16418	0.14014	0.17229	1.30E-03	5.83E-06	5.87E-06	5.74E-06	5.91E-06	1.3191E-03
519950.1	4258913.35	28183.23467	0.89965	0.34498	0.99588	0.33918	1.29E-03	3.68E-05	1.23E-05	4.08E-05	1.16E-05	1.3946E-03
520539.87	4258972.96	28183.00633	0.23036	0.11305	0.2217	0.11806	1.29E-03	9.43E-06	4.04E-06	9.08E-06	4.05E-06	1.3196E-03
520625.11	4258779.18	28180.6478	0.15968	0.12133	0.1539	0.12556	1.29E-03	6.54E-06	4.34E-06	6.30E-06	4.31E-06	1.3144E-03
520286.25	4258112.96	28168.93268	0.17673	0.97142	0.18677	1.05492	1.29E-03	7.24E-06	3.47E-05	7.65E-06	3.62E-05	1.3782E-03
520604.24	4258252.61	28162.2107	0.13566	0.17589	0.13451	0.18321	1.29E-03	5.55E-06	6.29E-06	5.51E-06	6.29E-06	1.3157E-03
520256.82	4258132.87	28150.53498	0.18353	1.22607	0.19269	1.33991	1.29E-03	7.51E-06	4.39E-05	7.89E-06	4.60E-05	1.3968E-03
520084.96	4259127.18	28140.38529	15.52793	0.23098	19.02608	0.21864	1.29E-03	6.36E-04	8.26E-06	7.79E-04	7.51E-06	2.7216E-03
520197.93	4258182.69	28100.50236	0.20038	2.1567	0.20506	2.40895	1.29E-03	8.20E-06	7.71E-05	8.40E-06	8.27E-05	1.4656E-03
520188.11	4258192.66	28099.73112	0.20406	2.41554	0.20806	2.71161	1.29E-03	8.36E-06	8.64E-05	8.52E-06	9.31E-05	1.4855E-03
519951.95	4258924.11	28093.21584	0.93018	0.33381	1.03038	0.32868	1.29E-03	3.81E-05	1.19E-05	4.22E-05	1.13E-05	1.3924E-03
520029.52	4258531.09	28085.34454	0.67132	3.92845	0.78019	3.20825	1.29E-03	2.75E-05	1.41E-04	3.19E-05	1.10E-04	1.5986E-03
520610.36	4258383.1	28082.16998	0.14426	0.16275	0.1415	0.17052	1.29E-03	5.91E-06	5.82E-06	5.79E-06	5.85E-06	1.3117E-03
520585.48	4258184.51	28064.15133	0.13521	0.18999	0.13569	0.19954	1.29E-03	5.54E-06	6.80E-06	5.56E-06	6.85E-06	1.3123E-03
520549.29	4258959.06	28050.02133	0.22144	0.11276	0.2133	0.11777	1.29E-03	9.07E-06	4.03E-06	8.73E-06	4.04E-06	1.3128E-03
520602.98	4258242.06	28048.07024	0.13513	0.1771	0.13395	0.18456	1.29E-03	5.53E-06	6.33E-06	5.48E-06	6.34E-06	1.3105E-03
520207.75	4258172.72	28045.99523	0.19672	1.93869	0.2021	2.15627	1.29E-03	8.05E-06	6.93E-05	8.27E-06	7.40E-05	1.4464E-03
519989.89	4258618.53	28036.40424	0.67422	1.47729	0.78852	1.35068	1.29E-03	2.76E-05	5.28E-05	3.23E-05	4.64E-05	1.4454E-03
520178.29	4258202.63	28015.28992	0.20768	2.72821	0.21112	3.07762	1.29E-03	8.50E-06	9.76E-05	8.64E-06	1.06E-04	1.5057E-03
520608.71	4258274.55	27971.33122	0.13616	0.17174	0.1352	0.17904	1.28E-03	5.57E-06	6.14E-06	5.54E-06	6.15E-06	1.3067E-03
520631.3	4258692.56	27969.62689	0.15058	0.13073	0.14498	0.13547	1.28E-03	6.17E-06	4.68E-06	5.94E-06	4.65E-06	1.3046E-03
520607.5	4258264.02	27944.95626	0.13563	0.17318	0.13456	0.1804	1.28E-03	5.55E-06	6.19E-06	5.51E-06	6.19E-06	1.3055E-03
520610.02	4258285.13	27936.61329	0.13665	0.17014	0.13576	0.17759	1.28E-03	5.60E-06	6.09E-06	5.56E-06	6.10E-06	1.3050E-03
519953.66	4258934.81	27933.87065	0.95938	0.32313	1.06346	0.31856	1.28E-03	3.93E-05	1.16E-05	4.35E-05	1.09E-05	1.3869E-03
520601.46	4258463.23	27932.8972	0.15277	0.1617	0.1488	0.1697	1.28E-03	6.26E-06	5.78E-06	6.09E-06	5.83E-06	1.3055E-03
520099.64	4258312.38	27931.524	0.2645	14.38467	0.27573	15.31853	1.28E-03	1.08E-05	5.15E-04	1.13E-05	5.26E-04	2.3440E-03
520217.57	4258162.75	27928.62509	0.19304	1.75331	0.19915	1.94212	1.28E-03	7.90E-06	6.27E-05	8.15E-06	6.67E-05	1.4268E-03
520558.88	4258945.08	27924.11751	0.21311	0.11253	0.20549	0.11751	1.28E-03	8.73E-06	4.03E-06	8.41E-06	4.03E-06	1.3063E-03
520094.88	4259137.17	27891.188	12.66773	0.22792	11.77934	0.21461	1.28E-03	5.19E-04	8.15E-06	4.82E-04	7.37E-06	2.2961E-03
520168.47	4258212.6	27876.75029	0.21133	3.1097	0.21431	3.53184	1.28E-03	8.65E-06	1.11E-04	8.77E-06	1.21E-04	1.5288E-03
520601.82	4258231.55	27876.01049	0.13455	0.17819	0.13344	0.18583	1.28E-03	5.51E-06	6.37E-06	5.46E-06	6.38E-06	1.3026E-03
520628.72	4258770.56	27867.10616	0.15717	0.12141	0.15146	0.1257	1.28E-03	6.44E-06	4.34E-06	6.20E-06	4.32E-06	1.2998E-03
520525.7	4258998.84	27861.99259	0.24477	0.11247	0.23532	0.11743	1.28E-03	1.00E-05	4.02E-06	9.63E-06	4.03E-06	1.3060E-03
520596.02	4258872.6	27853.51096	0.183	0.11472	0.17706	0.11925	1.28E-03	7.49E-06	4.10E-06	7.25E-06	4.09E-06	1.3008E-03
520611.47	4258295.76	27841.53692	0.13709	0.16826	0.13618	0.17591	1.28E-03	5.61E-06	6.02E-06	5.58E-06	6.04E-06	1.3006E-03
520599.6	4258864.04	27839.56553	0.18024	0.11513	0.17432	0.1196	1.28E-03	7.38E-06	4.12E-06	7.14E-06	4.11E-06	1.3000E-03
520535.28	4258984.87	27815.13624	0.235	0.11235	0.2261	0.1173	1.28E-03	9.62E-06	4.02E-06	9.26E-06	4.03E-06	1.3030E-03
520581.2	4258905.82	27813.78359	0.19476	0.11312	0.18827	0.11791	1.28E-03	7.97E-06	4.05E-06	7.71E-06	4.05E-06	1.2998E-03
520603.18	4258855.48	27813.06286	0.1775	0.11547	0.1716	0.1199	1.28E-03	7.27E-06	4.13E-06	7.03E-06	4.12E-06	1.2985E-03
520632.97	4258736.45	27781.71358	0.15262	0.12419	0.14701	0.12897	1.27E-03	6.25E-06	4.44E-06	6.02E-06	4.43E-06	1.2957E-03
519957.88	4258709.1	27781.67634	0.644	0.79196	0.72629	0.74641	1.27E-03	2.64E-05	2.83E-05	2.97E-05	2.56E-05	1.3846E-03
520050.29	4258455.9	27771.76966	0.45467	8.40345	0.49504	5.95118	1.27E-03	1.86E-05	3.01E-04	2.03E-05	2.04E-04	1.8179E-03
520266.64	4258122.9	27769.36693	0.17961	1.13225	0.18908	1.23339	1.27E-03	7.35E-06	4.05E-05	7.74E-06	4.23E-05	1.3719E-03
520606.77	4258846.93	27769.32782	0.17475	0.11584	0.16891	0.12022	1.27E-03	7.15E-06	4.14E-06	6.92E-06	4.13E-06	1.2963E-03
519944.31	4258893.39	27758.40357	0.82017	0.3652	0.90607	0.35769	1.27E-03	3.36E-05	1.31E-05	3.71E-05	1.23E-05	1.3695E-03
520227.39	4258152.78	27737.51884	0.18931	1.59437	0.19614	1.75823	1.27E-03	7.75E-06	5.70E-05	8.03E-06	6.04E-05	1.4057E-03
520568.67	4258931.02	27733.69225	0.20499	0.11226	0.19788	0.11717	1.27E-03	8.39E-06	4.02E-06	8.10E-06	4.02E-06	1.2969E-03
519955.25	4258945.46	27716.32044	0.98738	0.31291	1.09527	0.30882	1.27E-03	4.04E-05	1.12E-05	4.48E-05	1.06E-05	1.3786E-03
520610.35	4258838.37	27710.39394	0.17205	0.11639	0.16634	0.12071	1.27E-03	7.04E-06	4.16E-06	6.81E-06	4.14E-06	1.2935E-03
520129.16	4258262.47	27697.99358	0.23404	6.09769	0.23856	7.13881	1.27E-03	9.58E-06	2.18E-04	9.77E-06	2.45E-04	1.7533E-03
519942.4	4258792.34	27696.22017	0.67329	0.53008	0.74507	0.50712	1.27E-03	2.76E-05	1.90E-05	3.05E-05	1.74E-05	1.3651E-03
520053.34	4259105.75	27694.86895	7.23313	0.23162	11.83937	0.22392	1.27E-03	2.96E-04	8.28E-06	4.85E-04	7.69E-06	2.0675E-03
520043.01	4259095.77	27688.06454	5.09162	0.23346	7.00506	0.2271	1.27E-03	2.08E-04	8.35E-06	2.87E-04	7.80E-06	1.7817E-03
520600.74	4258221.08	27682.22474	0.13399	0.17902	0.13301	0.18695	1.27E-03	5.49E-06	6.40E-06	5.45E-06	6.42E-06	1.2938E-03
520584.59	4258174.11	27676.41057	0.13448	0.19078	0.13533	0.20055	1.27E-03	5.51E-06	6.82E-06	5.54E-06	6.89E-06	1.2945E-03
520613.06	4258306.46	27673.04476	0.13747	0.16623	0.13644	0.17408	1.27E-03	5.63E-06	5.95E-06	5.59E-06	5.98E-06	1.2927E-03
519940.03	4258834.84	27663.95346	0.71342	0.44753	0.78843	0.4322	1.27E-03	2.92E-05	1.60E-05	3.23E-05	1.48E-05	1.3615E-03
519958.3	4258956.71	27652.91168	1.03445	0.30348	1.14996	0.29979	1.27E-03	4.24E-05	1.09E-05	4.71E-05	1.03E-05	1.3792E-03
520610.3	4258408.81	27646.01308	0.14598	0.16118	0.14288	0.16873	1.27E-03	5.98E-06	5.77E-06	5.85E-06	5.79E-06	1.2917E-03
520158.65	4258222.57	27636.98135	0.21487	3.58758	0.21764	4.10158	1.27E-03	8.80E-06	1.28E-04	8.91E-06	1.41E-04	1.5548E-03
519940.49	4258860.07	27635.17538	0.74811	0.40804	0.82671	0.39653	1.27E-03	3.06E-05	1.46E-05	3.38E-05	1.36E-05	1.3605E-03
520613.93	4258829.81	27630.67172	0.16938	0.11684	0.16374	0.12108	1.27E-03	6.94E-06	4.18E-06	6.70E-06	4.16E-06	1.2896E-03
520614.34	4258341.83	27566.58129	0.13979	0.16307	0.13795	0.17115	1.26E-03	5.72E-06	5.83E-06	5.65E-06	5.88E-06	1.2878E-03
520634.33	4258709.28	27564.87933	0.15016	0.12722	0.14467	0.13203	1.26E-03	6.15E-06	4.55E-06	5.92E-06	4.53E-06	1.2858E-03
520109.49	4258292.41	27563.92643	0.25039	10.13268	0.25855	11.69529	1.26E-03	1.03E-05	3.62E-04	1.06E-05	4.02E-04	2.0494E-03
520237.21	4258142.81	27537.48385	0.18571	1.45586	0.19313	1.60058	1.26E-03	7.60E-06	5.21E-05	7.91E-06	5.49E-05	1.3859E-03
520613.99	4258366.77	27530.23864	0.14176	0.16155	0.13923	0.16942	1.26E-03	5.80E-06	5.78E-06	5.70E-06	5.82E-06	1.2861E-03
520617.51	4258821.26	27526.94163	0.16675	0.11722	0.16117	0.12139	1.26E-03	6.83E-06	4.19E-06	6.60E-06	4.17E-06	1.2847E-03
520595.42	4258198.77	27516.13011	0.13363	0.18284	0.13331	0.19155	1.26E-03	5.47E-06	6.54E-06	5.46E-06	6.58E-06	1.2864E-03
520632.33	4258761.93	27506.56169	0.15473	0.12139	0.14909	0.12578	1.26E-03	6.34E-06	4.34E-06	6.10E-06	4.32E-06	1.2830E-03
520019.6	4258550.53	27459.82534	0.68419	2.97292	0.80953	2.51846	1.26E-03	2.80E-05	1.06E-04	3.31E-05	8.65E-05	1.5138E-03
520608.47	4258429.88	27458.23525	0.148	0.16054	0.14464	0.16817	1.26E-03	6.06E-06	5.74E-06	5.92E-06	5.77E-06	1.2832E-03
520057.08	4258415.76	27448.96678	0.36667	11.88426	0.39541	7.52444	1.26E-03	1.50E-05	4.25E-04	1.62E-05	2.58E-04	1.9739E-03
520599.75	4258210.64	27437.19612	0.13339	0.17981	0.13263	0.18802	1.26E-03	5.46E-06	6.43E-06	5.43E-06	6.45E-06	1.2825E-03
520578.69	4258916.87	27406.65312	0.19699	0.11197	0.19038	0.11677	1.26E-03	8.07E-06	4.01E-06	7.79E-06	4.01E-06	1.2812E-03
520276.46	4258112.93	27402.68904	0.17588	1.04859	0.18549	1.13968	1.26E-03	7.20E-06	3.75E-05	7.59E-06	3.91E-05	1.3486E-03
520621.1	4258812.7	27396.93169	0.16416	0.11755	0.1586	0.12166	1.26E-03	6.72E-06	4.20E-06	6.49E-06	4.18E-06	1.2785E-03
520590.99	4258891.76	27365.80788	0.18728	0.1129	0.18121	0.11751	1.26E-03	7.67E-06	4.04E-06	7.42E-06	4.03E-06	1.2787E-03
519959.92	4258967.37	27361.92278	1.06385	0.29419	1.18396	0.29085	1.26E-03	4.36E-05	1.05E-05	4.85E-05	9.99E-06	1.3679E-03
520548.37	4258969.45	27354.25117	0.22244	0.1114	0.21427	0.11631	1.25E-03	9.11E-06	3.98E-06	8.77E-06	3.99E-06	1.2808E-03
520148.83	4258232.53	27319.36723	0.21835	4.1977	0.22112	4.84025	1.25E-03	8.94E-06	1.50E-04	9.05E-06	1.66E-04	1.5877E-03
519939.41	4258809.25	27297.74038	0.6738	0.49127	0.7433	0.47172	1.25E-03	2.76E-05	1.76E-05	3.04E-05	1.62E-05	1.3442E-03
519977.12	4258646.05	27291.23633	0.64282	1.16867	0.7375	1.08375	1.25E-03	2.63E-05	4.18E-05	3.02E-05	3.72E-05	1.3876E-03
519967.12	4258673.87	27285.32447	0.63489	0.96834	0.72391	0.9046	1.25E-03	2.60E-05	3.46E-05	2.96E-05	3.11E-05	1.3731E-03
520613.79	4258392.11	27274.69901	0.14355	0.16034	0.1406	0.16787	1.25E-03	5.88E-06	5.74E-06	5.76E-06	5.76E-06	1.2744E-03
520084.98	4259137.18	27268.55673	15.37999	0.22491	18.93128	0.21303	1.25E-03	6.30E-04	8.04E-06	7.75E-04	7.31E-06	2.6712E-03
519943.46	4258770.77	27265.29979	0.64668	0.57743	0.71605	0.55047	1.25E-03	2.65E-05	2.07E-05	2.93E-05	1.89E-05	1.3462E-03
520247.03	4258132.84	27261.20776	0.18202	1.33526	0.19002	1.46246	1.25E-03	7.45E-06	4.78E-05	7.78E-06	5.02E-05	1.3639E-03
519940.52	4258884.25	27259.08204	0.77518	0.37372	0.8546	0.36522	1.25E-03	3.17E-05	1.34E-05	3.50E-05	1.25E-05	1.3432E-03
520636.62	4258727.75	27252.83194	0.15032	0.12418	0.14488	0.12894	1.25E-03	6.15E-06	4.44E-06	5.93E-06	4.43E-06	1.2713E-03
519946.47	4258753.92	27243.4916	0.6377	0.62485	0.71251	0.59313	1.25E-03	2.61E-05	2.23E-05	2.92E-05	2.04E-05	1.3479E-03
520624.68	4258804.14	27239.18476	0.16161	0.11785	0.15608	0.1219	1.25E-03	6.62E-06	4.22E-06	6.39E-06	4.18E-06	1.2711E-03
520557.84	4258955.52	27224.22289	0.21404	0.11114	0.20637	0.11603	1.25E-03	8.76E-06	3.98E-06	8.45E-06	3.98E-06	1.2742E-03
520594.4	4258188.32	27208.81692	0.133	0.18362	0.13304	0.19261	1.25E-03	5.45E-06	6.57E-06	5.45E-06	6.61E-06	1.2724E-03
519949.36	4258736.79	27142.21194	0.63057	0.67632	0.70474	0.64095	1.25E-03	2.58E-05	2.42E-05	2.89E-05	2.20E-05	1.3461E-03
520635.94	4258753.3	27098.16987	0.15234	0.12131	0.14681	0.12579	1.24E-03	6.24E-06	4.34E-06	6.01E-06	4.32E-06	1.2641E-03
520534.39	4258995.25	27088.61155	0.23599	0.11092	0.22707	0.11577	1.24E-03	9.66E-06	3.97E-06	9.30E-06	3.97E-06	1.2697E-03
520567.49	4258941.52	27082.24116	0.20609	0.11091	0.19892	0.11576	1.24E-03	8.44E-06	3.97E-06	8.14E-06	3.97E-06	1.2670E-03
519960.75	4258691.89	27068.38764	0.62655	0.86139	0.70889	0.8093	1.24E-03	2.57E-05	3.08E-05	2.90E-05	2.78E-05	1.3551E-03
520628.26	4258795.59	27048.53939	0.15911	0.11812	0.15361	0.12214	1.24E-03	6.51E-06	4.22E-06	6.29E-06	4.19E-06	1.2622E-03
520119.34	4258272.44	27031.18079	0.23713	7.68679	0.24286	9.04061	1.24E-03	9.71E-06	2.75E-04	9.94E-06	3.10E-04	1.8451E-03
520604.84	4258472.09	27006.86845	0.1517	0.15928	0.14744	0.16713	1.24E-03	6.21E-06	5.70E-06	6.04E-06	5.74E-06	1.2627E-03
520544.02	4258981.26	26991.85409	0.22659	0.1107	0.21819	0.11554	1.24E-03	9.28E-06	3.96E-06	8.93E-06	3.97E-06	1.2645E-03
520009.69	4258569.96	26980.96469	0.67937	2.32234	0.81052	2.02174	1.24E-03	2.78E-05	8.31E-05	3.32E-05	6.94E-05	1.4513E-03
520095.31	4259147.99	26975.83372	12.42387	0.22163	11.55381	0.20878	1.24E-03	5.09E-04	7.93E-06	4.73E-04	7.17E-06	2.2344E-03
520256.85	4258122.87	26962.40632	0.17839	1.22892	0.18685	1.34172	1.24E-03	7.30E-06	4.40E-05	7.65E-06	4.61E-05	1.3420E-03
519936.82	4258851.23	26933.1338	0.70616	0.41706	0.77868	0.40417	1.24E-03	2.89E-05	1.49E-05	3.19E-05	1.39E-05	1.3252E-03
520043.44	4259105.77	26924.54648	5.20521	0.22732	7.14831	0.22113	1.24E-03	2.13E-04	8.13E-06	2.93E-04	7.59E-06	1.7568E-03
520617.71	4258350.66	26924.30707	0.13923	0.16064	0.13707	0.16852	1.24E-03	5.70E-06	5.75E-06	5.61E-06	5.79E-06	1.2581E-03
520637.83	4258700.92	26918.43397	0.14806	0.12728	0.14267	0.13193	1.23E-03	6.06E-06	4.55E-06	5.84E-06	4.53E-06	1.2560E-03
520613.22	4258256.46	26898.23935	0.13318	0.17007	0.13203	0.17702	1.23E-03	5.45E-06	6.08E-06	5.41E-06	6.08E-06	1.2571E-03
520593.45	4258177.9	26882.95095	0.13236	0.18435	0.13276	0.19361	1.23E-03	5.42E-06	6.59E-06	5.44E-06	6.65E-06	1.2574E-03
520139.01	4258242.5	26877.61037	0.22159	5.00612	0.22482	5.80904	1.23E-03	9.07E-06	1.79E-04	9.21E-06	1.99E-04	1.6299E-03
520589.65	4258902.32	26874.58234	0.18862	0.11154	0.1825	0.11616	1.23E-03	7.72E-06	3.99E-06	7.47E-06	3.99E-06	1.2561E-03
520053.36	4259115.75	26867.38762	7.31064	0.22539	11.90904	0.21798	1.23E-03	2.99E-04	8.06E-06	4.88E-04	7.48E-06	2.0351E-03
520611.88	4258245.87	26863.19484	0.13272	0.17131	0.13148	0.17833	1.23E-03	5.43E-06	6.13E-06	5.38E-06	6.12E-06	1.2555E-03
520577.34	4258927.43	26855.53143	0.19827	0.11064	0.19158	0.1154	1.23E-03	8.12E-06	3.96E-06	7.84E-06	3.96E-06	1.2560E-03
520039.4	4258501.95	26844.93713	0.58784	5.41337	0.65921	4.24396	1.23E-03	2.41E-05	1.94E-04	2.70E-05	1.46E-04	1.6220E-03
520631.84	4258787.03	26822.2246	0.15665	0.11834	0.15119	0.12236	1.23E-03	6.41E-06	4.23E-06	6.19E-06	4.20E-06	1.2516E-03
520197.96	4258172.69	26815.868	0.1937	2.16097	0.19763	2.41194	1.23E-03	7.93E-06	7.73E-05	8.09E-06	8.28E-05	1.4064E-03
520188.14	4258182.66	26807.67916	0.1971	2.41987	0.20038	2.71551	1.23E-03	8.07E-06	8.66E-05	8.20E-06	9.32E-05	1.4259E-03
520617.39	4258375.69	26806.6119	0.14112	0.15912	0.13834	0.16673	1.23E-03	5.78E-06	5.69E-06	5.66E-06	5.72E-06	1.2527E-03
520207.78	4258162.72	26783.87106	0.19035	1.9425	0.19495	2.15911	1.23E-03	7.79E-06	6.95E-05	7.98E-06	7.41E-05	1.3882E-03
519936.33	4258825.92	26778.66908	0.67124	0.45685	0.73933	0.44009	1.23E-03	2.75E-05	1.63E-05	3.03E-05	1.51E-05	1.3178E-03
520610.66	4258235.33	26759.58735	0.13219	0.17247	0.13096	0.17962	1.23E-03	5.41E-06	6.17E-06	5.36E-06	6.17E-06	1.2508E-03
519952.12	4258719.32	26734.78615	0.61744	0.7331	0.69152	0.69332	1.23E-03	2.53E-05	2.62E-05	2.83E-05	2.38E-05	1.3302E-03
520613.77	4258417.94	26726.20483	0.14516	0.15857	0.1419	0.16599	1.23E-03	5.94E-06	5.67E-06	5.81E-06	5.70E-06	1.2493E-03
520608.24	4258455.15	26724.92555	0.14944	0.1587	0.14559	0.16643	1.23E-03	6.12E-06	5.68E-06	5.96E-06	5.71E-06	1.2496E-03
519942.96	4258920.4	26720.8677	0.83299	0.33143	0.91714	0.32608	1.23E-03	3.41E-05	1.19E-05	3.76E-05	1.12E-05	1.3206E-03
520178.32	4258192.63	26704.01499	0.20038	2.73362	0.2032	3.08093	1.23E-03	8.20E-06	9.78E-05	8.32E-06	1.06E-04	1.4452E-03
519936.73	4258875.11	26693.74822	0.7323	0.38237	0.80588	0.37271	1.22E-03	3.00E-05	1.37E-05	3.30E-05	1.28E-05	1.3141E-03
520217.6	4258152.75	26664.75217	0.18689	1.75744	0.19224	1.94364	1.22E-03	7.65E-06	6.29E-05	7.87E-06	6.67E-05	1.3684E-03
520616.18	4258267.74	26659.45235	0.13319	0.16765	0.13215	0.17459	1.22E-03	5.45E-06	6.00E-06	5.41E-06	5.99E-06	1.2459E-03
519944.74	4258931.13	26643.82248	0.85984	0.32103	0.94728	0.31632	1.22E-03	3.52E-05	1.15E-05	3.88E-05	1.09E-05	1.3187E-03
520640.26	4258719.05	26636.25577	0.14804	0.12411	0.14275	0.1288	1.22E-03	6.06E-06	4.44E-06	5.84E-06	4.42E-06	1.2428E-03
520617.45	4258278.29	26625.82391	0.13367	0.16614	0.1327	0.17322	1.22E-03	5.47E-06	5.94E-06	5.43E-06	5.95E-06	1.2443E-03
520609.52	4258224.83	26624.10938	0.13167	0.17339	0.1305	0.18075	1.22E-03	5.39E-06	6.20E-06	5.34E-06	6.21E-06	1.2446E-03
520639.55	4258744.68	26614.86961	0.14999	0.12117	0.14459	0.12572	1.22E-03	6.14E-06	4.33E-06	5.92E-06	4.32E-06	1.2418E-03
520266.67	4258112.9	26612.30041	0.17473	1.13486	0.18359	1.23477	1.22E-03	7.15E-06	4.06E-05	7.52E-06	4.24E-05	1.3186E-03
520046.63	4258464.79	26585.29349	0.4697	7.19013	0.51282	5.29979	1.22E-03	1.92E-05	2.57E-04	2.10E-05	1.82E-04	1.6990E-03
520168.5	4258202.6	26574.48811	0.20378	3.11499	0.20615	3.53715	1.22E-03	8.34E-06	1.11E-04	8.44E-06	1.21E-04	1.4688E-03
520099.67	4258302.38	26570.75636	0.25267	14.43189	0.26294	15.36141	1.22E-03	1.03E-05	5.16E-04	1.08E-05	5.27E-04	2.2837E-03
520604.4	4258202.61	26569.47034	0.13135	0.17683	0.13066	0.18496	1.22E-03	5.38E-06	6.32E-06	5.35E-06	6.35E-06	1.2424E-03
519999.77	4258589.4	26569.0798	0.6616	1.85436	0.78751	1.65747	1.22E-03	2.71E-05	6.63E-05	3.22E-05	5.69E-05	1.4015E-03
520556.87	4258965.93	26563.78057	0.21497	0.10981	0.20726	0.11461	1.22E-03	8.80E-06	3.93E-06	8.49E-06	3.93E-06	1.2438E-03
520635.43	4258778.47	26550.13762	0.15423	0.11833	0.14877	0.1224	1.22E-03	6.31E-06	4.23E-06	6.09E-06	4.20E-06	1.2389E-03
520618.84	4258288.9	26533.64836	0.1341	0.16448	0.13314	0.17174	1.22E-03	5.49E-06	5.88E-06	5.45E-06	5.90E-06	1.2400E-03
520227.42	4258142.78	26525.06327	0.18352	1.59768	0.18956	1.76041	1.22E-03	7.51E-06	5.71E-05	7.76E-06	6.04E-05	1.3498E-03
520611.77	4258438.55	26520.66105	0.14712	0.15806	0.14358	0.16562	1.22E-03	6.02E-06	5.65E-06	5.88E-06	5.69E-06	1.2400E-03
519946.4	4258941.81	26505.50513	0.88562	0.31106	0.97629	0.30687	1.22E-03	3.63E-05	1.11E-05	4.00E-05	1.05E-05	1.3139E-03
520587.42	4258913.25	26479.51258	0.19056	0.11035	0.18434	0.11499	1.21E-03	7.80E-06	3.95E-06	7.55E-06	3.95E-06	1.2381E-03
519949.19	4258952.95	26474.50172	0.92413	0.30174	1.02017	0.29801	1.21E-03	3.78E-05	1.08E-05	4.18E-05	1.02E-05	1.3152E-03
520617.22	4258401.13	26452.33033	0.1428	0.15793	0.1397	0.16526	1.21E-03	5.85E-06	5.65E-06	5.72E-06	5.67E-06	1.2365E-03
520608.47	4258214.37	26449.35374	0.13112	0.17416	0.1301	0.18179	1.21E-03	5.37E-06	6.23E-06	5.33E-06	6.24E-06	1.2366E-03
520566.39	4258951.98	26440.08956	0.20706	0.10959	0.19984	0.11436	1.21E-03	8.48E-06	3.92E-06	8.18E-06	3.93E-06	1.2375E-03
519938.63	4258783.24	26437.40809	0.62836	0.53918	0.69293	0.51521	1.21E-03	2.57E-05	1.93E-05	2.84E-05	1.77E-05	1.3040E-03
520606.6	4258871.25	26419.03051	0.1761	0.11222	0.17056	0.11653	1.21E-03	7.21E-06	4.01E-06	6.98E-06	4.00E-06	1.2343E-03
520085.41	4259148.01	26390.22001	16.47279	0.21875	18.38497	0.20727	1.21E-03	6.74E-04	7.82E-06	7.53E-04	7.12E-06	2.6529E-03
520610.16	4258862.76	26389.34695	0.1735	0.1126	0.16798	0.11686	1.21E-03	7.10E-06	4.03E-06	6.88E-06	4.01E-06	1.2327E-03
520620.36	4258299.57	26387.38926	0.13447	0.16266	0.13343	0.17013	1.21E-03	5.51E-06	5.82E-06	5.46E-06	5.84E-06	1.2332E-03
520063.61	4258383.1	26380.1825	0.31685	18.89278	0.3399	9.72538	1.21E-03	1.30E-05	6.76E-04	1.39E-05	3.34E-04	2.2468E-03
520129.19	4258252.47	26357.99834	0.22468	6.11096	0.22868	7.1475	1.21E-03	9.20E-06	2.19E-04	9.36E-06	2.45E-04	1.6918E-03
520613.72	4258854.27	26350.3729	0.17092	0.11295	0.16543	0.11717	1.21E-03	7.00E-06	4.04E-06	6.77E-06	4.02E-06	1.2307E-03
520543.07	4258991.65	26342.1278	0.22769	0.10939	0.21926	0.11413	1.21E-03	9.32E-06	3.91E-06	8.98E-06	3.92E-06	1.2347E-03
520158.68	4258212.57	26339.75288	0.20702	3.59369	0.20923	4.10779	1.21E-03	8.48E-06	1.29E-04	8.57E-06	1.41E-04	1.4950E-03
520237.24	4258132.81	26326.77289	0.18012	1.45929	0.18681	1.60169	1.21E-03	7.37E-06	5.22E-05	7.65E-06	5.50E-05	1.3300E-03
520603.31	4258192.14	26324.66473	0.13079	0.17761	0.13042	0.18603	1.21E-03	5.36E-06	6.35E-06	5.34E-06	6.39E-06	1.2312E-03
519937.28	4258900.55	26312.35916	0.76255	0.35017	0.83794	0.34318	1.21E-03	3.12E-05	1.25E-05	3.43E-05	1.18E-05	1.2970E-03
520617.27	4258845.77	26299.65714	0.16836	0.11335	0.16292	0.11752	1.21E-03	6.89E-06	4.05E-06	6.67E-06	4.03E-06	1.2282E-03
520621.07	4258359.5	26276.0081	0.13865	0.1583	0.1362	0.16593	1.21E-03	5.68E-06	5.66E-06	5.58E-06	5.70E-06	1.2281E-03
519950.89	4258963.64	26260.22523	0.95105	0.29267	1.051	0.2893	1.20E-03	3.89E-05	1.05E-05	4.30E-05	9.93E-06	1.3071E-03
520576.09	4258937.95	26252.0077	0.19937	0.10933	0.19262	0.11404	1.20E-03	8.16E-06	3.91E-06	7.89E-06	3.92E-06	1.2283E-03

520109.52	4258282.41	26236.21276	0.23973	10.15774	0.24714	11.75557	1.20E-03	9.82E-06	3.63E-04	1.01E-05	4.04E-04	1.9905E-03
520620.83	4258837.28	26230.64942	0.1658	0.11381	0.16047	0.11791	1.20E-03	6.79E-06	4.07E-06	6.57E-06	4.05E-06	1.2249E-03
520552.76	4258977.64	26216.3725	0.21871	0.10911	0.21079	0.11385	1.20E-03	8.95E-06	3.90E-06	8.63E-06	3.91E-06	1.2282E-03
519935.68	4258800.24	26206.34413	0.63136	0.50032	0.69399	0.47959	1.20E-03	2.59E-05	1.79E-05	2.84E-05	1.65E-05	1.2909E-03
520639.01	4258769.92	26190.85145	0.15182	0.11828	0.14642	0.12243	1.20E-03	6.22E-06	4.23E-06	6.00E-06	4.20E-06	1.2222E-03
520641.33	4258692.55	26181.68131	0.14593	0.12729	0.14062	0.13177	1.20E-03	5.97E-06	4.55E-06	5.76E-06	4.52E-06	1.2220E-03
520608.22	4258480.96	26180.95342	0.15061	0.15697	0.14606	0.16462	1.20E-03	6.17E-06	5.61E-06	5.98E-06	5.65E-06	1.2245E-03
519933.15	4258842.38	26173.25517	0.66643	0.4258	0.73265	0.41156	1.20E-03	2.73E-05	1.52E-05	3.00E-05	1.41E-05	1.2874E-03
520095.33	4259157.99	26143.8389	12.33657	0.21597	11.51765	0.20358	1.20E-03	5.05E-04	7.72E-06	4.72E-04	6.99E-06	2.1908E-03
520624.38	4258828.79	26143.57436	0.16331	0.11414	0.158	0.11819	1.20E-03	6.69E-06	4.08E-06	6.47E-06	4.06E-06	1.2207E-03
520643.17	4258736.05	26142.53598	0.14776	0.12124	0.14255	0.12579	1.20E-03	6.05E-06	4.34E-06	5.84E-06	4.32E-06	1.2199E-03
520043.46	4259115.77	26127.53376	5.24457	0.22125	7.17551	0.21528	1.20E-03	2.15E-04	7.91E-06	2.94E-04	7.39E-06	1.7225E-03
520247.06	4258122.84	26119.54325	0.17683	1.33794	0.18406	1.46439	1.20E-03	7.24E-06	4.79E-05	7.54E-06	5.03E-05	1.3112E-03
519989.85	4258608.84	26111.20312	0.6371	1.51554	0.74521	1.38437	1.20E-03	2.61E-05	5.42E-05	3.05E-05	4.75E-05	1.3563E-03
520055.26	4259127.23	26076.2879	7.91443	0.21933	13.65884	0.21194	1.20E-03	3.24E-04	7.85E-06	5.59E-04	7.28E-06	2.0947E-03
520620.78	4258384.62	26074.73393	0.14043	0.15699	0.13749	0.16433	1.20E-03	5.75E-06	5.62E-06	5.63E-06	5.64E-06	1.2189E-03
519967.12	4258664.6	26069.13946	0.60798	0.99823	0.69188	0.93199	1.20E-03	2.49E-05	3.57E-05	2.83E-05	3.20E-05	1.3169E-03
519932.94	4258865.97	26061.02349	0.6913	0.39106	0.75969	0.38009	1.20E-03	2.83E-05	1.40E-05	3.11E-05	1.30E-05	1.2821E-03
520602.3	4258181.69	26056.68456	0.13021	0.1783	0.13018	0.18702	1.20E-03	5.33E-06	6.38E-06	5.33E-06	6.42E-06	1.2189E-03
520627.94	4258820.29	26034.20002	0.16083	0.11451	0.15557	0.11848	1.19E-03	6.59E-06	4.10E-06	6.37E-06	4.07E-06	1.2155E-03
520148.86	4258222.53	26029.34724	0.21018	4.20561	0.21247	4.84596	1.19E-03	8.61E-06	1.50E-04	8.70E-06	1.66E-04	1.5283E-03
520586	4258923.84	25993.60261	0.19186	0.10907	0.18557	0.11368	1.19E-03	7.86E-06	3.90E-06	7.60E-06	3.90E-06	1.2158E-03
520643.91	4258710.34	25992.23429	0.14584	0.12409	0.14067	0.12866	1.19E-03	5.97E-06	4.44E-06	5.76E-06	4.42E-06	1.2131E-03
520598.1	4258898.82	25963.70019	0.18275	0.11	0.17697	0.11445	1.19E-03	7.48E-06	3.93E-06	7.25E-06	3.93E-06	1.2138E-03
520631.5	4258811.8	25900.16578	0.15839	0.11485	0.15317	0.11876	1.19E-03	6.49E-06	4.11E-06	6.27E-06	4.08E-06	1.2092E-03
520642.59	4258761.36	25894.41089	0.1496	0.11836	0.14431	0.1226	1.19E-03	6.13E-06	4.23E-06	5.91E-06	4.21E-06	1.2085E-03
519939.82	4258762.01	25854.67519	0.60233	0.58525	0.66561	0.55764	1.19E-03	2.47E-05	2.09E-05	2.73E-05	1.91E-05	1.2782E-03
520256.88	4258112.87	25843.47367	0.17344	1.23147	0.1812	1.34313	1.19E-03	7.10E-06	4.40E-05	7.42E-06	4.61E-05	1.2903E-03
519933.52	4258891.5	25837.87121	0.72212	0.35804	0.7924	0.35007	1.19E-03	2.96E-05	1.28E-05	3.24E-05	1.20E-05	1.2722E-03
519932.63	4258817	25834.67934	0.6313	0.46541	0.69247	0.44751	1.19E-03	2.58E-05	1.66E-05	2.84E-05	1.54E-05	1.2715E-03
520611.58	4258463.91	25826.45038	0.14843	0.15633	0.14432	0.16394	1.18E-03	6.08E-06	5.59E-06	5.91E-06	5.63E-06	1.2081E-03
520565.36	4258962.41	25805.72147	0.20791	0.10827	0.20063	0.11296	1.18E-03	8.51E-06	3.87E-06	8.21E-06	3.88E-06	1.2084E-03
520617.25	4258427.06	25803.36852	0.1443	0.15597	0.14086	0.16331	1.18E-03	5.91E-06	5.58E-06	5.77E-06	5.61E-06	1.2067E-03
519977.12	4258636.77	25776.8955	0.61172	1.1995	0.7	1.11302	1.18E-03	2.50E-05	4.29E-05	2.87E-05	3.82E-05	1.3174E-03
519954.29	4258700.45	25758.59544	0.59322	0.79508	0.66501	0.7504	1.18E-03	2.43E-05	2.84E-05	2.72E-05	2.58E-05	1.2875E-03
520635.05	4258803.31	25739.6893	0.15599	0.11517	0.15082	0.11902	1.18E-03	6.39E-06	4.12E-06	6.18E-06	4.09E-06	1.2017E-03
520119.37	4258262.44	25732.71182	0.22745	7.70584	0.23266	9.04117	1.18E-03	9.31E-06	2.76E-04	9.53E-06	3.10E-04	1.7854E-03
520029.48	4258521.39	25713.45453	0.61609	3.97682	0.70406	3.25444	1.18E-03	2.52E-05	1.42E-04	2.88E-05	1.12E-04	1.4877E-03
519942.8	4258745.07	25702.12254	0.59329	0.63163	0.65944	0.60008	1.18E-03	2.43E-05	2.26E-05	2.70E-05	2.06E-05	1.2736E-03
520624.83	4258343.51	25700.07873	0.13623	0.15716	0.13411	0.16481	1.18E-03	5.58E-06	5.62E-06	5.49E-06	5.66E-06	1.2014E-03
520620.79	4258249.68	25660.77268	0.13029	0.1659	0.12908	0.17251	1.18E-03	5.33E-06	5.93E-06	5.29E-06	5.92E-06	1.1997E-03
520574.94	4258948.44	25645.84751	0.2003	0.10802	0.19349	0.11267	1.18E-03	8.20E-06	3.86E-06	7.92E-06	3.87E-06	1.2004E-03
520619.5	4258239.12	25637.30293	0.12984	0.16703	0.12856	0.17373	1.18E-03	5.32E-06	5.97E-06	5.26E-06	5.96E-06	1.1987E-03
520622.2	4258260.3	25628.31896	0.13069	0.16458	0.1296	0.17118	1.18E-03	5.35E-06	5.89E-06	5.31E-06	5.88E-06	1.1982E-03
520139.04	4258232.5	25627.03687	0.21318	5.01367	0.2159	5.82424	1.18E-03	8.73E-06	1.79E-04	8.84E-06	2.00E-04	1.5726E-03
520625.51	4258319.42	25625.67419	0.13431	0.15816	0.13281	0.16579	1.18E-03	5.50E-06	5.66E-06	5.44E-06	5.69E-06	1.1979E-03
520197.99	4258162.69	25621.2753	0.18737	2.16468	0.19063	2.41454	1.18E-03	7.67E-06	7.74E-05	7.81E-06	8.29E-05	1.3513E-03
520624.44	4258368.34	25616.98366	0.13804	0.15602	0.13533	0.1634	1.18E-03	5.65E-06	5.58E-06	5.54E-06	5.61E-06	1.1976E-03
520620.66	4258410.15	25615.82311	0.14202	0.15547	0.13877	0.16266	1.18E-03	5.81E-06	5.56E-06	5.68E-06	5.58E-06	1.1978E-03
520551.75	4258988.06	25609.92361	0.2198	0.10786	0.21183	0.1125	1.17E-03	9.00E-06	3.86E-06	8.67E-06	3.86E-06	1.2003E-03
520188.17	4258172.66	25605.20002	0.19051	2.42372	0.19317	2.71882	1.17E-03	7.80E-06	8.67E-05	7.91E-06	9.33E-05	1.3705E-03
520646.78	4258727.42	25602.55578	0.14553	0.12127	0.14051	0.12577	1.17E-03	5.96E-06	4.34E-06	5.75E-06	4.32E-06	1.1950E-03
520613.37	4258206.46	25600.10261	0.12906	0.17121	0.12809	0.17875	1.17E-03	5.28E-06	6.12E-06	5.24E-06	6.14E-06	1.1973E-03
520085.43	4259158.01	25591.79397	16.40962	0.21316	18.29117	0.2021	1.17E-03	6.72E-04	7.62E-06	7.49E-04	6.94E-06	2.6095E-03
520596.15	4258909.64	25577.70311	0.18441	0.1088	0.17856	0.11327	1.17E-03	7.55E-06	3.89E-06	7.31E-06	3.89E-06	1.1961E-03
520207.81	4258152.72	25575.853	0.18419	1.94677	0.18815	2.15986	1.17E-03	7.54E-06	6.96E-05	7.70E-06	7.42E-05	1.3324E-03
520618.3	4258228.59	25560.0225	0.12936	0.16803	0.12808	0.17488	1.17E-03	5.30E-06	6.01E-06	5.24E-06	6.00E-06	1.1952E-03
520638.61	4258794.82	25546.36443	0.15364	0.11539	0.14849	0.11922	1.17E-03	6.29E-06	4.13E-06	6.08E-06	4.09E-06	1.1926E-03
520039.36	4258492.26	25512.17175	0.5417	5.45468	0.60135	4.27519	1.17E-03	2.22E-05	1.95E-04	2.46E-05	1.47E-04	1.5591E-03
520217.63	4258142.75	25511.03479	0.18111	1.76051	0.18572	1.94583	1.17E-03	7.42E-06	6.30E-05	7.60E-06	6.68E-05	1.3152E-03
520042.98	4258473.67	25501.90201	0.48518	6.2486	0.53192	4.74921	1.17E-03	1.99E-05	2.24E-04	2.18E-05	1.63E-04	1.5982E-03
520646.17	4258752.8	25501.63933	0.14736	0.1184	0.14222	0.1227	1.17E-03	6.03E-06	4.24E-06	5.82E-06	4.21E-06	1.1903E-03
520178.35	4258182.63	25495.533	0.19353	2.73799	0.19577	3.08464	1.17E-03	7.92E-06	9.79E-05	8.02E-06	1.06E-04	1.3895E-03
520561.49	4258974.02	25467.23512	0.21125	0.10755	0.20378	0.11218	1.17E-03	8.65E-06	3.85E-06	8.34E-06	3.85E-06	1.1931E-03
520617.19	4258218.1	25448.23359	0.12887	0.16882	0.12766	0.17591	1.17E-03	5.28E-06	6.04E-06	5.23E-06	6.04E-06	1.1901E-03
520584.7	4258934.39	25441.95837	0.19295	0.10778	0.18659	0.11236	1.17E-03	7.90E-06	3.86E-06	7.64E-06	3.86E-06	1.1905E-03
520064.11	4258372.91	25425.2137	0.30089	19.68454	0.32213	9.93187	1.17E-03	1.23E-05	7.04E-04	1.32E-05	3.41E-04	2.2370E-03
520612.23	4258195.95	25417.13734	0.12856	0.17194	0.12784	0.17979	1.17E-03	5.26E-06	6.15E-06	5.23E-06	6.17E-06	1.1889E-03
520624.86	4258271.45	25409.95069	0.1308	0.16225	0.12975	0.16898	1.17E-03	5.36E-06	5.80E-06	5.31E-06	5.80E-06	1.1880E-03
519945.66	4258727.85	25399.92897	0.58354	0.682	0.64922	0.64699	1.17E-03	2.39E-05	2.44E-05	2.66E-05	2.22E-05	1.2624E-03
520045.36	4259127.25	25386.86661	5.60187	0.21537	7.80977	0.20939	1.16E-03	2.29E-04	7.70E-06	3.20E-04	7.19E-06	1.7287E-03
520227.45	4258132.78	25383.72452	0.17798	1.6007	0.18327	1.76192	1.16E-03	7.29E-06	5.73E-05	7.50E-06	6.05E-05	1.2971E-03
519929.15	4258856.83	25370.04645	0.6525	0.39951	0.71532	0.38725	1.16E-03	2.67E-05	1.43E-05	2.93E-05	1.33E-05	1.2475E-03
519935.82	4258927.45	25367.50145	0.77384	0.31869	0.84786	0.31375	1.16E-03	3.17E-05	1.14E-05	3.47E-05	1.08E-05	1.2524E-03
520168.53	4258192.6	25360.03364	0.19663	3.12028	0.19851	3.54089	1.16E-03	8.05E-06	1.12E-04	8.13E-06	1.22E-04	1.4128E-03
519929.49	4258833.54	25356.69185	0.62867	0.43413	0.68887	0.41865	1.16E-03	2.57E-05	1.55E-05	2.82E-05	1.44E-05	1.2472E-03
520055.28	4259137.23	25356.10449	7.98042	0.21378	13.76745	0.20664	1.16E-03	3.27E-04	7.65E-06	5.64E-04	7.09E-06	2.0685E-03
520095.34	4259167.99	25347.08696	12.22931	0.21055	11.4864	0.19859	1.16E-03	5.01E-04	7.53E-06	4.70E-04	6.82E-06	2.1482E-03
520624.18	4258393.54	25327.03218	0.13971	0.15473	0.13662	0.16186	1.16E-03	5.72E-06	5.53E-06	5.59E-06	5.56E-06	1.1844E-03
520099.7	4258292.38	25322.1174	0.24174	14.47958	0.25116	15.42029	1.16E-03	9.90E-06	5.18E-04	1.03E-05	5.29E-04	2.2292E-03
520626.19	4258282.04	25320.25051	0.13122	0.16073	0.1302	0.16763	1.16E-03	5.37E-06	5.75E-06	5.33E-06	5.75E-06	1.1839E-03
520642.16	4258786.32	25320.02337	0.15134	0.1155	0.1462	0.11935	1.16E-03	6.20E-06	4.13E-06	5.99E-06	4.10E-06	1.1820E-03
519929.76	4258882.44	25306.97459	0.68369	0.36591	0.74878	0.35686	1.16E-03	2.80E-05	1.31E-05	3.07E-05	1.23E-05	1.2450E-03
520647.55	4258701.64	25304.4457	0.14369	0.12409	0.13861	0.12849	1.16E-03	5.88E-06	4.44E-06	5.68E-06	4.41E-06	1.1813E-03
519937.54	4258938.15	25302.75208	0.79763	0.30901	0.87448	0.30467	1.16E-03	3.27E-05	1.11E-05	3.58E-05	1.05E-05	1.2508E-03
519940.09	4258949.2	25302.73606	0.82951	0.29987	0.91045	0.29605	1.16E-03	3.40E-05	1.07E-05	3.73E-05	1.02E-05	1.2530E-03
520237.27	4258122.81	25228.63696	0.17489	1.46182	0.18082	1.60356	1.16E-03	7.16E-06	5.23E-05	7.40E-06	5.51E-05	1.2793E-03
520611.16	4258185.48	25204.28491	0.12803	0.17262	0.12763	0.18077	1.16E-03	5.24E-06	6.17E-06	5.23E-06	6.21E-06	1.1792E-03
520627.65	4258292.67	25187.60335	0.1316	0.15903	0.13051	0.16615	1.16E-03	5.39E-06	5.69E-06	5.34E-06	5.70E-06	1.1777E-03
519941.85	4258959.92	25158.33892	0.8542	0.29095	0.9383	0.28755	1.15E-03	3.50E-05	1.04E-05	3.84E-05	9.87E-06	1.2479E-03
520594.67	4258920.26	25139.08736	0.18571	0.10755	0.17979	0.11202	1.15E-03	7.60E-06	3.85E-06	7.36E-06	3.85E-06	1.1760E-03
520158.71	4258202.57	25136.49035	0.19962	3.5994	0.20137	4.113	1.15E-03	8.17E-06	1.29E-04	8.24E-06	1.41E-04	1.4396E-03
519934.85	4258774.14	25130.72929	0.58619	0.54676	0.6438	0.52235	1.15E-03	2.40E-05	1.96E-05	2.64E-05	1.79E-05	1.2408E-03
520129.22	4258242.47	25129.41088	0.21596	6.12265	0.2195	7.16076	1.15E-03	8.84E-06	2.19E-04	8.99E-06	2.46E-04	1.6356E-03
520628.17	4258352.27	25110.41188	0.13569	0.15482	0.13325	0.16227	1.15E-03	5.56E-06	5.54E-06	5.46E-06	5.57E-06	1.1741E-03
520613.61	4258878.45	25095.14855	0.17207	0.10938	0.16681	0.11354	1.15E-03	7.05E-06	3.91E-06	6.83E-06	3.90E-06	1.1730E-03
520610.08	4258886.89	25093.87732	0.17459	0.10893	0.16922	0.11316	1.15E-03	7.15E-06	3.90E-06	6.93E-06	3.88E-06	1.1731E-03
520019.56	4258540.83	25079.88416	0.63263	3.02761	0.73768	2.56388	1.15E-03	2.59E-05	1.08E-04	3.02E-05	8.80E-05	1.4030E-03
520617.14	4258870.02	25079.15045	0.16958	0.1098	0.1644	0.11391	1.15E-03	6.94E-06	3.93E-06	6.73E-06	3.91E-06	1.1721E-03
520649.76	4258744.25	25065.4676	0.14517	0.11837	0.14019	0.1227	1.15E-03	5.94E-06	4.23E-06	5.74E-06	4.21E-06	1.1701E-03
520573.86	4258958.89	25060.86971	0.20115	0.10674	0.19428	0.11132	1.15E-03	8.24E-06	3.82E-06	7.95E-06	3.82E-06	1.1736E-03
519931.94	4258791.23	25053.74825	0.59102	0.50842	0.64768	0.48681	1.15E-03	2.42E-05	1.82E-05	2.65E-05	1.67E-05	1.2350E-03
520247.09	4258112.84	25044.22778	0.17184	1.34028	0.17834	1.46587	1.15E-03	7.04E-06	4.79E-05	7.30E-06	5.03E-05	1.2616E-03
520620.68	4258861.59	25036.79454	0.16713	0.11014	0.16196	0.11421	1.15E-03	6.84E-06	3.94E-06	6.63E-06	3.92E-06	1.1700E-03
520650.39	4258718.8	25022.01253	0.1434	0.12117	0.13849	0.12559	1.15E-03	5.87E-06	4.33E-06	5.67E-06	4.31E-06	1.1681E-03
520109.55	4258272.41	25015.16374	0.22984	10.18168	0.23659	11.81758	1.15E-03	9.41E-06	3.64E-04	9.69E-06	4.06E-04	1.9366E-03
520614.91	4258472.67	25010.46701	0.1474	0.15404	0.14302	0.16151	1.15E-03	6.04E-06	5.51E-06	5.86E-06	5.54E-06	1.1704E-03
520624.21	4258853.15	24990.60063	0.16471	0.11047	0.15956	0.1145	1.15E-03	6.74E-06	3.95E-06	6.53E-06	3.93E-06	1.1677E-03
519930.24	4258907.71	24973.60378	0.71111	0.33597	0.7774	0.32949	1.15E-03	2.91E-05	1.20E-05	3.18E-05	1.13E-05	1.2300E-03
520645.72	4258777.83	24959.52114	0.14894	0.11531	0.14379	0.11925	1.15E-03	6.10E-06	4.12E-06	5.89E-06	4.09E-06	1.1653E-03
520627.8	4258377.18	24948.3264	0.1374	0.15381	0.13448	0.16094	1.14E-03	5.63E-06	5.50E-06	5.51E-06	5.53E-06	1.1667E-03
520048.09	4258429.46	24926.58895	0.3737	7.68649	0.402	5.63349	1.14E-03	1.53E-05	2.75E-04	1.65E-05	1.93E-04	1.6437E-03
520620.72	4258436.19	24895.70684	0.14339	0.15353	0.13978	0.16078	1.14E-03	5.87E-06	5.49E-06	5.72E-06	5.52E-06	1.1648E-03
520583.48	4258944.9	24894.1607	0.19393	0.10653	0.1875	0.11106	1.14E-03	7.94E-06	3.81E-06	7.68E-06	3.81E-06	1.1653E-03
520560.44	4258984.46	24880.70023	0.21222	0.10632	0.20468	0.11086	1.14E-03	8.69E-06	3.80E-06	8.38E-06	3.81E-06	1.1662E-03
520631.27	4258836.28	24857.624	0.1599	0.11124	0.15488	0.11515	1.14E-03	6.55E-06	3.98E-06	6.34E-06	3.95E-06	1.1612E-03
520148.89	4258212.53	24834.37366	0.2025	4.21308	0.2044	4.85041	1.14E-03	8.29E-06	1.51E-04	8.37E-06	1.67E-04	1.4732E-03
519957.12	4258683.15	24832.72823	0.57349	0.86143	0.64606	0.80998	1.14E-03	2.35E-05	3.08E-05	2.65E-05	2.78E-05	1.2478E-03
519928.93	4258808.07	24831.65265	0.59318	0.47342	0.64844	0.45453	1.14E-03	2.43E-05	1.69E-05	2.65E-05	1.56E-05	1.2226E-03
519967.12	4258655.32	24827.07198	0.58213	1.02509	0.6592	0.9583	1.14E-03	2.38E-05	3.67E-05	2.70E-05	3.29E-05	1.2594E-03
520085.44	4259168.01	24826.1237	16.35577	0.20779	18.20768	0.19713	1.14E-03	6.70E-04	7.43E-06	7.45E-04	6.77E-06	2.5683E-03
519948.37	4258710.28	24785.83095	0.56826	0.73706	0.63402	0.69765	1.14E-03	2.33E-05	2.64E-05	2.60E-05	2.40E-05	1.2367E-03
520624.09	4258419.17	24775.38042	0.1412	0.15307	0.1378	0.16015	1.14E-03	5.78E-06	5.48E-06	5.64E-06	5.50E-06	1.1590E-03
520618.37	4258455.89	24753.761	0.14525	0.15334	0.14127	0.16073	1.14E-03	5.95E-06	5.48E-06	5.78E-06	5.52E-06	1.1584E-03
520570.23	4258970.4	24725.99414	0.2041	0.10599	0.19705	0.11052	1.13E-03	8.36E-06	3.79E-06	8.07E-06	3.79E-06	1.1584E-03
520634.8	4258827.85	24724.33141	0.15748	0.11145	0.15246	0.11531	1.13E-03	6.45E-06	3.99E-06	6.24E-06	3.96E-06	1.1549E-03
519926.01	4258873.38	24720.75305	0.64709	0.37373	0.70722	0.36353	1.13E-03	2.65E-05	1.34E-05	2.90E-05	1.25E-05	1.2154E-03
520045.38	4259137.25	24713.72123	5.64302	0.21001	7.85107	0.2042	1.13E-03	2.31E-04	7.51E-06	3.21E-04	7.01E-06	1.7008E-03
520009.65	4258560.27	24709.80679	0.63378	2.3707	0.74578	2.06469	1.13E-03	2.59E-05	8.48E-05	3.05E-05	7.09E-05	1.3458E-03
520604.88	4258906.02	24702.69683	0.17853	0.10728	0.17301	0.11159	1.13E-03	7.31E-06	3.84E-06	7.08E-06	3.83E-06	1.1554E-03
520593.3	4258930.83	24684.22782	0.18686	0.10631	0.18087	0.11075	1.13E-03	7.65E-06	3.80E-06	7.41E-06	3.80E-06	1.1551E-03
520055.71	4259147.23	24661.89529	8.13276	0.2086	14.31301	0.20162	1.13E-03	3.33E-04	7.46E-06	5.86E-04	6.92E-06	2.0648E-03
520649.28	4258769.34	24655.61212	0.14673	0.1153	0.14164	0.11931	1.13E-03	6.01E-06	4.12E-06	5.80E-06	4.10E-06	1.1512E-03
520638.33	4258819.41	24640.16403	0.15519	0.11183	0.15022	0.11562	1.13E-03	6.35E-06	4.00E-06	6.15E-06	3.97E-06	1.1509E-03
520622.35	4258210.3	24627.19276	0.1268	0.16582	0.1256	0.17282	1.13E-03	5.19E-06	5.93E-06	5.14E-06	5.93E-06	1.1520E-03
519925.35	4258847.69	24619.03331	0.61555	0.40764	0.67284	0.39412	1.13E-03	2.52E-05	1.46E-05	2.75E-05	1.35E-05	1.2103E-03
520653.34	4258735.69	24591.55001	0.14304	0.11831	0.13822	0.12265	1.13E-03	5.86E-06	4.23E-06	5.66E-06	4.21E-06	1.1482E-03
520651.19	4258692.94	24588.43318	0.1416	0.12394	0.13654	0.1282	1.13E-03	5.80E-06	4.43E-06	5.59E-06	4.40E-06	1.1483E-03
520095.36	4259177.99	24577.28283	12.18774	0.20529	11.44472	0.19376	1.13E-03	4.99E-04	7.34E-06	4.69E-04	6.65E-06	2.1092E-03
520119.4	4258252.44	24576.50676	0.21855	7.71638	0.22316	9.11469	1.13E-03	8.95E-06	2.76E-04	9.14E-06	3.13E-04	1.7345E-03
520627.58	4258402.46	24567.64966	0.13897	0.15243	0.13573	0.1594	1.13E-03	5.69E-06	5.45E-06	5.56E-06	5.47E-06	1.1493E-03
520039.32	4258482.56	24550.56962	0.50121	5.49239	0.55201	4.28891	1.13E-03	2.05E-05	1.96E-04	2.26E-05	1.47E-04	1.5132E-03
519926.52	4258898.73	24528.45038	0.67477	0.34333	0.73685	0.33587	1.13E-03	2.76E-05	1.23E-05	3.02E-05	1.15E-05	1.2069E-03
520054.1	4258397.01	24527.51633	0.32208	10.06846	0.34506	6.87415	1.13E-03	1.32E-05	3.60E-04	1.41E-05	2.36E-04	1.7487E-03
520628.33	4258242.9	24516.09981	0.12751	0.16182	0.12624	0.16813	1.12E-03	5.22E-06	5.79E-06	5.17E-06	5.77E-06	1.1467E-03
520641.86	4258810.98	24515.61659	0.15293	0.11224	0.14802	0.11596	1.12E-03	6.26E-06	4.01E-06	6.06E-06	3.98E-06	1.1450E-03
520631.5	4258361.03	24506.0456	0.1351	0.15263	0.1324	0.15984	1.12E-03	5.53E-06	5.46E-06	5.42E-06	5.49E-06	1.1462E-03
520627.08	4258232.35	24495.32882	0.12707	0.16287	0.12575	0.16927	1.12E-03	5.20E-06	5.83E-06	5.15E-06	5.81E-06	1.1458E-03
520629.7	4258253.5	24491.86012	0.12792	0.16056	0.12673	0.16688	1.12E-03	5.24E-06	5.74E-06	5.19E-06	5.73E-06	1.1455E-03
520064.53	4258362.75	24490.46865	0.28621	20.35148	0.30587	10.05851	1.12E-03	1.17E-05	7.28E-04	1.25E-05	3.45E-04	2.2211E-03
520632.69	4258312.41	24490.39673	0.13147	0.15461	0.12997	0.16196	1.12E-03	5.38E-06	5.53E-06	5.32E-06	5.56E-06	1.1454E-03
520621.14	4258199.77	24490.1549	0.12632	0.16663	0.12534	0.1739	1.12E-03	5.17E-06	5.96E-06	5.13E-06	5.97E-06	1.1458E-03
520198.02	4258152.69	24485.54687	0.18128	2.1687	0.18401	2.41506	1.12E-03	7.42E-06	7.76E-05	7.53E-06	8.29E-05	1.2988E-03
519925.82	4258824.69	24483.28352	0.59261	0.44191	0.64715	0.42536	1.12E-03	2.43E-05	1.58E-05	2.65E-05	1.46E-05	1.2044E-03
520207.84	4258142.72	24482.09181	0.17845	1.94957	0.18175	2.16205	1.12E-03	7.31E-06	6.97E-05	7.44E-06	7.42E-05	1.2819E-03
520632.46	4258337.68	24480.25348	0.13324	0.15341	0.13113	0.1608	1.12E-03	5.46E-06	5.49E-06	5.37E-06	5.52E-06	1.1449E-03
520188.2	4258162.66	24474.44245	0.18424	2.42769	0.18637	2.72072	1.12E-03	7.54E-06	8.68E-05	7.63E-06	9.34E-05	1.3183E-03
519999.73	4258579.7	24461.43823	0.62241	1.90211	0.73561	1.69457	1.12E-03	2.55E-05	6.80E-05	3.01E-05	5.82E-05	1.3041E-03
520139.07	4258222.5	24457.3604	0.20526	5.02259	0.20759	5.83078	1.12E-03	8.40E-06	1.80E-04	8.50E-06	2.00E-04	1.5188E-03
520625.91	4258221.84	24444.63378	0.12663	0.16371	0.12531	0.17031	1.12E-03	5.18E-06	5.86E-06	5.13E-06	5.85E-06	1.1435E-03
520217.66	4258132.75	24437.7424	0.17562	1.76298	0.17954	1.9479	1.12E-03	7.19E-06	6.31E-05	7.35E-06	6.69E-05	1.2656E-03
520652.83	4258760.84	24412.07286	0.14473	0.11546	0.13977	0.11954	1.12E-03	5.93E-06	4.13E-06	5.72E-06	4.10E-06	1.1399E-03
520654	4258710.17	24409.35378	0.14132	0.12112	0.13651	0.12541	1.12E-03	5.79E-06	4.33E-06	5.59E-06	4.31E-06	1.1399E-03
520631.17	4258264.14	24406.40295	0.12828	0.15917	0.12719	0.16555	1.12E-03	5.25E-06	5.69E-06	5.21E-06	5.68E-06	1.1416E-03
519936.19	4258753.25	24375.86386	0.55938	0.59161	0.61827	0.56342	1.12E-03	2.29E-05	2.12E-05	2.53E-05	1.93E-05	1.2070E-03
520178.39	4258172.63	24366.56221	0.18703	2.74183	0.18879	3.08667	1.12E-03	7.66E-06	9.81E-05	7.73E-06	1.06E-04	1.3373E-03
520645.4	4258802.55	24350.97148	0.15066	0.11253	0.1458	0.1162	1.12E-03	6.17E-06	4.03E-06	5.97E-06	3.99E-06	1.1373E-03
520582.36	4258955.37	24346.01731	0.19476	0.10528	0.18826	0.10975	1.12E-03	7.97E-06	3.77E-06	7.71E-06	3.77E-06	1.1402E-03
520620.02	4258189.27	24337.4922	0.12586	0.16726	0.12513	0.17484	1.12E-03	5.15E-06	5.98E-06	5.12E-06	6.00E-06	1.1388E-03
520227.48	4258122.78	24330.08958	0.17273	1.60303	0.17731	1.76366	1.12E-03	7.07E-06	5.73E-05	7.26E-06	6.05E-05	1.2484E-03
520603.33	4258916.67	24309.04856	0.17982	0.10609	0.17425	0.1104	1.12E-03	7.36E-06	3.79E-06	7.13E-06	3.79E-06	1.1373E-03
520618.25	4258481.43	24278.904	0.14633	0.15181	0.14168	0.15909	1.11E-03	5.99E-06	5.43E-06	5.80E-06	5.46E-06	1.1366E-03
520631.17	4258386.02	24266.86702	0.13672	0.15161	0.13363	0.15854	1.11E-03	5.60E-06	5.42E-06	5.47E-06	5.44E-06	1.1353E-03
520168.57	4258182.6	24233.64043	0.1899	3.12452	0.19134	3.54364	1.11E-03	7.78E-06	1.12E-04	7.83E-06	1.22E-04	1.3608E-03
519989.81	4258599.14	24220.22366	0.60273	1.55402	0.70523	1.41582	1.11E-03	2.47E-05	5.56E-05	2.89E-05	4.86E-05	1.2689E-03
520633.54	4258275.17	24204.50464	0.12845	0.157	0.12735	0.16359	1.11E-03	5.26E-06	5.62E-06	5.21E-06	5.62E-06	1.1322E-03
520237.3	4258112.81	24202.22634	0.1699	1.46386	0.1751	1.6052	1.11E-03	6.96E-06	5.24E-05	7.17E-06	5.51E-05	1.2319E-03
520569.12	4258980.87	24186.63084	0.20508	0.10482	0.19795	0.10927	1.11E-03	8.40E-06	3.75E-06	8.10E-06	3.75E-06	1.1336E-03
520043.36	4258448.48	24185.20678	0.40703	6.40089	0.43972	4.88744	1.11E-03	1.67E-05	2.29E-04	1.80E-05	1.68E-04	1.5410E-03
520099.73	4258282.38	24182.80639	0.23165	14.52717	0.24028	15.60521	1.11E-03	9.48E-06	5.20E-04	9.84E-06	5.36E-04	2.1841E-03
520592.03	4258941.36	24171.1186	0.18785	0.10508	0.18177	0.10949	1.11E-03	7.69E-06	3.76E-06	7.44E-06	3.76E-06	1.1316E-03
520648.93	4258794.11	24157.83601	0.14846	0.1127	0.1436	0.11637	1.11E-03	6.08E-06	4.03E-06	5.88E-06	4.00E-06	1.1283E-03
519939.13	4258736.23	24150.29045	0.55213	0.63652	0.61026	0.60564	1.11E-03	2.26E-05	2.28E-05	2.50E-05	2.08E-05	1.1991E-03
519930.98	4258945.44	24139.45444	0.74757	0.29781	0.81629	0.29382	1.11E-03	3.06E-05	1.07E-05	3.34E-05	1.01E-05	1.1922E-03
519928.69	4258934.5	24114.86169	0.72116	0.30679	0.78675	0.30219	1.11E-03	2.95E-05	1.10E-05	3.22E-05	1.04E-05	1.1894E-03
520085.46	4259178.01	24088.43505	16.27538	0.20264	18.11618	0.19236	1.11E-03	6.66E-04	7.25E-06	7.42E-04	6.60E-06	2.5271E-03
520656.92	4258727.13	24079.82293	0.14098	0.11824	0.13628	0.12253	1.10E-03	5.77E-06	4.23E-06	5.58E-06	4.21E-06	1.1245E-03
519922.25	4258864.32	24078.12065	0.61215	0.38136	0.66732	0.36999	1.10E-03	2.51E-05	1.36E-05	2.73E-05	1.27E-05	1.1834E-03
520634.94	4258285.78	24071.76332	0.12881	0.15548	0.12769	0.16226	1.10E-03	5.27E-06	5.56E-06	5.23E-06	5.57E-06	1.1260E-03
519932.82	4258956.19	24063.93367	0.7705	0.28909	0.84191	0.2856	1.10E-03	3.15E-05	1.03E-05	3.45E-05	9.80E-06	1.1902E-03

520045.81	4259147.25	24058.55565	5.72878	0.20501	8.04072	0.19931	1.10E-03	2.35E-04	7.33E-06	3.29E-04	6.84E-06	1.6817E-03
520656.39	4258752.35	24032.84248	0.14262	0.11551	0.13782	0.11964	1.10E-03	5.84E-06	4.13E-06	5.64E-06	4.11E-06	1.1223E-03
519922.79	4258889.74	24028.62931	0.64009	0.35055	0.69779	0.34207	1.10E-03	2.62E-05	1.25E-05	2.86E-05	1.17E-05	1.1814E-03
520158.75	4258192.57	24016.95309	0.19265	3.60439	0.19402	4.11604	1.10E-03	7.89E-06	1.29E-04	7.94E-06	1.41E-04	1.3879E-03
520578.97	4258966.78	24007.33836	0.19732	0.10448	0.19064	0.1089	1.10E-03	8.08E-06	3.74E-06	7.81E-06	3.74E-06	1.1248E-03
520129.25	4258232.47	24002.65574	0.20783	6.13214	0.21093	7.18204	1.10E-03	8.51E-06	2.19E-04	8.64E-06	2.47E-04	1.5842E-03
520049.63	4258408.85	23979.504	0.33415	8.19372	0.35782	5.94987	1.10E-03	1.37E-05	2.93E-04	1.47E-05	2.04E-04	1.6258E-03
520055.72	4259157.23	23962.05873	8.186	0.20341	14.40907	0.19667	1.10E-03	3.35E-04	7.28E-06	5.90E-04	6.75E-06	2.0385E-03
520621.67	4258464.56	23956.65913	0.14427	0.15115	0.14005	0.15842	1.10E-03	5.91E-06	5.41E-06	5.73E-06	5.44E-06	1.1216E-03
520627.53	4258428.19	23937.11718	0.14035	0.15067	0.13679	0.15767	1.10E-03	5.75E-06	5.39E-06	5.60E-06	5.41E-06	1.1203E-03
520652.46	4258785.68	23931.79361	0.1463	0.11275	0.14145	0.11646	1.10E-03	5.99E-06	4.03E-06	5.79E-06	4.00E-06	1.1178E-03
520635.94	4258346.8	23908.87399	0.1327	0.15104	0.13024	0.15825	1.10E-03	5.43E-06	5.40E-06	5.33E-06	5.43E-06	1.1185E-03
520601.91	4258927.27	23899.05878	0.18099	0.10489	0.17534	0.10919	1.10E-03	7.41E-06	3.75E-06	7.18E-06	3.75E-06	1.1185E-03
520634.84	4258369.79	23890.23928	0.13447	0.15059	0.13157	0.15754	1.10E-03	5.51E-06	5.39E-06	5.39E-06	5.41E-06	1.1177E-03
520054.92	4258386.69	23886.61801	0.30613	10.47884	0.32744	7.09565	1.10E-03	1.25E-05	3.75E-04	1.34E-05	2.44E-04	1.7402E-03
520109.58	4258262.41	23874.45137	0.22059	10.20896	0.22682	11.8116	1.10E-03	9.03E-06	3.65E-04	9.29E-06	4.06E-04	1.8843E-03
520617.26	4258893.69	23866.47322	0.1704	0.10624	0.16529	0.11032	1.09E-03	6.98E-06	3.80E-06	6.77E-06	3.79E-06	1.1163E-03
519979.89	4258618.58	23865.46296	0.57997	1.298	0.66666	1.20137	1.09E-03	2.37E-05	4.64E-05	2.73E-05	4.12E-05	1.2336E-03
520620.91	4258884.98	23863.0545	0.16792	0.10666	0.16291	0.11069	1.09E-03	6.88E-06	3.82E-06	6.67E-06	3.80E-06	1.1160E-03
519928.21	4258782.23	23861.37885	0.55314	0.51518	0.60415	0.49321	1.09E-03	2.26E-05	1.84E-05	2.47E-05	1.69E-05	1.1775E-03
520095.38	4259187.99	23848.69627	12.09062	0.20029	11.40588	0.18916	1.09E-03	4.95E-04	7.16E-06	4.67E-04	6.49E-06	2.0698E-03
520624.55	4258876.26	23848.48276	0.16547	0.10709	0.16054	0.11106	1.09E-03	6.78E-06	3.83E-06	6.57E-06	3.81E-06	1.1151E-03
520029.44	4258511.69	23831.3498	0.56745	4.01668	0.63926	3.29541	1.09E-03	2.32E-05	1.44E-04	2.62E-05	1.13E-04	1.3995E-03
520628.2	4258867.55	23817.37588	0.16304	0.10749	0.15818	0.11141	1.09E-03	6.68E-06	3.84E-06	6.48E-06	3.82E-06	1.1135E-03
519921.56	4258838.55	23813.31155	0.5804	0.41533	0.6325	0.40068	1.09E-03	2.38E-05	1.49E-05	2.59E-05	1.38E-05	1.1708E-03
520630.98	4258411.39	23799.74963	0.1382	0.15013	0.13482	0.15698	1.09E-03	5.66E-06	5.37E-06	5.52E-06	5.39E-06	1.1138E-03
519931.08	4258765.04	23781.9357	0.54647	0.55303	0.59837	0.52853	1.09E-03	2.24E-05	1.98E-05	2.45E-05	1.81E-05	1.1759E-03
519925.23	4258799.15	23776.26634	0.55693	0.48058	0.60712	0.46098	1.09E-03	2.28E-05	1.72E-05	2.49E-05	1.58E-05	1.1715E-03
519957.12	4258673.87	23774.04112	0.55108	0.88625	0.61977	0.83301	1.09E-03	2.26E-05	3.17E-05	2.54E-05	2.86E-05	1.1989E-03
519950.71	4258691.8	23771.34985	0.54647	0.79541	0.60925	0.75182	1.09E-03	2.24E-05	2.85E-05	2.49E-05	2.58E-05	1.1922E-03
520657.61	4258701.55	23767.39848	0.1393	0.12099	0.13453	0.12514	1.09E-03	5.70E-06	4.33E-06	5.51E-06	4.30E-06	1.1102E-03
520631.85	4258858.83	23766.97207	0.16065	0.10781	0.1558	0.11169	1.09E-03	6.58E-06	3.86E-06	6.38E-06	3.83E-06	1.1110E-03
519923.21	4258914.86	23736.79121	0.66493	0.32283	0.72381	0.31675	1.09E-03	2.72E-05	1.15E-05	2.96E-05	1.09E-05	1.1683E-03
520148.93	4258202.53	23730.70544	0.19531	4.21888	0.19684	4.85442	1.09E-03	8.00E-06	1.51E-04	8.06E-06	1.67E-04	1.4223E-03
520635.5	4258850.12	23711.04891	0.15827	0.10816	0.15346	0.11199	1.09E-03	6.48E-06	3.87E-06	6.28E-06	3.84E-06	1.1083E-03
520590.85	4258951.86	23659.68137	0.1887	0.10387	0.18254	0.10822	1.09E-03	7.73E-06	3.72E-06	7.47E-06	3.72E-06	1.1081E-03
520639.15	4258841.4	23640.93291	0.15591	0.10856	0.15117	0.11233	1.08E-03	6.38E-06	3.88E-06	6.19E-06	3.86E-06	1.1049E-03
520631.33	4258214.14	23638.11284	0.12453	0.16075	0.1232	0.16723	1.08E-03	5.10E-06	5.75E-06	5.04E-06	5.74E-06	1.1061E-03
519941.95	4258718.91	23634.55212	0.53931	0.68578	0.5983	0.65103	1.08E-03	2.21E-05	2.45E-05	2.45E-05	2.24E-05	1.1778E-03
520659.94	4258743.86	23618.66812	0.14057	0.11546	0.13592	0.11962	1.08E-03	5.76E-06	4.13E-06	5.57E-06	4.11E-06	1.1031E-03
520064.89	4258352.61	23582.61859	0.27271	20.91151	0.29095	10.16797	1.08E-03	1.12E-05	7.48E-04	1.19E-05	3.49E-04	2.2021E-03
520634.53	4258394.85	23577.00431	0.13601	0.14943	0.13279	0.15619	1.08E-03	5.57E-06	5.34E-06	5.44E-06	5.36E-06	1.1034E-03
520630.06	4258203.59	23569.0063	0.12413	0.16152	0.12292	0.16826	1.08E-03	5.08E-06	5.78E-06	5.03E-06	5.78E-06	1.1030E-03
519922.15	4258815.84	23560.72294	0.55832	0.44895	0.60757	0.43161	1.08E-03	2.29E-05	1.61E-05	2.49E-05	1.48E-05	1.1595E-03
520642.8	4258832.68	23553.50163	0.15358	0.10889	0.14887	0.11259	1.08E-03	6.29E-06	3.89E-06	6.10E-06	3.87E-06	1.1007E-03
520660.51	4258718.58	23533.67206	0.13897	0.11817	0.13438	0.12236	1.08E-03	5.69E-06	4.23E-06	5.50E-06	4.20E-06	1.0993E-03
520577.8	4258977.27	23506.04596	0.19828	0.10335	0.19151	0.1077	1.08E-03	8.12E-06	3.70E-06	7.84E-06	3.70E-06	1.1018E-03
520612	4258913.08	23501.46164	0.17417	0.10466	0.16891	0.10881	1.08E-03	7.13E-06	3.74E-06	6.92E-06	3.74E-06	1.0997E-03
519919.07	4258880.76	23479.78503	0.60704	0.35768	0.66041	0.34812	1.08E-03	2.49E-05	1.28E-05	2.70E-05	1.20E-05	1.1538E-03
520600.58	4258937.82	23479.40125	0.18204	0.10371	0.1763	0.10799	1.08E-03	7.45E-06	3.71E-06	7.22E-06	3.71E-06	1.0993E-03
520207.88	4258132.72	23466.83534	0.17301	1.9515	0.17571	2.16402	1.08E-03	7.08E-06	6.98E-05	7.19E-06	7.43E-05	1.2350E-03
520628.88	4258193.07	23464.91045	0.12371	0.16217	0.12269	0.16921	1.08E-03	5.07E-06	5.80E-06	5.02E-06	5.81E-06	1.0982E-03
520635.85	4258236.11	23458.98373	0.12485	0.15781	0.12349	0.16389	1.08E-03	5.11E-06	5.64E-06	5.06E-06	5.63E-06	1.0977E-03
520198.06	4258142.69	23454.57795	0.17561	2.17096	0.17779	2.41705	1.08E-03	7.19E-06	7.77E-05	7.28E-06	8.30E-05	1.2512E-03
520119.43	4258242.44	23454.04248	0.21009	7.73703	0.21436	9.08695	1.08E-03	8.60E-06	2.77E-04	8.78E-06	3.12E-04	1.6821E-03
519967.12	4258646.05	23448.27507	0.55411	1.04994	0.62504	0.98265	1.08E-03	2.27E-05	3.76E-05	2.56E-05	3.37E-05	1.1953E-03
520646.45	4258823.97	23446.13559	0.15128	0.1092	0.1466	0.11284	1.08E-03	6.19E-06	3.91E-06	6.00E-06	3.87E-06	1.0956E-03
520634.63	4258225.57	23445.70361	0.12442	0.15877	0.12304	0.16494	1.08E-03	5.09E-06	5.68E-06	5.04E-06	5.66E-06	1.0971E-03
520639.88	4258305.41	23431.57207	0.12871	0.15131	0.12722	0.15835	1.07E-03	5.27E-06	5.41E-06	5.21E-06	5.44E-06	1.0963E-03
520637.17	4258246.68	23428.78758	0.12524	0.15669	0.12396	0.16274	1.07E-03	5.13E-06	5.60E-06	5.08E-06	5.59E-06	1.0963E-03
520217.7	4258122.75	23417.25371	0.17034	1.76529	0.17365	1.94858	1.07E-03	6.97E-06	6.31E-05	7.11E-06	6.69E-05	1.2185E-03
520188.24	4258152.66	23415.15872	0.17828	2.43115	0.17996	2.72115	1.07E-03	7.30E-06	8.70E-05	7.37E-06	9.34E-05	1.2693E-03
520045.82	4259157.25	23392.01788	5.78934	0.1999	8.0689	0.1944	1.07E-03	2.37E-04	7.15E-06	3.30E-04	6.67E-06	1.6544E-03
519918.5	4258855.26	23383.66091	0.57885	0.38871	0.62932	0.37622	1.07E-03	2.37E-05	1.39E-05	2.58E-05	1.29E-05	1.1491E-03
520085.48	4259188.01	23378.47815	16.19473	0.1977	18.02497	0.18778	1.07E-03	6.63E-04	7.07E-06	7.38E-04	6.45E-06	2.4872E-03
520139.11	4258212.5	23375.36212	0.19784	5.02977	0.19983	5.83576	1.07E-03	8.10E-06	1.80E-04	8.18E-06	2.00E-04	1.4690E-03
520227.52	4258112.78	23347.50697	0.16773	1.60466	0.17165	1.76506	1.07E-03	6.87E-06	5.74E-05	7.03E-06	6.06E-05	1.2030E-03
520638.6	4258257.31	23344.28834	0.12558	0.15541	0.1244	0.1615	1.07E-03	5.14E-06	5.56E-06	5.09E-06	5.54E-06	1.0923E-03
520587.71	4258963.16	23338.3425	0.19099	0.10306	0.18467	0.10737	1.07E-03	7.82E-06	3.69E-06	7.56E-06	3.69E-06	1.0935E-03
520639.41	4258355.93	23322.97248	0.13211	0.14877	0.12936	0.15575	1.07E-03	5.41E-06	5.32E-06	5.30E-06	5.35E-06	1.0914E-03
520650.1	4258815.25	23316.32291	0.14901	0.10949	0.14435	0.11307	1.07E-03	6.10E-06	3.92E-06	5.91E-06	3.88E-06	1.0895E-03
519919.51	4258905.94	23315.0329	0.63215	0.32951	0.68711	0.32253	1.07E-03	2.59E-05	1.18E-05	2.81E-05	1.11E-05	1.1465E-03
520178.42	4258162.63	23310.2344	0.18087	2.74569	0.18221	3.08811	1.07E-03	7.41E-06	9.82E-05	7.46E-06	1.06E-04	1.2885E-03
520659.52	4258768.81	23297.36592	0.14199	0.11254	0.13722	0.11641	1.07E-03	5.81E-06	4.03E-06	5.62E-06	4.00E-06	1.0883E-03
520055.74	4259167.23	23282.08738	8.30476	0.19836	14.50856	0.19186	1.07E-03	3.40E-04	7.10E-06	5.94E-04	6.59E-06	2.0159E-03
520638.18	4258378.55	23269.19934	0.13382	0.1485	0.13075	0.15524	1.07E-03	5.48E-06	5.31E-06	5.35E-06	5.33E-06	1.0890E-03
520624.97	4258473.23	23231.3259	0.14326	0.14903	0.13879	0.15615	1.07E-03	5.87E-06	5.33E-06	5.68E-06	5.36E-06	1.0880E-03
520640.15	4258267.98	23224.05388	0.1259	0.15394	0.12478	0.16016	1.07E-03	5.15E-06	5.51E-06	5.11E-06	5.50E-06	1.0867E-03
520039.85	4258457.01	23223.5358	0.41853	5.66527	0.45334	4.42804	1.07E-03	1.71E-05	2.03E-04	1.86E-05	1.52E-04	1.4558E-03
520055.59	4258376.43	23199.71239	0.29136	10.82716	0.31116	7.27638	1.06E-03	1.19E-05	3.87E-04	1.27E-05	2.50E-04	1.7261E-03
520168.6	4258172.6	23170.79373	0.1835	3.12981	0.1846	3.54394	1.06E-03	7.51E-06	1.12E-04	7.56E-06	1.22E-04	1.3117E-03
520663.5	4258735.36	23165.31515	0.13858	0.11535	0.13405	0.1195	1.06E-03	5.67E-06	4.13E-06	5.49E-06	4.10E-06	1.0822E-03
520653.75	4258806.54	23161.23668	0.14679	0.10984	0.14219	0.11336	1.06E-03	6.01E-06	3.93E-06	5.82E-06	3.89E-06	1.0822E-03
520610.51	4258923.7	23132.32818	0.17533	0.10351	0.17001	0.10767	1.06E-03	7.18E-06	3.70E-06	6.96E-06	3.70E-06	1.0828E-03
520630.96	4258437.21	23117.84318	0.13946	0.14839	0.13574	0.15532	1.06E-03	5.71E-06	5.31E-06	5.56E-06	5.33E-06	1.0825E-03
520099.76	4258272.38	23114.46709	0.22224	14.5729	0.23022	15.63921	1.06E-03	9.10E-06	5.21E-04	9.43E-06	5.37E-04	2.1371E-03
520661.22	4258692.92	23101.89752	0.13736	0.12073	0.13255	0.12476	1.06E-03	5.62E-06	4.32E-06	5.43E-06	4.28E-06	1.0795E-03
520663.05	4258760.37	23046.75285	0.14009	0.11265	0.13545	0.11659	1.06E-03	5.74E-06	4.03E-06	5.55E-06	4.00E-06	1.0767E-03
520599.35	4258948.34	23031.11502	0.18295	0.10255	0.17713	0.10678	1.06E-03	7.49E-06	3.67E-06	7.25E-06	3.67E-06	1.0787E-03
520634.38	4258420.31	23030.79356	0.13739	0.14788	0.13388	0.15465	1.06E-03	5.63E-06	5.29E-06	5.48E-06	5.31E-06	1.0783E-03
520642.21	4258278.88	23019.32858	0.12609	0.15208	0.12494	0.1585	1.06E-03	5.16E-06	5.44E-06	5.12E-06	5.44E-06	1.0772E-03
520019.52	4258531.13	23005.26402	0.58549	3.07551	0.67301	2.60592	1.06E-03	2.40E-05	1.10E-04	2.76E-05	8.95E-05	1.3064E-03
520094.86	4259199.84	23004.63348	12.10895	0.19453	11.59905	0.1839	1.06E-03	4.96E-04	6.96E-06	4.75E-04	6.31E-06	2.0394E-03
519921.88	4258941.68	22991.56255	0.67611	0.2957	0.73513	0.29139	1.05E-03	2.77E-05	1.06E-05	3.01E-05	1.00E-05	1.1332E-03
519923.78	4258952.46	22977.75188	0.69736	0.28716	0.7587	0.28345	1.05E-03	2.86E-05	1.03E-05	3.11E-05	9.73E-06	1.1338E-03
520657.4	4258797.82	22976.58277	0.1446	0.11003	0.14002	0.11354	1.05E-03	5.92E-06	3.94E-06	5.73E-06	3.90E-06	1.0736E-03
520664.09	4258710.02	22960.30826	0.13701	0.1181	0.1325	0.12216	1.05E-03	5.61E-06	4.22E-06	5.43E-06	4.19E-06	1.0728E-03
520158.78	4258182.57	22957.32893	0.18603	3.61134	0.18711	4.11445	1.05E-03	7.62E-06	1.29E-04	7.66E-06	1.41E-04	1.3389E-03
519917.77	4258829.41	22954.30457	0.54688	0.42243	0.59423	0.40684	1.05E-03	2.24E-05	1.51E-05	2.43E-05	1.40E-05	1.1289E-03
520129.29	4258222.47	22952.70116	0.20021	6.14098	0.20295	7.19255	1.05E-03	8.20E-06	2.20E-04	8.31E-06	2.47E-04	1.5361E-03
520643.29	4258314.37	22936.25512	0.12823	0.1491	0.12649	0.1561	1.05E-03	5.25E-06	5.33E-06	5.18E-06	5.36E-06	1.0734E-03
519932.56	4258744.48	22933.19194	0.52127	0.5962	0.57447	0.56825	1.05E-03	2.13E-05	2.13E-05	2.35E-05	1.95E-05	1.1378E-03
520643.02	4258339.53	22894.76208	0.1299	0.14792	0.12751	0.1549	1.05E-03	5.32E-06	5.29E-06	5.22E-06	5.32E-06	1.0715E-03
519944.62	4258701.24	22891.14518	0.52384	0.73815	0.58109	0.69978	1.05E-03	2.14E-05	2.64E-05	2.38E-05	2.40E-05	1.1459E-03
519915.34	4258871.78	22882.31903	0.5755	0.36453	0.62433	0.35395	1.05E-03	2.36E-05	1.30E-05	2.56E-05	1.22E-05	1.1241E-03
520637.9	4258403.69	22875.89102	0.13528	0.14724	0.13193	0.15387	1.05E-03	5.54E-06	5.27E-06	5.40E-06	5.28E-06	1.0710E-03
520586.48	4258973.68	22859.6558	0.19188	0.10194	0.18545	0.10619	1.05E-03	7.86E-06	3.65E-06	7.59E-06	3.65E-06	1.0715E-03
519915.82	4258897.03	22847.78384	0.60084	0.33616	0.652	0.32821	1.05E-03	2.46E-05	1.20E-05	2.67E-05	1.13E-05	1.1228E-03
520109.62	4258252.41	22839.28243	0.21205	10.22686	0.21773	11.89476	1.05E-03	8.68E-06	3.66E-04	8.91E-06	4.08E-04	1.8396E-03
520661.05	4258789.11	22759.51189	0.14247	0.11009	0.1379	0.11364	1.04E-03	5.83E-06	3.94E-06	5.65E-06	3.90E-06	1.0635E-03
520609.13	4258934.28	22750.83403	0.17638	0.10237	0.17098	0.10651	1.04E-03	7.22E-06	3.66E-06	7.00E-06	3.66E-06	1.0653E-03
520642.89	4258365.05	22730.29148	0.13146	0.1468	0.12852	0.15352	1.04E-03	5.38E-06	5.25E-06	5.26E-06	5.27E-06	1.0640E-03
520624.29	4258900.84	22728.92019	0.1664	0.10365	0.16152	0.1076	1.04E-03	6.81E-06	3.71E-06	6.61E-06	3.69E-06	1.0636E-03
520627.91	4258892.19	22722.89265	0.16406	0.10404	0.15926	0.10793	1.04E-03	6.72E-06	3.72E-06	6.52E-06	3.71E-06	1.0631E-03
520045.84	4259167.25	22722.2932	5.83543	0.19496	8.09977	0.18965	1.04E-03	2.39E-04	6.97E-06	3.32E-04	6.51E-06	1.6265E-03
520631.53	4258883.54	22707.31096	0.16174	0.10444	0.15702	0.10828	1.04E-03	6.62E-06	3.74E-06	6.43E-06	3.72E-06	1.0623E-03
520148.96	4258192.53	22702.01557	0.18853	4.22502	0.18976	4.85807	1.04E-03	7.72E-06	1.51E-04	7.77E-06	1.67E-04	1.3749E-03
520596.45	4258959.54	22697.16735	0.18495	0.10168	0.17895	0.10589	1.04E-03	7.57E-06	3.64E-06	7.33E-06	3.64E-06	1.0635E-03
519957.12	4258664.6	22684.43285	0.52919	0.90952	0.59369	0.85506	1.04E-03	2.17E-05	3.25E-05	2.43E-05	2.94E-05	1.1486E-03
520666.58	4258751.94	22682.96868	0.13811	0.11269	0.13363	0.11666	1.04E-03	5.65E-06	4.03E-06	5.47E-06	4.01E-06	1.0598E-03
519921.53	4258790.23	22682.78212	0.52272	0.48657	0.56813	0.4667	1.04E-03	2.14E-05	1.74E-05	2.33E-05	1.60E-05	1.1187E-03
520635.15	4258874.89	22682.54032	0.15943	0.10484	0.15479	0.10863	1.04E-03	6.53E-06	3.75E-06	6.34E-06	3.73E-06	1.0610E-03
520667.06	4258726.87	22680.44043	0.13666	0.11515	0.1322	0.11926	1.04E-03	5.60E-06	4.12E-06	5.41E-06	4.09E-06	1.0598E-03
520009.61	4258550.57	22660.34989	0.5914	2.41549	0.68775	2.10303	1.04E-03	2.42E-05	8.64E-05	2.82E-05	7.22E-05	1.2506E-03
520638.98	4258207.4	22642.89764	0.12195	0.15663	0.12058	0.16289	1.04E-03	4.99E-06	5.60E-06	4.94E-06	5.59E-06	1.0599E-03
520638.77	4258866.24	22642.40584	0.15715	0.1052	0.15256	0.10894	1.04E-03	6.43E-06	3.76E-06	6.25E-06	3.74E-06	1.0590E-03
520641.51	4258387.31	22639.89524	0.13315	0.14641	0.12994	0.15298	1.04E-03	5.45E-06	5.24E-06	5.32E-06	5.25E-06	1.0599E-03
520640.31	4258217.98	22638.61406	0.12225	0.15587	0.12087	0.16186	1.04E-03	5.01E-06	5.58E-06	4.95E-06	5.56E-06	1.0597E-03
519914.74	4258846.2	22633.51397	0.54687	0.3957	0.59318	0.38216	1.04E-03	2.24E-05	1.42E-05	2.43E-05	1.31E-05	1.1123E-03
519924.47	4258773.22	22632.01581	0.5174	0.52067	0.56341	0.49873	1.04E-03	2.12E-05	1.86E-05	2.31E-05	1.71E-05	1.1183E-03
520055.76	4259177.23	22624.27858	8.37566	0.19355	14.61722	0.18727	1.04E-03	3.43E-04	6.92E-06	5.98E-04	6.43E-06	1.9927E-03
520637.74	4258196.86	22600.652	0.12159	0.15726	0.12033	0.16382	1.04E-03	4.98E-06	5.62E-06	4.93E-06	5.62E-06	1.0580E-03
519918.48	4258807	22590.30133	0.5256	0.45524	0.57041	0.43735	1.04E-03	2.15E-05	1.63E-05	2.34E-05	1.50E-05	1.1126E-03
520642.4	4258857.59	22588.68168	0.15489	0.10543	0.15029	0.10914	1.04E-03	6.34E-06	3.77E-06	6.15E-06	3.75E-06	1.0563E-03
519916.17	4258922	22588.48017	0.62325	0.31049	0.67579	0.30476	1.04E-03	2.55E-05	1.11E-05	2.77E-05	1.05E-05	1.1111E-03
520628.28	4258481.9	22579.9256	0.14222	0.14702	0.13752	0.15394	1.04E-03	5.82E-06	5.26E-06	5.63E-06	5.28E-06	1.0579E-03
520084.96	4259199.85	22561.86465	16.23762	0.19199	18.48339	0.18254	1.04E-03	6.65E-04	6.87E-06	7.57E-04	6.27E-06	2.4698E-03
519935.46	4258727.38	22550.45274	0.51237	0.64005	0.56496	0.60942	1.03E-03	2.10E-05	2.29E-05	2.31E-05	2.09E-05	1.1225E-03
520646.02	4258848.94	22508.05849	0.15262	0.10573	0.14805	0.10939	1.03E-03	6.25E-06	3.78E-06	6.06E-06	3.76E-06	1.0525E-03
520056.13	4258366.21	22491.27721	0.27764	11.12471	0.29615	7.41828	1.03E-03	1.14E-05	3.98E-04	1.21E-05	2.55E-04	1.7079E-03
519999.69	4258570	22491.02055	0.58548	1.94363	0.68423	1.72989	1.03E-03	2.40E-05	6.95E-05	2.80E-05	5.94E-05	1.2127E-03
520207.91	4258122.72	22486.90932	0.16773	1.95411	0.16995	2.16398	1.03E-03	6.87E-06	6.99E-05	6.96E-06	7.43E-05	1.1897E-03
520198.09	4258132.69	22485.08716	0.17021	2.17317	0.1719	2.41859	1.03E-03	6.97E-06	7.77E-05	7.04E-06	8.30E-05	1.2063E-03
520664.69	4258780.39	22470.71961	0.14033	0.10998	0.13576	0.1136	1.03E-03	5.75E-06	3.93E-06	5.56E-06	3.90E-06	1.0501E-03
520217.73	4258112.75	22469.35682	0.16533	1.7671	0.16808	1.94961	1.03E-03	6.77E-06	6.32E-05	6.88E-06	6.69E-05	1.1746E-03
520649.64	4258840.29	22455.16805	0.15042	0.10626	0.14598	0.10984	1.03E-03	6.16E-06	3.80E-06	5.98E-06	3.77E-06	1.0499E-03
520643.35	4258229.3	22448.93518	0.12222	0.154	0.12083	0.1598	1.03E-03	5.00E-06	5.51E-06	4.95E-06	5.49E-06	1.0509E-03
520119.47	4258232.44	22442.70689	0.20227	7.74917	0.20614	9.10789	1.03E-03	8.28E-06	2.77E-04	8.44E-06	3.13E-04	1.6362E-03
520188.27	4258142.66	22435.78345	0.17266	2.43379	0.17392	2.72261	1.03E-03	7.07E-06	8.71E-05	7.12E-06	9.35E-05	1.2240E-03
520631.15	4258463.57	22414.17939	0.14045	0.14668	0.13619	0.15363	1.03E-03	5.75E-06	5.25E-06	5.58E-06	5.27E-06	1.0502E-03
520644.63	4258239.86	22413.22265	0.12259	0.15298	0.12127	0.15873	1.03E-03	5.02E-06	5.47E-06	4.97E-06	5.45E-06	1.0492E-03
520029.4	4258502	22405.19666	0.52468	4.05088	0.58428	3.33118	1.03E-03	2.15E-05	1.45E-04	2.39E-05	1.14E-04	1.3326E-03
520647.06	4258298.41	22399.85274	0.12595	0.14828	0.12455	0.15492	1.03E-03	5.16E-06	5.30E-06	5.10E-06	5.32E-06	1.0485E-03
519989.77	4258589.44	22391.05145	0.57069	1.59211	0.66639	1.44582	1.03E-03	2.34E-05	5.69E-05	2.73E-05	4.96E-05	1.1845E-03
520619.12	4258920.14	22387.75169	0.16992	0.10213	0.16487	0.10614	1.03E-03	6.96E-06	3.65E-06	6.75E-06	3.64E-06	1.0481E-03
519927.31	4258755.94	22383.97815	0.50852	0.55816	0.55652	0.53352	1.03E-03	2.08E-05	2.00E-05	2.28E-05	1.83E-05	1.1088E-03
520139.14	4258202.5	22366.00542	0.19086	5.03777	0.19256	5.83952	1.03E-03	7.81E-06	1.80E-04	7.88E-06	2.00E-04	1.4225E-03
520653.26	4258831.64	22365.78403	0.14822	0.10662	0.14384	0.11013	1.03E-03	6.07E-06	3.81E-06	5.89E-06	3.78E-06	1.0457E-03
520667.67	4258701.46	22361.5786	0.13512	0.11794	0.13062	0.12187	1.03E-03	5.53E-06	4.22E-06	5.35E-06	4.18E-06	1.0452E-03
520607.85	4258944.82	22359.06363	0.17733	0.10125	0.17183	0.10537	1.03E-03	7.26E-06	3.62E-06	7.04E-06	3.62E-06	1.0473E-03
520094.88	4259209.84	22340.17167	12.01625	0.18995	11.54891	0.17967	1.02E-03	4.92E-04	6.79E-06	4.73E-04	6.17E-06	2.0027E-03
519912.12	4258888.12	22331.39948	0.57078	0.3427	0.61826	0.33373	1.02E-03	2.34E-05	1.23E-05	2.53E-05	1.15E-05	1.0969E-03
520646.01	4258250.47	22330.31344	0.12293	0.1518	0.1217	0.15758	1.02E-03	5.03E-06	5.43E-06	4.98E-06	5.41E-06	1.0453E-03
520178.45	4258152.63	22325.66205	0.17504	2.74891	0.17602	3.08917	1.02E-03	7.17E-06	9.83E-05	7.21E-06	1.06E-04	1.2430E-03
520036.34	4258465.54	22305.19546	0.43028	5.0577	0.46772	4.02895	1.02E-03	1.76E-05	1.81E-04	1.92E-05	1.38E-04	1.3793E-03
520063.14	4258343.35	22294.95143	0.25853	17.72939	0.27538	9.49938	1.02E-03	1.06E-05	6.34E-04	1.13E-05	3.26E-04	2.0050E-03
520670.12	4258743.5	22284.22167	0.13619	0.11261	0.13183	0.11659	1.02E-03	5.58E-06	4.03E-06	5.40E-06	4.00E-06	1.0414E-03
520637.77	4258429.23	22270.87058	0.13655	0.14568	0.13291	0.15238	1.02E-03	5.59E-06	5.21E-06	5.44E-06	5.23E-06	1.0432E-03
520656.88	4258822.99	22254.58227	0.14608	0.10684	0.14168	0.11029	1.02E-03	5.98E-06	3.82E-06	5.80E-06	3.79E-06	1.0404E-03
520595.17	4258970.08	22252.4573	0.18583	0.10059	0.17972	0.10474	1.02E-03	7.61E-06	3.60E-06	7.36E-06	3.60E-06	1.0431E-03
519979.85	4258608.88	22236.97671	0.55146	1.32736	0.6343	1.2277	1.02E-03	2.26E-05	4.75E-05	2.60E-05	4.21E-05	1.1584E-03
519911.62	4258862.8	22236.72401	0.54535	0.37112	0.58996	0.35955	1.02E-03	2.23E-05	1.33E-05	2.42E-05	1.23E-05	1.0923E-03
519967.12	4258636.77	22236.26939	0.53208	1.07388	0.60001	1.00578	1.02E-03	2.18E-05	3.84E-05	2.46E-05	3.45E-05	1.1395E-03
520647.51	4258261.12	22207.33431	0.12322	0.15046	0.12207	0.15634	1.02E-03	5.05E-06	5.38E-06	5.00E-06	5.37E-06	1.0396E-03
519912.5	4258913.15	22189.78586	0.5936	0.3166	0.64259	0.31003	1.02E-03	2.43E-05	1.13E-05	2.63E-05	1.06E-05	1.0906E-03
520168.63	4258162.6	22181.16998	0.17745	3.13431	0.17825	3.54362	1.02E-03	7.27E-06	1.12E-04	7.30E-06	1.22E-04	1.2660E-03
520670.61	4258718.38	22169.63714	0.13477	0.11513	0.13041	0.11913	1.02E-03	5.52E-06	4.12E-06	5.34E-06	4.09E-06	1.0362E-03
520668.34	4258771.68	22141.62622	0.1382	0.10986	0.13369	0.11356	1.02E-03	5.66E-06	3.93E-06	5.47E-06	3.90E-06	1.0348E-03
520099.8	4258262.38	22127.29528	0.21349	14.61157	0.22087	15.68769	1.02E-03	8.74E-06	5.23E-04	9.04E-06	5.39E-04	2.0942E-03
520045.86	4259177.25	22113.01952	5.87577	0.19034	8.13971	0.18519	1.01E-03	2.41E-04	6.81E-06	3.33E-04	6.36E-06	1.6015E-03
520660.51	4258814.34	22111.17503	0.14393	0.10703	0.13953	0.11044	1.01E-03	5.89E-06	3.83E-06	5.71E-06	3.79E-06	1.0336E-03
520605.19	4258955.93	22072.07856	0.17914	0.10036	0.17347	0.10445	1.01E-03	7.33E-06	3.59E-06	7.10E-06	3.59E-06	1.0342E-03
520649.13	4258271.83	22048.50142	0.12348	0.14897	0.12235	0.15501	1.01E-03	5.06E-06	5.33E-06	5.01E-06	5.32E-06	1.0323E-03
519913.98	4258820.27	22047.54135	0.51496	0.42878	0.55801	0.41253	1.01E-03	2.11E-05	1.53E-05	2.28E-05	1.42E-05	1.0849E-03
520617.68	4258930.74	22040.98457	0.17096	0.10103	0.16583	0.10504	1.01E-03	7.00E-06	3.61E-06	6.79E-06	3.61E-06	1.0322E-03
520055.77	4259187.23	22005.07425	8.43678	0.18896	14.7269	0.18289	1.01E-03	3.45E-04	6.76E-06	6.03E-04	6.28E-06	1.9710E-03
520045.22	4258400.68	21996.90603	0.3101	6.8756	0.33054	5.24635	1.01E-03	1.27E-05	2.46E-04	1.35E-05	1.80E-04	1.4614E-03
520158.81	4258172.57	21984.34144	0.17982	3.61595	0.18061	4.11612	1.01E-03	7.36E-06	1.29E-04	7.39E-06	1.41E-04	1.2940E-03
520129.32	4258212.47	21965.22566	0.19301	6.15272	0.19548	7.19041	1.01E-03	7.90E-06	2.20E-04	8.00E-06	2.47E-04	1.4906E-03
520664.13	4258805.69	21964.66357	0.14186	0.10734	0.13751	0.11071	1.01E-03	5.81E-06	3.84E-06	5.63E-06	3.80E-06	1.0268E-03

520650.45	4258307.3	21950.3704	0.12551	0.14602	0.12386	0.15268	1.01E-03	5.14E-06	5.22E-06	5.07E-06	5.24E-06	1.0277E-03
520084.98	4259209.85	21920.88291	16.0936	0.18749	18.37711	0.17836	1.01E-03	6.59E-04	6.71E-06	7.52E-04	6.12E-06	2.4299E-03
520040.84	4258422.46	21916.90013	0.33981	5.89923	0.36327	4.61787	1.01E-03	1.39E-05	2.11E-04	1.49E-05	1.59E-04	1.4038E-03
519914.74	4258948.73	21904.55547	0.63321	0.2851	0.68615	0.28105	1.00E-03	2.59E-05	1.02E-05	2.81E-05	9.65E-06	1.0788E-03
519938.24	4258709.97	21902.41614	0.49892	0.68741	0.55147	0.65321	1.00E-03	2.04E-05	2.46E-05	2.26E-05	2.24E-05	1.0949E-03
520109.65	4258242.41	21859.06159	0.204	10.25357	0.20927	11.87741	1.00E-03	8.35E-06	3.67E-04	8.57E-06	4.08E-04	1.7943E-03
520671.99	4258762.96	21858.35334	0.13628	0.10986	0.13187	0.11364	1.00E-03	5.58E-06	3.93E-06	5.40E-06	3.90E-06	1.0216E-03
519910.98	4258837.14	21838.90512	0.51646	0.40206	0.55867	0.3877	1.00E-03	2.11E-05	1.44E-05	2.29E-05	1.33E-05	1.0736E-03
520673.65	4258735.07	21816.69491	0.13428	0.11229	0.12997	0.11628	1.00E-03	5.50E-06	4.02E-06	5.32E-06	3.99E-06	1.0197E-03
519947.12	4258683.15	21806.38265	0.50295	0.79367	0.55946	0.75043	1.00E-03	2.06E-05	2.84E-05	2.29E-05	2.58E-05	1.0981E-03
520667.75	4258797.04	21779.9798	0.13981	0.10748	0.13547	0.11085	9.99E-04	5.72E-06	3.84E-06	5.55E-06	3.81E-06	1.0181E-03
519908.43	4258879.21	21774.47485	0.54216	0.34896	0.58575	0.33904	9.99E-04	2.22E-05	1.25E-05	2.40E-05	1.16E-05	1.0693E-03
519908.83	4258904.31	21748.91201	0.56513	0.3227	0.61077	0.31521	9.98E-04	2.31E-05	1.15E-05	2.50E-05	1.08E-05	1.0683E-03
520671.25	4258692.91	21734.91315	0.13327	0.11758	0.12871	0.12141	9.97E-04	5.46E-06	4.21E-06	5.27E-06	4.17E-06	1.0163E-03
520148.99	4258182.53	21734.13692	0.18211	4.23212	0.18311	4.85666	9.97E-04	7.46E-06	1.51E-04	7.50E-06	1.67E-04	1.3302E-03
520646.59	4258200.65	21722.36263	0.11947	0.15263	0.11806	0.15872	9.97E-04	4.89E-06	5.46E-06	4.83E-06	5.45E-06	1.0172E-03
520634.62	4258472.69	21715.82923	0.13941	0.1446	0.13492	0.1514	9.96E-04	5.71E-06	5.17E-06	5.52E-06	5.20E-06	1.0179E-03
520647.89	4258211.22	21701.97585	0.11974	0.15196	0.11831	0.15775	9.96E-04	4.90E-06	5.44E-06	4.84E-06	5.42E-06	1.0162E-03
520616.34	4258941.3	21683.79938	0.1719	0.09993	0.16667	0.10392	9.95E-04	7.04E-06	3.57E-06	6.82E-06	3.57E-06	1.0158E-03
520603.85	4258966.49	21678.15081	0.18004	0.0993	0.17423	0.10334	9.95E-04	7.37E-06	3.55E-06	7.13E-06	3.55E-06	1.0162E-03
520649.28	4258221.83	21675.52869	0.12007	0.15108	0.11863	0.15671	9.94E-04	4.92E-06	5.40E-06	4.86E-06	5.38E-06	1.0150E-03
520095.31	4259220.66	21667.64588	11.78707	0.18528	11.30752	0.17533	9.94E-04	4.83E-04	6.63E-06	4.63E-04	6.02E-06	1.9523E-03
520631.32	4258907.99	21666.69247	0.16249	0.10113	0.15778	0.10496	9.94E-04	6.65E-06	3.62E-06	6.46E-06	3.60E-06	1.0144E-03
520634.91	4258899.4	21661.92698	0.16028	0.10151	0.15565	0.10528	9.94E-04	6.56E-06	3.63E-06	6.37E-06	3.61E-06	1.0140E-03
520638.51	4258890.81	21645.0008	0.15807	0.10188	0.15352	0.1056	9.93E-04	6.47E-06	3.64E-06	6.29E-06	3.63E-06	1.0131E-03
520674.17	4258709.89	21632.43669	0.13291	0.11512	0.12864	0.11897	9.92E-04	5.44E-06	4.12E-06	5.27E-06	4.08E-06	1.0114E-03
520642.11	4258882.22	21621.48989	0.15588	0.10226	0.15141	0.10593	9.92E-04	6.38E-06	3.66E-06	6.20E-06	3.64E-06	1.0118E-03
520046.24	4258390.27	21609.27118	0.29544	7.13838	0.31452	5.41589	9.91E-04	1.21E-05	2.55E-04	1.29E-05	1.86E-04	1.4576E-03
520645.7	4258873.63	21587.55408	0.15371	0.10262	0.1493	0.10624	9.90E-04	6.29E-06	3.67E-06	6.11E-06	3.65E-06	1.0101E-03
520637.83	4258455.25	21584.3424	0.13757	0.14404	0.13347	0.15081	9.90E-04	5.63E-06	5.15E-06	5.46E-06	5.18E-06	1.0117E-03
519914.81	4258798.15	21583.16131	0.49454	0.46059	0.53538	0.44248	9.90E-04	2.02E-05	1.65E-05	2.19E-05	1.52E-05	1.0640E-03
520207.94	4258112.72	21581.23858	0.16276	1.95586	0.16451	2.16442	9.90E-04	6.66E-06	7.00E-05	6.74E-06	7.43E-05	1.1478E-03
519957.12	4258655.32	21579.40761	0.50808	0.93077	0.56808	0.87603	9.90E-04	2.08E-05	3.33E-05	2.33E-05	3.01E-05	1.0975E-03
520198.12	4258122.69	21572.26872	0.16505	2.17512	0.16632	2.4193	9.90E-04	6.76E-06	7.78E-05	6.81E-06	8.31E-05	1.1641E-03
519917.82	4258781.3	21558.25079	0.49044	0.4914	0.53146	0.47164	9.89E-04	2.01E-05	1.76E-05	2.18E-05	1.62E-05	1.0647E-03
520675.64	4258754.24	21552.55334	0.13441	0.10992	0.13014	0.11373	9.89E-04	5.50E-06	3.93E-06	5.33E-06	3.90E-06	1.0075E-03
519907.89	4258853.81	21544.04826	0.51639	0.37739	0.55721	0.36493	9.88E-04	2.11E-05	1.35E-05	2.28E-05	1.25E-05	1.0584E-03
520649.3	4258865.04	21543.46457	0.15157	0.10289	0.14718	0.10648	9.88E-04	6.21E-06	3.68E-06	6.03E-06	3.66E-06	1.0079E-03
520045.87	4259187.25	21536.31597	5.898	0.18593	8.17959	0.18093	9.88E-04	2.41E-04	6.65E-06	3.35E-04	6.21E-06	1.5773E-03
520063.58	4258333.18	21534.87008	0.24735	18.29936	0.26303	9.6878	9.88E-04	1.01E-05	6.55E-04	1.08E-05	3.33E-04	1.9960E-03
520671.37	4258788.38	21532.57284	0.13776	0.10741	0.13341	0.11084	9.88E-04	5.64E-06	3.84E-06	5.46E-06	3.81E-06	1.0066E-03
520188.3	4258132.66	21528.64559	0.16736	2.43547	0.16822	2.72473	9.88E-04	6.85E-06	8.71E-05	6.89E-06	9.35E-05	1.1821E-03
520641.17	4258438.16	21528.23171	0.13568	0.14354	0.13188	0.15018	9.88E-04	5.56E-06	5.13E-06	5.40E-06	5.16E-06	1.0089E-03
519928.92	4258735.72	21524.73295	0.48705	0.5992	0.53411	0.57204	9.88E-04	1.99E-05	2.14E-05	2.19E-05	1.96E-05	1.0704E-03
519909	4258928.82	21509.18344	0.58455	0.29913	0.63157	0.29367	9.87E-04	2.39E-05	1.07E-05	2.59E-05	1.01E-05	1.0574E-03
520653.83	4258316.18	21508.93212	0.12508	0.14383	0.12311	0.15047	9.87E-04	5.12E-06	5.14E-06	5.04E-06	5.17E-06	1.0073E-03
520119.5	4258222.44	21504.06249	0.19495	7.762	0.19845	9.13619	9.87E-04	7.98E-06	2.78E-04	8.13E-06	3.14E-04	1.5940E-03
520652.9	4258856.44	21488.47926	0.14942	0.10317	0.14506	0.10672	9.86E-04	6.12E-06	3.69E-06	5.94E-06	3.66E-06	1.0053E-03
520032.83	4258474.07	21478.54246	0.44214	4.54755	0.48265	3.67788	9.85E-04	1.81E-05	1.63E-04	1.98E-05	1.26E-04	1.3122E-03
520652.07	4258233.03	21471.25971	0.12005	0.14934	0.11867	0.15485	9.85E-04	4.92E-06	5.34E-06	4.86E-06	5.32E-06	1.0055E-03
520654.25	4258291.42	21459.16066	0.12334	0.1451	0.12195	0.15142	9.85E-04	5.05E-06	5.19E-06	4.99E-06	5.20E-06	1.0049E-03
520029.36	4258492.3	21456.00994	0.48734	4.0818	0.53773	3.35986	9.84E-04	2.00E-05	1.46E-04	2.20E-05	1.15E-04	1.2877E-03
520656.5	4258847.85	21427.75959	0.14731	0.10363	0.14306	0.1071	9.83E-04	6.03E-06	3.71E-06	5.86E-06	3.68E-06	1.0023E-03
520139.17	4258192.5	21423.74751	0.18428	5.04568	0.18574	5.8407	9.83E-04	7.55E-06	1.80E-04	7.60E-06	2.01E-04	1.3790E-03
520178.48	4258142.63	21413.88246	0.16955	2.75115	0.17018	3.0912	9.82E-04	6.94E-06	9.84E-05	6.97E-06	1.06E-04	1.2009E-03
520613.93	4258952.31	21406.69531	0.17348	0.09907	0.16812	0.10305	9.82E-04	7.10E-06	3.54E-06	6.88E-06	3.54E-06	1.0032E-03
520653.41	4258243.62	21391.93252	0.12038	0.14826	0.11909	0.15378	9.81E-04	4.93E-06	5.30E-06	4.88E-06	5.28E-06	1.0018E-03
519920.74	4258764.21	21378.58328	0.48382	0.52504	0.52567	0.50332	9.81E-04	1.98E-05	1.88E-05	2.15E-05	1.73E-05	1.0582E-03
520677.18	4258726.64	21365.75251	0.13246	0.11222	0.12826	0.11614	9.80E-04	5.42E-06	4.01E-06	5.25E-06	3.99E-06	9.9890E-04
520660.09	4258839.26	21355.18312	0.1452	0.10405	0.14105	0.10744	9.80E-04	5.95E-06	3.72E-06	5.78E-06	3.69E-06	9.9887E-04
520626.23	4258927.2	21347.25164	0.16577	0.09967	0.16086	0.10355	9.79E-04	6.79E-06	3.57E-06	6.59E-06	3.55E-06	9.9986E-04
520036.38	4258441.17	21312.87662	0.36748	5.1098	0.39463	4.09337	9.78E-04	1.50E-05	1.83E-04	1.62E-05	1.41E-04	1.3323E-03
520019.48	4258521.43	21312.1974	0.54311	3.11741	0.61576	2.64249	9.78E-04	2.22E-05	1.12E-04	2.52E-05	9.07E-05	1.2274E-03
520654.85	4258254.25	21287.27911	0.12069	0.14701	0.11947	0.15264	9.77E-04	4.94E-06	5.26E-06	4.89E-06	5.24E-06	9.9695E-04
520674.99	4258779.73	21278.33961	0.13578	0.10739	0.13149	0.11089	9.76E-04	5.56E-06	3.84E-06	5.38E-06	3.81E-06	9.9480E-04
520085.41	4259220.68	21274.03973	15.74677	0.18291	17.82027	0.17407	9.76E-04	6.45E-04	6.54E-06	7.30E-04	5.98E-06	2.3629E-03
519905.17	4258895.46	21266.79744	0.53782	0.32873	0.58031	0.32029	9.76E-04	2.20E-05	1.18E-05	2.38E-05	1.10E-05	1.0442E-03
520168.66	4258152.6	21260.04375	0.17174	3.13782	0.17227	3.54327	9.75E-04	7.03E-06	1.12E-04	7.05E-06	1.22E-04	1.2233E-03
520663.69	4258830.67	21259.57254	0.14314	0.10435	0.13901	0.10767	9.75E-04	5.86E-06	3.73E-06	5.69E-06	3.70E-06	9.9433E-04
520055.26	4259199.9	21237.40478	8.3029	0.18328	14.25239	0.1775	9.74E-04	3.40E-04	6.56E-06	5.84E-04	6.09E-06	1.9105E-03
520099.83	4258252.38	21206.84799	0.20533	14.65645	0.21217	15.72365	9.73E-04	8.41E-06	5.24E-04	8.69E-06	5.40E-04	2.0541E-03
519904.73	4258870.3	21171.6787	0.51471	0.35488	0.55452	0.3441	9.71E-04	2.11E-05	1.27E-05	2.27E-05	1.18E-05	1.0396E-03
520679.29	4258745.53	21167.35049	0.1325	0.1099	0.12839	0.11372	9.71E-04	5.43E-06	3.93E-06	5.26E-06	3.90E-06	9.8963E-04
520656.41	4258264.93	21144.38484	0.12097	0.14563	0.11976	0.15141	9.70E-04	4.95E-06	5.21E-06	4.90E-06	5.20E-06	9.9033E-04
520667.29	4258822.08	21144.16031	0.14113	0.10449	0.13696	0.10777	9.70E-04	5.78E-06	3.74E-06	5.61E-06	3.70E-06	9.8888E-04
520047.06	4258379.95	21139.65758	0.2817	7.35746	0.29957	5.55724	9.70E-04	1.15E-05	2.63E-04	1.23E-05	1.91E-04	1.4476E-03
519905.23	4258919.72	21116.96492	0.55669	0.30497	0.60048	0.29867	9.69E-04	2.28E-05	1.09E-05	2.46E-05	1.03E-05	1.0373E-03
519910.19	4258811.13	21106.0122	0.48483	0.43419	0.52373	0.41766	9.68E-04	1.99E-05	1.55E-05	2.14E-05	1.43E-05	1.0395E-03
520638.09	4258481.82	21090.89776	0.13835	0.14258	0.13364	0.14919	9.68E-04	5.66E-06	5.10E-06	5.47E-06	5.12E-06	9.8897E-04
520677.72	4258701.39	21074.3778	0.13113	0.11497	0.12687	0.1187	9.67E-04	5.37E-06	4.11E-06	5.19E-06	4.08E-06	9.8560E-04
520158.84	4258162.57	21071.20597	0.17393	3.62043	0.1745	4.11545	9.67E-04	7.12E-06	1.29E-04	7.14E-06	1.41E-04	1.2518E-03
520095.33	4259230.66	21057.33166	11.72894	0.18105	11.2421	0.17142	9.66E-04	4.80E-04	6.48E-06	4.60E-04	5.89E-06	1.9190E-03
520129.35	4258202.47	21054.06771	0.18628	6.16192	0.18848	7.19834	9.66E-04	7.63E-06	2.20E-04	7.72E-06	2.47E-04	1.4488E-03
520657.61	4258300.24	21052.4063	0.12295	0.14289	0.12131	0.14929	9.66E-04	5.03E-06	5.11E-06	4.97E-06	5.13E-06	9.8608E-04
520612.53	4258962.89	21047.85431	0.1744	0.09802	0.16888	0.10196	9.66E-04	7.14E-06	3.51E-06	6.91E-06	3.50E-06	9.8670E-04
519940.87	4258692.19	21026.70548	0.48269	0.73699	0.53331	0.69943	9.65E-04	1.98E-05	2.64E-05	2.18E-05	2.40E-05	1.0566E-03
520624.84	4258937.78	21023.17104	0.1667	0.09861	0.16169	0.10248	9.65E-04	6.83E-06	3.53E-06	6.62E-06	3.52E-06	9.8499E-04
519907.23	4258828.09	21005.69672	0.48758	0.4077	0.52597	0.39282	9.64E-04	2.00E-05	1.46E-05	2.15E-05	1.35E-05	1.0333E-03
520678.62	4258771.08	21000.63915	0.13386	0.10734	0.12964	0.11091	9.63E-04	5.48E-06	3.84E-06	5.31E-06	3.81E-06	9.8190E-04
520670.88	4258813.49	20983.85832	0.13909	0.10465	0.13492	0.1079	9.63E-04	5.69E-06	3.74E-06	5.52E-06	3.70E-06	9.8137E-04
519931.79	4258718.53	20969.0141	0.47566	0.64186	0.52312	0.61159	9.62E-04	1.95E-05	2.30E-05	2.14E-05	2.10E-05	1.0469E-03
519923.53	4258746.84	20968.54431	0.47286	0.56176	0.51725	0.53714	9.62E-04	1.94E-05	2.01E-05	2.12E-05	1.84E-05	1.0411E-03
520109.68	4258232.41	20963.87994	0.19654	10.27337	0.20136	11.9517	9.62E-04	8.05E-06	3.67E-04	8.24E-06	4.10E-04	1.7559E-03
520656.94	4258350.21	20938.84714	0.12605	0.14094	0.12322	0.14726	9.61E-04	5.16E-06	5.04E-06	5.05E-06	5.06E-06	9.8094E-04
520653.31	4258392.43	20901.49855	0.1294	0.14064	0.12604	0.14682	9.59E-04	5.30E-06	5.03E-06	5.16E-06	5.04E-06	9.7945E-04
520641.26	4258464.26	20897.25349	0.13659	0.14207	0.13228	0.14871	9.59E-04	5.59E-06	5.08E-06	5.42E-06	5.11E-06	9.7992E-04
520009.56	4258540.87	20866.49543	0.55231	2.45583	0.63502	2.13794	9.57E-04	2.26E-05	8.78E-05	2.60E-05	7.34E-05	1.1672E-03
520674.48	4258804.9	20852.55573	0.13716	0.10488	0.13302	0.1081	9.57E-04	5.62E-06	3.75E-06	5.45E-06	3.71E-06	9.7520E-04
520655.45	4258204.44	20845.08248	0.11737	0.14816	0.11585	0.15381	9.56E-04	4.81E-06	5.30E-06	4.74E-06	5.28E-06	9.7646E-04
519947.12	4258673.87	20842.58495	0.48421	0.81349	0.53777	0.76919	9.56E-04	1.98E-05	2.91E-05	2.20E-05	2.64E-05	1.0536E-03
520149.02	4258172.53	20837.37993	0.17607	4.23751	0.17685	4.85736	9.56E-04	7.21E-06	1.52E-04	7.24E-06	1.67E-04	1.2888E-03
520656.81	4258215.03	20811.30406	0.11767	0.14736	0.11615	0.15283	9.55E-04	4.82E-06	5.27E-06	4.76E-06	5.25E-06	9.7487E-04
519904.17	4258844.83	20808.95654	0.48874	0.38316	0.52614	0.36998	9.55E-04	2.00E-05	1.37E-05	2.15E-05	1.27E-05	1.0226E-03
520063.96	4258323.03	20793.6551	0.23693	18.78887	0.25158	9.82144	9.54E-04	9.70E-06	6.72E-04	1.03E-05	3.37E-04	1.9832E-03
520045.36	4259199.92	20784.36055	5.85024	0.18034	8.03087	0.17558	9.54E-04	2.40E-04	6.45E-06	3.29E-04	6.03E-06	1.5344E-03
520029.32	4258482.6	20768.00252	0.45428	4.11072	0.49767	3.37868	9.53E-04	1.86E-05	1.47E-04	2.04E-05	1.16E-04	1.2548E-03
520622.67	4258948.69	20754.61656	0.16807	0.0977	0.16292	0.10157	9.52E-04	6.88E-06	3.49E-06	6.67E-06	3.49E-06	9.7272E-04
520682.94	4258736.81	20750.97498	0.13067	0.10973	0.12665	0.11354	9.52E-04	5.35E-06	3.92E-06	5.19E-06	3.90E-06	9.7037E-04
520658.26	4258225.67	20745.5361	0.11795	0.14641	0.11648	0.15178	9.52E-04	4.83E-06	5.24E-06	4.77E-06	5.21E-06	9.7181E-04
519901.5	4258886.61	20743.64558	0.51165	0.33448	0.55083	0.32515	9.52E-04	2.09E-05	1.20E-05	2.26E-05	1.12E-05	1.0183E-03
520198.15	4258112.69	20710.70292	0.16013	2.17684	0.16104	2.41905	9.50E-04	6.56E-06	7.79E-05	6.59E-06	8.30E-05	1.1242E-03
520682.24	4258762.43	20699.24892	0.13201	0.10727	0.12789	0.11091	9.50E-04	5.41E-06	3.84E-06	5.24E-06	3.81E-06	9.6793E-04
520656.79	4258375.69	20698.62791	0.12743	0.13995	0.12422	0.14606	9.50E-04	5.22E-06	5.01E-06	5.09E-06	5.01E-06	9.6994E-04
519999.65	4258560.31	20695.50058	0.55058	1.98023	0.63651	1.76235	9.49E-04	2.25E-05	7.08E-05	2.61E-05	6.05E-05	1.1294E-03
519901.45	4258910.62	20682.46033	0.5299	0.31075	0.57056	0.30357	9.49E-04	2.17E-05	1.11E-05	2.34E-05	1.04E-05	1.0155E-03
520638.35	4258915.13	20677.68898	0.15866	0.09872	0.15407	0.10242	9.49E-04	6.50E-06	3.53E-06	6.31E-06	3.52E-06	9.6850E-04
520085.43	4259230.68	20675.7744	15.79691	0.17873	17.66177	0.17018	9.49E-04	6.47E-04	6.39E-06	7.23E-04	5.84E-06	2.3307E-03
519989.73	4258579.74	20674.37442	0.54068	1.62784	0.62715	1.47508	9.49E-04	2.21E-05	5.82E-05	2.57E-05	5.06E-05	1.1052E-03
520188.33	4258122.66	20672.90001	0.16231	2.43701	0.16282	2.72582	9.48E-04	6.65E-06	8.72E-05	6.67E-06	9.36E-05	1.1425E-03
520641.92	4258906.59	20672.10396	0.15656	0.09908	0.15206	0.10273	9.48E-04	6.41E-06	3.54E-06	6.23E-06	3.53E-06	9.6810E-04
520678.08	4258796.31	20667.84733	0.13523	0.10498	0.13112	0.10822	9.48E-04	5.54E-06	3.75E-06	5.37E-06	3.72E-06	9.6658E-04
520055.28	4259209.9	20666.86716	8.32508	0.17911	14.36016	0.17351	9.48E-04	3.41E-04	6.41E-06	5.88E-04	5.96E-06	1.8893E-03
519979.81	4258599.18	20656.42493	0.52484	1.35722	0.60391	1.2525	9.48E-04	2.15E-05	4.85E-05	2.47E-05	4.30E-05	1.0854E-03
520645.5	4258898.06	20656.14146	0.15446	0.09944	0.15005	0.10304	9.48E-04	6.32E-06	3.56E-06	6.14E-06	3.54E-06	9.6723E-04
520660.97	4258309.06	20648.18784	0.12254	0.14075	0.1206	0.14717	9.47E-04	5.02E-06	5.03E-06	4.94E-06	5.05E-06	9.6734E-04
520649.07	4258889.52	20635.82308	0.15239	0.09981	0.14806	0.10336	9.47E-04	6.24E-06	3.57E-06	6.06E-06	3.55E-06	9.6615E-04
520047.74	4258369.68	20632.10161	0.26897	7.54648	0.28579	5.67799	9.47E-04	1.10E-05	2.70E-04	1.17E-05	1.95E-04	1.4341E-03
520119.53	4258212.44	20618.41027	0.18804	7.77724	0.19126	9.13248	9.46E-04	7.70E-06	2.78E-04	7.83E-06	3.14E-04	1.5532E-03
520652.65	4258880.99	20607.97794	0.15031	0.10018	0.14607	0.10368	9.45E-04	6.15E-06	3.58E-06	5.98E-06	3.56E-06	9.6473E-04
520661.58	4258284.79	20584.51992	0.12084	0.14186	0.11942	0.14794	9.44E-04	4.95E-06	5.07E-06	4.89E-06	5.08E-06	9.6437E-04
520178.51	4258132.63	20567.69602	0.16438	2.75241	0.16468	3.09419	9.44E-04	6.73E-06	9.84E-05	6.74E-06	1.06E-04	1.1618E-03
520656.22	4258872.46	20566.31483	0.14828	0.10047	0.14407	0.10394	9.44E-04	6.07E-06	3.59E-06	5.90E-06	3.57E-06	9.6268E-04
520054.26	4258347.01	20563.43368	0.25083	10.03674	0.26679	6.94661	9.43E-04	1.03E-05	3.59E-04	1.09E-05	2.38E-04	1.5621E-03
519911.14	4258789.3	20557.36981	0.46546	0.46481	0.50223	0.44693	9.43E-04	1.91E-05	1.66E-05	2.06E-05	1.53E-05	1.0147E-03
520660.79	4258236.77	20553.36257	0.11801	0.14477	0.11659	0.15013	9.43E-04	4.83E-06	5.18E-06	4.77E-06	5.15E-06	9.6289E-04
520139.2	4258182.5	20542.31207	0.17807	5.05349	0.17933	5.83902	9.42E-04	7.29E-06	1.81E-04	7.34E-06	2.00E-04	1.3383E-03
519901.03	4258861.38	20528.6378	0.48836	0.36049	0.52475	0.34896	9.42E-04	2.00E-05	1.29E-05	2.15E-05	1.20E-05	1.0082E-03
519969.89	4258618.62	20527.1137	0.5065	1.15231	0.57411	1.0773	9.42E-04	2.07E-05	4.12E-05	2.35E-05	3.70E-05	1.0642E-03
520659.79	4258863.92	20521.40625	0.14625	0.10076	0.14209	0.10419	9.41E-04	5.99E-06	3.60E-06	5.82E-06	3.58E-06	9.6047E-04
520032.97	4258449.47	20520.88354	0.37658	4.61742	0.40539	3.75703	9.41E-04	1.54E-05	1.65E-04	1.66E-05	1.29E-04	1.2676E-03
519901.96	4258935.97	20515.18549	0.55024	0.2883	0.59299	0.28306	9.41E-04	2.25E-05	1.03E-05	2.43E-05	9.72E-06	1.0080E-03
520681.28	4258692.9	20497.21156	0.1294	0.1147	0.1251	0.11832	9.40E-04	5.30E-06	4.10E-06	5.12E-06	4.06E-06	9.5896E-04
520095.34	4259240.66	20471.17866	11.68977	0.17698	11.17173	0.16766	9.39E-04	4.79E-04	6.33E-06	4.57E-04	5.76E-06	1.8873E-03
520663.37	4258855.39	20466.87288	0.14423	0.10117	0.14016	0.10453	9.39E-04	5.91E-06	3.62E-06	5.74E-06	3.59E-06	9.5783E-04
519957.12	4258646.05	20452.06007	0.48759	0.95035	0.54413	0.89559	9.38E-04	2.00E-05	3.40E-05	2.23E-05	3.07E-05	1.0453E-03
520662.19	4258247.38	20451.52988	0.11831	0.14362	0.11697	0.14906	9.38E-04	4.84E-06	5.14E-06	4.79E-06	5.12E-06	9.5816E-04
520681.67	4258787.72	20445.50447	0.13334	0.10498	0.12925	0.10828	9.38E-04	5.46E-06	3.75E-06	5.29E-06	3.72E-06	9.5622E-04
520660.35	4258359.17	20434.42235	0.12545	0.13905	0.12243	0.14516	9.37E-04	5.14E-06	4.97E-06	5.01E-06	4.98E-06	9.5760E-04
520621.22	4258959.3	20428.11653	0.16897	0.09671	0.16369	0.10054	9.37E-04	6.92E-06	3.46E-06	6.70E-06	3.45E-06	9.5773E-04
520684.24	4258709.77	20414.33128	0.12899	0.11225	0.12496	0.11591	9.37E-04	5.28E-06	4.02E-06	5.12E-06	3.98E-06	9.5496E-04
520168.69	4258142.6	20410.62146	0.16638	3.13997	0.16664	3.54552	9.36E-04	6.81E-06	1.12E-04	6.82E-06	1.22E-04	1.1841E-03
519914.12	4258772.38	20409.17189	0.45995	0.49531	0.49751	0.47577	9.36E-04	1.88E-05	1.77E-05	2.04E-05	1.63E-05	1.0096E-03
520666.94	4258846.85	20404.50429	0.14222	0.10154	0.13824	0.10483	9.36E-04	5.82E-06	3.63E-06	5.66E-06	3.60E-06	9.5483E-04
520685.86	4258753.78	20393.37171	0.13023	0.10727	0.12624	0.11094	9.36E-04	5.33E-06	3.84E-06	5.17E-06	3.81E-06	9.5376E-04
520633.34	4258934.27	20378.36431	0.16171	0.0973	0.15689	0.10105	9.35E-04	6.62E-06	3.48E-06	6.42E-06	3.47E-06	9.5491E-04
520099.86	4258242.38	20345.04431	0.19768	14.70342	0.20406	15.68575	9.33E-04	8.09E-06	5.26E-04	8.36E-06	5.39E-04	2.0143E-03
520670.51	4258838.32	20324.96019	0.14026	0.10185	0.13632	0.10507	9.32E-04	5.74E-06	3.64E-06	5.58E-06	3.61E-06	9.5104E-04
520663.69	4258258.03	20317.88214	0.11859	0.14235	0.11728	0.14792	9.32E-04	4.86E-06	5.09E-06	4.80E-06	5.08E-06	9.5197E-04
520686.59	4258728.1	20307.29609	0.12887	0.10963	0.12494	0.11336	9.32E-04	5.28E-06	3.92E-06	5.12E-06	3.89E-06	9.4986E-04
520644.69	4258473.28	20272.84284	0.13557	0.14025	0.13109	0.14671	9.30E-04	5.55E-06	5.02E-06	5.37E-06	5.04E-06	9.5105E-04
520656.79	4258401.56	20269.14633	0.12865	0.13867	0.1252	0.14474	9.30E-04	5.27E-06	4.96E-06	5.13E-06	4.97E-06	9.5023E-04
520045.38	4259209.92	20240.89581	5.87893	0.17626	8.07374	0.17164	9.29E-04	2.41E-04	6.30E-06	3.31E-04	5.89E-06	1.5121E-03
519934.53	4258701.03	20236.26888	0.4625	0.68657	0.50822	0.65358	9.28E-04	1.89E-05	2.46E-05	2.08E-05	2.24E-05	1.0151E-03
520664.33	4258317.88	20231.73792	0.12209	0.13872	0.11983	0.14508	9.28E-04	5.00E-06	4.96E-06	4.91E-06	4.98E-06	9.4804E-04
520674.09	4258829.78	20225.13151	0.13833	0.10209	0.13439	0.10525	9.28E-04	5.66E-06	3.65E-06	5.50E-06	3.61E-06	9.4632E-04
520158.87	4258152.57	20219.45916	0.16838	3.62397	0.16873	4.11477	9.28E-04	6.89E-06	1.30E-04	6.91E-06	1.41E-04	1.2123E-03
519897.68	4258901.52	20207.2529	0.50417	0.31645	0.54197	0.30835	9.27E-04	2.06E-05	1.13E-05	2.22E-05	1.06E-05	9.9181E-04
520665.05	4258293.92	20201.71223	0.12049	0.1396	0.1188	0.1458	9.27E-04	4.93E-06	4.99E-06	4.86E-06	5.01E-06	9.4661E-04
520129.38	4258192.47	20192.34757	0.17991	6.17362	0.18191	7.18863	9.26E-04	7.37E-06	2.21E-04	7.45E-06	2.47E-04	1.4088E-03
519897.83	4258877.77	20183.31123	0.48662	0.33987	0.52244	0.32976	9.26E-04	1.99E-05	1.22E-05	2.14E-05	1.13E-05	9.9076E-04
520685.27	4258779.13	20174.96377	0.13145	0.1049	0.12741	0.10827	9.26E-04	5.38E-06	3.75E-06	5.22E-06	3.72E-06	9.4366E-04
520647.97	4258456	20148.48562	0.13382	0.1396	0.1297	0.14606	9.24E-04	5.48E-06	4.99E-06	5.31E-06	5.01E-06	9.4517E-04
519898.22	4258926.94	20144.90772	0.52489	0.29366	0.56462	0.28764	9.24E-04	2.15E-05	1.05E-05	2.31E-05	9.87E-06	9.8920E-04
519903.47	4258819.03	20139.85292	0.46024	0.41248	0.49486	0.39744	9.24E-04	1.88E-05	1.48E-05	2.03E-05	1.36E-05	9.9148E-04
520660.23	4258384.72	20136.6087	0.12676	0.13798	0.12343	0.14396	9.24E-04	5.19E-06	4.94E-06	5.05E-06	4.94E-06	9.4395E-04
519906.4	4258801.98	20136.39137	0.45643	0.43863	0.49142	0.4222	9.24E-04	1.87E-05	1.57E-05	2.01E-05	1.45E-05	9.9281E-04
520055.71	4259219.9	20133.91703	8.47172	0.17521	14.95748	0.16973	9.24E-04	3.47E-04	6.27E-06	6.12E-04	5.83E-06	1.8951E-03
520663.98	4258342.85	20127.78447	0.1235	0.13802	0.12071	0.14418	9.23E-04	5.06E-06	4.94E-06	4.94E-06	4.95E-06	9.4331E-04
520631.41	4258945.07	20117.60027	0.16289	0.09636	0.15793	0.10011	9.23E-04	6.67E-06	3.45E-06	6.47E-06	3.44E-06	9.4298E-04
520109.71	4258222.41	20117.44065	0.18949	10.29732	0.19397	11.94461	9.23E-04	7.76E-06	3.68E-04	7.94E-06	4.10E-04	1.7170E-03
520677.66	4258821.25	20110.51796	0.13641	0.10221	0.13245	0.10533	9.23E-04	5.59E-06	3.66E-06	5.42E-06	3.62E-06	9.4091E-04
520085.44	4259240.68	20108.86279	15.71945	0.17473	17.48792	0.16646	9.23E-04	6.44E-04	6.25E-06	7.16E-04	5.71E-06	2.2942E-03
519917	4258755.21	20105.52742	0.45214	0.52833	0.49067	0.50683	9.22E-04	1.85E-05	1.89E-05	2.01E-05	1.74E-05	9.9730E-04
520048.31	4258359.46	20097.79486	0.25715	7.71063	0.27305	5.78155	9.22E-04	1.05E-05	2.76E-04	1.12E-05	1.98E-04	1.4180E-03
520064.3	4258312.91	20084.78507	0.22726	19.23788	0.24096	9.97406	9.21E-04	9.30E-06	6.88E-04	9.87E-06	3.42E-04	1.9712E-03
519925.29	4258726.96	20081.78069	0.45375	0.60104	0.4966	0.57417	9.21E-04	1.86E-05	2.15E-05	2.03E-05	1.97E-05	1.0014E-03
519900.44	4258835.85	20035.39242	0.46233	0.38824	0.49652	0.3746	9.19E-04	1.89E-05	1.39E-05	2.03E-05	1.29E-05	9.8519E-04
520019.44	4258511.74	20029.22996	0.50527	3.15246	0.56563	2.67421	9.19E-04	2.07E-05	1.13E-04	2.32E-05	9.18E-05	1.1673E-03
520689.48	4258745.13	20026.33313	0.12845	0.10726	0.12461	0.11092	9.19E-04	5.26E-06	3.84E-06	5.10E-06	3.81E-06	9.3678E-04
520149.05	4258162.53	20000.16386	0.17037	4.24204	0.17096	4.858	9.18E-04	6.98E-06	1.52E-04	7.00E-06	1.67E-04	1.2501E-03

520664.31	4258208.23	19999.23357	0.11534	0.14378	0.11374	0.14911	9.18E-04	4.72E-06	5.14E-06	4.66E-06	5.12E-06	9.3717E-04
520681.23	4258812.71	19969.67304	0.13453	0.1024	0.13058	0.10549	9.16E-04	5.51E-06	3.66E-06	5.35E-06	3.62E-06	9.3431E-04
520054.84	4258336.79	19963.55788	0.24036	10.30052	0.25539	7.09594	9.16E-04	9.84E-06	3.68E-04	1.05E-05	2.44E-04	1.5482E-03
520665.72	4258218.85	19938.13237	0.11563	0.1429	0.11405	0.14813	9.15E-04	4.73E-06	5.11E-06	4.67E-06	5.09E-06	9.3432E-04
520663.76	4258368.13	19929.14063	0.12484	0.13717	0.12166	0.1431	9.14E-04	5.11E-06	4.91E-06	4.98E-06	4.91E-06	9.3422E-04
520684.84	4258684.41	19907.5946	0.1277	0.11448	0.12338	0.11801	9.13E-04	5.23E-06	4.09E-06	5.05E-06	4.05E-06	9.3175E-04
520095.36	4259250.66	19905.24901	11.69115	0.17304	11.0871	0.16403	9.13E-04	4.79E-04	6.19E-06	4.54E-04	5.63E-06	1.8577E-03
520688.87	4258770.54	19893.29917	0.12963	0.1048	0.12567	0.10825	9.13E-04	5.31E-06	3.75E-06	5.15E-06	3.72E-06	9.3058E-04
520687.77	4258701.33	19892.43439	0.12729	0.11218	0.12329	0.1157	9.13E-04	5.21E-06	4.01E-06	5.05E-06	3.97E-06	9.3087E-04
519947.12	4258664.6	19862.53455	0.46604	0.83188	0.51656	0.78703	9.11E-04	1.91E-05	2.98E-05	2.12E-05	2.70E-05	1.0083E-03
520667.24	4258229.51	19859.70174	0.11593	0.14183	0.11439	0.14707	9.11E-04	4.75E-06	5.07E-06	4.68E-06	5.05E-06	9.3068E-04
520188.36	4258112.66	19854.56096	0.15745	2.43901	0.15771	2.72446	9.11E-04	6.45E-06	8.72E-05	6.46E-06	9.35E-05	1.1046E-03
519897.34	4258852.47	19849.95687	0.4632	0.36565	0.49644	0.35352	9.11E-04	1.90E-05	1.31E-05	2.03E-05	1.21E-05	9.7518E-04
520690.24	4258719.38	19839.74301	0.12712	0.10958	0.12327	0.1132	9.10E-04	5.20E-06	3.92E-06	5.05E-06	3.89E-06	9.2827E-04
520629.9	4258955.7	19822.08149	0.16379	0.09537	0.15868	0.09911	9.09E-04	6.71E-06	3.41E-06	6.50E-06	3.40E-06	9.2942E-04
520668.53	4258303.05	19804.98978	0.12007	0.13738	0.11808	0.14362	9.09E-04	4.92E-06	4.91E-06	4.83E-06	4.93E-06	9.2821E-04
520684.81	4258804.18	19796.43829	0.13266	0.1025	0.12873	0.1056	9.08E-04	5.43E-06	3.67E-06	5.27E-06	3.63E-06	9.2622E-04
520668.77	4258277.8	19796.2655	0.11849	0.13874	0.11699	0.14463	9.08E-04	4.85E-06	4.96E-06	4.79E-06	4.97E-06	9.2778E-04
520119.56	4258202.44	19792.77796	0.18156	7.79141	0.18451	9.1313	9.08E-04	7.43E-06	2.79E-04	7.55E-06	3.13E-04	1.5152E-03
520178.54	4258122.63	19770.45398	0.15945	2.75337	0.15947	3.09617	9.07E-04	6.53E-06	9.85E-05	6.53E-06	1.06E-04	1.1249E-03
520645.39	4258922.27	19752.40743	0.15491	0.09637	0.15038	0.09995	9.06E-04	6.34E-06	3.45E-06	6.16E-06	3.43E-06	9.2558E-04
520648.94	4258913.78	19746.26371	0.15291	0.09672	0.14849	0.10026	9.06E-04	6.26E-06	3.46E-06	6.08E-06	3.44E-06	9.2516E-04
519894.48	4258917.91	19738.25108	0.50055	0.29893	0.53727	0.2921	9.06E-04	2.05E-05	1.07E-05	2.20E-05	1.00E-05	9.6877E-04
520652.49	4258905.3	19732.55642	0.15093	0.09708	0.14661	0.10057	9.05E-04	6.18E-06	3.47E-06	6.00E-06	3.45E-06	9.2440E-04
520139.23	4258172.5	19732.20315	0.17226	5.05745	0.1733	5.84905	9.05E-04	7.05E-06	1.81E-04	7.10E-06	2.01E-04	1.3011E-03
520045.81	4259219.92	19730.08532	5.98326	0.17245	8.27515	0.16793	9.05E-04	2.45E-04	6.17E-06	3.39E-04	5.77E-06	1.5009E-03
520036.34	4258404.35	19727.09991	0.29839	5.13151	0.31683	4.15242	9.05E-04	1.22E-05	1.84E-04	1.30E-05	1.43E-04	1.2563E-03
520656.04	4258896.82	19713.73734	0.14895	0.09744	0.14472	0.10088	9.04E-04	6.10E-06	3.49E-06	5.93E-06	3.46E-06	9.2340E-04
520648.13	4258482.3	19711.298	0.13454	0.13846	0.12989	0.14472	9.04E-04	5.51E-06	4.95E-06	5.32E-06	4.97E-06	9.2506E-04
519893.91	4258892.43	19695.57417	0.47962	0.32181	0.5143	0.31289	9.04E-04	1.96E-05	1.15E-05	2.11E-05	1.07E-05	9.6654E-04
520659.59	4258888.33	19689.24808	0.14699	0.0978	0.14285	0.10119	9.03E-04	6.02E-06	3.50E-06	5.85E-06	3.47E-06	9.2214E-04
520669.52	4258240.5	19683.25469	0.11605	0.14026	0.11455	0.14559	9.03E-04	4.75E-06	5.02E-06	4.69E-06	5.00E-06	9.2249E-04
520684.89	4258674.93	19668.31814	0.12727	0.11517	0.1228	0.11872	9.02E-04	5.21E-06	4.12E-06	5.03E-06	4.08E-06	9.2078E-04
520667.37	4258351.74	19666.19584	0.12293	0.13621	0.11993	0.14216	9.02E-04	5.03E-06	4.87E-06	4.91E-06	4.88E-06	9.2194E-04
520663.15	4258879.85	19659.28056	0.14502	0.09816	0.14099	0.1015	9.02E-04	5.94E-06	3.51E-06	5.77E-06	3.48E-06	9.2064E-04
520660.26	4258410.69	19636.75726	0.12787	0.13671	0.12435	0.14269	9.01E-04	5.24E-06	4.89E-06	5.09E-06	4.90E-06	9.2101E-04
520693.1	4258736.48	19632.33065	0.1267	0.10724	0.12299	0.11084	9.01E-04	5.19E-06	3.84E-06	5.04E-06	3.81E-06	9.1856E-04
520168.72	4258132.6	19625.39065	0.16133	3.1407	0.16133	3.55034	9.00E-04	6.61E-06	1.12E-04	6.61E-06	1.22E-04	1.1478E-03
520692.46	4258761.95	19623.05703	0.12792	0.10477	0.12407	0.10827	9.00E-04	5.24E-06	3.75E-06	5.08E-06	3.72E-06	9.1805E-04
520666.7	4258871.37	19612.97495	0.14311	0.0984	0.13909	0.10171	9.00E-04	5.86E-06	3.52E-06	5.69E-06	3.49E-06	9.1837E-04
520055.72	4259229.9	19602.9869	8.55555	0.17129	15.13791	0.16599	8.99E-04	3.50E-04	6.13E-06	6.20E-04	5.70E-06	1.8813E-03
519919.76	4258737.74	19592.64565	0.44084	0.56397	0.48107	0.53973	8.99E-04	1.80E-05	2.02E-05	1.97E-05	1.85E-05	9.7532E-04
520688.38	4258795.64	19592.12583	0.13082	0.10252	0.1269	0.10565	8.99E-04	5.36E-06	3.67E-06	5.20E-06	3.63E-06	9.1670E-04
519894.16	4258868.92	19585.11416	0.46259	0.3449	0.4953	0.33414	8.99E-04	1.89E-05	1.23E-05	2.03E-05	1.15E-05	9.6156E-04
520670.25	4258862.89	19565.61031	0.1412	0.09873	0.13724	0.10199	8.98E-04	5.78E-06	3.53E-06	5.62E-06	3.50E-06	9.1607E-04
520663.67	4258393.76	19564.01361	0.12606	0.13604	0.12264	0.14192	8.98E-04	5.16E-06	4.87E-06	5.02E-06	4.87E-06	9.1748E-04
520085.46	4259250.68	19563.18816	15.66186	0.17087	17.2853	0.16287	8.98E-04	6.41E-04	6.11E-06	7.08E-04	5.59E-06	2.2582E-03
520099.89	4258232.38	19556.62523	0.19058	14.7417	0.19647	15.88256	8.97E-04	7.80E-06	5.27E-04	8.04E-06	5.45E-04	1.9856E-03
520670.97	4258251.13	19553.14054	0.11631	0.13909	0.11486	0.14453	8.97E-04	4.76E-06	4.98E-06	4.70E-06	4.96E-06	9.1646E-04
520037.55	4258393.86	19538.64378	0.28501	5.32387	0.30216	4.28954	8.96E-04	1.17E-05	1.90E-04	1.24E-05	1.47E-04	1.2581E-03
520651.36	4258464.93	19528.33809	0.13286	0.13779	0.12857	0.1441	8.96E-04	5.44E-06	4.93E-06	5.26E-06	4.95E-06	9.1650E-04
520673.8	4258854.4	19509.32005	0.13929	0.09907	0.13541	0.10227	8.95E-04	5.70E-06	3.54E-06	5.54E-06	3.51E-06	9.1335E-04
519907.47	4258780.46	19505.3606	0.43782	0.46825	0.47147	0.45066	8.95E-04	1.79E-05	1.67E-05	1.93E-05	1.55E-05	9.6432E-04
520640.15	4258941.45	19496.06371	0.15792	0.09506	0.15313	0.0987	8.94E-04	6.47E-06	3.40E-06	6.27E-06	3.39E-06	9.1397E-04
520033.64	4258415.45	19491.94429	0.31093	4.74342	0.33078	3.87537	8.94E-04	1.27E-05	1.70E-04	1.35E-05	1.33E-04	1.2232E-03
519928.13	4258709.69	19453.45345	0.44275	0.64164	0.48445	0.61235	8.92E-04	1.81E-05	2.30E-05	1.98E-05	2.10E-05	9.7442E-04
520677.35	4258845.92	19441.29684	0.13742	0.09936	0.13358	0.10249	8.92E-04	5.63E-06	3.55E-06	5.47E-06	3.52E-06	9.1010E-04
520158.9	4258142.57	19433.11661	0.16316	3.62597	0.1633	4.11823	8.92E-04	6.68E-06	1.30E-04	6.69E-06	1.41E-04	1.1760E-03
520672.21	4258286.85	19430.20256	0.11812	0.13654	0.1164	0.14255	8.91E-04	4.84E-06	4.88E-06	4.77E-06	4.89E-06	9.1080E-04
520684.94	4258665.44	19424.75725	0.12689	0.11597	0.12232	0.11957	8.91E-04	5.20E-06	4.15E-06	5.01E-06	4.10E-06	9.0963E-04
520658.19	4258431.12	19419.22395	0.12936	0.13651	0.12564	0.14263	8.91E-04	5.30E-06	4.88E-06	5.14E-06	4.90E-06	9.1114E-04
520667.17	4258377.09	19411.3212	0.1242	0.13531	0.1209	0.1411	8.91E-04	5.09E-06	4.84E-06	4.95E-06	4.84E-06	9.1027E-04
520129.41	4258182.47	19395.00844	0.17393	6.18218	0.17573	7.19121	8.90E-04	7.12E-06	2.21E-04	7.20E-06	2.47E-04	1.3721E-03
520064.6	4258302.8	19394.15944	0.21821	19.6311	0.23109	10.05715	8.90E-04	8.93E-06	7.02E-04	9.46E-06	3.45E-04	1.9556E-03
520672	4258312.17	19392.08647	0.11961	0.13532	0.11731	0.1415	8.90E-04	4.90E-06	4.84E-06	4.80E-06	4.86E-06	9.0907E-04
520691.95	4258787.11	19390.06791	0.12906	0.10254	0.12519	0.10572	8.90E-04	5.28E-06	3.67E-06	5.13E-06	3.63E-06	9.0729E-04
520055.34	4258326.6	19367.21491	0.23057	10.52954	0.24474	7.22773	8.89E-04	9.44E-06	3.77E-04	1.00E-05	2.48E-04	1.5328E-03
520671.05	4258335.53	19361.86318	0.12102	0.13516	0.11827	0.14115	8.88E-04	4.96E-06	4.83E-06	4.84E-06	4.85E-06	9.0776E-04
520680.9	4258837.44	19359.72192	0.13557	0.09961	0.13176	0.10268	8.88E-04	5.55E-06	3.56E-06	5.39E-06	3.53E-06	9.0622E-04
520095.38	4259260.66	19358.52312	11.70573	0.16925	10.99748	0.16052	8.88E-04	4.79E-04	6.05E-06	4.50E-04	5.51E-06	1.8293E-03
520691.3	4258692.9	19354.67302	0.12565	0.11199	0.12163	0.1154	8.88E-04	5.14E-06	4.01E-06	4.98E-06	3.96E-06	9.0605E-04
520693.89	4258710.67	19351.05602	0.1254	0.10958	0.12162	0.11305	8.88E-04	5.13E-06	3.92E-06	4.98E-06	3.88E-06	9.0570E-04
520109.74	4258212.41	19336.88921	0.18292	10.31592	0.18703	12.0048	8.87E-04	7.49E-06	3.69E-04	7.66E-06	4.12E-04	1.6834E-03
520009.52	4258531.17	19329.75075	0.51618	2.49318	0.58698	2.17029	8.87E-04	2.11E-05	8.92E-05	2.40E-05	7.45E-05	1.0957E-03
519957.12	4258636.77	19323.0011	0.46813	0.96858	0.52212	0.91391	8.87E-04	1.92E-05	3.46E-05	2.14E-05	3.14E-05	9.9307E-04
520696.06	4258753.36	19322.50101	0.12624	0.10479	0.12253	0.10831	8.86E-04	5.17E-06	3.75E-06	5.02E-06	3.72E-06	9.0413E-04
519890.73	4258908.88	19293.22798	0.47707	0.30406	0.51097	0.29643	8.85E-04	1.95E-05	1.09E-05	2.09E-05	1.02E-05	9.4664E-04
520684.46	4258828.95	19261.73554	0.13373	0.09984	0.12994	0.10285	8.84E-04	5.48E-06	3.57E-06	5.32E-06	3.53E-06	9.0159E-04
519937.12	4258683.15	19248.48916	0.44561	0.73301	0.49006	0.69676	8.83E-04	1.82E-05	2.62E-05	2.01E-05	2.39E-05	9.7153E-04
519910.42	4258763.46	19246.14786	0.43124	0.49829	0.46591	0.47901	8.83E-04	1.77E-05	1.78E-05	1.91E-05	1.64E-05	9.5398E-04
519899.71	4258809.97	19244.22131	0.43426	0.41646	0.4656	0.40152	8.83E-04	1.78E-05	1.49E-05	1.91E-05	1.38E-05	9.4841E-04
520038.53	4258383.47	19238.82263	0.27226	5.48569	0.28829	4.40686	8.83E-04	1.11E-05	1.96E-04	1.18E-05	1.51E-04	1.2531E-03
519896.72	4258826.87	19233.91479	0.43731	0.39258	0.46844	0.37879	8.82E-04	1.79E-05	1.40E-05	1.92E-05	1.30E-05	9.4655E-04
520638.58	4258952.11	19229.02908	0.15881	0.09413	0.15389	0.09776	8.82E-04	6.50E-06	3.37E-06	6.30E-06	3.36E-06	9.0172E-04
520045.82	4259229.92	19219.90283	6.01483	0.16865	8.32552	0.16426	8.82E-04	2.46E-04	6.03E-06	3.41E-04	5.64E-06	1.4806E-03
520149.08	4258152.53	19215.42744	0.16497	4.24599	0.1654	4.85748	8.82E-04	6.75E-06	1.52E-04	6.77E-06	1.67E-04	1.2137E-03
520696.73	4258727.83	19212.1974	0.12501	0.10715	0.12138	0.11068	8.81E-04	5.12E-06	3.83E-06	4.97E-06	3.80E-06	8.9914E-04
520670.75	4258360.62	19200.19455	0.12234	0.13442	0.11918	0.14019	8.81E-04	5.01E-06	4.81E-06	4.88E-06	4.81E-06	9.0038E-04
520673.17	4258212.02	19169.57905	0.11336	0.13953	0.1117	0.1446	8.79E-04	4.64E-06	4.99E-06	4.57E-06	4.96E-06	8.9863E-04
519969.85	4258608.92	19151.39117	0.48405	1.1755	0.54914	1.09825	8.79E-04	1.98E-05	4.20E-05	2.25E-05	3.77E-05	1.0007E-03
520685	4258655.96	19145.55574	0.12649	0.11671	0.12184	0.12039	8.78E-04	5.18E-06	4.17E-06	4.99E-06	4.13E-06	8.9684E-04
519890.13	4258883.33	19145.14707	0.45602	0.32685	0.48771	0.31722	8.78E-04	1.87E-05	1.17E-05	2.00E-05	1.09E-05	9.3956E-04
519979.77	4258589.48	19142.73486	0.49963	1.387	0.57406	1.27613	8.78E-04	2.05E-05	4.96E-05	2.35E-05	4.38E-05	1.0156E-03
519902.61	4258792.84	19141.82873	0.42954	0.44217	0.4612	0.42607	8.78E-04	1.76E-05	1.58E-05	1.89E-05	1.46E-05	9.4510E-04
520695.53	4258778.57	19141.16317	0.1273	0.10246	0.1235	0.10572	8.78E-04	5.21E-06	3.66E-06	5.06E-06	3.63E-06	8.9572E-04
520688.01	4258820.47	19134.31536	0.13191	0.1	0.12813	0.10298	8.78E-04	5.40E-06	3.58E-06	5.25E-06	3.54E-06	8.9561E-04
519893.64	4258843.56	19134.30818	0.43909	0.37023	0.46953	0.35773	8.78E-04	1.80E-05	1.32E-05	1.92E-05	1.23E-05	9.4057E-04
519999.61	4258550.61	19101.93836	0.51793	2.01437	0.59321	1.79191	8.76E-04	2.12E-05	7.21E-05	2.43E-05	6.15E-05	1.0554E-03
520055.74	4259239.9	19091.77945	8.60538	0.16754	15.38308	0.1624	8.76E-04	3.52E-04	5.99E-06	6.30E-04	5.58E-06	1.8696E-03
520674.64	4258222.66	19087.97445	0.11364	0.13856	0.11202	0.14362	8.76E-04	4.65E-06	4.96E-06	4.59E-06	4.93E-06	8.9485E-04
519989.69	4258570.05	19084.88471	0.51192	1.65962	0.58831	1.50242	8.76E-04	2.10E-05	5.94E-05	2.41E-05	5.16E-05	1.0316E-03
520675.95	4258270.8	19050.94863	0.11619	0.13568	0.11463	0.1414	8.74E-04	4.76E-06	4.85E-06	4.69E-06	4.85E-06	8.9318E-04
520675.66	4258295.9	19048.73604	0.11771	0.13437	0.11572	0.14043	8.74E-04	4.82E-06	4.81E-06	4.74E-06	4.82E-06	8.9310E-04
520019.4	4258502.04	19045.97721	0.47115	3.18109	0.52164	2.70255	8.74E-04	1.93E-05	1.14E-04	2.14E-05	9.28E-05	1.1210E-03
520085.48	4259260.68	19035.45382	15.64757	0.16714	17.07409	0.15939	8.73E-04	6.41E-04	5.98E-06	6.99E-04	5.47E-06	2.2245E-03
520026.15	4258466.06	19029.41185	0.39509	3.83016	0.42781	3.19431	8.73E-04	1.62E-05	1.37E-04	1.75E-05	1.10E-04	1.1534E-03
520663.74	4258419.81	19012.33298	0.12708	0.13473	0.12347	0.14067	8.72E-04	5.20E-06	4.82E-06	5.06E-06	4.83E-06	8.9216E-04
520119.59	4258192.44	19006.37974	0.17539	7.81034	0.17817	9.08187	8.72E-04	7.18E-06	2.79E-04	7.30E-06	3.12E-04	1.4776E-03
520178.57	4258112.63	19004.65954	0.1547	2.75524	0.15453	3.09456	8.72E-04	6.33E-06	9.86E-05	6.33E-06	1.06E-04	1.0893E-03
520676.22	4258233.35	19001.07453	0.11395	0.13731	0.11234	0.14251	8.72E-04	4.67E-06	4.91E-06	4.60E-06	4.89E-06	8.9080E-04
520691.56	4258811.99	18987.37156	0.13013	0.10014	0.12636	0.1031	8.71E-04	5.33E-06	3.58E-06	5.17E-06	3.54E-06	8.8873E-04
520667.11	4258402.8	18983.26977	0.12532	0.13415	0.12184	0.13994	8.71E-04	5.13E-06	4.80E-06	4.99E-06	4.80E-06	8.9064E-04
520029.38	4258433.94	18978.01154	0.33424	4.21109	0.35718	3.49151	8.71E-04	1.37E-05	1.51E-04	1.46E-05	1.20E-04	1.1695E-03
520699.66	4258744.77	18972.29863	0.12455	0.10481	0.12099	0.10829	8.70E-04	5.10E-06	3.75E-06	4.95E-06	3.72E-06	8.8793E-04
520654.76	4258473.85	18960.98497	0.13187	0.13605	0.12743	0.14219	8.70E-04	5.40E-06	4.87E-06	5.22E-06	4.88E-06	8.9026E-04
520139.26	4258162.5	18960.71709	0.16672	5.06368	0.16762	5.8466	8.70E-04	6.83E-06	1.81E-04	6.86E-06	2.01E-04	1.2654E-03
519890.49	4258860.07	18953.33508	0.43956	0.3495	0.46941	0.33826	8.70E-04	1.80E-05	1.25E-05	1.92E-05	1.16E-05	9.3087E-04
520045.38	4258350.68	18937.74456	0.24313	6.88366	0.25759	5.31291	8.69E-04	9.95E-06	2.46E-04	1.05E-05	1.82E-04	1.3179E-03
520674.4	4258344.35	18935.74323	0.12047	0.13343	0.11752	0.13922	8.69E-04	4.93E-06	4.77E-06	4.81E-06	4.78E-06	8.8803E-04
520652.54	4258929.11	18890.85357	0.15118	0.09415	0.14668	0.09763	8.67E-04	6.19E-06	3.37E-06	6.01E-06	3.35E-06	8.8559E-04
520670.58	4258386.05	18886.16444	0.12353	0.13347	0.12015	0.13914	8.66E-04	5.06E-06	4.77E-06	4.92E-06	4.78E-06	8.8599E-04
520656.2	4258920.38	18882.56718	0.14921	0.09448	0.14483	0.09791	8.66E-04	6.11E-06	3.38E-06	5.93E-06	3.36E-06	8.8508E-04
520699.1	4258770.04	18880.56364	0.12561	0.10238	0.12189	0.10571	8.66E-04	5.14E-06	3.66E-06	4.99E-06	3.63E-06	8.8363E-04
520168.75	4258122.6	18879.40497	0.15652	3.1416	0.15629	3.55243	8.66E-04	6.41E-06	1.12E-04	6.40E-06	1.22E-04	1.1133E-03
519947.12	4258655.32	18873.88321	0.44857	0.84872	0.49621	0.80389	8.66E-04	1.84E-05	3.04E-05	2.03E-05	2.76E-05	9.6254E-04
520659.85	4258911.66	18868.32107	0.14726	0.09483	0.14299	0.09821	8.66E-04	6.03E-06	3.39E-06	5.85E-06	3.37E-06	8.8429E-04
520039.34	4258373.15	18866.58445	0.2603	5.62352	0.27536	4.506	8.66E-04	1.07E-05	2.01E-04	1.13E-05	1.55E-04	1.2433E-03
520663.5	4258902.93	18848.38071	0.14533	0.09518	0.14115	0.09851	8.65E-04	5.95E-06	3.40E-06	5.78E-06	3.38E-06	8.8324E-04
520658.09	4258456.72	18847.87469	0.13022	0.13531	0.1261	0.14147	8.65E-04	5.33E-06	4.84E-06	5.16E-06	4.86E-06	8.8490E-04
520685.05	4258646.48	18847.50972	0.12611	0.11731	0.1214	0.12111	8.65E-04	5.16E-06	4.20E-06	4.97E-06	4.16E-06	8.8318E-04
520697.54	4258701.95	18843.71066	0.12373	0.10948	0.11997	0.11281	8.65E-04	5.07E-06	3.92E-06	4.91E-06	3.87E-06	8.8228E-04
520099.92	4258222.38	18823.11626	0.18393	14.77425	0.18935	16.12868	8.64E-04	7.53E-06	5.28E-04	7.75E-06	5.54E-04	1.9610E-03
520695.11	4258803.51	18822.46452	0.12838	0.10022	0.12463	0.10319	8.64E-04	5.26E-06	3.58E-06	5.10E-06	3.54E-06	8.8103E-04
520678.24	4258244.23	18822.1073	0.11408	0.13592	0.11251	0.14121	8.64E-04	4.67E-06	4.86E-06	4.61E-06	4.85E-06	8.8251E-04
520667.16	4258894.21	18821.67527	0.14339	0.09554	0.13932	0.09882	8.64E-04	5.87E-06	3.42E-06	5.70E-06	3.39E-06	8.8189E-04
519886.99	4258899.85	18814.42376	0.45457	0.30896	0.4857	0.30059	8.63E-04	1.86E-05	1.11E-05	1.99E-05	1.03E-05	9.2304E-04
519913.27	4258746.2	18811.91833	0.42187	0.53069	0.45807	0.50911	8.63E-04	1.73E-05	1.90E-05	1.88E-05	1.75E-05	9.3554E-04
520661.53	4258439.88	18808.76278	0.12853	0.13462	0.12467	0.14069	8.63E-04	5.26E-06	4.82E-06	5.10E-06	4.83E-06	8.8292E-04
520694.84	4258684.46	18803.57535	0.12405	0.11171	0.11999	0.11504	8.63E-04	5.08E-06	4.00E-06	4.91E-06	3.95E-06	8.8061E-04
520670.81	4258885.48	18793.27012	0.14147	0.0959	0.1375	0.09913	8.62E-04	5.79E-06	3.43E-06	5.63E-06	3.40E-06	8.8045E-04
520055.77	4258316.43	18779.4655	0.2214	10.72754	0.2348	7.3244	8.62E-04	9.07E-06	3.84E-04	9.61E-06	2.51E-04	1.5154E-03
520700.35	4258719.18	18772.0444	0.12336	0.10709	0.1198	0.11049	8.61E-04	5.05E-06	3.83E-06	4.91E-06	3.79E-06	8.7881E-04
520674.46	4258876.76	18755.45101	0.13957	0.09623	0.13568	0.09942	8.60E-04	5.71E-06	3.44E-06	5.56E-06	3.41E-06	8.7859E-04
520045.84	4259239.92	18728.14155	6.03691	0.16501	8.39069	0.16073	8.59E-04	2.47E-04	5.90E-06	3.44E-04	5.52E-06	1.4614E-03
520096.39	4259273.23	18727.14007	11.41923	0.16484	10.49985	0.15637	8.59E-04	4.68E-04	5.90E-06	4.30E-04	5.37E-06	1.7679E-03
520674.14	4258369.51	18720.35024	0.12171	0.13267	0.11845	0.13828	8.59E-04	4.98E-06	4.75E-06	4.85E-06	4.75E-06	8.7818E-04
520678.12	4258868.03	18707.94563	0.1377	0.09649	0.13385	0.09963	8.58E-04	5.64E-06	3.45E-06	5.48E-06	3.42E-06	8.7627E-04
520158.93	4258132.57	18701.84298	0.15823	3.62666	0.15817	4.12419	8.58E-04	6.48E-06	1.30E-04	6.48E-06	1.42E-04	1.1423E-03
520679.37	4258279.79	18688.06887	0.1158	0.13366	0.11407	0.13946	8.57E-04	4.74E-06	4.78E-06	4.67E-06	4.79E-06	8.7635E-04
519921.65	4258718.2	18683.61573	0.4235	0.60123	0.46175	0.57501	8.57E-04	1.73E-05	2.15E-05	1.89E-05	1.97E-05	9.3466E-04
520679.11	4258304.95	18660.145	0.11725	0.13242	0.11499	0.13843	8.56E-04	4.80E-06	4.74E-06	4.71E-06	4.75E-06	8.7509E-04
520681.77	4258859.31	18654.70531	0.13583	0.09678	0.13204	0.09987	8.56E-04	5.56E-06	3.46E-06	5.41E-06	3.43E-06	8.7370E-04
520129.44	4258172.47	18650.06812	0.16829	6.18924	0.16991	7.19675	8.56E-04	6.89E-06	2.21E-04	6.96E-06	2.47E-04	1.3379E-03
520647.27	4258948.51	18649.24994	0.15403	0.09289	0.14926	0.09641	8.56E-04	6.31E-06	3.32E-06	6.11E-06	3.31E-06	8.7464E-04
520698.66	4258795.02	18646.01942	0.12668	0.10026	0.12297	0.10327	8.55E-04	5.19E-06	3.59E-06	5.03E-06	3.55E-06	8.7280E-04
520702.67	4258761.5	18637.92262	0.12403	0.10238	0.12043	0.10574	8.55E-04	5.08E-06	3.66E-06	4.93E-06	3.63E-06	8.7237E-04
519930.83	4258692.09	18614.72996	0.4288	0.68378	0.46909	0.65189	8.54E-04	1.76E-05	2.45E-05	1.92E-05	2.24E-05	9.3761E-04
520055.76	4259249.9	18598.98899	8.67635	0.16391	15.67614	0.15893	8.53E-04	3.55E-04	5.86E-06	6.42E-04	5.46E-06	1.8617E-03
520703.25	4258736.18	18598.78408	0.12291	0.10476	0.11947	0.10818	8.53E-04	5.03E-06	3.75E-06	4.89E-06	3.71E-06	8.7066E-04
520109.77	4258202.41	18591.45668	0.17669	10.34008	0.18053	11.96041	8.53E-04	7.23E-06	3.70E-04	7.39E-06	4.11E-04	1.6480E-03
520685.42	4258850.58	18591.14138	0.13399	0.09708	0.13025	0.10011	8.53E-04	5.49E-06	3.47E-06	5.33E-06	3.44E-06	8.7065E-04
520694.89	4258674.98	18581.8938	0.12368	0.11241	0.11948	0.11577	8.53E-04	5.06E-06	4.02E-06	4.89E-06	3.97E-06	8.7045E-04
519886.36	4258874.23	18561.12347	0.43345	0.3315	0.46234	0.3213	8.52E-04	1.77E-05	1.19E-05	1.89E-05	1.10E-05	9.1111E-04
520063.3	4258293.35	18540.01116	0.20891	17.35354	0.22096	9.65838	8.51E-04	8.55E-06	6.21E-04	9.05E-06	3.32E-04	1.8205E-03
520685.1	4258637	18535.43147	0.12575	0.11782	0.12101	0.12176	8.50E-04	5.15E-06	4.21E-06	4.95E-06	4.18E-06	8.6887E-04
520689.08	4258841.86	18513.72506	0.13216	0.09736	0.12847	0.10032	8.49E-04	5.41E-06	3.48E-06	5.26E-06	3.44E-06	8.6697E-04
520677.76	4258353.17	18509.62549	0.11992	0.1317	0.11679	0.13733	8.49E-04	4.91E-06	4.71E-06	4.78E-06	4.71E-06	8.6830E-04
520149.11	4258142.53	18500.32975	0.15995	4.24595	0.16016	4.8699	8.49E-04	6.55E-06	1.52E-04	6.56E-06	1.67E-04	1.1809E-03
520046.09	4258340.4	18481.49415	0.23329	7.05446	0.2471	5.41804	8.48E-04	9.55E-06	2.52E-04	1.01E-05	1.86E-04	1.3059E-03
520658.16	4258482.77	18461.68841	0.13091	0.13427	0.12629	0.14024	8.47E-04	5.36E-06	4.80E-06	5.17E-06	4.81E-06	8.6713E-04
520702.21	4258786.54	18447.03642	0.12503	0.10025	0.12137	0.10332	8.46E-04	5.12E-06	3.59E-06	4.97E-06	3.55E-06	8.6354E-04
519903.81	4258771.61	18436.69654	0.41163	0.47101	0.44292	0.45366	8.46E-04	1.69E-05	1.68E-05	1.81E-05	1.56E-05	9.1325E-04
520086.48	4259273.24	18430.47624	15.24018	0.16285	15.97494	0.15532	8.46E-04	6.24E-04	5.82E-06	6.54E-04	5.33E-06	2.1348E-03
520692.73	4258833.13	18422.24049	0.13036	0.09761	0.1267	0.1005	8.45E-04	5.34E-06	3.49E-06	5.19E-06	3.45E-06	8.6264E-04
519892.99	4258817.88	18407.50096	0.41357	0.39612	0.44178	0.38248	8.45E-04	1.69E-05	1.42E-05	1.81E-05	1.31E-05	9.0682E-04
520670.55	4258411.84	18405.14795	0.12457	0.13226	0.12102	0.138	8.44E-04	5.10E-06	4.73E-06	4.96E-06	4.74E-06	8.6392E-04
520667.21	4258428.94	18402.51112	0.12627	0.13278	0.12255	0.13868	8.44E-04	5.17E-06	4.75E-06	5.02E-06	4.76E-06	8.6397E-04
519889.95	4258834.65	18389.39655	0.4161	0.3742	0.44409	0.36154	8.44E-04	1.70E-05	1.34E-05	1.82E-05	1.24E-05	9.0469E-04
520022.73	4258474.35	18387.60803	0.40425	3.51081	0.43921	2.95493	8.44E-04	1.66E-05	1.26E-04	1.80E-05	1.01E-04	1.1051E-03
519937.12	4258673.87	18382.58803	0.42999	0.74884	0.47202	0.7122	8.43E-04	1.76E-05	2.68E-05	1.93E-05	2.45E-05	9.3153E-04
520682.02	4258215.81	18365.75859	0.11142	0.1354	0.10973	0.14029	8.43E-04	4.56E-06	4.84E-06	4.49E-06	4.82E-06	8.6130E-04
520673.99	4258395.01	18354.20031	0.12284	0.13165	0.1194	0.13724	8.42E-04	5.03E-06	4.71E-06	4.89E-06	4.71E-06	8.6139E-04
520019.36	4258492.34	18352.72355	0.44076	3.20558	0.48362	2.7269	8.42E-04	1.80E-05	1.15E-04	1.98E-05	9.36E-05	1.0881E-03
520683.14	4258263.81	18335.50879	0.11394	0.13276	0.11232	0.13828	8.41E-04	4.67E-06	4.75E-06	4.60E-06	4.75E-06	8.5996E-04
520694.94	4258665.5	18335.13734	0.12332	0.11306	0.11899	0.11648	8.41E-04	5.05E-06	4.04E-06	4.87E-06	4.00E-06	8.5914E-04
520682.8	4258288.77	18333.25251	0.1154	0.13162	0.11344	0.13747	8.41E-04	4.72E-06	4.71E-06	4.64E-06	4.72E-06	8.5989E-04
520706.25	4258752.97	18330.24585	0.12242	0.10241	0.11897	0.10577	8.41E-04	5.01E-06	3.66E-06	4.87E-06	3.63E-06	8.5813E-04
519895.96	4258800.91	18327.15598	0.40966	0.41968	0.43823	0.40504	8.41E-04	1.68E-05	1.50E-05	1.79E-05	1.39E-05	9.0445E-04
519882.82	4258922.25	18321.9331	0.45211	0.28683	0.48247	0.28003	8.41E-04	1.85E-05	1.03E-05	1.98E-05	9.61E-06	8.9871E-04
520701.19	4258693.24	18320.81424	0.12212	0.10925	0.11833	0.11249	8.41E-04	5.00E-06	3.91E-06	4.84E-06	3.86E-06	8.5814E-04

520703.97	4258710.53	18312.5041	0.12175	0.10699	0.11822	0.11027	8.40E-04	4.98E-06	3.83E-06	4.84E-06	3.79E-06	8.5758E-04
520696.38	4258824.41	18308.82451	0.12857	0.0978	0.12494	0.10064	8.40E-04	5.26E-06	3.50E-06	5.12E-06	3.46E-06	8.5731E-04
519883.24	4258890.82	18300.221	0.43293	0.31353	0.46139	0.30452	8.40E-04	1.77E-05	1.12E-05	1.89E-05	1.05E-05	8.9787E-04
519886.82	4258851.23	18291.13112	0.41751	0.35359	0.44481	0.34206	8.39E-04	1.71E-05	1.26E-05	1.82E-05	1.17E-05	8.9886E-04
520661.45	4258465.56	18290.79808	0.1293	0.13356	0.12502	0.1396	8.39E-04	5.29E-06	4.78E-06	5.12E-06	4.79E-06	8.5913E-04
520119.62	4258182.44	18287.18717	0.16965	7.82114	0.1722	9.09417	8.39E-04	6.95E-06	2.80E-04	7.05E-06	3.12E-04	1.4449E-03
520682.55	4258314.01	18274.5752	0.11676	0.13065	0.11424	0.13654	8.38E-04	4.78E-06	4.67E-06	4.68E-06	4.69E-06	8.5722E-04
520683.55	4258226.48	18268.65798	0.1117	0.13433	0.11004	0.13929	8.38E-04	4.57E-06	4.80E-06	4.51E-06	4.78E-06	8.5680E-04
520045.86	4259249.92	18251.50847	6.08114	0.16145	8.46322	0.1573	8.37E-04	2.49E-04	5.77E-06	3.47E-04	5.40E-06	1.4440E-03
519915.99	4258728.64	18247.41579	0.41155	0.56481	0.44756	0.54114	8.37E-04	1.69E-05	2.02E-05	1.83E-05	1.86E-05	9.1111E-04
520139.29	4258152.5	18239.59569	0.1615	5.06849	0.16225	5.84583	8.37E-04	6.61E-06	1.81E-04	6.64E-06	2.01E-04	1.2320E-03
520677.52	4258378.4	18236.01905	0.12107	0.13093	0.11773	0.13641	8.37E-04	4.96E-06	4.68E-06	4.82E-06	4.68E-06	8.5578E-04
520096.4	4259283.23	18232.80974	11.41462	0.16135	10.41881	0.15315	8.36E-04	4.67E-04	5.77E-06	4.27E-04	5.26E-06	1.7415E-03
520685.16	4258627.52	18213.75445	0.1254	0.11831	0.12065	0.1224	8.36E-04	5.13E-06	4.23E-06	4.94E-06	4.20E-06	8.5412E-04
520705.77	4258778.06	18208.05134	0.12338	0.10016	0.1198	0.10331	8.35E-04	5.05E-06	3.58E-06	4.91E-06	3.55E-06	8.5244E-04
520706.85	4258727.59	18201.63895	0.12132	0.10466	0.11795	0.108	8.35E-04	4.97E-06	3.74E-06	4.83E-06	3.71E-06	8.5230E-04
520056.16	4258306.28	18200.55583	0.21281	10.90763	0.22553	7.40153	8.35E-04	8.71E-06	3.90E-04	9.23E-06	2.54E-04	1.4972E-03
520700.04	4258815.68	18171.6703	0.12682	0.09794	0.12321	0.10077	8.34E-04	5.19E-06	3.50E-06	5.04E-06	3.46E-06	8.5088E-04
520168.78	4258112.6	18161.39777	0.15187	3.14367	0.15152	3.54925	8.33E-04	6.22E-06	1.12E-04	6.20E-06	1.22E-04	1.0799E-03
519881.35	4258911.69	18152.42536	0.43945	0.29428	0.46835	0.28672	8.33E-04	1.80E-05	1.05E-05	1.92E-05	9.84E-06	8.9034E-04
520685.19	4258237.2	18149.70995	0.11195	0.13305	0.1103	0.13817	8.33E-04	4.58E-06	4.76E-06	4.52E-06	4.74E-06	8.5128E-04
519898.82	4258783.7	18131.34036	0.40417	0.44486	0.43294	0.42922	8.32E-04	1.65E-05	1.59E-05	1.77E-05	1.47E-05	8.9675E-04
520682.43	4258339.55	18126.63381	0.11794	0.13023	0.11497	0.13581	8.32E-04	4.83E-06	4.66E-06	4.71E-06	4.66E-06	8.5047E-04
520055.77	4259259.9	18121.59877	8.72331	0.16041	15.97142	0.15557	8.31E-04	3.57E-04	5.74E-06	6.54E-04	5.34E-06	1.8536E-03
520099.95	4258212.38	18119.40482	0.17763	14.81669	0.18269	16.12089	8.31E-04	7.27E-06	5.30E-04	7.48E-06	5.53E-04	1.9295E-03
520009.48	4258521.48	18100.38872	0.48322	2.52748	0.54365	2.19921	8.30E-04	1.98E-05	9.04E-05	2.23E-05	7.55E-05	1.0384E-03
520659.58	4258936.25	18083.01001	0.14759	0.09199	0.14308	0.09536	8.30E-04	6.04E-06	3.29E-06	5.86E-06	3.27E-06	8.4808E-04
519906.72	4258754.54	18080.76413	0.40429	0.50035	0.43639	0.4813	8.30E-04	1.66E-05	1.79E-05	1.79E-05	1.65E-05	8.9835E-04
520663.21	4258927.58	18074.34596	0.14573	0.09228	0.14133	0.0956	8.29E-04	5.97E-06	3.30E-06	5.79E-06	3.28E-06	8.4755E-04
520681.12	4258361.99	18067.89636	0.11932	0.13005	0.11608	0.1355	8.29E-04	4.89E-06	4.65E-06	4.75E-06	4.65E-06	8.4786E-04
520695	4258656.02	18065.29259	0.12296	0.11368	0.11855	0.1172	8.29E-04	5.03E-06	4.07E-06	4.85E-06	4.02E-06	8.4678E-04
520666.84	4258918.91	18060.15705	0.14388	0.0926	0.13959	0.09588	8.29E-04	5.89E-06	3.31E-06	5.72E-06	3.29E-06	8.4678E-04
520670.47	4258910.24	18040.97771	0.14204	0.09294	0.13786	0.09617	8.28E-04	5.82E-06	3.32E-06	5.64E-06	3.30E-06	8.4577E-04
520674.1	4258901.58	18016.93882	0.1402	0.0933	0.13614	0.09648	8.27E-04	5.74E-06	3.34E-06	5.57E-06	3.31E-06	8.4455E-04
520046.71	4258330.16	18013.50923	0.2241	7.2038	0.23726	5.52231	8.26E-04	9.18E-06	2.58E-04	9.71E-06	1.90E-04	1.2926E-03
520158.96	4258122.57	18001.69824	0.15351	3.62826	0.1533	4.12425	8.26E-04	6.29E-06	1.30E-04	6.28E-06	1.42E-04	1.1098E-03
520703.69	4258806.96	18001.19786	0.12508	0.098	0.12149	0.10084	8.26E-04	5.12E-06	3.51E-06	4.97E-06	3.46E-06	8.4292E-04
520709.82	4258744.43	17996.93449	0.12083	0.10239	0.11751	0.10571	8.26E-04	4.95E-06	3.66E-06	4.81E-06	3.63E-06	8.4271E-04
520686.54	4258272.74	17990.54502	0.11354	0.13084	0.11181	0.13643	8.25E-04	4.65E-06	4.68E-06	4.58E-06	4.68E-06	8.4396E-04
520677.73	4258892.91	17988.48878	0.13838	0.09362	0.13441	0.09676	8.25E-04	5.67E-06	3.35E-06	5.50E-06	3.32E-06	8.4312E-04
519924.46	4258700.84	17976.87101	0.41223	0.6395	0.44876	0.61134	8.25E-04	1.69E-05	2.29E-05	1.84E-05	2.10E-05	9.0386E-04
520686.22	4258297.76	17969.87416	0.11497	0.12959	0.11274	0.13543	8.24E-04	4.71E-06	4.64E-06	4.62E-06	4.65E-06	8.4303E-04
520709.32	4258769.57	17957.17477	0.12179	0.10008	0.11831	0.10328	8.24E-04	4.99E-06	3.58E-06	4.84E-06	3.55E-06	8.4080E-04
520681.36	4258884.24	17955.36247	0.13657	0.09397	0.1327	0.09706	8.24E-04	5.59E-06	3.36E-06	5.43E-06	3.33E-06	8.4148E-04
520086.5	4259283.24	17953.57969	15.16056	0.15944	15.78644	0.15213	8.24E-04	6.21E-04	5.70E-06	6.46E-04	5.22E-06	2.1017E-03
520129.47	4258162.47	17948.73231	0.16296	6.19612	0.16441	7.19761	8.23E-04	6.67E-06	2.22E-04	6.73E-06	2.47E-04	1.3056E-03
519882.59	4258865.13	17944.82181	0.41184	0.33565	0.43813	0.32509	8.23E-04	1.69E-05	1.20E-05	1.79E-05	1.12E-05	8.8124E-04
520063.64	4258283.22	17942.73312	0.20113	17.72943	0.2125	9.76668	8.23E-04	8.24E-06	6.34E-04	8.70E-06	3.35E-04	1.8096E-03
520684.98	4258875.57	17918.26517	0.13477	0.09431	0.131	0.09735	8.22E-04	5.52E-06	3.37E-06	5.36E-06	3.34E-06	8.3965E-04
519947.12	4258646.05	17890.38505	0.432	0.86409	0.4772	0.81973	8.21E-04	1.77E-05	3.09E-05	1.95E-05	2.81E-05	9.1705E-04
520685.21	4258618.03	17890.24322	0.12505	0.11883	0.12035	0.12304	8.21E-04	5.12E-06	4.25E-06	4.93E-06	4.22E-06	8.3929E-04
520109.8	4258192.41	17877.88222	0.17076	10.36886	0.17441	11.80161	8.20E-04	6.99E-06	3.71E-04	7.14E-06	4.05E-04	1.6104E-03
520688.61	4258866.9	17871.31867	0.13299	0.09461	0.12929	0.0976	8.20E-04	5.45E-06	3.38E-06	5.29E-06	3.35E-06	8.3738E-04
520707.59	4258701.88	17836.46907	0.12019	0.10682	0.11665	0.10999	8.18E-04	4.92E-06	3.82E-06	4.78E-06	3.78E-06	8.3560E-04
520707.34	4258798.23	17834.99668	0.12343	0.09804	0.11987	0.10092	8.18E-04	5.05E-06	3.51E-06	4.91E-06	3.46E-06	8.3517E-04
520673.99	4258420.88	17834.33812	0.12381	0.13039	0.12017	0.13609	8.18E-04	5.07E-06	4.66E-06	4.92E-06	4.67E-06	8.3753E-04
519969.81	4258599.22	17828.75657	0.46285	1.19921	0.52534	1.11813	8.18E-04	1.90E-05	4.29E-05	2.15E-05	3.84E-05	9.3969E-04
519959.89	4258618.66	17827.56056	0.44784	1.03195	0.5018	0.97281	8.18E-04	1.83E-05	3.69E-05	2.05E-05	3.34E-05	9.2709E-04
520677.4	4258403.97	17819.45754	0.12213	0.12984	0.11863	0.13537	8.18E-04	5.00E-06	4.64E-06	4.86E-06	4.65E-06	8.3667E-04
520692.24	4258858.23	17816.50809	0.13124	0.09485	0.12759	0.09779	8.17E-04	5.37E-06	3.39E-06	5.22E-06	3.36E-06	8.3473E-04
520149.14	4258132.54	17811.78251	0.15512	4.24828	0.1552	4.87086	8.17E-04	6.35E-06	1.52E-04	6.35E-06	1.67E-04	1.1491E-03
520670.69	4258438.06	17809.35232	0.12542	0.1309	0.12159	0.13676	8.17E-04	5.14E-06	4.68E-06	4.98E-06	4.70E-06	8.3655E-04
520045.87	4259259.92	17789.34351	6.10454	0.15803	8.54294	0.15401	8.16E-04	2.50E-04	5.65E-06	3.50E-04	5.29E-06	1.4268E-03
520704.84	4258684.52	17786.05247	0.12055	0.10896	0.11671	0.11213	8.16E-04	4.94E-06	3.90E-06	4.78E-06	3.85E-06	8.3345E-04
520710.45	4258719	17785.26879	0.11977	0.10455	0.11644	0.10779	8.16E-04	4.90E-06	3.74E-06	4.77E-06	3.70E-06	8.3307E-04
520664.82	4258474.39	17784.06255	0.12836	0.13188	0.12393	0.13776	8.16E-04	5.26E-06	4.72E-06	5.07E-06	4.73E-06	8.3568E-04
520695.05	4258646.54	17778.76221	0.12261	0.11423	0.11814	0.11787	8.16E-04	5.02E-06	4.09E-06	4.84E-06	4.05E-06	8.3365E-04
520096.42	4259293.23	17763.42573	11.36135	0.15802	10.33526	0.15005	8.15E-04	4.65E-04	5.65E-06	4.23E-04	5.15E-06	1.7141E-03
519879.5	4258881.79	17755.69846	0.41219	0.31775	0.43819	0.30825	8.15E-04	1.69E-05	1.14E-05	1.79E-05	1.06E-05	8.7136E-04
520695.87	4258849.56	17750.9293	0.1295	0.09511	0.12589	0.09797	8.14E-04	5.30E-06	3.40E-06	5.15E-06	3.36E-06	8.3160E-04
520680.9	4258387.29	17749.21511	0.12042	0.12918	0.11702	0.13457	8.14E-04	4.93E-06	4.62E-06	4.79E-06	4.62E-06	8.3326E-04
519979.73	4258579.79	17736.69483	0.47589	1.41467	0.54363	1.29929	8.14E-04	1.95E-05	5.06E-05	2.23E-05	4.46E-05	9.5068E-04
519999.56	4258540.91	17727.7182	0.48745	2.04543	0.55332	1.819	8.13E-04	2.00E-05	7.32E-05	2.27E-05	6.24E-05	9.9154E-04
520685.9	4258348.68	17713.60129	0.11737	0.12854	0.11424	0.13394	8.13E-04	4.81E-06	4.60E-06	4.68E-06	4.60E-06	8.3135E-04
520712.87	4258761.09	17707.9625	0.12028	0.10006	0.11691	0.10329	8.12E-04	4.92E-06	3.58E-06	4.79E-06	3.55E-06	8.2924E-04
520027.45	4258408.01	17705.42129	0.28722	4.03022	0.30444	3.3828	8.12E-04	1.18E-05	1.44E-04	1.25E-05	1.16E-04	1.0968E-03
520668.2	4258457.4	17679.32654	0.12679	0.13109	0.12266	0.13701	8.11E-04	5.19E-06	4.69E-06	5.02E-06	4.70E-06	8.3070E-04
520699.5	4258840.9	17672.41842	0.12778	0.09536	0.12421	0.09816	8.11E-04	5.23E-06	3.41E-06	5.09E-06	3.37E-06	8.2787E-04
520028.87	4258397.44	17668.7709	0.27495	4.18292	0.29081	3.50053	8.11E-04	1.13E-05	1.50E-04	1.19E-05	1.20E-04	1.1036E-03
520690.33	4258256.83	17662.0149	0.11175	0.12991	0.11009	0.13525	8.10E-04	4.58E-06	4.65E-06	4.51E-06	4.64E-06	8.2867E-04
520689.94	4258281.66	17652.43328	0.11315	0.12893	0.11122	0.13458	8.10E-04	4.63E-06	4.61E-06	4.55E-06	4.62E-06	8.2828E-04
519989.65	4258560.35	17651.45848	0.48451	1.68792	0.55185	1.52776	8.10E-04	1.98E-05	6.04E-05	2.26E-05	5.24E-05	9.6507E-04
520022.69	4258450.19	17647.77569	0.34893	3.5502	0.37448	3.00497	8.10E-04	1.43E-05	1.27E-04	1.53E-05	1.03E-04	1.0694E-03
520713.39	4258735.9	17639.92041	0.11931	0.10226	0.11606	0.10553	8.09E-04	4.89E-06	3.66E-06	4.75E-06	3.62E-06	8.2620E-04
520711	4258789.51	17636.92227	0.12179	0.09801	0.11829	0.10096	8.09E-04	4.99E-06	3.51E-06	4.84E-06	3.47E-06	8.2595E-04
519886.25	4258825.74	17623.44082	0.3943	0.3774	0.41984	0.36489	8.09E-04	1.61E-05	1.35E-05	1.72E-05	1.25E-05	8.6789E-04
520684.48	4258370.81	17620.12075	0.1187	0.1284	0.11539	0.1337	8.08E-04	4.86E-06	4.59E-06	4.72E-06	4.59E-06	8.2714E-04
520119.65	4258172.44	17611.90221	0.16422	7.83074	0.16657	9.10763	8.08E-04	6.72E-06	2.80E-04	6.82E-06	3.13E-04	1.4143E-03
520689.64	4258306.74	17609.06478	0.1145	0.12778	0.11201	0.13353	8.08E-04	4.69E-06	4.57E-06	4.59E-06	4.58E-06	8.2630E-04
519883.15	4258842.38	17599.20413	0.39638	0.35718	0.42156	0.34554	8.07E-04	1.62E-05	1.28E-05	1.73E-05	1.19E-05	8.6555E-04
520690.88	4258219.6	17585.31389	0.10953	0.13137	0.10781	0.13614	8.07E-04	4.48E-06	4.70E-06	4.41E-06	4.67E-06	8.2505E-04
520703.13	4258832.23	17579.04295	0.12607	0.09557	0.12254	0.09832	8.06E-04	5.16E-06	3.42E-06	5.02E-06	3.38E-06	8.2347E-04
520139.32	4258142.5	17575.16661	0.1566	5.06941	0.15719	5.85904	8.06E-04	6.41E-06	1.81E-04	6.44E-06	2.01E-04	1.2016E-03
520704.89	4258675.04	17570.38647	0.12022	0.10962	0.11624	0.11281	8.06E-04	4.92E-06	3.92E-06	4.76E-06	3.87E-06	8.2357E-04
520685.26	4258608.55	17569.97017	0.12473	0.11933	0.12007	0.12363	8.06E-04	5.11E-06	4.27E-06	4.92E-06	4.24E-06	8.2461E-04
519909.53	4258737.19	17567.6603	0.39478	0.53164	0.42761	0.51047	8.06E-04	1.62E-05	1.90E-05	1.75E-05	1.75E-05	8.7618E-04
519889.27	4258808.9	17559.69366	0.39102	0.39902	0.41686	0.38567	8.06E-04	1.60E-05	1.43E-05	1.71E-05	1.32E-05	8.6620E-04
520047.25	4258319.95	17540.46536	0.21548	7.33462	0.22802	5.61451	8.05E-04	8.82E-06	2.62E-04	9.34E-06	1.93E-04	1.2780E-03
520030	4258386.98	17525.84029	0.26322	4.3102	0.27791	3.59891	8.04E-04	1.08E-05	1.54E-04	1.14E-05	1.24E-04	1.1039E-03
519937.12	4258664.6	17504.2284	0.41479	0.76352	0.45474	0.72676	8.03E-04	1.70E-05	2.73E-05	1.86E-05	2.50E-05	8.9092E-04
520086.52	4259293.24	17494.4617	15.07173	0.15614	15.59979	0.14906	8.03E-04	6.17E-04	5.58E-06	6.39E-04	5.12E-06	2.0691E-03
520695.1	4258637.05	17478.89696	0.12228	0.11474	0.11778	0.11851	8.02E-04	5.01E-06	4.10E-06	4.82E-06	4.07E-06	8.1990E-04
520692.47	4258230.3	17478.47282	0.1098	0.13019	0.10809	0.13511	8.02E-04	4.50E-06	4.66E-06	4.43E-06	4.64E-06	8.2010E-04
520706.76	4258823.56	17468.53018	0.12441	0.09576	0.1209	0.09847	8.01E-04	5.09E-06	3.43E-06	4.95E-06	3.38E-06	8.1827E-04
520099.98	4258202.38	17452.47096	0.17168	14.86159	0.17643	15.99199	8.01E-04	7.03E-06	5.32E-04	7.22E-06	5.49E-04	1.8955E-03
520051.83	4259272.06	17443.63894	7.50513	0.15542	12.08496	0.15108	8.00E-04	3.07E-04	5.56E-06	4.95E-04	5.19E-06	1.6131E-03
520036.49	4258354.35	17418.44102	0.23555	5.15313	0.24839	4.20998	7.99E-04	9.64E-06	1.84E-04	1.02E-05	1.45E-04	1.1478E-03
520714.65	4258780.78	17417.60487	0.12019	0.09795	0.11677	0.10096	7.99E-04	4.92E-06	3.50E-06	4.78E-06	3.47E-06	8.1576E-04
520716.42	4258752.61	17410.00689	0.11876	0.10007	0.11553	0.10329	7.99E-04	4.86E-06	3.58E-06	4.73E-06	3.55E-06	8.1546E-04
519892.2	4258791.85	17393.01381	0.38637	0.42216	0.41254	0.40792	7.98E-04	1.58E-05	1.51E-05	1.69E-05	1.40E-05	8.5977E-04
520054.41	4258297.01	17383.71009	0.20354	9.92769	0.21547	6.99899	7.98E-04	8.33E-06	3.55E-04	8.82E-06	2.40E-04	1.4101E-03
519900.14	4258762.77	17373.18774	0.38723	0.47281	0.41598	0.45583	7.97E-04	1.59E-05	1.69E-05	1.70E-05	1.56E-05	8.6250E-04
520063.95	4258273.1	17362.33975	0.19382	18.06496	0.20457	9.84206	7.97E-04	7.94E-06	6.46E-04	8.38E-06	3.38E-04	1.7969E-03
520714.04	4258710.4	17352.6035	0.11827	0.10441	0.11494	0.10753	7.96E-04	4.84E-06	3.73E-06	4.71E-06	3.69E-06	8.1308E-04
520711.21	4258693.23	17347.04686	0.11868	0.10659	0.11509	0.10967	7.96E-04	4.86E-06	3.81E-06	4.71E-06	3.77E-06	8.1300E-04
520710.39	4258814.89	17338.86817	0.12277	0.09588	0.11929	0.09858	7.95E-04	5.03E-06	3.43E-06	4.88E-06	3.38E-06	8.1220E-04
520159	4258112.57	17337.11544	0.14901	3.62941	0.14869	4.12012	7.95E-04	6.10E-06	1.30E-04	6.09E-06	1.41E-04	1.0788E-03
520693.71	4258265.69	17336.98739	0.11137	0.12806	0.10961	0.13347	7.95E-04	4.56E-06	4.58E-06	4.49E-06	4.58E-06	8.1360E-04
519918.02	4258709.44	17335.57702	0.39584	0.59975	0.42946	0.57453	7.95E-04	1.62E-05	2.15E-05	1.76E-05	1.97E-05	8.7029E-04
519874.04	4258918.7	17332.56187	0.41594	0.28323	0.44189	0.27603	7.95E-04	1.70E-05	1.01E-05	1.81E-05	9.48E-06	8.4991E-04
520704.94	4258665.56	17331.23255	0.1199	0.11018	0.11579	0.11345	7.95E-04	4.91E-06	3.94E-06	4.74E-06	3.89E-06	8.1261E-04
520668.18	4258483.23	17327.22142	0.12743	0.1302	0.12285	0.13591	7.95E-04	5.22E-06	4.66E-06	5.03E-06	4.67E-06	8.1451E-04
520693.33	4258290.58	17319.09193	0.11275	0.12695	0.11057	0.13262	7.95E-04	4.62E-06	4.54E-06	4.53E-06	4.55E-06	8.1280E-04
519878.81	4258856.03	17298.15331	0.39113	0.33927	0.4151	0.32855	7.94E-04	1.60E-05	1.21E-05	1.70E-05	1.13E-05	8.5003E-04
520689.38	4258357.8	17292.47879	0.11678	0.12687	0.11353	0.13211	7.93E-04	4.78E-06	4.54E-06	4.65E-06	4.54E-06	8.1185E-04
520129.5	4258152.47	17291.22682	0.15791	6.20159	0.15923	7.20094	7.93E-04	6.47E-06	2.22E-04	6.52E-06	2.47E-04	1.2753E-03
520030.94	4258376.61	17288.1181	0.25209	4.41898	0.26579	3.68365	7.93E-04	1.03E-05	1.58E-04	1.09E-05	1.26E-04	1.0989E-03
520680.82	4258412.93	17285.09424	0.1214	0.12805	0.11784	0.13354	7.93E-04	4.97E-06	4.58E-06	4.82E-06	4.58E-06	8.1197E-04
520677.44	4258429.92	17269.2358	0.123	0.1286	0.11928	0.13426	7.92E-04	5.04E-06	4.60E-06	4.88E-06	4.61E-06	8.1141E-04
520716.97	4258727.36	17263.68346	0.11781	0.10216	0.11462	0.10534	7.92E-04	4.82E-06	3.65E-06	4.69E-06	3.62E-06	8.0881E-04
520684.29	4258396.18	17259.49001	0.11976	0.12742	0.11629	0.13276	7.92E-04	4.90E-06	4.56E-06	4.76E-06	4.56E-06	8.1061E-04
520685.32	4258599.07	17257.36996	0.12441	0.1198	0.11981	0.12417	7.92E-04	5.09E-06	4.29E-06	4.91E-06	4.26E-06	8.1028E-04
520693.06	4258315.73	17251.83448	0.114	0.12632	0.11129	0.1319	7.91E-04	4.67E-06	4.52E-06	4.56E-06	4.53E-06	8.0975E-04
520109.83	4258182.41	17225.52692	0.16523	10.38729	0.16864	11.79446	7.90E-04	6.77E-06	3.72E-04	6.90E-06	4.05E-04	1.5804E-03
520714.02	4258806.22	17183.41816	0.12115	0.09593	0.11771	0.09865	7.88E-04	4.96E-06	3.43E-06	4.82E-06	3.39E-06	8.0494E-04
519875.75	4258872.76	17180.76239	0.39225	0.32153	0.41601	0.3117	7.88E-04	1.61E-05	1.15E-05	1.70E-05	1.07E-05	8.4352E-04
520718.3	4258772.05	17176.27324	0.11864	0.09786	0.11531	0.10093	7.88E-04	4.86E-06	3.50E-06	4.72E-06	3.47E-06	8.0456E-04
520671.53	4258466.16	17174.11015	0.1259	0.12942	0.12163	0.13521	7.88E-04	5.15E-06	4.63E-06	4.98E-06	4.64E-06	8.0732E-04
520687.84	4258379.63	17173.25566	0.11809	0.12672	0.11471	0.13193	7.88E-04	4.84E-06	4.53E-06	4.70E-06	4.53E-06	8.0647E-04
520695.16	4258627.57	17170.58791	0.12195	0.1152	0.11745	0.11911	7.88E-04	4.99E-06	4.12E-06	4.81E-06	4.09E-06	8.0577E-04
520092.31	4259304.47	17150.56632	12.72305	0.15367	11.94546	0.14631	7.87E-04	5.21E-04	5.50E-06	4.89E-04	5.02E-06	1.8074E-03
520149.18	4258122.54	17150.441	0.15048	4.25158	0.1505	4.86062	7.87E-04	6.16E-06	1.52E-04	6.16E-06	1.67E-04	1.1181E-03
520009.44	4258511.78	17145.172	0.45302	2.55742	0.50431	2.22523	7.87E-04	1.85E-05	9.15E-05	2.06E-05	7.64E-05	9.9365E-04
520041.93	4259272.07	17133.49297	5.38645	0.15319	7.24762	0.14956	7.86E-04	2.21E-04	5.48E-06	2.97E-04	5.13E-06	1.3140E-03
519872.52	4258908.12	17128.07961	0.40401	0.29013	0.4286	0.28229	7.86E-04	1.65E-05	1.04E-05	1.75E-05	9.69E-06	8.3996E-04
519895.03	4258774.56	17108.32386	0.38019	0.44694	0.40671	0.43166	7.85E-04	1.56E-05	1.60E-05	1.67E-05	1.48E-05	8.4792E-04
520692.89	4258341.17	17100.934	0.1151	0.12598	0.11202	0.13125	7.85E-04	4.71E-06	4.51E-06	4.59E-06	4.51E-06	8.0287E-04
520719.97	4258744.13	17091.6466	0.11726	0.10002	0.11416	0.1032	7.84E-04	4.80E-06	3.58E-06	4.67E-06	3.54E-06	8.0073E-04
520037.34	4258344.01	17089.44427	0.22637	5.27908	0.23866	4.30336	7.84E-04	9.27E-06	1.89E-04	9.77E-06	1.48E-04	1.1396E-03
520705	4258656.07	17071.27907	0.11957	0.11077	0.11538	0.11413	7.83E-04	4.90E-06	3.96E-06	4.72E-06	3.92E-06	8.0070E-04
519927.12	4258683.15	17068.96143	0.39817	0.67877	0.43376	0.64827	7.83E-04	1.63E-05	2.43E-05	1.78E-05	2.23E-05	8.6369E-04
520022.36	4258426.74	17047.55935	0.30586	3.55203	0.32553	3.02045	7.82E-04	1.25E-05	1.27E-04	1.33E-05	1.04E-04	1.0387E-03
520031.72	4258366.3	17024.91962	0.24172	4.51135	0.25458	3.75647	7.81E-04	9.90E-06	1.61E-04	1.04E-05	1.29E-04	1.0917E-03
520697.08	4258274.56	17021.83588	0.111	0.12618	0.10907	0.13166	7.81E-04	4.54E-06	4.51E-06	4.47E-06	4.52E-06	7.9897E-04
520019.35	4258458.31	17021.41641	0.35631	3.27749	0.38324	2.79822	7.81E-04	1.46E-05	1.17E-04	1.57E-05	9.61E-05	1.0245E-03
520697.65	4258250.16	17017.45636	0.10962	0.12704	0.1079	0.13221	7.81E-04	4.49E-06	4.54E-06	4.42E-06	4.54E-06	7.9872E-04
520051.84	4259282.06	17012.88221	7.39373	0.15229	12.24817	0.14806	7.81E-04	3.03E-04	5.45E-06	5.01E-04	5.08E-06	1.5953E-03
520717.65	4258797.55	17004.91021	0.11957	0.09591	0.11617	0.09869	7.80E-04	4.90E-06	3.43E-06	4.76E-06	3.39E-06	7.9662E-04
520696.73	4258299.51	16980.94778	0.11231	0.12517	0.10987	0.13077	7.79E-04	4.60E-06	4.48E-06	4.50E-06	4.49E-06	7.9712E-04
520119.68	4258162.44	16976.85398	0.1591	7.83906	0.16126	9.12156	7.79E-04	6.51E-06	2.80E-04	6.60E-06	3.13E-04	1.3855E-03
520685.37	4258589.59	16959.71285	0.12411	0.12031	0.11955	0.12471	7.78E-04	5.08E-06	4.30E-06	4.89E-06	4.28E-06	7.9664E-04
520139.36	4258132.5	16937.35661	0.1519	5.07212	0.15239	5.8555	7.77E-04	6.22E-06	1.81E-04	6.24E-06	2.01E-04	1.1720E-03
519912.21	4258719.55	16934.00077	0.38445	0.56413	0.41643	0.54118	7.77E-04	1.57E-05	2.02E-05	1.71E-05	1.86E-05	8.4845E-04
519903.02	4258745.61	16925.35106	0.37912	0.50146	0.40873	0.48263	7.77E-04	1.55E-05	1.79E-05	1.67E-05	1.66E-05	8.4327E-04
520721.96	4258763.33	16924.35815	0.11713	0.09779	0.11392	0.1009	7.76E-04	4.80E-06	3.50E-06	4.66E-06	3.46E-06	7.9288E-04
519947.12	4258636.77	16918.08316	0.41632	0.87852	0.45981	0.83464	7.76E-04	1.70E-05	3.14E-05	1.88E-05	2.87E-05	8.7212E-04
520717.64	4258701.81	16904.83475	0.1168	0.10423	0.11344	0.10724	7.76E-04	4.78E-06	3.73E-06	4.64E-06	3.68E-06	7.9240E-04
519879.49	4258833.54	16887.54596	0.37629	0.36014	0.39954	0.3486	7.75E-04	1.54E-05	1.29E-05	1.64E-05	1.20E-05	8.3138E-04
520054.86	4258286.84	16881.04395	0.1962	10.10755	0.20752	7.11162	7.74E-04	8.03E-06	3.62E-04	8.50E-06	2.44E-04	1.3967E-03
519870.89	4258897.5	16875.83215	0.3917	0.29694	0.41494	0.28852	7.74E-04	1.60E-05	1.06E-05	1.70E-05	9.91E-06	8.2778E-04
520720.54	4258718.83	16871.11411	0.11635	0.10201	0.11318	0.1051	7.74E-04	4.76E-06	3.65E-06	4.63E-06	3.61E-06	7.9067E-04
520082.41	4259304.48	16869.75814	15.83084	0.15168	19.20433	0.14522	7.74E-04	6.48E-04	5.43E-06	7.86E-04	4.99E-06	2.2188E-03
520695.21	4258618.09	16861.14067	0.12164	0.11564	0.11717	0.11969	7.74E-04	4.98E-06	4.14E-06	4.80E-06	4.11E-06	7.9158E-04
520692.85	4258366.93	16860.25631	0.11616	0.12524	0.11285	0.13033	7.74E-04	4.76E-06	4.48E-06	4.62E-06	4.47E-06	7.9185E-04
520714.83	4258684.58	16847.08807	0.1172	0.1063	0.11357	0.10931	7.73E-04	4.80E-06	3.80E-06	4.65E-06	3.75E-06	7.8992E-04
519882.56	4258816.83	16839.44921	0.37359	0.38001	0.39704	0.36779	7.73E-04	1.53E-05	1.36E-05	1.63E-05	1.26E-05	8.3033E-04
520699.74	4258223.39	16833.98056	0.10767	0.12747	0.10593	0.13217	7.72E-04	4.41E-06	4.56E-06	4.34E-06	4.54E-06	7.9015E-04
520721.28	4258788.88	16814.47575	0.11804	0.09587	0.11471	0.09871	7.71E-04	4.83E-06	3.43E-06	4.70E-06	3.39E-06	7.8776E-04
520100.01	4258192.38	16810.26871	0.16601	14.90134	0.17054	15.57916	7.71E-04	6.80E-06	5.33E-04	6.98E-06	5.35E-04	1.8528E-03
520064.23	4258263	16802.94892	0.18695	18.34822	0.19714	9.89889	7.71E-04	7.65E-06	6.56E-04	8.07E-06	3.40E-04	1.7827E-03
520705.05	4258646.59	16795.88171	0.11925	0.1113	0.11501	0.11479	7.71E-04	4.88E-06	3.98E-06	4.71E-06	3.94E-06	7.8808E-04
520687.67	4258405.06	16765.40987	0.11907	0.12569	0.11556	0.131	7.69E-04	4.88E-06	4.50E-06	4.73E-06	4.50E-06	7.8776E-04
520684.23	4258421.89	16757.49961	0.12064	0.1263	0.11702	0.13177	7.69E-04	4.94E-06	4.52E-06	4.79E-06	4.52E-06	7.8757E-04
520723.52	4258735.64	16752.31763	0.11582	0.0999	0.11278	0.10302	7.69E-04	4.74E-06	3.57E-06	4.62E-06	3.54E-06	7.8503E-04
520038.08	4258333.72	16735.63655	0.2177	5.39226	0.22954	4.38017	7.68E-04	8.91E-06	1.93E-04	9.40E-06	1.50E-04	1.1294E-03
520680.88	4258438.96	16726.96032	0.12217	0.12685	0.11836	0.13246	7.67E-04	5.00E-06	4.54E-06	4.85E-06	4.55E-06	7.8633E-04
520691.2	4258388.46	16721.8921	0.11746	0.12502	0.11402	0.13019	7.67E-04	4.81E-06	4.47E-06	4.67E-06	4.47E-06	7.8559E-04
520041.94	4259282.07	16718.47338	5.34692	0.15014	7.31716	0.1466	7.67E-04	2.19E-04	5.37E-06	3.00E-04	5.03E-06	1.2959E-03
520696.34	4258350.22	16712.24245	0.11453	0.1244	0.11133	0.12949	7.67E-04	4.69E-06	4.45E-06	4.56E-06	4.45E-06	7.8487E-04
520674.87	4258474.92	16710.70554	0.12499	0.12785	0.1206	0.13349	7.67E-04	5.12E-06	4.57E-06	4.94E-06	4.58E-06	7.8587E-04

520677.64	4258456.32	16710.68648	0.12366	0.12739	0.11958	0.13308	7.67E-04	5.06E-06	4.56E-06	4.90E-06	4.57E-06	7.8574E-04
520092.32	4259314.47	16706.97309	12.82561	0.15053	11.83066	0.1434	7.66E-04	5.25E-04	5.38E-06	4.84E-04	4.92E-06	1.7863E-03
520700.46	4258283.43	16702.51377	0.11059	0.12442	0.10846	0.12992	7.66E-04	4.53E-06	4.45E-06	4.44E-06	4.46E-06	7.8416E-04
520701.12	4258259.29	16699.33494	0.10925	0.12521	0.10744	0.13046	7.66E-04	4.47E-06	4.48E-06	4.40E-06	4.48E-06	7.8396E-04
519885.54	4258799.92	16694.82215	0.36958	0.40131	0.39347	0.38831	7.66E-04	1.51E-05	1.44E-05	1.61E-05	1.33E-05	8.2485E-04
520685.42	4258580.11	16680.68189	0.12382	0.12082	0.11928	0.12522	7.65E-04	5.07E-06	4.32E-06	4.88E-06	4.30E-06	7.8385E-04
520129.54	4258142.47	16673.09348	0.15314	6.2048	0.15432	7.20189	7.65E-04	6.27E-06	2.22E-04	6.32E-06	2.47E-04	1.2467E-03
519959.85	4258608.96	16664.70385	0.42975	1.05064	0.48197	0.98977	7.65E-04	1.76E-05	3.76E-05	1.97E-05	3.40E-05	8.7343E-04
520700.13	4258308.43	16646.94528	0.11183	0.12367	0.10917	0.12913	7.64E-04	4.58E-06	4.42E-06	4.47E-06	4.43E-06	7.8164E-04
520714.89	4258675.09	16636.29603	0.1169	0.10689	0.11313	0.10994	7.63E-04	4.79E-06	3.82E-06	4.63E-06	3.77E-06	7.8026E-04
520725.61	4258754.6	16635.16912	0.11564	0.09777	0.11257	0.10087	7.63E-04	4.73E-06	3.50E-06	4.61E-06	3.46E-06	7.7949E-04
519937.12	4258655.32	16628.65181	0.40029	0.77694	0.43836	0.7405	7.63E-04	1.64E-05	2.78E-05	1.79E-05	2.54E-05	8.5044E-04
519875.04	4258846.93	16625.47711	0.37132	0.34244	0.39345	0.33171	7.63E-04	1.52E-05	1.22E-05	1.61E-05	1.14E-05	8.1769E-04
520109.86	4258172.41	16614.49276	0.16002	10.40377	0.1632	11.81847	7.62E-04	6.55E-06	3.72E-04	6.68E-06	4.06E-04	1.5533E-03
520724.91	4258780.21	16596.98357	0.11653	0.09578	0.11329	0.09869	7.61E-04	4.77E-06	3.43E-06	4.64E-06	3.39E-06	7.7766E-04
520051.86	4259292.06	16595.42506	7.30459	0.14925	12.41777	0.14512	7.61E-04	2.99E-04	5.34E-06	5.08E-04	4.98E-06	1.5792E-03
519872.01	4258863.73	16580.74354	0.3732	0.32483	0.39496	0.31488	7.61E-04	1.53E-05	1.16E-05	1.62E-05	1.08E-05	8.1457E-04
519969.77	4258589.53	16571.40155	0.4426	1.2229	0.50181	1.13712	7.60E-04	1.81E-05	4.37E-05	2.05E-05	3.90E-05	8.8171E-04
519999.52	4258531.21	16559.24122	0.45924	2.07456	0.51681	1.84421	7.60E-04	1.88E-05	7.42E-05	2.12E-05	6.33E-05	9.3719E-04
520695.26	4258608.61	16555.11295	0.12135	0.1161	0.11691	0.12023	7.60E-04	4.97E-06	4.15E-06	4.79E-06	4.13E-06	7.7755E-04
519920.79	4258692	16552.30571	0.38406	0.63573	0.41656	0.60863	7.59E-04	1.57E-05	2.27E-05	1.71E-05	2.09E-05	8.3580E-04
520149.21	4258112.54	16537.47067	0.14611	4.25292	0.14604	4.85883	7.59E-04	5.98E-06	1.52E-04	5.98E-06	1.67E-04	1.0896E-03
520705.1	4258637.11	16508.32819	0.11894	0.11176	0.11467	0.11538	7.57E-04	4.87E-06	4.00E-06	4.70E-06	3.96E-06	7.7489E-04
519868.5	4258886.57	16496.72798	0.37675	0.30316	0.39842	0.29428	7.57E-04	1.54E-05	1.08E-05	1.63E-05	1.01E-05	8.0952E-04
520724.11	4258710.29	16463.22722	0.11493	0.10186	0.11176	0.10484	7.55E-04	4.71E-06	3.64E-06	4.58E-06	3.60E-06	7.7183E-04
519888.44	4258782.79	16450.99941	0.3644	0.42394	0.38846	0.41013	7.55E-04	1.49E-05	1.52E-05	1.59E-05	1.41E-05	8.1481E-04
520721.24	4258693.22	16445.12209	0.11537	0.10399	0.11197	0.10692	7.54E-04	4.72E-06	3.72E-06	4.58E-06	3.67E-06	7.7117E-04
519979.69	4258570.09	16444.64425	0.45294	1.43973	0.51339	1.32095	7.54E-04	1.85E-05	5.15E-05	2.10E-05	4.53E-05	8.9086E-04
520082.42	4259314.48	16444.11344	15.90091	0.14861	18.91807	0.14235	7.54E-04	6.51E-04	5.32E-06	7.75E-04	4.89E-06	2.1903E-03
520696.33	4258376.05	16428.13875	0.11554	0.12356	0.11217	0.12858	7.54E-04	4.73E-06	4.42E-06	4.59E-06	4.41E-06	7.7185E-04
520685.48	4258570.63	16423.66438	0.12356	0.12118	0.11899	0.12561	7.53E-04	5.06E-06	4.33E-06	4.87E-06	4.31E-06	7.7206E-04
520009.4	4258502.08	16422.74489	0.42546	2.58246	0.4689	2.24849	7.53E-04	1.74E-05	9.24E-05	1.92E-05	7.72E-05	9.5963E-04
520704.83	4258243.18	16418.40152	0.10758	0.1243	0.10579	0.12931	7.53E-04	4.40E-06	4.45E-06	4.33E-06	4.44E-06	7.7087E-04
520714.94	4258665.61	16405.32534	0.1166	0.10746	0.11272	0.11058	7.53E-04	4.77E-06	3.84E-06	4.62E-06	3.80E-06	7.6967E-04
520727.08	4258727.16	16395.32902	0.11441	0.09979	0.11142	0.10283	7.52E-04	4.68E-06	3.57E-06	4.56E-06	3.53E-06	7.6853E-04
519989.61	4258550.65	16394.64822	0.45857	1.71424	0.51831	1.55112	7.52E-04	1.88E-05	6.13E-05	2.12E-05	5.33E-05	9.0672E-04
520055.27	4258276.69	16388.0124	0.18927	10.27597	0.20006	7.19542	7.52E-04	7.75E-06	3.68E-04	8.19E-06	2.47E-04	1.3824E-03
520703.84	4258292.29	16385.68651	0.11017	0.12269	0.1078	0.12815	7.52E-04	4.51E-06	4.39E-06	4.41E-06	4.40E-06	7.6946E-04
520704.6	4258268.42	16385.0199	0.10885	0.12339	0.10691	0.12871	7.52E-04	4.46E-06	4.41E-06	4.38E-06	4.42E-06	7.6938E-04
519865.27	4258915.14	16378.19053	0.38344	0.2793	0.4056	0.27184	7.51E-04	1.57E-05	9.99E-06	1.66E-05	9.33E-06	8.0303E-04
520119.72	4258152.44	16376.82808	0.15423	7.84537	0.15623	9.12063	7.51E-04	6.31E-06	2.81E-04	6.40E-06	3.13E-04	1.3578E-03
520038.72	4258323.47	16364.16915	0.20958	5.48863	0.22093	4.45692	7.51E-04	8.58E-06	1.96E-04	9.05E-06	1.53E-04	1.1177E-03
520728.54	4258771.55	16353.09758	0.11505	0.09566	0.11191	0.09863	7.50E-04	4.71E-06	3.42E-06	4.58E-06	3.39E-06	7.6635E-04
519905.8	4258728.19	16352.48618	0.36972	0.53141	0.3993	0.51071	7.50E-04	1.51E-05	1.90E-05	1.63E-05	1.75E-05	8.1825E-04
520139.39	4258122.5	16331.21059	0.14742	5.07602	0.14784	5.84708	7.49E-04	6.04E-06	1.82E-04	6.05E-06	2.01E-04	1.1436E-03
519896.47	4258753.92	16325.19281	0.36457	0.47363	0.39049	0.45716	7.49E-04	1.49E-05	1.69E-05	1.60E-05	1.57E-05	8.1252E-04
520729.26	4258745.88	16324.87562	0.11418	0.09772	0.11123	0.10078	7.49E-04	4.67E-06	3.50E-06	4.55E-06	3.46E-06	7.6514E-04
520699.79	4258359.27	16318.79892	0.11395	0.12282	0.11067	0.12777	7.49E-04	4.67E-06	4.39E-06	4.53E-06	4.39E-06	7.6665E-04
520041.96	4259292.07	16314.972	5.32238	0.14715	7.38698	0.14369	7.48E-04	2.18E-04	5.26E-06	3.02E-04	4.93E-06	1.2791E-03
520703.53	4258317.35	16314.50015	0.11132	0.12227	0.10847	0.12756	7.48E-04	4.56E-06	4.37E-06	4.44E-06	4.38E-06	7.6623E-04
519927.12	4258673.87	16292.10239	0.38505	0.69152	0.41874	0.66105	7.47E-04	1.58E-05	2.47E-05	1.71E-05	2.27E-05	8.2779E-04
520678.21	4258483.68	16291.78551	0.12408	0.12636	0.11958	0.13182	7.47E-04	5.08E-06	4.52E-06	4.90E-06	4.53E-06	7.6646E-04
520064.49	4258252.91	16282.52963	0.18054	18.60954	0.19014	10.03676	7.47E-04	7.39E-06	6.66E-04	7.79E-06	3.45E-04	1.7724E-03
520045.53	4258300.68	16280.5128	0.19815	6.84725	0.20938	5.33975	7.47E-04	8.11E-06	2.45E-04	8.57E-06	1.83E-04	1.1918E-03
520092.34	4259324.47	16276.83213	12.95923	0.14748	11.70976	0.14057	7.47E-04	5.31E-04	5.28E-06	4.79E-04	4.83E-06	1.7669E-03
520691.06	4258413.95	16269.12062	0.11835	0.12401	0.1148	0.12929	7.46E-04	4.85E-06	4.44E-06	4.70E-06	4.44E-06	7.6482E-04
520694.56	4258397.28	16260.7368	0.1168	0.12339	0.11333	0.1285	7.46E-04	4.78E-06	4.41E-06	4.64E-06	4.41E-06	7.6426E-04
520695.32	4258599.13	16257.05741	0.12105	0.11657	0.11667	0.12076	7.46E-04	4.96E-06	4.17E-06	4.78E-06	4.15E-06	7.6389E-04
520687.64	4258430.85	16241.9711	0.11986	0.12459	0.11617	0.13003	7.45E-04	4.91E-06	4.46E-06	4.76E-06	4.46E-06	7.6373E-04
520100.05	4258182.38	16221.96072	0.16072	14.92564	0.16498	15.50809	7.44E-04	6.58E-06	5.34E-04	6.75E-06	5.32E-04	1.8238E-03
520681.11	4258465.44	16218.48367	0.12276	0.12574	0.11855	0.13131	7.44E-04	5.03E-06	4.50E-06	4.85E-06	4.51E-06	7.6296E-04
520705.16	4258627.63	16213.19634	0.11865	0.11219	0.11438	0.11595	7.44E-04	4.86E-06	4.01E-06	4.68E-06	3.98E-06	7.6137E-04
520685.53	4258561.14	16193.83258	0.1233	0.12158	0.11869	0.12602	7.43E-04	5.05E-06	4.35E-06	4.86E-06	4.33E-06	7.6153E-04
519866.94	4258875.98	16178.80738	0.36493	0.30971	0.38546	0.30049	7.42E-04	1.49E-05	1.11E-05	1.58E-05	1.03E-05	7.9437E-04
519875.82	4258824.69	16161.58274	0.35726	0.36243	0.37853	0.35122	7.41E-04	1.46E-05	1.30E-05	1.55E-05	1.21E-05	7.9661E-04
520703.32	4258342.69	16160.78692	0.11236	0.12194	0.1092	0.12692	7.41E-04	4.60E-06	4.36E-06	4.47E-06	4.36E-06	7.5922E-04
520715	4258656.13	16154.67269	0.1163	0.10799	0.11234	0.11121	7.41E-04	4.76E-06	3.86E-06	4.60E-06	3.82E-06	7.5819E-04
519863.68	4258904.54	16141.51843	0.37215	0.28558	0.39307	0.27763	7.41E-04	1.52E-05	1.02E-05	1.61E-05	9.53E-06	7.9162E-04
520052.7	4259304.53	16116.6157	7.50665	0.1457	13.47389	0.14166	7.39E-04	3.07E-04	5.21E-06	5.52E-04	4.86E-06	1.6085E-03
520708.29	4258252.24	16116.42076	0.1072	0.12258	0.10537	0.12767	7.39E-04	4.39E-06	4.38E-06	4.31E-06	4.38E-06	7.5686E-04
520732.17	4258762.88	16105.73713	0.11363	0.09558	0.1106	0.09857	7.39E-04	4.65E-06	3.42E-06	4.53E-06	3.38E-06	7.5488E-04
520129.57	4258132.47	16092.25774	0.14862	6.20763	0.14967	7.21008	7.38E-04	6.09E-06	2.22E-04	6.13E-06	2.48E-04	1.2201E-03
519891.24	4258765.42	16086.67476	0.35767	0.4483	0.38214	0.43332	7.38E-04	1.46E-05	1.60E-05	1.56E-05	1.49E-05	7.9923E-04
520708.07	4258277.54	16076.39943	0.10845	0.12162	0.10631	0.12697	7.38E-04	4.44E-06	4.35E-06	4.35E-06	4.36E-06	7.5506E-04
520707.21	4258301.16	16073.37917	0.10972	0.12112	0.10712	0.12648	7.37E-04	4.49E-06	4.33E-06	4.39E-06	4.34E-06	7.5497E-04
520109.9	4258162.41	16042.15075	0.15511	10.41422	0.15806	11.86834	7.36E-04	6.35E-06	3.73E-04	6.47E-06	4.07E-04	1.5288E-03
520727.69	4258701.76	16041.50044	0.11354	0.10165	0.11034	0.10454	7.36E-04	4.65E-06	3.64E-06	4.52E-06	3.59E-06	7.5234E-04
519878.86	4258807.91	16037.97881	0.35385	0.3821	0.37562	0.37021	7.36E-04	1.45E-05	1.37E-05	1.54E-05	1.27E-05	7.9204E-04
520082.44	4259324.48	16034.1997	15.91924	0.14565	18.63394	0.13957	7.36E-04	6.52E-04	5.21E-06	7.63E-04	4.79E-06	2.1604E-03
519914.39	4258700.67	16033.29726	0.37022	0.59668	0.39979	0.5726	7.36E-04	1.52E-05	2.13E-05	1.64E-05	1.97E-05	8.0810E-04
520730.63	4258718.68	16023.80271	0.11304	0.09965	0.11006	0.10258	7.35E-04	4.63E-06	3.56E-06	4.51E-06	3.52E-06	7.5136E-04
520027.61	4258358.01	16006.97461	0.2282	4.05937	0.23976	3.43629	7.34E-04	9.34E-06	1.45E-04	9.82E-06	1.18E-04	1.0167E-03
520732.92	4258737.15	15994.72809	0.11277	0.09761	0.10988	0.10061	7.34E-04	4.62E-06	3.49E-06	4.50E-06	3.45E-06	7.4987E-04
520685.58	4258551.66	15993.18904	0.12305	0.12188	0.11839	0.12637	7.34E-04	5.04E-06	4.36E-06	4.85E-06	4.34E-06	7.5232E-04
520699.8	4258385.18	15991.63159	0.11491	0.12188	0.11149	0.12684	7.34E-04	4.70E-06	4.36E-06	4.56E-06	4.35E-06	7.5165E-04
520020.18	4258401.03	15986.17555	0.26529	3.39902	0.2803	2.92213	7.33E-04	1.09E-05	1.22E-04	1.15E-05	1.00E-04	9.7765E-04
520039.28	4258313.25	15982.96698	0.20192	5.5738	0.21284	4.52268	7.33E-04	8.27E-06	1.99E-04	8.71E-06	1.55E-04	1.1049E-03
520680.86	4258510.71	15977.06868	0.12373	0.12466	0.11898	0.1297	7.33E-04	5.07E-06	4.46E-06	4.87E-06	4.45E-06	7.5185E-04
520724.83	4258684.63	15976.98525	0.11397	0.10371	0.11053	0.10659	7.33E-04	4.67E-06	3.71E-06	4.53E-06	3.66E-06	7.4955E-04
520695.37	4258589.65	15974.32189	0.12077	0.11705	0.11643	0.12127	7.33E-04	4.94E-06	4.19E-06	4.77E-06	4.16E-06	7.5093E-04
520021.48	4258390.5	15959.73454	0.25451	3.50495	0.26837	3.00751	7.32E-04	1.04E-05	1.25E-04	1.10E-05	1.03E-04	9.8223E-04
519868.26	4258854.71	15954.96669	0.35492	0.32767	0.37502	0.31773	7.32E-04	1.45E-05	1.17E-05	1.54E-05	1.09E-05	7.8450E-04
520012.66	4258474.56	15943.87679	0.3708	2.81823	0.40094	2.43911	7.31E-04	1.52E-05	1.01E-04	1.64E-05	8.37E-05	9.4761E-04
519871.27	4258837.83	15933.10801	0.35247	0.34501	0.37293	0.33446	7.31E-04	1.44E-05	1.23E-05	1.53E-05	1.15E-05	7.8450E-04
520681.2	4258501.58	15928.68257	0.12344	0.12473	0.11876	0.12989	7.31E-04	5.05E-06	4.46E-06	4.86E-06	4.46E-06	7.4961E-04
520009.36	4258492.38	15920.10755	0.40069	2.60367	0.43773	2.2687	7.30E-04	1.64E-05	9.31E-05	1.79E-05	7.79E-05	9.3573E-04
520703.23	4258368.33	15919.55494	0.11336	0.12124	0.11002	0.12609	7.30E-04	4.64E-06	4.34E-06	4.50E-06	4.33E-06	7.4817E-04
520705.21	4258618.15	15917.20986	0.11837	0.1126	0.11412	0.11648	7.30E-04	4.85E-06	4.03E-06	4.67E-06	4.00E-06	7.4780E-04
520681.54	4258492.44	15916.95774	0.12316	0.12493	0.1186	0.13019	7.30E-04	5.04E-06	4.47E-06	4.86E-06	4.47E-06	7.4908E-04
520055.63	4258266.55	15908.04325	0.18274	10.42051	0.19302	7.27358	7.30E-04	7.48E-06	3.73E-04	7.90E-06	2.50E-04	1.3677E-03
520015.77	4258442.74	15899.95718	0.31785	3.05378	0.33934	2.63912	7.29E-04	1.30E-05	1.09E-04	1.39E-05	9.06E-05	9.5620E-04
520715.05	4258646.65	15890.04704	0.11601	0.10847	0.112	0.11181	7.29E-04	4.75E-06	3.88E-06	4.59E-06	3.84E-06	7.4606E-04
520092.36	4259334.47	15870.98586	12.9653	0.14457	11.59682	0.13786	7.28E-04	5.31E-04	5.17E-06	4.75E-04	4.73E-06	1.7437E-03
520046.09	4258290.46	15866.78021	0.19123	6.96703	0.20198	5.43134	7.28E-04	7.83E-06	2.49E-04	8.27E-06	1.86E-04	1.1797E-03
519861.99	4258893.9	15860.51045	0.36058	0.29172	0.38032	0.28337	7.28E-04	1.48E-05	1.04E-05	1.56E-05	9.73E-06	7.7815E-04
520022.54	4258380.08	15856.19319	0.24427	3.59457	0.25711	3.08006	7.27E-04	1.00E-05	1.29E-04	1.05E-05	1.06E-04	9.8229E-04
520042.8	4259304.55	15852.07143	5.44814	0.14368	7.74943	0.14029	7.27E-04	2.23E-04	5.14E-06	3.17E-04	4.82E-06	1.2776E-03
520712.03	4258236.19	15848.33141	0.10558	0.12173	0.10374	0.12656	7.27E-04	4.32E-06	4.35E-06	4.25E-06	4.34E-06	7.4436E-04
520735.8	4258754.21	15832.49589	0.11224	0.09551	0.10932	0.09849	7.26E-04	4.60E-06	3.42E-06	4.48E-06	3.38E-06	7.4223E-04
519881.82	4258790.94	15825.93432	0.34941	0.40296	0.37145	0.39036	7.26E-04	1.43E-05	1.44E-05	1.52E-05	1.34E-05	7.8339E-04
520685.64	4258542.18	15823.70812	0.12281	0.12219	0.11812	0.12674	7.26E-04	5.03E-06	4.37E-06	4.84E-06	4.35E-06	7.4455E-04
520711.74	4258261.3	15820.43565	0.10683	0.12077	0.10488	0.12595	7.26E-04	4.37E-06	4.32E-06	4.29E-06	4.32E-06	7.4312E-04
520119.75	4258142.44	15816.31654	0.14965	7.84944	0.15148	9.15061	7.26E-04	6.13E-06	2.81E-04	6.20E-06	3.14E-04	1.3329E-03
519899.32	4258736.69	15799.36067	0.35593	0.50149	0.38285	0.483	7.25E-04	1.46E-05	1.79E-05	1.57E-05	1.66E-05	7.8961E-04
520697.92	4258406.1	15797.72005	0.11611	0.12178	0.11263	0.12686	7.25E-04	4.75E-06	4.36E-06	4.61E-06	4.36E-06	7.4285E-04
520028.6	4258347.62	15788.40846	0.21963	4.15991	0.23065	3.51465	7.24E-04	8.99E-06	1.49E-04	9.44E-06	1.21E-04	1.0122E-03
520694.44	4258422.84	15780.54074	0.11761	0.12237	0.11401	0.12762	7.24E-04	4.82E-06	4.38E-06	4.67E-06	4.38E-06	7.4222E-04
520724.89	4258675.15	15772.31763	0.1137	0.10426	0.11013	0.10718	7.24E-04	4.66E-06	3.73E-06	4.51E-06	3.68E-06	7.4018E-04
520684.58	4258474.57	15769.82912	0.12183	0.12422	0.11753	0.12963	7.23E-04	4.99E-06	4.44E-06	4.81E-06	4.45E-06	7.4218E-04
520711.54	4258286.67	15769.63206	0.10801	0.12	0.10567	0.1253	7.23E-04	4.42E-06	4.29E-06	4.33E-06	4.30E-06	7.4082E-04
520139.42	4258112.5	15767.30283	0.1432	5.07727	0.14353	5.84917	7.23E-04	5.86E-06	1.82E-04	5.88E-06	2.01E-04	1.1175E-03
519937.12	4258646.05	15766.53398	0.38661	0.78932	0.42324	0.75345	7.23E-04	1.58E-05	2.82E-05	1.73E-05	2.59E-05	8.1060E-04
520710.59	4258310.02	15762.68806	0.10925	0.11969	0.10644	0.12489	7.23E-04	4.47E-06	4.28E-06	4.36E-06	4.29E-06	7.4056E-04
520691.05	4258439.81	15743.21699	0.11906	0.12296	0.11528	0.12836	7.22E-04	4.87E-06	4.40E-06	4.72E-06	4.41E-06	7.4067E-04
520052.72	4259314.53	15729.71568	7.49717	0.14282	13.7302	0.1389	7.22E-04	3.07E-04	5.11E-06	5.62E-04	4.77E-06	1.6007E-03
520687.76	4258457.04	15725.34115	0.12047	0.12357	0.11644	0.12903	7.21E-04	4.93E-06	4.42E-06	4.77E-06	4.43E-06	7.4000E-04
520695.42	4258580.16	15708.02879	0.12049	0.11758	0.11618	0.12179	7.21E-04	4.93E-06	4.21E-06	4.76E-06	4.18E-06	7.3873E-04
520685.69	4258532.7	15688.62408	0.12259	0.12249	0.11788	0.12713	7.20E-04	5.02E-06	4.38E-06	4.83E-06	4.36E-06	7.3836E-04
520100.08	4258172.38	15675.462	0.15576	14.96626	0.15973	15.6528	7.19E-04	6.38E-06	5.35E-04	6.54E-06	5.37E-04	1.8048E-03
519908.44	4258710.45	15673.58459	0.35967	0.5619	0.38766	0.53997	7.19E-04	1.47E-05	2.01E-05	1.59E-05	1.85E-05	7.8831E-04
520063.45	4258243.35	15667.68562	0.17396	16.89893	0.18306	9.64845	7.19E-04	7.12E-06	6.04E-04	7.50E-06	3.31E-04	1.6691E-03
520736.57	4258728.43	15648.81295	0.11137	0.09755	0.10856	0.10045	7.18E-04	4.56E-06	3.49E-06	4.44E-06	3.45E-06	7.3388E-04
520082.46	4259334.48	15642.35225	15.82203	0.1428	18.37836	0.1369	7.18E-04	6.48E-04	5.11E-06	7.52E-04	4.70E-06	2.1278E-03
520734.18	4258710.19	15638.52723	0.11169	0.09952	0.10872	0.10234	7.17E-04	4.57E-06	3.56E-06	4.45E-06	3.51E-06	7.3356E-04
519999.48	4258521.52	15627.62468	0.43308	2.10159	0.4833	1.86737	7.17E-04	1.77E-05	7.52E-05	1.98E-05	6.41E-05	8.9377E-04
520705.26	4258608.67	15624.9238	0.1181	0.11301	0.11389	0.11698	7.17E-04	4.84E-06	4.04E-06	4.66E-06	4.02E-06	7.3440E-04
519949.89	4258618.7	15622.58145	0.40001	0.93111	0.44393	0.88381	7.17E-04	1.64E-05	3.33E-05	1.82E-05	3.03E-05	8.1493E-04
520715.1	4258637.17	15614.47807	0.11574	0.10887	0.11169	0.11235	7.16E-04	4.74E-06	3.89E-06	4.57E-06	3.86E-06	7.3343E-04
520731.26	4258693.22	15610.11702	0.11218	0.10147	0.10896	0.10427	7.16E-04	4.59E-06	3.63E-06	4.46E-06	3.58E-06	7.3243E-04
520685.75	4258523.22	15586.73664	0.12238	0.12268	0.11767	0.12744	7.15E-04	5.01E-06	4.39E-06	4.82E-06	4.38E-06	7.3368E-04
520715.45	4258245.19	15562.19976	0.10521	0.1201	0.10336	0.12501	7.14E-04	4.31E-06	4.30E-06	4.23E-06	4.29E-06	7.3109E-04
519959.81	4258599.26	15555.50399	0.41254	1.06971	0.46281	1.00599	7.14E-04	1.69E-05	3.83E-05	1.89E-05	3.45E-05	8.2230E-04
520724.94	4258665.67	15548.99997	0.11343	0.10481	0.10976	0.1078	7.13E-04	4.64E-06	3.75E-06	4.49E-06	3.70E-06	7.2995E-04
520129.6	4258122.47	15546.10156	0.14433	6.2087	0.14526	7.22412	7.13E-04	5.91E-06	2.22E-04	5.95E-06	2.48E-04	1.1952E-03
520703.28	4258394.31	15544.68814	0.11424	0.12024	0.11081	0.12516	7.13E-04	4.68E-06	4.30E-06	4.54E-06	4.30E-06	7.3097E-04
520739.43	4258745.54	15535.96152	0.11087	0.09545	0.10806	0.09839	7.13E-04	4.54E-06	3.41E-06	4.42E-06	3.38E-06	7.2852E-04
520029.45	4258337.28	15532.31925	0.21151	4.24793	0.22205	3.58367	7.13E-04	8.66E-06	1.52E-04	9.09E-06	1.23E-04	1.0053E-03
520715.19	4258270.36	15526.97125	0.10644	0.11905	0.10432	0.12427	7.12E-04	4.36E-06	4.26E-06	4.27E-06	4.27E-06	7.2950E-04
519927.12	4258664.6	15514.54089	0.3724	0.70324	0.40449	0.67309	7.12E-04	1.52E-05	2.52E-05	1.66E-05	2.31E-05	7.9185E-04
520706.68	4258377.38	15512.3567	0.11274	0.11967	0.10938	0.12445	7.12E-04	4.62E-06	4.28E-06	4.48E-06	4.27E-06	7.2932E-04
519884.69	4258773.74	15508.41777	0.3437	0.42524	0.366	0.41172	7.11E-04	1.41E-05	1.52E-05	1.50E-05	1.41E-05	7.6990E-04
520109.93	4258152.41	15500.57112	0.15045	10.42545	0.15319	11.92105	7.11E-04	6.16E-06	3.73E-04	6.27E-06	4.09E-04	1.5057E-03
519859.86	4258883.07	15495.66851	0.34768	0.29742	0.36623	0.2888	7.11E-04	1.42E-05	1.06E-05	1.50E-05	9.91E-06	7.6069E-04
520042.82	4259314.55	15477.2618	5.45125	0.14087	7.83104	0.13757	7.10E-04	2.23E-04	5.04E-06	3.21E-04	4.72E-06	1.2637E-03
520695.48	4258570.68	15467.73416	0.12026	0.11794	0.11591	0.12217	7.10E-04	4.92E-06	4.22E-06	4.75E-06	4.19E-06	7.2771E-04
520715.02	4258295.79	15466.10442	0.10757	0.11838	0.10499	0.1236	7.10E-04	4.40E-06	4.23E-06	4.30E-06	4.24E-06	7.2674E-04
520092.79	4259345.29	15461.40228	12.73861	0.14161	11.30437	0.13508	7.09E-04	5.22E-04	5.07E-06	4.63E-04	4.64E-06	1.7035E-03
519856.49	4258911.59	15458.08704	0.35415	0.2749	0.373	0.26738	7.09E-04	1.45E-05	9.83E-06	1.53E-05	9.18E-06	7.5797E-04
520055.96	4258256.43	15453.08673	0.17661	10.54756	0.18638	7.3588	7.09E-04	7.23E-06	3.77E-04	7.63E-06	2.53E-04	1.3537E-03
520046.58	4258280.27	15453.08023	0.18466	7.07317	0.19499	5.5055	7.09E-04	7.56E-06	2.53E-04	7.98E-06	1.89E-04	1.1665E-03
520713.96	4258318.89	15449.59271	0.10873	0.11843	0.10578	0.12343	7.09E-04	4.45E-06	4.24E-06	4.33E-06	4.24E-06	7.2605E-04
519872.15	4258815.84	15418.53852	0.33906	0.36432	0.35887	0.35343	7.07E-04	1.39E-05	1.30E-05	1.47E-05	1.21E-05	7.6111E-04
519969.73	4258579.83	15415.52802	0.42341	1.24492	0.47763	1.15578	7.07E-04	1.73E-05	4.45E-05	1.96E-05	3.97E-05	8.2834E-04
520014.92	4258420.56	15366.58308	0.28202	3.02335	0.29909	2.62484	7.05E-04	1.15E-05	1.08E-04	1.22E-05	9.01E-05	9.2704E-04
520688.06	4258483.69	15364.31329	0.12089	0.12283	0.11652	0.12805	7.05E-04	4.95E-06	4.39E-06	4.77E-06	4.40E-06	7.2340E-04
520052.74	4259324.53	15355.93396	7.50525	0.14004	13.98496	0.13623	7.05E-04	3.07E-04	5.01E-06	5.73E-04	4.68E-06	1.5941E-03
520701.28	4258414.92	15341.2015	0.11542	0.12014	0.1119	0.12522	7.04E-04	4.73E-06	4.30E-06	4.58E-06	4.30E-06	7.2173E-04
520705.32	4258599.18	15341.04234	0.11783	0.11345	0.11366	0.11748	7.04E-04	4.82E-06	4.06E-06	4.65E-06	4.03E-06	7.2139E-04
520715.16	4258627.69	15331.91973	0.11547	0.10927	0.11143	0.11289	7.03E-04	4.73E-06	3.91E-06	4.56E-06	3.88E-06	7.2047E-04
519989.56	4258540.95	15313.79697	0.43445	1.73883	0.4876	1.57246	7.03E-04	1.78E-05	6.22E-05	2.00E-05	5.40E-05	8.5650E-04
519864.52	4258845.68	15310.2832	0.33748	0.33003	0.3562	0.32025	7.02E-04	1.38E-05	1.18E-05	1.46E-05	1.10E-05	7.5361E-04
520725	4258656.19	15307.8122	0.11315	0.10531	0.10941	0.1084	7.02E-04	4.63E-06	3.77E-06	4.48E-06	3.72E-06	7.1889E-04
520697.82	4258431.73	15302.87927	0.11685	0.12079	0.1132	0.12601	7.02E-04	4.78E-06	4.32E-06	4.63E-06	4.33E-06	7.2013E-04
519979.65	4258560.39	15290.61825	0.43101	1.46209	0.48483	1.34114	7.02E-04	1.76E-05	5.23E-05	1.99E-05	4.60E-05	8.3734E-04
520119.78	4258132.44	15287.77568	0.1453	7.85158	0.14697	9.18409	7.01E-04	5.95E-06	2.81E-04	6.02E-06	3.15E-04	1.3095E-03
520740.22	4258719.7	15286.75623	0.11002	0.09743	0.10723	0.10023	7.01E-04	4.50E-06	3.48E-06	4.39E-06	3.44E-06	7.1715E-04
520691.2	4258466.08	15275.80269	0.11959	0.12205	0.11546	0.12738	7.01E-04	4.90E-06	4.37E-06	4.73E-06	4.37E-06	7.1919E-04
520718.88	4258254.2	15275.43891	0.10483	0.11847	0.1029	0.12345	7.01E-04	4.29E-06	4.24E-06	4.21E-06	4.24E-06	7.1779E-04
519892.8	4258745.07	15265.90599	0.34273	0.47415	0.36715	0.45763	7.00E-04	1.40E-05	1.70E-05	1.50E-05	1.57E-05	7.6211E-04
520695.53	4258561.2	15252.05656	0.12003	0.11826	0.11563	0.12251	7.00E-04	4.91E-06	4.23E-06	4.73E-06	4.21E-06	7.1782E-04
520030.19	4258326.99	15251.20441	0.20383	4.32546	0.21395	3.64536	7.00E-04	8.35E-06	1.55E-04	8.76E-06	1.25E-04	9.9667E-04
520082.89	4259345.31	15244.01047	14.18758	0.1399	17.71265	0.13415	6.99E-04	5.81E-04	5.00E-06	7.25E-04	4.61E-06	2.0151E-03
520737.73	4258701.71	15241.63616	0.11038	0.09934	0.10738	0.10208	6.99E-04	4.52E-06	3.55E-06	4.40E-06	3.50E-06	7.1523E-04
520718.64	4258279.43	15238.48915	0.10602	0.11754	0.10371	0.12273	6.99E-04	4.34E-06	4.20E-06	4.25E-06	4.21E-06	7.1612E-04
519875.16	4258799	15229.53312	0.33517	0.38366	0.35543	0.37211	6.99E-04	1.37E-05	1.37E-05	1.46E-05	1.28E-05	7.5348E-04
519867.49	4258828.73	15227.76334	0.33461	0.34692	0.35338	0.33675	6.99E-04	1.37E-05	1.24E-05	1.45E-05	1.16E-05	7.5076E-04
520743.06	4258736.87	15222.28988	0.10953	0.09541	0.10681	0.09827	6.98E-04	4.48E-06	3.41E-06	4.37E-06	3.37E-06	7.1401E-04
519917.12	4258683.15	15204.04509	0.35847	0.63018	0.38748	0.6044	6.98E-04	1.47E-05	2.25E-05	1.59E-05	2.07E-05	7.7136E-04
520063.74	4258233.24	15197.68779	0.16831	17.14835	0.17691	9.73966	6.97E-04	6.89E-06	6.13E-04	7.24E-06	3.34E-04	1.6591E-03
519854.84	4258900.97	15195.11542	0.3435	0.28058	0.36129	0.27273	6.97E-04	1.41E-05	1.00E-05	1.48E-05	9.36E-06	7.4538E-04

519902.06	4258719.18	15174.16914	0.34655	0.52989	0.37302	0.50981	6.96E-04	1.42E-05	1.90E-05	1.53E-05	1.75E-05	7.6208E-04
520734.83	4258684.69	15170.27029	0.11085	0.10122	0.1076	0.10398	6.96E-04	4.54E-06	3.62E-06	4.41E-06	3.57E-06	7.1212E-04
520718.49	4258304.92	15166.41201	0.1071	0.11689	0.10431	0.12197	6.96E-04	4.39E-06	4.18E-06	4.27E-06	4.19E-06	7.1283E-04
520100.11	4258162.38	15160.16116	0.15106	14.99827	0.15476	15.85769	6.96E-04	6.19E-06	5.36E-04	6.34E-06	5.44E-04	1.7889E-03
520042.84	4259324.55	15115.00865	5.45596	0.13815	7.91258	0.13494	6.93E-04	2.23E-04	4.94E-06	3.24E-04	4.63E-06	1.2504E-03
520706.75	4258403.43	15097.23054	0.11356	0.11861	0.11011	0.12351	6.93E-04	4.65E-06	4.24E-06	4.51E-06	4.24E-06	7.1027E-04
520092.8	4259355.29	15086.3754	12.69207	0.13889	11.20425	0.13255	6.92E-04	5.20E-04	4.97E-06	4.59E-04	4.55E-06	1.6801E-03
519887.45	4258756.28	15078.11	0.33667	0.44876	0.35897	0.43414	6.92E-04	1.38E-05	1.61E-05	1.47E-05	1.49E-05	7.5119E-04
520705.37	4258589.7	15072.39623	0.11757	0.11392	0.11344	0.11797	6.91E-04	4.81E-06	4.07E-06	4.64E-06	4.05E-06	7.0908E-04
520695.58	4258551.72	15065.17332	0.1198	0.11858	0.11535	0.12287	6.91E-04	4.91E-06	4.24E-06	4.72E-06	4.22E-06	7.0925E-04
520690.85	4258511.08	15053.71739	0.12051	0.12123	0.11593	0.12604	6.91E-04	4.93E-06	4.34E-06	4.75E-06	4.33E-06	7.0898E-04
520725.05	4258646.71	15053.62612	0.1129	0.10574	0.1091	0.10896	6.91E-04	4.62E-06	3.78E-06	4.47E-06	3.74E-06	7.0724E-04
520715.21	4258618.2	15048.94509	0.11521	0.10968	0.11119	0.11341	6.90E-04	4.72E-06	3.92E-06	4.55E-06	3.89E-06	7.0750E-04
520047.03	4258270.1	15041.23875	0.17844	7.17285	0.1884	5.56741	6.90E-04	7.31E-06	2.57E-04	7.71E-06	1.91E-04	1.1528E-03
520129.63	4258112.47	15024.82122	0.14024	6.21097	0.14108	7.22608	6.89E-04	5.74E-06	2.22E-04	5.78E-06	2.48E-04	1.1711E-03
520691.19	4258501.95	15011.55438	0.12024	0.12129	0.11572	0.12621	6.89E-04	4.92E-06	4.34E-06	4.74E-06	4.33E-06	7.0703E-04
520722.31	4258263.2	15006.49958	0.10448	0.11672	0.10239	0.12178	6.88E-04	4.28E-06	4.17E-06	4.19E-06	4.18E-06	7.0530E-04
520691.53	4258492.82	15002.58732	0.11996	0.12144	0.11554	0.12646	6.88E-04	4.91E-06	4.34E-06	4.73E-06	4.34E-06	7.0662E-04
520052.75	4259334.53	14994.65095	7.5258	0.13735	14.22908	0.13364	6.88E-04	3.08E-04	4.91E-06	5.83E-04	4.59E-06	1.5882E-03
520109.96	4258142.41	14990.11578	0.14604	10.43302	0.14858	11.98875	6.88E-04	5.98E-06	3.73E-04	6.08E-06	4.12E-04	1.4845E-03
520734.89	4258675.21	14971.57139	0.11061	0.10173	0.10724	0.10453	6.87E-04	4.53E-06	3.64E-06	4.39E-06	3.59E-06	7.0301E-04
520722.09	4258288.49	14954.4451	0.10558	0.11602	0.10307	0.12113	6.86E-04	4.32E-06	4.15E-06	4.22E-06	4.16E-06	7.0293E-04
520030.84	4258316.73	14952.36096	0.19659	4.39365	0.20633	3.70121	6.86E-04	8.05E-06	1.57E-04	8.45E-06	1.27E-04	9.8670E-04
519878.09	4258781.96	14951.16246	0.33031	0.40406	0.35072	0.39179	6.86E-04	1.35E-05	1.45E-05	1.44E-05	1.35E-05	7.4172E-04
519937.12	4258636.77	14921.6155	0.37368	0.80119	0.40941	0.76569	6.85E-04	1.53E-05	2.87E-05	1.68E-05	2.63E-05	7.7158E-04
519999.44	4258511.82	14916.92714	0.40894	2.12648	0.45261	1.88851	6.84E-04	1.67E-05	7.61E-05	1.85E-05	6.48E-05	8.6053E-04
520743.87	4258710.98	14911.28123	0.1087	0.09729	0.10591	0.09998	6.84E-04	4.45E-06	3.48E-06	4.34E-06	3.43E-06	6.9980E-04
520695.64	4258542.24	14907.70145	0.11958	0.1188	0.11508	0.12317	6.84E-04	4.90E-06	4.25E-06	4.71E-06	4.23E-06	7.0202E-04
520037.31	4258294.09	14897.66231	0.18626	5.23396	0.19607	4.30669	6.83E-04	7.63E-06	1.87E-04	8.03E-06	1.48E-04	1.0342E-03
520746.69	4258728.2	14892.87957	0.10822	0.09531	0.10555	0.09808	6.83E-04	4.43E-06	3.41E-06	4.32E-06	3.37E-06	6.9879E-04
519853.09	4258890.3	14890.37448	0.33263	0.28607	0.34945	0.27799	6.83E-04	1.36E-05	1.02E-05	1.43E-05	9.54E-06	7.3084E-04
520704.63	4258423.74	14887.09914	0.11469	0.11862	0.11114	0.12367	6.83E-04	4.70E-06	4.24E-06	4.55E-06	4.25E-06	7.0073E-04
520082.9	4259355.31	14878.35828	14.12594	0.13722	17.49195	0.13164	6.83E-04	5.78E-04	4.91E-06	7.16E-04	4.52E-06	1.9866E-03
520721.97	4258314.05	14867.77638	0.1066	0.1156	0.10365	0.12048	6.82E-04	4.36E-06	4.13E-06	4.24E-06	4.14E-06	6.9898E-04
520694.64	4258475.12	14865.61534	0.1187	0.12066	0.1145	0.12582	6.82E-04	4.86E-06	4.32E-06	4.69E-06	4.32E-06	7.0019E-04
520054.57	4258247.01	14856.30836	0.17008	9.7882	0.17936	7.01779	6.82E-04	6.96E-06	3.50E-04	7.34E-06	2.41E-04	1.2869E-03
520009.19	4258458.73	14840.57631	0.32975	2.65368	0.35317	2.32304	6.81E-04	1.35E-05	9.49E-05	1.45E-05	7.98E-05	8.8349E-04
520741.28	4258693.23	14834.9504	0.1091	0.0991	0.10606	0.10177	6.81E-04	4.47E-06	3.54E-06	4.34E-06	3.49E-06	6.9645E-04
520697.87	4258457.73	14822.34055	0.11739	0.11996	0.11345	0.12517	6.80E-04	4.81E-06	4.29E-06	4.65E-06	4.30E-06	6.9806E-04
520705.42	4258580.22	14820.53233	0.11731	0.11441	0.11321	0.11845	6.80E-04	4.80E-06	4.09E-06	4.64E-06	4.07E-06	6.9753E-04
520720.71	4258336.62	14806.72886	0.10765	0.11583	0.10453	0.12042	6.79E-04	4.41E-06	4.14E-06	4.28E-06	4.13E-06	6.9627E-04
520011.26	4258429.45	14802.62341	0.28763	2.79869	0.30536	2.44862	6.79E-04	1.18E-05	1.00E-04	1.25E-05	8.41E-05	8.8756E-04
520725.1	4258637.22	14789.16945	0.11265	0.10612	0.10883	0.10947	6.78E-04	4.61E-06	3.80E-06	4.46E-06	3.76E-06	6.9512E-04
520119.81	4258122.44	14785.16607	0.14115	7.85414	0.14269	9.20502	6.78E-04	5.78E-06	2.81E-04	5.84E-06	3.16E-04	1.2869E-03
520695.69	4258532.76	14783.72937	0.11938	0.11909	0.11486	0.12353	6.78E-04	4.89E-06	4.26E-06	4.70E-06	4.24E-06	6.9634E-04
519910.75	4258691.91	14783.43051	0.34655	0.59226	0.37302	0.56925	6.78E-04	1.42E-05	2.12E-05	1.53E-05	1.95E-05	7.4842E-04
520715.26	4258608.72	14770.43226	0.11496	0.11008	0.11098	0.1139	6.78E-04	4.71E-06	3.94E-06	4.54E-06	3.91E-06	6.9474E-04
520042.85	4259334.55	14764.49393	5.46518	0.13552	7.9915	0.13239	6.77E-04	2.24E-04	4.85E-06	3.27E-04	4.55E-06	1.2377E-03
520734.94	4258665.73	14755.85206	0.11037	0.10224	0.1069	0.10511	6.77E-04	4.52E-06	3.66E-06	4.38E-06	3.61E-06	6.9313E-04
520064	4258223.15	14746.21532	0.16295	17.40711	0.17112	9.81808	6.77E-04	6.67E-06	6.23E-04	7.01E-06	3.37E-04	1.6499E-03
519927.12	4258655.32	14742.89504	0.36031	0.71407	0.39121	0.68444	6.76E-04	1.48E-05	2.55E-05	1.60E-05	2.35E-05	7.5618E-04
520725.74	4258272.21	14734.39648	0.10407	0.11518	0.10181	0.12024	6.76E-04	4.26E-06	4.12E-06	4.17E-06	4.13E-06	6.9266E-04
520092.82	4259365.29	14724.19497	12.63571	0.13626	11.09954	0.1301	6.76E-04	5.17E-04	4.87E-06	4.54E-04	4.47E-06	1.6567E-03
520018.73	4258361.68	14702.17606	0.22112	3.30649	0.23196	2.86913	6.75E-04	9.05E-06	1.18E-04	9.50E-06	9.85E-05	9.0983E-04
520695.75	4258523.27	14690.86864	0.11918	0.11925	0.11465	0.12381	6.74E-04	4.88E-06	4.27E-06	4.69E-06	4.25E-06	6.9208E-04
519895.62	4258727.77	14680.97162	0.33373	0.50051	0.35866	0.48214	6.74E-04	1.37E-05	1.79E-05	1.47E-05	1.66E-05	7.3634E-04
520725.54	4258297.55	14673.90199	0.10513	0.1146	0.10242	0.11959	6.73E-04	4.30E-06	4.10E-06	4.19E-06	4.11E-06	6.8991E-04
519868.48	4258807	14666.98087	0.32178	0.36578	0.34035	0.35519	6.73E-04	1.32E-05	1.31E-05	1.39E-05	1.22E-05	7.2528E-04
520100.14	4258152.38	14663.7744	0.14658	15.02436	0.15006	15.85514	6.73E-04	6.00E-06	5.37E-04	6.14E-06	5.44E-04	1.7666E-03
520053.18	4259344.53	14654.75487	7.69063	0.13481	14.97615	0.13118	6.72E-04	3.15E-04	4.82E-06	6.13E-04	4.50E-06	1.6097E-03
519860.78	4258836.65	14653.74431	0.32094	0.33185	0.3383	0.32239	6.72E-04	1.31E-05	1.19E-05	1.39E-05	1.11E-05	7.2222E-04
520047.43	4258259.95	14647.72851	0.1726	7.25673	0.18214	5.63286	6.72E-04	7.07E-06	2.60E-04	7.46E-06	1.93E-04	1.1395E-03
519949.85	4258609	14638.07597	0.38517	0.94644	0.42781	0.89773	6.72E-04	1.58E-05	3.39E-05	1.75E-05	3.08E-05	7.6953E-04
520720.52	4258361.97	14609.94761	0.10861	0.11524	0.10533	0.11973	6.70E-04	4.45E-06	4.12E-06	4.31E-06	4.11E-06	6.8727E-04
519854.6	4258863.81	14605.08885	0.32129	0.30531	0.33772	0.29665	6.70E-04	1.32E-05	1.09E-05	1.38E-05	1.02E-05	7.1814E-04
520705.48	4258570.74	14593.6653	0.11709	0.11475	0.11296	0.11881	6.70E-04	4.79E-06	4.10E-06	4.63E-06	4.08E-06	6.8713E-04
519847.71	4258908.04	14574.61512	0.32771	0.27013	0.34376	0.26273	6.69E-04	1.34E-05	9.66E-06	1.41E-05	9.02E-06	7.1483E-04
520019.85	4258351.23	14572.86798	0.21312	3.38911	0.22332	2.93651	6.69E-04	8.73E-06	1.21E-04	9.14E-06	1.01E-04	9.0848E-04
519880.93	4258764.68	14571.60298	0.32421	0.42591	0.34483	0.4126	6.69E-04	1.33E-05	1.52E-05	1.41E-05	1.42E-05	7.2531E-04
520037.9	4258283.86	14555.67372	0.18006	5.31391	0.18955	4.37136	6.68E-04	7.37E-06	1.90E-04	7.76E-06	1.50E-04	1.0231E-03
520750.32	4258719.53	14549.10918	0.10695	0.09513	0.10428	0.09781	6.67E-04	4.38E-06	3.40E-06	4.27E-06	3.36E-06	6.8289E-04
520012.95	4258394.02	14537.16838	0.24609	2.92041	0.25925	2.55849	6.67E-04	1.01E-05	1.04E-04	1.06E-05	8.78E-05	8.7992E-04
520082.92	4259365.31	14523.57991	15.70952	0.13463	17.25251	0.1292	6.66E-04	6.43E-04	4.82E-06	7.06E-04	4.44E-06	2.0252E-03
520747.53	4258702.25	14523.48259	0.10742	0.09707	0.10459	0.09968	6.66E-04	4.40E-06	3.47E-06	4.28E-06	3.42E-06	6.8188E-04
520735	4258656.24	14523.3266	0.11013	0.10269	0.10659	0.10567	6.66E-04	4.51E-06	3.67E-06	4.36E-06	3.63E-06	6.8248E-04
520725.16	4258627.74	14519.12696	0.11241	0.10649	0.10859	0.10997	6.66E-04	4.60E-06	3.81E-06	4.45E-06	3.78E-06	6.8274E-04
520014.14	4258383.54	14518.92111	0.23662	2.99651	0.24885	2.62189	6.66E-04	9.69E-06	1.07E-04	1.02E-05	9.00E-05	8.8317E-04
519917.12	4258673.87	14509.4049	0.34739	0.64051	0.37494	0.61505	6.66E-04	1.42E-05	2.29E-05	1.54E-05	2.11E-05	7.3926E-04
519863.72	4258819.63	14508.43744	0.31759	0.34848	0.3351	0.33865	6.66E-04	1.30E-05	1.25E-05	1.37E-05	1.16E-05	7.1643E-04
520109.99	4258132.41	14506.38579	0.14185	10.43818	0.14421	12.05007	6.66E-04	5.81E-06	3.73E-04	5.90E-06	4.14E-04	1.4643E-03
520724.09	4258345.48	14506.19695	0.10718	0.1144	0.10395	0.11889	6.66E-04	4.39E-06	4.09E-06	4.26E-06	4.08E-06	6.8233E-04
519959.77	4258589.57	14506.05203	0.39593	1.08894	0.44387	1.02148	6.66E-04	1.62E-05	3.89E-05	1.82E-05	3.51E-05	7.7391E-04
520715.32	4258599.24	14500.34474	0.11472	0.11047	0.11078	0.11435	6.65E-04	4.70E-06	3.95E-06	4.54E-06	3.93E-06	6.8236E-04
520698.09	4258484.15	14492.46164	0.11779	0.11934	0.11354	0.12432	6.65E-04	4.82E-06	4.27E-06	4.65E-06	4.27E-06	6.8289E-04
520729.17	4258281.21	14466.8689	0.10367	0.11355	0.1012	0.11858	6.64E-04	4.24E-06	4.06E-06	4.14E-06	4.07E-06	6.8023E-04
519904.67	4258701.35	14464.06876	0.33678	0.55816	0.36134	0.53741	6.64E-04	1.38E-05	2.00E-05	1.48E-05	1.84E-05	7.3058E-04
520054.94	4258236.87	14443.55596	0.16468	9.9189	0.17353	7.0919	6.63E-04	6.74E-06	3.55E-04	7.11E-06	2.43E-04	1.2747E-03
520015.14	4258373.14	14442.68389	0.2276	3.0623	0.23899	2.67703	6.63E-04	9.32E-06	1.10E-04	9.79E-06	9.19E-05	8.8315E-04
520043.28	4259344.55	14434.82779	5.55415	0.13304	8.22942	0.12997	6.62E-04	2.27E-04	4.76E-06	3.37E-04	4.46E-06	1.2358E-03
519989.52	4258531.26	14425.57278	0.41206	1.76187	0.45928	1.59249	6.62E-04	1.69E-05	6.30E-05	1.88E-05	5.47E-05	8.1519E-04
519871.47	4258790.09	14420.74264	0.31757	0.38468	0.33637	0.37346	6.62E-04	1.30E-05	1.38E-05	1.38E-05	1.28E-05	7.1495E-04
520744.83	4258684.75	14420.72666	0.10785	0.09881	0.10478	0.10145	6.62E-04	4.42E-06	3.53E-06	4.29E-06	3.48E-06	6.7732E-04
520701.29	4258466.69	14411.56046	0.11655	0.1185	0.11252	0.1236	6.61E-04	4.77E-06	4.24E-06	4.61E-06	4.24E-06	6.7904E-04
520020.82	4258340.84	14402.6648	0.20552	3.46188	0.21513	2.99744	6.61E-04	8.41E-06	1.24E-04	8.81E-06	1.03E-04	9.0472E-04
520728.99	4258306.62	14395.50825	0.10467	0.11323	0.10177	0.11805	6.60E-04	4.29E-06	4.05E-06	4.17E-06	4.05E-06	6.7699E-04
520705.53	4258561.26	14391.07705	0.11688	0.11504	0.11269	0.11913	6.60E-04	4.79E-06	4.11E-06	4.61E-06	4.09E-06	6.7784E-04
520092.84	4259375.29	14371.19927	12.60874	0.13369	10.98905	0.12771	6.59E-04	5.16E-04	4.78E-06	4.50E-04	4.38E-06	1.6347E-03
519969.69	4258570.13	14359.50609	0.40473	1.26526	0.45362	1.17316	6.59E-04	1.66E-05	4.53E-05	1.86E-05	4.03E-05	7.7946E-04
519999.4	4258502.12	14354.94726	0.38642	2.14822	0.42408	1.90778	6.59E-04	1.58E-05	7.68E-05	1.74E-05	6.55E-05	8.3410E-04
520053.2	4259354.53	14317.09151	7.75148	0.13229	15.27015	0.12876	6.57E-04	3.17E-04	4.73E-06	6.25E-04	4.42E-06	1.6086E-03
520064.24	4258213.06	14312.54883	0.15789	17.62013	0.16563	9.88711	6.57E-04	6.46E-06	6.30E-04	6.78E-06	3.39E-04	1.6396E-03
520119.84	4258112.44	14304.22998	0.13719	7.85872	0.13862	9.20207	6.56E-04	5.62E-06	2.81E-04	5.68E-06	3.16E-04	1.2646E-03
519846.01	4258897.39	14290.67221	0.31771	0.27522	0.33289	0.26764	6.56E-04	1.30E-05	9.84E-06	1.36E-05	9.19E-06	7.0130E-04
519979.61	4258550.69	14285.54215	0.41015	1.48279	0.45838	1.35989	6.55E-04	1.68E-05	5.30E-05	1.88E-05	4.67E-05	7.9068E-04
520720.43	4258387.62	14284.43809	0.10943	0.11445	0.10611	0.11899	6.55E-04	4.48E-06	4.09E-06	4.34E-06	4.09E-06	6.7235E-04
520735.05	4258646.76	14279.25377	0.1099	0.10309	0.10631	0.10619	6.55E-04	4.50E-06	3.69E-06	4.35E-06	3.65E-06	6.7129E-04
519889.13	4258736.23	14257.67052	0.32301	0.47329	0.34491	0.45729	6.54E-04	1.32E-05	1.69E-05	1.41E-05	1.57E-05	7.1409E-04
520723.91	4258370.89	14255.78725	0.10804	0.11383	0.10475	0.11825	6.54E-04	4.42E-06	4.07E-06	4.29E-06	4.06E-06	6.7087E-04
520725.21	4258618.26	14249.32684	0.11217	0.10687	0.10838	0.11046	6.54E-04	4.59E-06	3.82E-06	4.44E-06	3.79E-06	6.7038E-04
520715.37	4258589.76	14245.14559	0.11449	0.11087	0.11057	0.11478	6.54E-04	4.69E-06	3.97E-06	4.53E-06	3.94E-06	6.7066E-04
520007.6	4258438.34	14243.98891	0.29317	2.59818	0.31161	2.28841	6.53E-04	1.20E-05	9.29E-05	1.28E-05	7.86E-05	8.4975E-04
520027.77	4258308.01	14240.00197	0.18762	4.06165	0.19657	3.46285	6.53E-04	7.68E-06	1.45E-04	8.05E-06	1.19E-04	9.3320E-04
520744.89	4258675.26	14227.85486	0.10764	0.0993	0.10445	0.10199	6.53E-04	4.41E-06	3.55E-06	4.28E-06	3.50E-06	6.6848E-04
520705.58	4258551.78	14216.16103	0.11668	0.11535	0.11243	0.11947	6.52E-04	4.78E-06	4.13E-06	4.60E-06	4.10E-06	6.6982E-04
520038.43	4258273.65	14212.86357	0.17416	5.38672	0.18337	4.42712	6.52E-04	7.13E-06	1.93E-04	7.51E-06	1.52E-04	1.0114E-03
520700.84	4258511.46	14206.74688	0.1174	0.11785	0.11299	0.12244	6.52E-04	4.81E-06	4.22E-06	4.63E-06	4.20E-06	6.6963E-04
520732.6	4258290.22	14204.35118	0.10323	0.11227	0.10058	0.11718	6.52E-04	4.23E-06	4.02E-06	4.12E-06	4.02E-06	6.6805E-04
520021.66	4258330.5	14200.33809	0.19828	3.52608	0.20742	3.05073	6.51E-04	8.12E-06	1.26E-04	8.49E-06	1.05E-04	8.9895E-04
520100.17	4258142.38	14196.26664	0.14233	15.04492	0.1456	15.91239	6.51E-04	5.83E-06	5.38E-04	5.96E-06	5.46E-04	1.7475E-03
520753.95	4258710.86	14193.44198	0.10571	0.09495	0.10303	0.09754	6.51E-04	4.33E-06	3.40E-06	4.22E-06	3.35E-06	6.6646E-04
520082.94	4259375.31	14183.30432	15.65256	0.13212	17.01862	0.12685	6.51E-04	6.41E-04	4.73E-06	6.97E-04	4.35E-06	1.9975E-03
520727.46	4258354.35	14182.52505	0.10663	0.11307	0.10339	0.11744	6.51E-04	4.37E-06	4.04E-06	4.23E-06	4.03E-06	6.6734E-04
520701.18	4258502.33	14169.80421	0.11715	0.11796	0.11279	0.12265	6.50E-04	4.80E-06	4.22E-06	4.62E-06	4.21E-06	6.6793E-04
520701.53	4258493.19	14162.80034	0.1169	0.118	0.11261	0.1228	6.50E-04	4.79E-06	4.22E-06	4.61E-06	4.22E-06	6.6760E-04
520751.18	4258693.53	14126.86506	0.10616	0.09681	0.1033	0.09937	6.48E-04	4.35E-06	3.46E-06	4.23E-06	3.41E-06	6.6356E-04
520732.44	4258315.68	14117.04144	0.10417	0.11199	0.10116	0.11663	6.48E-04	4.27E-06	4.01E-06	4.14E-06	4.00E-06	6.6408E-04
520043.3	4259354.55	14106.81781	5.57877	0.13058	8.31975	0.12758	6.47E-04	2.28E-04	4.67E-06	3.41E-04	4.38E-06	1.2253E-03
519874.37	4258772.97	14082.80594	0.3123	0.40479	0.33127	0.39271	6.46E-04	1.28E-05	1.45E-05	1.36E-05	1.35E-05	7.0040E-04
519883.66	4258747.14	14075.29301	0.31674	0.44886	0.33762	0.43423	6.46E-04	1.30E-05	1.61E-05	1.38E-05	1.49E-05	7.0350E-04
520045.69	4258250.68	14075.2646	0.16614	6.78528	0.17518	5.35522	6.46E-04	6.80E-06	2.43E-04	7.17E-06	1.84E-04	1.0863E-03
520705.64	4258542.29	14069.38826	0.11648	0.11556	0.11217	0.11974	6.45E-04	4.77E-06	4.13E-06	4.59E-06	4.11E-06	6.6308E-04
519898.33	4258710.17	14061.21806	0.32564	0.52695	0.34881	0.50795	6.45E-04	1.33E-05	1.88E-05	1.43E-05	1.74E-05	7.0900E-04
520055.28	4258226.75	14044.48202	0.15957	10.04245	0.16802	7.15987	6.44E-04	6.53E-06	3.59E-04	6.88E-06	2.46E-04	1.2628E-03
520110.02	4258122.41	14042.49321	0.13785	10.44651	0.14005	12.04597	6.44E-04	5.64E-06	3.74E-04	5.73E-06	4.14E-04	1.4428E-03
519850.96	4258855.16	14040.68429	0.30668	0.30698	0.32205	0.29854	6.44E-04	1.26E-05	1.10E-05	1.32E-05	1.02E-05	6.9113E-04
520092.85	4259385.29	14036.80581	12.48859	0.13124	10.8918	0.12542	6.44E-04	5.11E-04	4.69E-06	4.46E-04	4.31E-06	1.6103E-03
520704.7	4258475.65	14035.27931	0.11568	0.11719	0.1116	0.12213	6.44E-04	4.74E-06	4.19E-06	4.57E-06	4.19E-06	6.6160E-04
519847.6	4258870.98	14027.11967	0.30735	0.29316	0.32225	0.2851	6.44E-04	1.26E-05	1.05E-05	1.32E-05	9.79E-06	6.8959E-04
520735.1	4258637.28	14026.46689	0.10968	0.10346	0.10607	0.10669	6.44E-04	4.49E-06	3.70E-06	4.34E-06	3.66E-06	6.5970E-04
520744.94	4258665.78	14019.30218	0.10742	0.09976	0.10414	0.10253	6.43E-04	4.40E-06	3.57E-06	4.26E-06	3.52E-06	6.5893E-04
520715.42	4258580.28	14008.34904	0.11427	0.1113	0.11036	0.11521	6.43E-04	4.68E-06	3.98E-06	4.52E-06	3.96E-06	6.5981E-04
520007.92	4258413.3	14005.02339	0.26059	2.63683	0.27533	2.32687	6.43E-04	1.07E-05	9.43E-05	1.13E-05	7.99E-05	8.3867E-04
520707.98	4258458.39	13996.83081	0.11445	0.11644	0.11059	0.12143	6.42E-04	4.69E-06	4.16E-06	4.53E-06	4.17E-06	6.5970E-04
520053.22	4259364.53	13990.65864	7.80478	0.12985	15.58313	0.12641	6.42E-04	3.20E-04	4.64E-06	6.38E-04	4.34E-06	1.6084E-03
519927.12	4258646.05	13987.66337	0.34887	0.72427	0.37905	0.69514	6.42E-04	1.43E-05	2.59E-05	1.55E-05	2.39E-05	7.2130E-04
519857.03	4258827.62	13986.3514	0.3052	0.33319	0.3213	0.3241	6.42E-04	1.25E-05	1.19E-05	1.32E-05	1.11E-05	6.9036E-04
520725.26	4258608.78	13983.95926	0.11195	0.10724	0.10819	0.11092	6.42E-04	4.58E-06	3.84E-06	4.43E-06	3.81E-06	6.5821E-04
520022.41	4258320.21	13976.28843	0.19144	3.58397	0.20017	3.09898	6.41E-04	7.84E-06	1.28E-04	8.20E-06	1.06E-04	8.9182E-04
520002.61	4258474.73	13975.19984	0.34126	2.3269	0.36748	2.05643	6.41E-04	1.40E-05	8.32E-05	1.50E-05	7.06E-05	8.2400E-04
520028.53	4258297.71	13972.60874	0.1814	4.13345	0.1901	3.52006	6.41E-04	7.43E-06	1.48E-04	7.78E-06	1.21E-04	9.2494E-04
519999.36	4258492.42	13956.3272	0.36589	2.16708	0.39833	1.925	6.40E-04	1.50E-05	7.75E-05	1.63E-05	6.61E-05	8.1518E-04
520705.69	4258532.81	13954.8524	0.11629	0.1158	0.11196	0.12006	6.40E-04	4.76E-06	4.14E-06	4.58E-06	4.12E-06	6.5783E-04
520732.39	4258341.42	13947.32997	0.105	0.11173	0.10184	0.11607	6.40E-04	4.30E-06	4.00E-06	4.17E-06	3.98E-06	6.5633E-04
520736.02	4258299.22	13943.90935	0.10277	0.11105	0.09996	0.1158	6.40E-04	4.21E-06	3.97E-06	4.09E-06	3.98E-06	6.5597E-04
519864.81	4258798.15	13913.61352	0.30542	0.36679	0.32278	0.35648	6.38E-04	1.25E-05	1.31E-05	1.32E-05	1.22E-05	6.8941E-04
520727.31	4258379.82	13891.82767	0.10743	0.11244	0.10418	0.11681	6.37E-04	4.40E-06	4.02E-06	4.27E-06	4.01E-06	6.5403E-04
520723.85	4258396.6	13891.76892	0.10879	0.113	0.10548	0.11751	6.37E-04	4.45E-06	4.04E-06	4.32E-06	4.03E-06	6.5418E-04
520038.91	4258263.47	13872.62353	0.16859	5.45238	0.17752	4.47766	6.36E-04	6.90E-06	1.95E-04	7.27E-06	1.54E-04	9.9937E-04
520705.75	4258523.33	13870.55887	0.11611	0.116	0.11176	0.12035	6.36E-04	4.75E-06	4.15E-06	4.58E-06	4.13E-06	6.5397E-04
520082.95	4259385.31	13858.71222	15.48663	0.12972	16.81339	0.12459	6.36E-04	6.34E-04	4.64E-06	6.88E-04	4.28E-06	1.9672E-03
520730.84	4258363.21	13851.8994	0.10607	0.11173	0.10284	0.11602	6.35E-04	4.34E-06	4.00E-06	4.21E-06	3.98E-06	6.5203E-04
520720.47	4258413.59	13836.62374	0.11007	0.11364	0.10673	0.11829	6.35E-04	4.51E-06	4.06E-06	4.37E-06	4.06E-06	6.5180E-04
520757.58	4258702.2	13827.65383	0.1045	0.09476	0.10179	0.09728	6.34E-04	4.28E-06	3.39E-06	4.17E-06	3.34E-06	6.4956E-04
519917.12	4258664.6	13819.87054	0.33674	0.65002	0.36318	0.62508	6.34E-04	1.38E-05	2.33E-05	1.49E-05	2.15E-05	7.0740E-04
520063.35	4258203.44	13815.54656	0.15269	16.2997	0.16013	9.53009	6.34E-04	6.25E-06	5.83E-04	6.56E-06	3.27E-04	1.5568E-03
519939.89	4258618.74	13803.07463	0.36035	0.84549	0.39661	0.80722	6.33E-04	1.48E-05	3.02E-05	1.62E-05	2.77E-05	7.2221E-04
520745	4258656.3	13795.85294	0.10721	0.10016	0.10386	0.10303	6.33E-04	4.39E-06	3.58E-06	4.25E-06	3.54E-06	6.4869E-04
520715.48	4258570.8	13792.36419	0.11406	0.11162	0.11012	0.11554	6.33E-04	4.67E-06	3.99E-06	4.51E-06	3.97E-06	6.4991E-04
520043.32	4259364.55	13789.4761	5.60916	0.12819	8.41254	0.12527	6.33E-04	2.30E-04	4.59E-06	3.44E-04	4.30E-06	1.2156E-03
519859.95	4258810.54	13782.80826	0.30142	0.34971	0.31789	0.34014	6.32E-04	1.23E-05	1.25E-05	1.30E-05	1.17E-05	6.8187E-04
520735.16	4258627.8	13768.39287	0.10946	0.1038	0.10585	0.10716	6.32E-04	4.48E-06	3.71E-06	4.33E-06	3.68E-06	6.4787E-04
520100.2	4258132.38	13753.08727	0.1383	15.06047	0.14136	15.96666	6.31E-04	5.66E-06	5.39E-04	5.79E-06	5.48E-04	1.7293E-03
519838.93	4258904.49	13728.54681	0.30381	0.26501	0.3175	0.25789	6.30E-04	1.24E-05	9.48E-06	1.30E-05	8.85E-06	6.7361E-04
520725.32	4258599.3	13727.08255	0.11173	0.1076	0.108	0.11134	6.30E-04	4.57E-06	3.85E-06	4.42E-06	3.82E-06	6.4644E-04
520754.83	4258684.8	13723.07729	0.10495	0.09646	0.10204	0.099	6.30E-04	4.30E-06	3.45E-06	4.18E-06	3.40E-06	6.4491E-04
520046.14	4258240.51	13716.28351	0.16099	6.87349	0.1697	5.41591	6.29E-04	6.59E-06	2.46E-04	6.95E-06	1.86E-04	1.0746E-03
520003.95	4258447.22	13712.29719	0.29869	2.41874	0.31788	2.14282	6.29E-04	1.22E-05	8.65E-05	1.30E-05	7.36E-05	8.1442E-04
519949.81	4258599.31	13702.88299	0.37093	0.96202	0.41211	0.91107	6.29E-04	1.52E-05	3.44E-05	1.69E-05	3.13E-05	7.2641E-04
520029.21	4258287.44	13696.16921	0.17552	4.1974	0.18397	3.57333	6.28E-04	7.19E-06	1.50E-04	7.53E-06	1.23E-04	9.1588E-04
520708.11	4258484.61	13695.27799	0.11482	0.11589	0.11069	0.12067	6.28E-04	4.70E-06	4.15E-06	4.53E-06	4.14E-06	6.4583E-04
519989.48	4258521.56	13687.6774	0.39084	1.78305	0.43265	1.61122	6.28E-04	1.60E-05	6.38E-05	1.77E-05	5.53E-05	7.8077E-04
520739.45	4258308.23	13683.22465	0.1023	0.10981	0.09936	0.11439	6.28E-04	4.19E-06	3.93E-06	4.07E-06	3.93E-06	6.4387E-04
520053.23	4259374.53	13674.85115	7.86009	0.12749	15.89956	0.12414	6.27E-04	3.22E-04	4.56E-06	6.51E-04	4.26E-06	1.6090E-03
520055.59	4258216.63	13657.86582	0.15471	10.1548	0.16279	7.22087	6.27E-04	6.33E-06	3.63E-04	6.67E-06	2.48E-04	1.2507E-03
520089.57	4259395.71	13651.26178	13.53983	0.12831	12.26189	0.12287	6.26E-04	5.54E-04	4.59E-06	5.02E-04	4.22E-06	1.6915E-03
519877.17	4258755.62	13646.34042	0.30591	0.42595	0.32498	0.41279	6.26E-04	1.25E-05	1.52E-05	1.33E-05	1.42E-05	6.8131E-04
520735.87	4258350.55	13639.32394	0.10448	0.11037	0.10128	0.11461	6.26E-04	4.28E-06	3.95E-06	4.15E-06	3.93E-06	6.4205E-04
519891.92	4258718.84	13629.47439	0.31393	0.49834	0.33639	0.48056	6.25E-04	1.29E-05	1.78E-05	1.38E-05	1.65E-05	6.8624E-04
520711.36	4258467.28	13618.06892	0.11362	0.11514	0.10971	0.12001	6.25E-04	4.65E-06	4.12E-06	4.49E-06	4.12E-06	6.4215E-04
519867.77	4258781.18	13612.63234	0.30089	0.38528	0.31835	0.37428	6.25E-04	1.23E-05	1.38E-05	1.30E-05	1.28E-05	6.7651E-04

519907.12	4258683.15	13607.63183	0.32501	0.58641	0.3489	0.56469	6.24E-04	1.33E-05	2.10E-05	1.43E-05	1.94E-05	6.9225E-04
520715.53	4258561.31	13601.37858	0.11386	0.11194	0.10987	0.11587	6.24E-04	4.66E-06	4.00E-06	4.50E-06	3.98E-06	6.4115E-04
520110.05	4258112.41	13599.35505	0.13402	10.45566	0.1361	12.00483	6.24E-04	5.49E-06	3.74E-04	5.57E-06	4.12E-04	1.4211E-03
520745.05	4258646.82	13561.76708	0.10701	0.10051	0.10361	0.10351	6.22E-04	4.38E-06	3.60E-06	4.24E-06	3.55E-06	6.3796E-04
519959.73	4258579.87	13552.97295	0.38017	1.10675	0.42426	1.03673	6.22E-04	1.56E-05	3.96E-05	1.74E-05	3.56E-05	7.2990E-04
520754.89	4258675.32	13536.2278	0.10477	0.09692	0.10174	0.09951	6.21E-04	4.29E-06	3.47E-06	4.17E-06	3.42E-06	6.3635E-04
520730.71	4258388.74	13525.76086	0.10682	0.11105	0.10359	0.11539	6.21E-04	4.37E-06	3.97E-06	4.24E-06	3.96E-06	6.3708E-04
520734.21	4258372.08	13518.45524	0.10551	0.11038	0.1023	0.11462	6.20E-04	4.32E-06	3.95E-06	4.19E-06	3.94E-06	6.3659E-04
520004.35	4258421.99	13517.61263	0.26525	2.46118	0.28045	2.18456	6.20E-04	1.09E-05	8.80E-05	1.15E-05	7.50E-05	8.0554E-04
520735.21	4258618.32	13511.02193	0.10925	0.10414	0.10567	0.10761	6.20E-04	4.47E-06	3.72E-06	4.33E-06	3.69E-06	6.3608E-04
519843.98	4258862.39	13499.85382	0.2938	0.29463	0.30775	0.2868	6.19E-04	1.20E-05	1.05E-05	1.26E-05	9.85E-06	6.6436E-04
520009.85	4258365.34	13497.86049	0.21431	2.75852	0.22462	2.44038	6.19E-04	8.77E-06	9.87E-05	9.20E-06	8.38E-05	8.1968E-04
520727.27	4258405.59	13496.58946	0.10813	0.11159	0.10484	0.11609	6.19E-04	4.43E-06	3.99E-06	4.29E-06	3.99E-06	6.3589E-04
520725.37	4258589.82	13484.7708	0.11153	0.10795	0.10781	0.11172	6.19E-04	4.57E-06	3.86E-06	4.41E-06	3.84E-06	6.3533E-04
520043.33	4259374.55	13482.18444	5.64531	0.12587	8.50373	0.12303	6.19E-04	2.31E-04	4.50E-06	3.48E-04	4.22E-06	1.2066E-03
520079.67	4259395.72	13475.5324	16.36914	0.12678	20.03811	0.12202	6.18E-04	6.70E-04	4.53E-06	8.20E-04	4.19E-06	2.1176E-03
519840.47	4258877.85	13467.65591	0.29389	0.28178	0.30734	0.27429	6.18E-04	1.20E-05	1.01E-05	1.26E-05	9.42E-06	6.6198E-04
519847.32	4258846.51	13466.4475	0.29273	0.30827	0.30715	0.30012	6.18E-04	1.20E-05	1.10E-05	1.26E-05	1.03E-05	6.6371E-04
520761.2	4258693.53	13453.67071	0.1033	0.09456	0.10058	0.09701	6.17E-04	4.23E-06	3.38E-06	4.12E-06	3.33E-06	6.3229E-04
520011.11	4258354.84	13444.74143	0.20688	2.82895	0.21655	2.49953	6.17E-04	8.47E-06	1.01E-04	8.87E-06	8.58E-05	8.2115E-04
520715.58	4258551.83	13437.49698	0.11368	0.11221	0.10963	0.11618	6.16E-04	4.65E-06	4.01E-06	4.49E-06	3.99E-06	6.3363E-04
520710.84	4258511.83	13428.18787	0.11441	0.11467	0.11018	0.11905	6.16E-04	4.68E-06	4.10E-06	4.51E-06	4.09E-06	6.3344E-04
520723.92	4258422.64	13424.76196	0.10936	0.11221	0.10601	0.11684	6.16E-04	4.48E-06	4.01E-06	4.34E-06	4.01E-06	6.3275E-04
519969.65	4258560.43	13421.42302	0.38686	1.28331	0.43075	1.18952	6.16E-04	1.58E-05	4.59E-05	1.76E-05	4.08E-05	7.3596E-04
520742.88	4258317.23	13421.42057	0.10182	0.1086	0.09878	0.11301	6.16E-04	4.17E-06	3.88E-06	4.04E-06	3.88E-06	6.3173E-04
520063.61	4258193.35	13420.95286	0.14816	16.52504	0.15526	9.59285	6.16E-04	6.07E-06	5.91E-04	6.36E-06	3.29E-04	1.5486E-03
520029.82	4258277.2	13412.34215	0.16993	4.25475	0.17816	3.6214	6.15E-04	6.96E-06	1.52E-04	7.29E-06	1.24E-04	9.0610E-04
519979.56	4258541	13408.81911	0.39036	1.50209	0.4337	1.37707	6.15E-04	1.60E-05	5.37E-05	1.78E-05	4.73E-05	7.4992E-04
520711.18	4258502.7	13393.6232	0.11417	0.11472	0.10999	0.1192	6.14E-04	4.67E-06	4.10E-06	4.50E-06	4.09E-06	6.3185E-04
520711.52	4258493.57	13390.83229	0.11395	0.11468	0.10981	0.11927	6.14E-04	4.67E-06	4.10E-06	4.50E-06	4.09E-06	6.3170E-04
520053.25	4259384.53	13368.84592	7.97432	0.12518	16.24682	0.12192	6.13E-04	3.27E-04	4.48E-06	6.65E-04	4.19E-06	1.6137E-03
520046.56	4258230.35	13366.11498	0.15611	6.9574	0.1645	5.4729	6.13E-04	6.39E-06	2.49E-04	6.74E-06	1.88E-04	1.0631E-03
520720.65	4258439.94	13354.27753	0.11059	0.11271	0.10705	0.11748	6.13E-04	4.53E-06	4.03E-06	4.38E-06	4.03E-06	6.2964E-04
520012.19	4258344.4	13345.65486	0.19975	2.89047	0.2088	2.55239	6.12E-04	8.18E-06	1.03E-04	8.55E-06	8.76E-05	8.2001E-04
520089.58	4259405.71	13344.56976	13.34105	0.12603	12.14676	0.12073	6.12E-04	5.46E-04	4.51E-06	4.97E-04	4.14E-06	1.6645E-03
520754.94	4258665.84	13335.03518	0.10458	0.09735	0.10147	0.10002	6.12E-04	4.28E-06	3.48E-06	4.15E-06	3.43E-06	6.2714E-04
520100.23	4258122.38	13330.49556	0.13446	15.07372	0.13734	15.96652	6.12E-04	5.51E-06	5.39E-04	5.62E-06	5.48E-04	1.7100E-03
520036.8	4258254.35	13323.21804	0.16218	5.11207	0.1706	4.24758	6.11E-04	6.64E-06	1.83E-04	6.99E-06	1.46E-04	9.5354E-04
520739.34	4258359.68	13321.77189	0.10393	0.10904	0.10074	0.11319	6.11E-04	4.26E-06	3.90E-06	4.12E-06	3.89E-06	6.2734E-04
520745.1	4258637.34	13319.69126	0.10682	0.10083	0.1034	0.10397	6.11E-04	4.37E-06	3.61E-06	4.23E-06	3.57E-06	6.2687E-04
519853.29	4258818.59	13310.46106	0.29019	0.33431	0.30536	0.32548	6.11E-04	1.19E-05	1.20E-05	1.25E-05	1.12E-05	6.5817E-04
519900.89	4258692.25	13308.08877	0.3156	0.55324	0.33769	0.53354	6.11E-04	1.29E-05	1.98E-05	1.38E-05	1.83E-05	6.7540E-04
520005.75	4258387.01	13301.95688	0.22922	2.54609	0.2408	2.26479	6.10E-04	9.39E-06	9.11E-05	9.86E-06	7.78E-05	7.9834E-04
520715.64	4258542.35	13301.06866	0.11349	0.11247	0.10939	0.11648	6.10E-04	4.65E-06	4.02E-06	4.48E-06	4.00E-06	6.2737E-04
520018.88	4258311.68	13295.22742	0.18259	3.31427	0.19059	2.89457	6.10E-04	7.48E-06	1.19E-04	7.80E-06	9.94E-05	8.4316E-04
520714.75	4258476.17	13271.79658	0.11279	0.11387	0.10883	0.11859	6.09E-04	4.62E-06	4.07E-06	4.46E-06	4.07E-06	6.2610E-04
519885.46	4258727.38	13262.50169	0.30418	0.47176	0.32444	0.45597	6.08E-04	1.25E-05	1.69E-05	1.33E-05	1.57E-05	6.6672E-04
520725.42	4258580.33	13260.00173	0.11133	0.1083	0.10761	0.11207	6.08E-04	4.56E-06	3.87E-06	4.41E-06	3.85E-06	6.2503E-04
520735.26	4258608.84	13258.15945	0.10905	0.10449	0.1055	0.10804	6.08E-04	4.46E-06	3.74E-06	4.32E-06	3.71E-06	6.2449E-04
519927.12	4258636.77	13252.63084	0.33805	0.73424	0.36787	0.7053	6.08E-04	1.38E-05	2.63E-05	1.51E-05	2.42E-05	6.8738E-04
520742.79	4258342.87	13252.30622	0.10261	0.10832	0.09948	0.11246	6.08E-04	4.20E-06	3.87E-06	4.07E-06	3.86E-06	6.2400E-04
520718.07	4258459.03	13236.63954	0.11161	0.11309	0.10786	0.11788	6.07E-04	4.57E-06	4.05E-06	4.42E-06	4.05E-06	6.2435E-04
519870.64	4258763.99	13226.05349	0.29537	0.40485	0.31286	0.39295	6.07E-04	1.21E-05	1.45E-05	1.28E-05	1.35E-05	6.5966E-04
520000.29	4258456.11	13220.66004	0.30412	2.25667	0.32419	2.00938	6.07E-04	1.25E-05	8.07E-05	1.33E-05	6.90E-05	7.8197E-04
520013.14	4258334.02	13212.90196	0.19294	2.94594	0.20147	2.59929	6.06E-04	7.90E-06	1.05E-04	8.25E-06	8.92E-05	8.1694E-04
520715.69	4258532.87	13194.53009	0.11332	0.11268	0.10918	0.11676	6.05E-04	4.64E-06	4.03E-06	4.47E-06	4.01E-06	6.2249E-04
520043.35	4259384.55	13184.91109	5.70134	0.12362	8.59936	0.12084	6.05E-04	2.33E-04	4.42E-06	3.52E-04	4.15E-06	1.1990E-03
520737.59	4258380.94	13182.42671	0.10495	0.10898	0.10175	0.11319	6.05E-04	4.30E-06	3.90E-06	4.17E-06	3.89E-06	6.2103E-04
520054.39	4258207.14	13180.8256	0.14956	9.54213	0.15734	6.92649	6.05E-04	6.12E-06	3.41E-04	6.44E-06	2.38E-04	1.1964E-03
520079.68	4259405.72	13176.50391	16.11421	0.12454	19.76931	0.1199	6.05E-04	6.60E-04	4.45E-06	8.09E-04	4.12E-06	2.0823E-03
519861.14	4258789.3	13161.34504	0.28995	0.36735	0.30611	0.35726	6.04E-04	1.19E-05	1.31E-05	1.25E-05	1.23E-05	6.5363E-04
520734.11	4258397.66	13151.86666	0.10618	0.10972	0.103	0.11402	6.03E-04	4.35E-06	3.92E-06	4.22E-06	3.91E-06	6.1979E-04
519917.12	4258655.32	13142.27325	0.3266	0.65889	0.35232	0.63455	6.03E-04	1.34E-05	2.36E-05	1.44E-05	2.18E-05	6.7609E-04
519989.44	4258511.86	13134.84945	0.37127	1.80311	0.40832	1.62855	6.03E-04	1.52E-05	6.45E-05	1.67E-05	5.59E-05	7.5493E-04
520030.38	4258266.99	13126.57486	0.16463	4.30797	0.17266	3.66458	6.02E-04	6.74E-06	1.54E-04	7.07E-06	1.26E-04	8.9593E-04
520754.99	4258656.36	13120.78441	0.1044	0.09773	0.10123	0.1005	6.02E-04	4.27E-06	3.50E-06	4.14E-06	3.45E-06	6.1732E-04
520715.74	4258523.39	13117.85351	0.11316	0.11289	0.109	0.11706	6.02E-04	4.63E-06	4.04E-06	4.46E-06	4.02E-06	6.1897E-04
519879.86	4258738	13104.46814	0.29827	0.44779	0.31745	0.43338	6.01E-04	1.22E-05	1.60E-05	1.30E-05	1.49E-05	6.5731E-04
520730.69	4258414.57	13102.65092	0.10745	0.11024	0.10418	0.11472	6.01E-04	4.40E-06	3.94E-06	4.27E-06	3.94E-06	6.1767E-04
520019.75	4258301.33	13093.38073	0.17672	3.37395	0.18442	2.94481	6.01E-04	7.24E-06	1.21E-04	7.55E-06	1.01E-04	8.3727E-04
520745.16	4258627.86	13073.38184	0.10662	0.10118	0.10321	0.10443	6.00E-04	4.37E-06	3.62E-06	4.23E-06	3.59E-06	6.1558E-04
520764.83	4258684.86	13072.78467	0.10215	0.0942	0.09939	0.09664	6.00E-04	4.18E-06	3.37E-06	4.07E-06	3.32E-06	6.1469E-04
520725.48	4258570.85	13055.78547	0.11114	0.10861	0.10739	0.1124	5.99E-04	4.55E-06	3.88E-06	4.40E-06	3.86E-06	6.1567E-04
519856.17	4258801.44	13054.30318	0.28609	0.35052	0.30153	0.34115	5.99E-04	1.17E-05	1.25E-05	1.23E-05	1.17E-05	6.4722E-04
520013.97	4258323.69	13051.66667	0.18646	2.99478	0.19453	2.64122	5.99E-04	7.63E-06	1.07E-04	7.96E-06	9.07E-05	8.1218E-04
520063.85	4258183.26	13050.78713	0.14389	16.70083	0.15062	9.66763	5.99E-04	5.89E-06	5.97E-04	6.17E-06	3.32E-04	1.5401E-03
520090.41	4258132.35	13044.06622	0.13471	25.66983	0.13843	17.09441	5.98E-04	5.52E-06	9.18E-04	5.67E-06	5.87E-04	2.1147E-03
520089.6	4259415.71	13043.89012	13.20119	0.1238	12.01849	0.11864	5.98E-04	5.41E-04	4.43E-06	4.92E-04	4.07E-06	1.6395E-03
520000.77	4258430.68	13029.4315	0.26983	2.30145	0.28548	2.05423	5.98E-04	1.10E-05	8.23E-05	1.17E-05	7.05E-05	7.7335E-04
520727.36	4258431.7	13024.77862	0.10863	0.11083	0.10525	0.11543	5.98E-04	4.45E-06	3.96E-06	4.31E-06	3.96E-06	6.1424E-04
520046.94	4258220.2	13023.90875	0.15146	7.03249	0.15954	5.52358	5.98E-04	6.20E-06	2.52E-04	6.53E-06	1.90E-04	1.0514E-03
520037.34	4258244.14	13015.14398	0.15728	5.18007	0.16547	4.29917	5.97E-04	6.44E-06	1.85E-04	6.78E-06	1.48E-04	9.4320E-04
520735.32	4258599.35	13013.94234	0.10885	0.10483	0.10533	0.10843	5.97E-04	4.46E-06	3.75E-06	4.31E-06	3.72E-06	6.1330E-04
520742.82	4258368.8	12996.81183	0.10336	0.10771	0.10021	0.1118	5.96E-04	4.23E-06	3.85E-06	4.10E-06	3.84E-06	6.1229E-04
520049.96	4259394.95	12996.74451	7.20017	0.12234	12.75539	0.11933	5.96E-04	2.95E-04	4.38E-06	5.22E-04	4.10E-06	1.4218E-03
519894.59	4258701.16	12989.56257	0.30608	0.52283	0.32671	0.50485	5.96E-04	1.25E-05	1.87E-05	1.34E-05	1.73E-05	6.5788E-04
519907.12	4258673.87	12987.38325	0.31558	0.59486	0.33841	0.57362	5.96E-04	1.29E-05	2.13E-05	1.39E-05	1.97E-05	6.6358E-04
519939.85	4258609.05	12966.42429	0.34797	0.8582	0.38328	0.81876	5.95E-04	1.42E-05	3.07E-05	1.57E-05	2.81E-05	6.8362E-04
519840.37	4258853.79	12962.90019	0.28086	0.29579	0.29398	0.28824	5.95E-04	1.15E-05	1.06E-05	1.20E-05	9.90E-06	6.3872E-04
520746.24	4258351.93	12960.62073	0.10209	0.10704	0.09896	0.11109	5.95E-04	4.18E-06	3.83E-06	4.05E-06	3.81E-06	6.1048E-04
520724.13	4258449.06	12960.36727	0.10981	0.11134	0.10622	0.11604	5.95E-04	4.50E-06	3.98E-06	4.35E-06	3.98E-06	6.1141E-04
519833.48	4258885.03	12960.27665	0.28179	0.27104	0.29393	0.26406	5.95E-04	1.15E-05	9.69E-06	1.20E-05	9.07E-06	6.3693E-04
520718.13	4258485.06	12959.24161	0.11195	0.11268	0.10797	0.11724	5.95E-04	4.58E-06	4.03E-06	4.42E-06	4.02E-06	6.1160E-04
519836.75	4258869	12955.94208	0.28087	0.28317	0.2935	0.27591	5.94E-04	1.15E-05	1.01E-05	1.20E-05	9.47E-06	6.3751E-04
520100.26	4258112.38	12933.32263	0.13082	15.08266	0.13351	16.12367	5.93E-04	5.36E-06	5.39E-04	5.47E-06	5.54E-04	1.6972E-03
520106.08	4258102.11	12910.53662	0.12906	11.99693	0.13124	13.56271	5.92E-04	5.28E-06	4.29E-04	5.37E-06	4.66E-04	1.4977E-03
520755.05	4258646.88	12895.54311	0.10422	0.09804	0.10101	0.10094	5.92E-04	4.27E-06	3.51E-06	4.14E-06	3.47E-06	6.0700E-04
520764.89	4258675.38	12891.79233	0.102	0.09462	0.09913	0.09712	5.91E-04	4.18E-06	3.38E-06	4.06E-06	3.33E-06	6.0640E-04
520079.7	4259415.72	12888.76323	15.85025	0.12237	19.49327	0.11785	5.91E-04	6.49E-04	4.38E-06	7.98E-04	4.05E-06	2.0468E-03
520721.43	4258467.85	12886.57406	0.11081	0.11189	0.10702	0.11655	5.91E-04	4.54E-06	4.00E-06	4.38E-06	4.00E-06	6.0813E-04
519843.68	4258837.86	12884.04621	0.27942	0.30926	0.29302	0.30139	5.91E-04	1.14E-05	1.11E-05	1.20E-05	1.03E-05	6.3594E-04
520020.53	4258291.03	12876.4942	0.17113	3.42831	0.1786	2.98985	5.91E-04	7.01E-06	1.23E-04	7.31E-06	1.03E-04	8.3034E-04
520725.53	4258561.37	12876.3508	0.11096	0.10896	0.10717	0.11275	5.91E-04	4.54E-06	3.90E-06	4.39E-06	3.87E-06	6.0744E-04
520000.91	4258406.07	12836.04019	0.24184	2.32534	0.25454	2.08075	5.89E-04	9.90E-06	8.32E-05	1.04E-05	7.14E-05	7.6382E-04
520054.73	4258197.01	12831.59383	0.14523	9.65938	0.15268	6.99027	5.89E-04	5.95E-06	3.46E-04	6.25E-06	2.40E-04	1.1864E-03
520740.97	4258389.81	12831.1545	0.10433	0.10773	0.10119	0.11191	5.89E-04	4.27E-06	3.85E-06	4.14E-06	3.84E-06	6.0478E-04
520745.21	4258618.37	12827.66543	0.10643	0.10152	0.10305	0.10487	5.89E-04	4.36E-06	3.63E-06	4.22E-06	3.60E-06	6.0432E-04
519949.77	4258589.61	12826.62717	0.35715	0.97771	0.39649	0.92395	5.88E-04	1.46E-05	3.50E-05	1.62E-05	3.17E-05	6.8601E-04
520040.06	4259394.96	12823.37819	5.21773	0.12085	7.47668	0.11828	5.88E-04	2.14E-04	4.32E-06	3.06E-04	4.06E-06	1.1165E-03
519864.08	4258772.27	12815.50683	0.28518	0.38545	0.30136	0.37461	5.88E-04	1.17E-05	1.38E-05	1.23E-05	1.29E-05	6.3861E-04
520735.37	4258589.87	12783.93522	0.10867	0.10514	0.10516	0.10878	5.87E-04	4.45E-06	3.76E-06	4.31E-06	3.73E-06	6.0275E-04
520737.5	4258406.59	12782.38221	0.10554	0.10838	0.10238	0.11267	5.86E-04	4.32E-06	3.88E-06	4.19E-06	3.87E-06	6.0269E-04
519996.63	4258465	12781.94091	0.30942	2.1098	0.33065	1.88733	5.86E-04	1.27E-05	7.55E-05	1.35E-05	6.48E-05	7.5288E-04
520089.62	4259425.71	12753.94116	13.03529	0.12163	11.8887	0.11661	5.85E-04	5.34E-04	4.35E-06	4.87E-04	4.00E-06	1.6140E-03
519873.42	4258746.56	12747.44398	0.28887	0.42517	0.30635	0.41225	5.85E-04	1.18E-05	1.52E-05	1.25E-05	1.42E-05	6.3856E-04
520725.58	4258551.89	12722.11779	0.11078	0.10925	0.10694	0.11306	5.84E-04	4.54E-06	3.91E-06	4.38E-06	3.88E-06	6.0037E-04
520734.11	4258423.56	12713.02113	0.10673	0.10894	0.10348	0.11339	5.83E-04	4.37E-06	3.90E-06	4.24E-06	3.89E-06	5.9965E-04
520049.98	4259404.95	12712.62167	7.31155	0.1202	12.97143	0.11727	5.83E-04	2.99E-04	4.30E-06	5.31E-04	4.03E-06	1.4220E-03
520720.83	4258512.21	12711.78671	0.11154	0.11153	0.10748	0.11573	5.83E-04	4.57E-06	3.99E-06	4.40E-06	3.97E-06	6.0012E-04
520037.84	4258233.95	12711.42201	0.15262	5.24363	0.1606	4.34703	5.83E-04	6.25E-06	1.88E-04	6.58E-06	1.49E-04	9.3279E-04
519979.52	4258531.3	12699.51655	0.37207	1.52051	0.41104	1.39331	5.83E-04	1.52E-05	5.44E-05	1.68E-05	4.78E-05	7.1691E-04
520764.94	4258665.9	12697.6504	0.10184	0.095	0.09889	0.09759	5.83E-04	4.17E-06	3.40E-06	4.05E-06	3.35E-06	5.9751E-04
519989.4	4258502.16	12692.8227	0.35279	1.82147	0.38543	1.64454	5.82E-04	1.44E-05	6.52E-05	1.58E-05	5.65E-05	7.3416E-04
520064.08	4258173.18	12690.69499	0.13982	16.86979	0.14622	9.72724	5.82E-04	5.72E-06	6.03E-04	5.99E-06	3.34E-04	1.5313E-03
519959.69	4258570.17	12683.05881	0.36479	1.12301	0.40466	1.05109	5.82E-04	1.49E-05	4.02E-05	1.66E-05	3.61E-05	6.8963E-04
520721.17	4258503.08	12681.36046	0.11132	0.11155	0.1073	0.11584	5.82E-04	4.56E-06	3.99E-06	4.39E-06	3.98E-06	5.9871E-04
520721.51	4258493.94	12678.48547	0.11111	0.11155	0.10713	0.11594	5.82E-04	4.55E-06	3.99E-06	4.39E-06	3.98E-06	5.9857E-04
520746.29	4258377.93	12664.02533	0.10277	0.10641	0.09967	0.11046	5.81E-04	4.21E-06	3.81E-06	4.08E-06	3.79E-06	5.9689E-04
520755.1	4258637.39	12663.80033	0.10405	0.09834	0.10082	0.10137	5.81E-04	4.26E-06	3.52E-06	4.13E-06	3.48E-06	5.9638E-04
520749.7	4258361	12661.82883	0.10156	0.10573	0.09845	0.10973	5.81E-04	4.16E-06	3.78E-06	4.03E-06	3.77E-06	5.9664E-04
520090.44	4258122.35	12661.29794	0.13104	25.70709	0.13455	17.29996	5.81E-04	5.37E-06	9.20E-04	5.51E-06	5.94E-04	2.1052E-03
520021.22	4258280.75	12646.67152	0.16581	3.47589	0.17307	3.0309	5.80E-04	6.79E-06	1.24E-04	7.09E-06	1.04E-04	8.2246E-04
520730.81	4258440.75	12638.73373	0.10788	0.10952	0.10447	0.11407	5.80E-04	4.42E-06	3.92E-06	4.28E-06	3.92E-06	5.9637E-04
519849.54	4258809.56	12630.97046	0.27591	0.33509	0.29021	0.32644	5.79E-04	1.13E-05	1.20E-05	1.19E-05	1.12E-05	6.2586E-04
519888.22	4258709.92	12628.90984	0.29574	0.49506	0.31596	0.47803	5.79E-04	1.21E-05	1.77E-05	1.29E-05	1.64E-05	6.3855E-04
520079.72	4259425.72	12617.15597	15.41232	0.1203	19.24512	0.11588	5.79E-04	6.31E-04	4.30E-06	7.88E-04	3.98E-06	2.0061E-03
519969.61	4258550.74	12607.01906	0.36988	1.2994	0.40935	1.20492	5.78E-04	1.51E-05	4.65E-05	1.68E-05	4.14E-05	6.9813E-04
520753.17	4258344.24	12604.90303	0.10028	0.10509	0.09722	0.10905	5.78E-04	4.11E-06	3.76E-06	3.98E-06	3.74E-06	5.9388E-04
520027.92	4258258.01	12601.08256	0.15829	4.04527	0.16581	3.47211	5.78E-04	6.48E-06	1.45E-04	6.79E-06	1.19E-04	8.5528E-04
520725.64	4258542.41	12594.2987	0.11061	0.1095	0.10672	0.11334	5.78E-04	4.53E-06	3.92E-06	4.37E-06	3.89E-06	5.9451E-04
520727.6	4258458.19	12591.43857	0.10901	0.11009	0.10538	0.11468	5.78E-04	4.46E-06	3.94E-06	4.31E-06	3.94E-06	5.9432E-04
520745.26	4258608.89	12587.01551	0.10625	0.10185	0.1029	0.10528	5.77E-04	4.35E-06	3.64E-06	4.21E-06	3.61E-06	5.9329E-04
520735.42	4258580.39	12570.67549	0.1085	0.10538	0.10496	0.10905	5.77E-04	4.44E-06	3.77E-06	4.30E-06	3.74E-06	5.9297E-04
520724.79	4258476.67	12567.99218	0.11	0.11072	0.10618	0.11523	5.77E-04	4.50E-06	3.96E-06	4.35E-06	3.96E-06	5.9336E-04
520045.43	4258210.84	12565.39333	0.14637	6.64334	0.15414	5.28473	5.76E-04	5.99E-06	2.38E-04	6.31E-06	1.81E-04	1.0078E-03
519997.2	4258439.37	12558.69888	0.27435	2.15685	0.29049	1.93475	5.76E-04	1.12E-05	7.71E-05	1.19E-05	6.64E-05	7.4287E-04
520040.08	4259404.96	12547.06365	5.27491	0.11875	7.55354	0.11625	5.76E-04	2.16E-04	4.25E-06	3.09E-04	3.99E-06	1.1091E-03
520106.11	4258092.11	12535.65858	0.12569	11.99699	0.1277	13.72723	5.75E-04	5.15E-06	4.29E-04	5.23E-06	4.71E-04	1.4859E-03
520725.69	4258532.92	12494.81597	0.11046	0.10971	0.10652	0.11362	5.73E-04	4.52E-06	3.92E-06	4.36E-06	3.90E-06	5.8995E-04
520055.04	4258186.9	12493.80626	0.14111	9.76226	0.14825	7.0465	5.73E-04	5.78E-06	3.49E-04	6.07E-06	2.42E-04	1.1761E-03
520764.99	4258656.41	12491.46104	0.10168	0.09534	0.09868	0.09803	5.73E-04	4.16E-06	3.41E-06	4.04E-06	3.37E-06	5.8806E-04
519917.12	4258646.05	12482.55802	0.31697	0.66742	0.34239	0.64349	5.73E-04	1.30E-05	2.39E-05	1.40E-05	2.21E-05	6.4564E-04
519826.48	4258892.21	12482.33989	0.2704	0.261	0.28142	0.25445	5.73E-04	1.11E-05	9.34E-06	1.15E-05	8.74E-06	6.1333E-04
519829.78	4258876.24	12480.46639	0.26965	0.27231	0.28112	0.26554	5.73E-04	1.10E-05	9.74E-06	1.15E-05	9.12E-06	6.1399E-04
520089.63	4259435.71	12479.48032	12.81139	0.11956	11.7699	0.11466	5.73E-04	5.25E-04	4.28E-06	4.82E-04	3.94E-06	1.5872E-03
520744.34	4258398.67	12477.96253	0.1037	0.10649	0.10062	0.11063	5.72E-04	4.25E-06	3.81E-06	4.12E-06	3.80E-06	5.8844E-04
520050	4259414.95	12438.2199	7.44017	0.11812	13.1941	0.11527	5.71E-04	3.05E-04	4.22E-06	5.40E-04	3.96E-06	1.4237E-03
519833.03	4258860.16	12433.81486	0.26843	0.28423	0.28035	0.27724	5.70E-04	1.10E-05	1.02E-05	1.15E-05	9.52E-06	6.1259E-04
520755.16	4258627.91	12428.7513	0.10388	0.09863	0.10066	0.10179	5.70E-04	4.25E-06	3.53E-06	4.12E-06	3.49E-06	5.8560E-04
520725.74	4258523.44	12423.58164	0.11031	0.10986	0.10635	0.11386	5.70E-04	4.52E-06	3.93E-06	4.35E-06	3.91E-06	5.8668E-04
519836.75	4258845.2	12417.08441	0.26846	0.29668	0.28089	0.2894	5.70E-04	1.10E-05	1.06E-05	1.15E-05	9.94E-06	6.1271E-04
519857.47	4258780.46	12416.82929	0.27533	0.36751	0.29032	0.35758	5.70E-04	1.13E-05	1.31E-05	1.19E-05	1.23E-05	6.1824E-04
520740.9	4258415.51	12416.75976	0.10488	0.10706	0.10173	0.11135	5.70E-04	4.29E-06	3.83E-06	4.17E-06	3.82E-06	5.8577E-04
520038.29	4258223.77	12411.14841	0.14818	5.30041	0.15593	4.38955	5.69E-04	6.07E-06	1.90E-04	6.38E-06	1.51E-04	9.2214E-04
520021.85	4258270.5	12409.75605	0.16076	3.51953	0.16782	3.06791	5.69E-04	6.58E-06	1.26E-04	6.87E-06	1.05E-04	8.1400E-04
519997.4	4258414.6	12408.36107	0.24571	2.18472	0.25878	1.96332	5.69E-04	1.01E-05	7.81E-05	1.06E-05	6.74E-05	7.3547E-04
519992.98	4258473.88	12402.62311	0.31458	1.97633	0.33747	1.77542	5.69E-04	1.29E-05	7.07E-05	1.38E-05	6.10E-05	7.2735E-04
520002.36	4258358.45	12399.47615	0.20082	2.40472	0.21	2.15826	5.69E-04	8.22E-06	8.60E-05	8.60E-06	7.41E-05	7.4579E-04
520000.96	4258369.01	12391.26646	0.20771	2.34375	0.21742	2.10594	5.68E-04	8.50E-06	8.38E-05	8.90E-06	7.23E-05	7.4203E-04
519866.92	4258755.01	12382.62754	0.27941	0.40444	0.29572	0.3926	5.68E-04	1.14E-05	1.45E-05	1.21E-05	1.35E-05	6.1958E-04
520735.48	4258570.91	12377.88746	0.10833	0.10575	0.10477	0.1094	5.68E-04	4.44E-06	3.78E-06	4.29E-06	3.76E-06	5.8414E-04
519907.12	4258664.6	12377.44379	0.30656	0.60266	0.32866	0.58204	5.68E-04	1.26E-05	2.16E-05	1.35E-05	2.00E-05	6.3540E-04
520003.56	4258347.96	12360.81621	0.19417	2.45839	0.20281	2.2047	5.67E-04	7.95E-06	8.79E-05	8.30E-06	7.57E-05	7.4697E-04
519989.36	4258492.47	12355.71407	0.33564	1.8381	0.36422	1.65909	5.67E-04	1.37E-05	6.57E-05	1.49E-05	5.70E-05	7.1822E-04
520745.32	4258599.41	12355.14581	0.10608	0.10215	0.10275	0.10563	5.67E-04	4.34E-06	3.65E-06	4.21E-06	3.63E-06	5.8266E-04
520753.15	4258370.06	12354.70027	0.10101	0.10445	0.09794	0.1084	5.67E-04	4.14E-06	3.74E-06	4.01E-06	3.72E-06	5.8241E-04
520079.73	4259435.72	12346.92365	13.75175	0.11828	19.00838	0.11397	5.66E-04	5.63E-04	4.23E-06	7.78E-04	3.91E-06	1.9159E-03
520028.55	4258247.77	12341.01187	0.15363	4.09988	0.161	3.51621	5.66E-04	6.29E-06	1.47E-04	6.59E-06	1.21E-04	8.4643E-04
520064.29	4258163.1	12337.24086	0.13589	17.07678	0.14204	9.77496	5.66E-04	5.56E-06	6.11E-04	5.82E-06	3.36E-04	1.5238E-03
520737.54	4258432.54	12335.66528	0.106	0.10768	0.10275	0.11208	5.66E-04	4.34E-06	3.85E-06	4.21E-06	3.85E-06	5.8218E-04
519852.4	4258792.34	12330.65655	0.27162	0.35092	0.28602	0.34171	5.66E-04	1.11E-05	1.26E-05	1.17E-05	1.17E-05	6.1282E-04
520756.6	4258353.25	12329.96836	0.09978	0.10385	0.09674	0.10774	5.66E-04	4.09E-06	3.71E-06	3.96E-06	3.70E-06	5.8113E-04
520749.77	4258387.05	12321.01975	0.10215	0.10516	0.09912	0.10916	5.65E-04	4.18E-06	3.76E-06	4.06E-06	3.75E-06	5.8101E-04
520107.26	4258084.19	12314.50712	0.12344	11.52707	0.12528	13.29827	5.65E-04	5.05E-06	4.12E-04	5.13E-06	4.57E-04	1.4440E-03
519881.79	4258718.53	12309.27503	0.28672	0.46918	0.30542	0.45375	5.65E-04	1.17E-05	1.68E-05	1.25E-05	1.56E-05	6.2133E-04
519840.04	4258829.2	12296.36403	0.26673	0.30996	0.27956	0.30234	5.64E-04	1.09E-05	1.11E-05	1.14E-05	1.04E-05	6.0797E-04
520090.47	4258112.35	12295.88407	0.12754	25.74522	0.13085	17.47521	5.64E-04	5.22E-06	9.21E-04	5.36E-06	6.00E-04	2.0955E-03
520096.29	4258102.08	12291.90353	0.12597	18.23749	0.12873	18.28798	5.64E-04	5.16E-06	6.52E-04	5.27E-06	6.28E-04	1.8545E-03
520004.61	4258337.54	12285.75709	0.18778	2.50638	0.19591	2.24628	5.64E-04	7.69E-06	8.96E-05	8.02E-06	7.71E-05	7.4612E-04
519929.89	4258618.79	12282.25945	0.32693	0.77206	0.3574	0.74068	5.63E-04	1.34E-05	2.76E-05	1.46E-05	2.54E-05	6.4455E-04

520728.15	4258485.5	12279.09501	0.10919	0.1096	0.10536	0.11396	5.63E-04	4.47E-06	3.92E-06	4.31E-06	3.91E-06	5.7996E-04
520040.1	4259414.96	12278.77625	5.34353	0.11672	7.63229	0.11427	5.63E-04	2.19E-04	4.17E-06	3.12E-04	3.92E-06	1.1027E-03
520765.05	4258646.93	12275.72801	0.10153	0.09564	0.09849	0.09845	5.63E-04	4.16E-06	3.42E-06	4.03E-06	3.38E-06	5.7818E-04
520734.26	4258449.8	12275.54506	0.10713	0.10825	0.10367	0.11274	5.63E-04	4.39E-06	3.87E-06	4.24E-06	3.87E-06	5.7955E-04
520010.97	4258304.96	12257.93404	0.17221	2.82106	0.17925	2.5077	5.62E-04	7.05E-06	1.01E-04	7.34E-06	8.61E-05	7.6376E-04
520045.84	4258200.68	12254.68573	0.14222	6.72003	0.14973	5.33613	5.62E-04	5.82E-06	2.40E-04	6.13E-06	1.83E-04	9.9774E-04
520731.07	4258467.32	12249.48212	0.10819	0.10894	0.10454	0.1134	5.62E-04	4.43E-06	3.90E-06	4.28E-06	3.89E-06	5.7848E-04
519998.56	4258379.99	12234.75779	0.21419	2.24553	0.22437	2.02286	5.61E-04	8.77E-06	8.03E-05	9.19E-06	6.94E-05	7.2903E-04
519897.12	4258683.15	12233.26188	0.29648	0.54693	0.3164	0.52863	5.61E-04	1.21E-05	1.96E-05	1.30E-05	1.81E-05	6.2404E-04
520089.65	4259445.71	12212.86549	12.59876	0.11754	11.63442	0.11276	5.60E-04	5.16E-04	4.20E-06	4.76E-04	3.87E-06	1.5606E-03
520735.53	4258561.43	12208.31623	0.10816	0.10609	0.10456	0.10974	5.60E-04	4.43E-06	3.79E-06	4.28E-06	3.77E-06	5.7637E-04
520755.21	4258618.43	12195.04043	0.10371	0.09896	0.10052	0.10221	5.59E-04	4.25E-06	3.54E-06	4.12E-06	3.51E-06	5.7490E-04
519876.07	4258728.86	12181.82002	0.28142	0.4457	0.29871	0.4318	5.59E-04	1.15E-05	1.59E-05	1.22E-05	1.48E-05	6.1340E-04
520005.53	4258327.18	12180.25534	0.18167	2.54908	0.18933	2.28334	5.59E-04	7.44E-06	9.12E-05	7.75E-06	7.84E-05	7.4356E-04
519939.81	4258599.35	12176.30281	0.33603	0.87106	0.37019	0.82992	5.59E-04	1.38E-05	3.12E-05	1.52E-05	2.85E-05	6.4719E-04
520050.01	4259424.95	12171.18381	7.58902	0.11611	13.41094	0.11332	5.58E-04	3.11E-04	4.15E-06	5.49E-04	3.89E-06	1.4263E-03
520055.34	4258176.79	12167.95247	0.1372	9.85915	0.14402	7.09809	5.58E-04	5.62E-06	3.53E-04	5.90E-06	2.44E-04	1.1661E-03
520745.37	4258589.93	12136.97217	0.10592	0.10243	0.1026	0.10595	5.57E-04	4.34E-06	3.66E-06	4.20E-06	3.64E-06	5.7266E-04
520747.72	4258407.54	12133.34008	0.10309	0.10518	0.10002	0.10933	5.57E-04	4.22E-06	3.76E-06	4.10E-06	3.75E-06	5.7249E-04
519979.48	4258521.6	12123.42309	0.35485	1.53755	0.38981	1.40854	5.56E-04	1.45E-05	5.50E-05	1.60E-05	4.84E-05	6.9004E-04
519993.62	4258448.05	12117.00303	0.2788	2.02518	0.29555	1.82435	5.56E-04	1.14E-05	7.24E-05	1.21E-05	6.26E-05	7.1449E-04
520011.84	4258294.61	12093.41459	0.16691	2.86681	0.17363	2.54735	5.55E-04	6.83E-06	1.03E-04	7.11E-06	8.75E-05	7.5876E-04
520079.75	4259445.72	12081.47121	15.79727	0.11632	18.72106	0.1121	5.54E-04	6.47E-04	4.16E-06	7.67E-04	3.85E-06	1.9756E-03
519989.32	4258482.77	12079.85437	0.31952	1.85285	0.34446	1.67211	5.54E-04	1.31E-05	6.63E-05	1.41E-05	5.74E-05	7.0507E-04
520029.12	4258237.55	12079.63051	0.14918	4.1485	0.15641	3.55536	5.54E-04	6.11E-06	1.48E-04	6.40E-06	1.22E-04	8.3715E-04
520735.58	4258551.94	12062.82494	0.10801	0.10632	0.10434	0.10999	5.53E-04	4.42E-06	3.80E-06	4.27E-06	3.78E-06	5.6969E-04
520744.3	4258424.43	12054.89005	0.1042	0.10582	0.10106	0.11008	5.53E-04	4.27E-06	3.79E-06	4.14E-06	3.78E-06	5.6902E-04
520765.1	4258637.45	12054.53176	0.10138	0.09593	0.09833	0.09887	5.53E-04	4.15E-06	3.43E-06	4.03E-06	3.39E-06	5.6804E-04
520730.82	4258512.58	12050.9731	0.10878	0.10846	0.10489	0.11248	5.53E-04	4.45E-06	3.88E-06	4.29E-06	3.86E-06	5.6937E-04
520760.02	4258362.25	12043.50338	0.09925	0.10265	0.09626	0.10649	5.53E-04	4.06E-06	3.67E-06	3.94E-06	3.66E-06	5.6787E-04
519949.73	4258579.91	12035.94659	0.34403	0.99217	0.38027	0.93661	5.52E-04	1.41E-05	3.55E-05	1.56E-05	3.22E-05	6.4949E-04
520756.6	4258379.12	12034.98197	0.10042	0.10327	0.09742	0.10718	5.52E-04	4.11E-06	3.69E-06	3.99E-06	3.68E-06	5.6762E-04
519860.38	4258763.36	12033.15617	0.2704	0.38503	0.2853	0.37436	5.52E-04	1.11E-05	1.38E-05	1.17E-05	1.29E-05	6.0143E-04
519822.8	4258883.48	12031.95823	0.25909	0.26212	0.26951	0.25579	5.52E-04	1.06E-05	9.38E-06	1.10E-05	8.78E-06	5.9180E-04
520731.16	4258503.45	12023.42572	0.10859	0.10845	0.10471	0.11257	5.52E-04	4.45E-06	3.88E-06	4.29E-06	3.86E-06	5.6809E-04
520731.51	4258494.32	12021.08317	0.10839	0.10848	0.10456	0.11269	5.52E-04	4.44E-06	3.88E-06	4.28E-06	3.87E-06	5.6797E-04
520040.11	4259424.96	12019.83999	5.41791	0.11475	7.71109	0.11235	5.51E-04	2.22E-04	4.10E-06	3.16E-04	3.86E-06	1.0970E-03
519826.08	4258867.46	11990.63807	0.25803	0.27332	0.26894	0.26678	5.50E-04	1.06E-05	9.78E-06	1.10E-05	9.16E-06	5.9062E-04
520753.24	4258396.18	11986.87575	0.10156	0.10382	0.09856	0.10784	5.50E-04	4.16E-06	3.71E-06	4.04E-06	3.70E-06	5.6554E-04
519890.86	4258692.16	11980.2727	0.28815	0.51762	0.30677	0.50077	5.50E-04	1.18E-05	1.85E-05	1.26E-05	1.72E-05	6.0970E-04
519993.89	4258423.14	11979.06136	0.24956	2.0554	0.26293	1.85559	5.50E-04	1.02E-05	7.35E-05	1.08E-05	6.37E-05	7.0778E-04
520740.96	4258441.53	11977.77258	0.10528	0.10645	0.102	0.1108	5.50E-04	4.31E-06	3.81E-06	4.18E-06	3.80E-06	5.6562E-04
520036.47	4258214.54	11970.51088	0.14315	5.01769	0.15057	4.1931	5.49E-04	5.86E-06	1.79E-04	6.16E-06	1.44E-04	8.8464E-04
520755.26	4258608.95	11965.70498	0.10355	0.09928	0.1004	0.1026	5.49E-04	4.24E-06	3.55E-06	4.11E-06	3.52E-06	5.6439E-04
519845.8	4258800.53	11955.20778	0.26243	0.33548	0.27579	0.32699	5.48E-04	1.07E-05	1.20E-05	1.13E-05	1.12E-05	5.9374E-04
520107.29	4258074.19	11954.78216	0.12027	11.53685	0.12202	13.28157	5.48E-04	4.92E-06	4.13E-04	5.00E-06	4.56E-04	1.4270E-03
520046.23	4258190.53	11953.07557	0.13827	6.79314	0.14553	5.38525	5.48E-04	5.66E-06	2.43E-04	5.96E-06	1.85E-04	9.8787E-04
520063.54	4258153.43	11946.84478	0.13191	16.02437	0.13786	9.43431	5.48E-04	5.40E-06	5.73E-04	5.64E-06	3.24E-04	1.4562E-03
520735.64	4258542.46	11942.77135	0.10785	0.10658	0.10414	0.11029	5.48E-04	4.42E-06	3.81E-06	4.26E-06	3.79E-06	5.6419E-04
520096.32	4258092.08	11940.37032	0.1227	18.25557	0.12531	18.34495	5.48E-04	5.02E-06	6.53E-04	5.13E-06	6.30E-04	1.8407E-03
520734.55	4258476.44	11938.22306	0.10737	0.10781	0.10371	0.11213	5.48E-04	4.40E-06	3.86E-06	4.25E-06	3.85E-06	5.6405E-04
520745.42	4258580.45	11935.09625	0.10577	0.10269	0.10243	0.10622	5.48E-04	4.33E-06	3.67E-06	4.19E-06	3.65E-06	5.6340E-04
520737.7	4258458.86	11934.55778	0.10636	0.10708	0.10287	0.11146	5.48E-04	4.35E-06	3.83E-06	4.21E-06	3.83E-06	5.6376E-04
520050.03	4259434.95	11918.96021	7.72817	0.11417	13.66492	0.11144	5.47E-04	3.16E-04	4.08E-06	5.59E-04	3.83E-06	1.4306E-03
520012.62	4258284.3	11913.96795	0.16185	2.90839	0.16831	2.58291	5.47E-04	6.63E-06	1.04E-04	6.89E-06	8.87E-05	7.5281E-04
519969.56	4258541.04	11908.73189	0.35359	1.31493	0.38941	1.21897	5.46E-04	1.45E-05	4.70E-05	1.59E-05	4.18E-05	6.6565E-04
520019.04	4258261.68	11906.96371	0.15451	3.3041	0.16106	2.9022	5.46E-04	6.33E-06	1.18E-04	6.59E-06	9.96E-05	7.7701E-04
519829.31	4258851.31	11903.54626	0.25654	0.28504	0.26784	0.2783	5.46E-04	1.05E-05	1.02E-05	1.10E-05	9.55E-06	5.8733E-04
520084.71	4259456.12	11881.74333	14.1073	0.11492	14.22784	0.11053	5.45E-04	5.78E-04	4.11E-06	5.83E-04	3.79E-06	1.7132E-03
519869.66	4258737.5	11873.47415	0.27288	0.42364	0.28903	0.41093	5.45E-04	1.12E-05	1.52E-05	1.18E-05	1.41E-05	5.9700E-04
519833.14	4258836.61	11867.27345	0.25664	0.29735	0.26844	0.29028	5.44E-04	1.05E-05	1.06E-05	1.10E-05	9.97E-06	5.8655E-04
519959.65	4258560.47	11864.04826	0.34905	1.13651	0.38439	1.06443	5.44E-04	1.43E-05	4.07E-05	1.57E-05	3.65E-05	6.5152E-04
520055.61	4258166.69	11852.96095	0.13345	9.9536	0.14	7.14562	5.44E-04	5.46E-06	3.56E-04	5.73E-06	2.45E-04	1.1563E-03
520735.69	4258532.98	11849.73804	0.10771	0.10679	0.10396	0.11054	5.44E-04	4.41E-06	3.82E-06	4.26E-06	3.79E-06	5.5992E-04
519917.12	4258636.77	11844.39598	0.30782	0.67588	0.33314	0.65201	5.43E-04	1.26E-05	2.42E-05	1.36E-05	2.24E-05	6.1620E-04
520765.16	4258627.97	11830.2323	0.10123	0.09621	0.0982	0.09926	5.43E-04	4.14E-06	3.44E-06	4.02E-06	3.41E-06	5.5776E-04
519993.89	4258398.88	11823.69401	0.22528	2.07028	0.23627	1.87393	5.42E-04	9.22E-06	7.41E-05	9.67E-06	6.43E-05	6.9973E-04
520029.64	4258227.34	11819.04909	0.14493	4.1947	0.15204	3.59212	5.42E-04	5.93E-06	1.50E-04	6.23E-06	1.23E-04	8.2775E-04
520751.09	4258416.4	11791.58106	0.10246	0.1039	0.09939	0.10805	5.41E-04	4.20E-06	3.72E-06	4.07E-06	3.71E-06	5.5667E-04
520735.74	4258523.5	11783.27108	0.10758	0.1069	0.10379	0.11073	5.41E-04	4.40E-06	3.82E-06	4.25E-06	3.80E-06	5.5687E-04
519907.12	4258655.32	11780.79762	0.29794	0.61008	0.31971	0.58999	5.40E-04	1.22E-05	2.18E-05	1.31E-05	2.03E-05	6.0785E-04
520040.13	4259434.96	11770.74179	5.49993	0.11284	7.79856	0.11049	5.40E-04	2.25E-04	4.04E-06	3.19E-04	3.79E-06	1.0923E-03
520745.48	4258570.96	11751.98623	0.10561	0.10299	0.10224	0.10652	5.39E-04	4.32E-06	3.68E-06	4.19E-06	3.66E-06	5.5501E-04
520763.45	4258371.26	11748.21916	0.0987	0.10147	0.09577	0.10526	5.39E-04	4.04E-06	3.63E-06	3.92E-06	3.61E-06	5.5419E-04
520074.81	4259456.13	11746.51704	14.42934	0.11358	25.77511	0.10977	5.39E-04	5.91E-04	4.06E-06	1.06E-03	3.77E-06	2.1929E-03
520755.32	4258599.47	11745.45988	0.1034	0.09957	0.10027	0.10294	5.39E-04	4.23E-06	3.56E-06	4.11E-06	3.53E-06	5.5429E-04
520097.47	4258084.16	11738.06705	0.12055	17.26476	0.12298	17.8146	5.39E-04	4.94E-06	6.18E-04	5.04E-06	6.12E-04	1.7776E-03
520013.32	4258274.02	11722.50018	0.15701	2.9455	0.16327	2.61488	5.38E-04	6.43E-06	1.05E-04	6.68E-06	8.98E-05	7.4605E-04
519990.05	4258456.74	11716.47688	0.28318	1.90516	0.30079	1.7227	5.38E-04	1.16E-05	6.81E-05	1.23E-05	5.91E-05	6.8873E-04
520760.05	4258388.18	11707.82395	0.0998	0.1021	0.0969	0.10596	5.37E-04	4.09E-06	3.65E-06	3.97E-06	3.64E-06	5.5248E-04
519836.4	4258820.55	11707.00572	0.25461	0.31049	0.26678	0.30301	5.37E-04	1.04E-05	1.11E-05	1.09E-05	1.04E-05	5.7995E-04
520747.7	4258433.35	11705.48582	0.1035	0.10462	0.10035	0.10884	5.37E-04	4.24E-06	3.74E-06	4.11E-06	3.74E-06	5.5285E-04
519884.52	4258701	11704.51647	0.27958	0.4906	0.29732	0.47487	5.37E-04	1.14E-05	1.75E-05	1.22E-05	1.63E-05	5.9445E-04
520036.96	4258204.35	11696.79983	0.1392	5.07521	0.14642	4.23562	5.37E-04	5.70E-06	1.82E-04	6.00E-06	1.45E-04	8.7527E-04
520019.75	4258251.4	11691.25483	0.15006	3.35222	0.15652	2.94191	5.36E-04	6.14E-06	1.20E-04	6.41E-06	1.01E-04	7.6983E-04
519853.81	4258771.61	11685.86542	0.26156	0.36724	0.27541	0.35745	5.36E-04	1.07E-05	1.31E-05	1.13E-05	1.23E-05	5.8352E-04
519897.12	4258673.87	11681.57349	0.28844	0.55387	0.30758	0.53619	5.36E-04	1.18E-05	1.98E-05	1.26E-05	1.84E-05	5.9855E-04
520050.05	4259444.95	11674.51042	7.86108	0.1123	13.94759	0.10964	5.36E-04	3.22E-04	4.02E-06	5.71E-04	3.76E-06	1.4363E-03
519979.44	4258511.9	11670.54364	0.33868	1.55357	0.37008	1.42282	5.35E-04	1.39E-05	5.56E-05	1.52E-05	4.88E-05	6.6886E-04
520738.02	4258485.57	11659.7419	0.10656	0.1067	0.10289	0.11086	5.35E-04	4.36E-06	3.82E-06	4.21E-06	3.81E-06	5.5112E-04
520046.59	4258180.4	11659.59405	0.13452	6.86117	0.14151	5.4277	5.35E-04	5.51E-06	2.45E-04	5.79E-06	1.86E-04	9.7797E-04
520756.72	4258405.31	11647.61068	0.10094	0.10253	0.09796	0.10655	5.34E-04	4.13E-06	3.67E-06	4.01E-06	3.66E-06	5.4984E-04
520744.38	4258450.51	11639.39312	0.10454	0.10529	0.10123	0.10956	5.34E-04	4.28E-06	3.77E-06	4.14E-06	3.76E-06	5.4995E-04
520063.76	4258143.35	11631.13195	0.1284	16.22394	0.13409	9.4817	5.34E-04	5.26E-06	5.80E-04	5.49E-06	3.26E-04	1.4502E-03
520084.73	4259466.12	11630.84794	13.77693	0.11304	13.98689	0.10876	5.34E-04	5.64E-04	4.04E-06	5.73E-04	3.73E-06	1.6781E-03
520741.15	4258467.91	11617.89946	0.10556	0.10599	0.10206	0.11023	5.33E-04	4.32E-06	3.79E-06	4.18E-06	3.78E-06	5.4908E-04
519848.63	4258783.24	11616.02611	0.25798	0.35085	0.27128	0.34179	5.33E-04	1.06E-05	1.25E-05	1.11E-05	1.17E-05	5.7887E-04
520107.32	4258064.19	11614.82128	0.11726	11.54345	0.1189	13.28956	5.33E-04	4.80E-06	4.13E-04	4.87E-06	4.56E-04	1.4117E-03
520765.21	4258618.49	11607.65013	0.10109	0.0965	0.09808	0.09965	5.33E-04	4.14E-06	3.45E-06	4.02E-06	3.42E-06	5.4756E-04
520745.53	4258561.48	11591.58988	0.10546	0.1033	0.10205	0.10682	5.32E-04	4.32E-06	3.69E-06	4.18E-06	3.67E-06	5.4766E-04
519819.13	4258874.75	11572.79623	0.24826	0.263	0.25817	0.25691	5.31E-04	1.02E-05	9.41E-06	1.06E-05	8.82E-06	5.6990E-04
519929.85	4258609.09	11571.9195	0.31649	0.78265	0.34614	0.75038	5.31E-04	1.30E-05	2.80E-05	1.42E-05	2.58E-05	6.1178E-04
519863.19	4258746.03	11564.74219	0.26447	0.40319	0.27958	0.39154	5.31E-04	1.08E-05	1.44E-05	1.14E-05	1.34E-05	5.8071E-04
520001.12	4258319.01	11561.47168	0.17311	2.35762	0.18013	2.12849	5.30E-04	7.09E-06	8.43E-05	7.38E-06	7.31E-05	7.0228E-04
519990.38	4258431.67	11559.43407	0.25332	1.93677	0.26699	1.75597	5.30E-04	1.04E-05	6.93E-05	1.09E-05	6.03E-05	6.8119E-04
520755.37	4258589.98	11538.22886	0.10326	0.09985	0.10013	0.10325	5.29E-04	4.23E-06	3.57E-06	4.10E-06	3.54E-06	5.4480E-04
520040.15	4259444.96	11529.83938	5.58981	0.11098	7.89275	0.10869	5.29E-04	2.29E-04	3.97E-06	3.23E-04	3.73E-06	1.0887E-03
520074.83	4259466.13	11500.63861	14.3175	0.11173	25.2064	0.10801	5.28E-04	5.86E-04	4.00E-06	1.03E-03	3.71E-06	2.1536E-03
519822.39	4258858.67	11494.11395	0.24695	0.27402	0.2573	0.26774	5.27E-04	1.01E-05	9.80E-06	1.05E-05	9.19E-06	5.6697E-04
520054.59	4258157.12	11474.88823	0.1295	9.45464	0.13587	6.8905	5.26E-04	5.30E-06	3.38E-04	5.56E-06	2.37E-04	1.1120E-03
520020.39	4258241.14	11469.35438	0.14581	3.38971	0.15216	2.9737	5.26E-04	5.97E-06	1.21E-04	6.23E-06	1.02E-04	7.6173E-04
520002.19	4258308.58	11466.04232	0.16786	2.40161	0.1745	2.16658	5.26E-04	6.87E-06	8.59E-05	7.14E-06	7.44E-05	7.0034E-04
520745.58	4258552	11454.28654	0.10533	0.10354	0.10185	0.10707	5.26E-04	4.31E-06	3.70E-06	4.17E-06	3.68E-06	5.4136E-04
520754.47	4258425.27	11452.73628	0.10179	0.10273	0.09873	0.10686	5.25E-04	4.17E-06	3.67E-06	4.04E-06	3.67E-06	5.4098E-04
519994.93	4258351.52	11446.81165	0.18874	2.12186	0.19687	1.92717	5.25E-04	7.73E-06	7.59E-05	8.06E-06	6.62E-05	6.8300E-04
519939.77	4258589.65	11446.76697	0.32451	0.88393	0.35707	0.84077	5.25E-04	1.33E-05	3.16E-05	1.46E-05	2.89E-05	6.1354E-04
520766.88	4258380.26	11443.98906	0.09812	0.10033	0.09527	0.10407	5.25E-04	4.02E-06	3.59E-06	3.90E-06	3.57E-06	5.4011E-04
520740.81	4258512.96	11439.92732	0.10613	0.10549	0.1024	0.10936	5.25E-04	4.35E-06	3.77E-06	4.19E-06	3.75E-06	5.4091E-04
519993.61	4258362.05	11436.14783	0.19491	2.07488	0.20347	1.88569	5.25E-04	7.98E-06	7.42E-05	8.33E-06	6.47E-05	6.7993E-04
520037.42	4258194.17	11428.96272	0.13541	5.13176	0.14247	4.27669	5.24E-04	5.54E-06	1.84E-04	5.83E-06	1.47E-04	8.6609E-04
520050.06	4259454.95	11427.61853	8.09177	0.11042	14.20794	0.10783	5.24E-04	3.31E-04	3.95E-06	5.82E-04	3.70E-06	1.4450E-03
519996.08	4258341.06	11419.63228	0.18276	2.16383	0.19048	1.96419	5.24E-04	7.48E-06	7.74E-05	7.80E-06	6.74E-05	6.8402E-04
520741.16	4258503.83	11413.85342	0.10594	0.10552	0.10223	0.10946	5.24E-04	4.34E-06	3.77E-06	4.19E-06	3.76E-06	5.3970E-04
519878.13	4258709.69	11413.29674	0.27083	0.46558	0.28794	0.45079	5.24E-04	1.11E-05	1.67E-05	1.18E-05	1.55E-05	5.7863E-04
520741.5	4258494.69	11412.88106	0.10576	0.10558	0.10209	0.1096	5.24E-04	4.33E-06	3.78E-06	4.18E-06	3.76E-06	5.3965E-04
520097.5	4258074.16	11409.83044	0.11752	17.28431	0.11981	17.82044	5.23E-04	4.81E-06	6.18E-04	4.91E-06	6.12E-04	1.7632E-03
520027.51	4258218.24	11395.77086	0.13996	3.97313	0.14671	3.42692	5.23E-04	5.73E-06	1.42E-04	6.01E-06	1.18E-04	7.9432E-04
520763.5	4258397.25	11392.10153	0.09923	0.10085	0.09635	0.10472	5.23E-04	4.06E-06	3.61E-06	3.94E-06	3.60E-06	5.3786E-04
520765.26	4258609	11389.44132	0.10095	0.0968	0.09798	0.10002	5.23E-04	4.13E-06	3.46E-06	4.01E-06	3.43E-06	5.3757E-04
520084.75	4259476.12	11387.90235	13.65237	0.11118	13.6865	0.10701	5.22E-04	5.59E-04	3.98E-06	5.60E-04	3.67E-06	1.6495E-03
519992.08	4258372.67	11380.50649	0.20126	2.02181	0.21023	1.83931	5.22E-04	8.24E-06	7.23E-05	8.61E-06	6.31E-05	6.7443E-04
520046.92	4258170.27	11374.12586	0.13091	6.92348	0.13767	5.46662	5.22E-04	5.36E-06	2.48E-04	5.64E-06	1.88E-04	9.6814E-04
520751.09	4258442.28	11373.04022	0.1028	0.10346	0.09962	0.10764	5.22E-04	4.21E-06	3.70E-06	4.08E-06	3.70E-06	5.3746E-04
519825.58	4258842.46	11367.70512	0.24516	0.28564	0.25591	0.27909	5.22E-04	1.00E-05	1.02E-05	1.05E-05	9.58E-06	5.6184E-04
519986.47	4258465.43	11361.43497	0.28741	1.79455	0.3063	1.62836	5.21E-04	1.18E-05	6.42E-05	1.25E-05	5.59E-05	6.6564E-04
519997.09	4258330.66	11361.22735	0.17701	2.2015	0.18432	1.99732	5.21E-04	7.25E-06	7.87E-05	7.55E-06	6.86E-05	6.8334E-04
520003.15	4258298.19	11348.32202	0.16283	2.4407	0.1691	2.20078	5.21E-04	6.67E-06	8.73E-05	6.92E-06	7.56E-05	6.9709E-04
520755.42	4258580.5	11346.70541	0.10313	0.10011	0.09998	0.10351	5.21E-04	4.22E-06	3.58E-06	4.09E-06	3.55E-06	5.3602E-04
520745.64	4258542.52	11340.92501	0.10519	0.10376	0.10166	0.10733	5.20E-04	4.31E-06	3.71E-06	4.16E-06	3.68E-06	5.3617E-04
520744.6	4258476.96	11331.1041	0.10477	0.10492	0.10126	0.10902	5.20E-04	4.29E-06	3.75E-06	4.15E-06	3.74E-06	5.3578E-04
520063.98	4258133.27	11330.64887	0.12505	16.43267	0.13048	9.54957	5.20E-04	5.12E-06	5.88E-04	5.34E-06	3.28E-04	1.4459E-03
520747.8	4258459.5	11327.87989	0.10381	0.10414	0.10045	0.10833	5.20E-04	4.25E-06	3.72E-06	4.11E-06	3.72E-06	5.3551E-04
519969.52	4258531.34	11324.73535	0.33839	1.32981	0.37092	1.23227	5.20E-04	1.39E-05	4.76E-05	1.52E-05	4.23E-05	6.3847E-04
519829.52	4258828.01	11314.48529	0.24533	0.29782	0.25654	0.29088	5.19E-04	1.00E-05	1.07E-05	1.05E-05	9.99E-06	5.6027E-04
520760.19	4258414.43	11308.97063	0.1003	0.1013	0.09734	0.10531	5.19E-04	4.11E-06	3.62E-06	3.99E-06	3.62E-06	5.3416E-04
519979.4	4258502.21	11307.06942	0.32335	1.56857	0.35147	1.43612	5.19E-04	1.32E-05	5.61E-05	1.44E-05	4.93E-05	6.5179E-04
519872.28	4258719.71	11301.42977	0.26583	0.44272	0.28146	0.42944	5.18E-04	1.09E-05	1.58E-05	1.15E-05	1.47E-05	5.7147E-04
520040.16	4259454.96	11293.96818	5.68902	0.10917	7.99091	0.10693	5.18E-04	2.33E-04	3.90E-06	3.27E-04	3.67E-06	1.0858E-03
519842.05	4258791.5	11285.32075	0.24965	0.3355	0.26207	0.32711	5.18E-04	1.02E-05	1.20E-05	1.07E-05	1.12E-05	5.6193E-04
519856.69	4258754.44	11265.21833	0.25641	0.38419	0.27037	0.37358	5.17E-04	1.05E-05	1.37E-05	1.11E-05	1.28E-05	5.6496E-04
520074.85	4259476.13	11262.50929	16.26559	0.10991	24.47647	0.10628	5.17E-04	6.66E-04	3.93E-06	1.00E-03	3.65E-06	2.1924E-03
520745.69	4258533.04	11253.45094	0.10506	0.10396	0.10149	0.10757	5.16E-04	4.30E-06	3.72E-06	4.16E-06	3.69E-06	5.3216E-04
520020.99	4258230.91	11246.76693	0.14175	3.42655	0.14802	3.00374	5.16E-04	5.80E-06	1.23E-04	6.06E-06	1.03E-04	7.5353E-04
520106.57	4258053.98	11245.37638	0.11412	11.87464	0.1157	13.63537	5.16E-04	4.67E-06	4.25E-04	4.74E-06	4.68E-04	1.4182E-03
520010.16	4258265.34	11242.19437	0.15086	2.76812	0.15665	2.4733	5.16E-04	6.18E-06	9.90E-05	6.41E-06	8.49E-05	7.1228E-04
519959.61	4258550.78	11227.98053	0.33546	1.15048	0.3679	1.07708	5.15E-04	1.37E-05	4.12E-05	1.51E-05	3.70E-05	6.2204E-04
520004.02	4258287.85	11213.43607	0.158	2.47515	0.16396	2.23093	5.14E-04	6.47E-06	8.85E-05	6.71E-06	7.66E-05	6.9276E-04
519949.69	4258570.21	11204.95883	0.32834	1.00353	0.35999	0.94758	5.14E-04	1.34E-05	3.59E-05	1.47E-05	3.25E-05	6.1067E-04
519907.12	4258646.05	11203.77788	0.28974	0.61734	0.31148	0.59752	5.14E-04	1.19E-05	2.21E-05	1.28E-05	2.05E-05	5.8122E-04
520745.74	4258523.56	11191.34786	0.10495	0.10407	0.10133	0.10775	5.13E-04	4.30E-06	3.72E-06	4.15E-06	3.70E-06	5.2931E-04
520054.88	4258147.02	11187.97148	0.12612	9.5546	0.13224	6.93828	5.13E-04	5.16E-06	3.42E-04	5.41E-06	2.38E-04	1.1038E-03
520765.32	4258599.52	11179.78712	0.10081	0.09707	0.09787	0.10034	5.13E-04	4.13E-06	3.47E-06	4.01E-06	3.44E-06	5.2796E-04
520755.48	4258571.02	11173.40605	0.10299	0.10038	0.09981	0.10378	5.13E-04	4.22E-06	3.59E-06	4.09E-06	3.56E-06	5.2807E-04
520037.84	4258184.01	11166.20338	0.13179	5.18194	0.13868	4.31285	5.12E-04	5.40E-06	1.85E-04	5.68E-06	1.48E-04	8.5677E-04
519986.87	4258440.2	11161.51388	0.25701	1.8281	0.27109	1.66355	5.12E-04	1.05E-05	6.54E-05	1.11E-05	5.71E-05	6.5619E-04
520028.08	4258208.01	11157.04798	0.13618	4.02	0.14283	3.46318	5.12E-04	5.58E-06	1.44E-04	5.85E-06	1.19E-04	7.8597E-04
520084.76	4259486.12	11152.60518	13.26241	0.1094	13.34248	0.10533	5.12E-04	5.43E-04	3.91E-06	5.46E-04	3.62E-06	1.6085E-03
519897.12	4258664.6	11142.53322	0.28074	0.56036	0.29945	0.5433	5.11E-04	1.15E-05	2.00E-05	1.23E-05	1.87E-05	5.7365E-04
520770.31	4258389.26	11138.8966	0.09754	0.09918	0.09476	0.1029	5.11E-04	3.99E-06	3.55E-06	3.88E-06	3.53E-06	5.2598E-04
520757.84	4258434.14	11123.29574	0.1011	0.10166	0.09805	0.10573	5.10E-04	4.14E-06	3.64E-06	4.01E-06	3.63E-06	5.2574E-04
519832.76	4258811.9	11117.62642	0.24305	0.31078	0.2546	0.30336	5.10E-04	9.95E-06	1.11E-05	1.04E-05	1.04E-05	5.5196E-04
519815.46	4258866.02	11106.23991	0.23791	0.2636	0.2473	0.25776	5.10E-04	9.74E-06	9.43E-06	1.01E-05	8.85E-06	5.4768E-04
520045.13	4259466.18	11104.74966	6.8697	0.10784	10.48169	0.10548	5.09E-04	2.81E-04	3.86E-06	4.29E-04	3.62E-06	1.2274E-03
520097.53	4258064.16	11095.06439	0.11461	17.30617	0.11679	17.78716	5.09E-04	4.69E-06	6.19E-04	4.78E-06	6.11E-04	1.7482E-03
520748.05	4258486.01	11075.012	0.10399	0.10386	0.10048	0.10782	5.08E-04	4.26E-06	3.71E-06	4.11E-06	3.70E-06	5.2389E-04
520766.95	4258406.31	11072.93479	0.09863	0.09962	0.09577	0.1035	5.08E-04	4.04E-06	3.56E-06	3.92E-06	3.55E-06	5.2308E-04
520010.95	4258255.03	11066.25063	0.14662	2.80633	0.15226	2.50599	5.08E-04	6.00E-06	1.00E-04	6.23E-06	8.60E-05	7.0635E-04
520004.8	4258277.54	11064.40339	0.1534	2.5081	0.15909	2.25965	5.08E-04	6.28E-06	8.97E-05	6.51E-06	7.76E-05	6.8770E-04
519986.98	4258415.68	11064.18011	0.23181	1.849	0.24324	1.68584	5.08E-04	9.49E-06	6.61E-05	9.96E-06	5.79E-05	6.5107E-04
520754.49	4258451.2	11060.9247	0.10209	0.10233	0.09888	0.10644	5.07E-04	4.18E-06	3.66E-06	4.05E-06	3.65E-06	5.2300E-04
519982.9	4258474.12	11056.06162	0.2915	1.69232	0.31206	1.54092	5.07E-04	1.19E-05	6.05E-05	1.28E-05	5.29E-05	6.4538E-04
519887.12	4258683.15	11046.09996	0.27195	0.51119	0.28874	0.49584	5.07E-04	1.11E-05	1.83E-05	1.18E-05	1.70E-05	5.6504E-04
520064.18	4258123.2	11040.33094	0.12185	16.62208	0.12704	9.59777	5.07E-04	4.99E-06	5.95E-04	5.20E-06	3.30E-04	1.4407E-03
519865.9	4258728.44	11040.09877	0.25811	0.42122	0.27293	0.40891	5.06E-04	1.06E-05	1.51E-05	1.12E-05	1.40E-05	5.5735E-04
520751.22	4258468.49	11037.42749	0.10305	0.10309	0.09968	0.10715	5.06E-04	4.22E-06	3.69E-06	4.08E-06	3.68E-06	5.2204E-04
520074.86	4259486.13	11031.69951	15.94607	0.10816	23.43619	0.10461	5.06E-04	6.53E-04	3.87E-06	9.60E-04	3.59E-06	2.1260E-03
519979.36	4258492.51	11022.02567	0.3089	1.58261	0.33394	1.44847	5.06E-04	1.26E-05	5.66E-05	1.37E-05	4.97E-05	6.3832E-04
520755.53	4258561.54	11021.30182	0.10286	0.10066	0.09963	0.10405	5.06E-04	4.21E-06	3.60E-06	4.08E-06	3.57E-06	5.2110E-04
520045.64	4258160.82	11015.99486	0.12702	6.5996	0.13358	5.26288	5.05E-04	5.20E-06	2.36E-04	5.47E-06	1.81E-04	9.3280E-04
519919.89	4258618.83	11009.96033	0.29854	0.70827	0.3243	0.68249	5.05E-04	1.22E-05	2.53E-05	1.33E-05	2.34E-05	5.7938E-04

519818.69	4258849.89	10991.9581	0.23633	0.27455	0.24619	0.26845	5.04E-04	9.68E-06	9.82E-06	1.01E-05	9.22E-06	5.4308E-04
520765.37	4258590.04	10982.86187	0.10069	0.09736	0.09775	0.10064	5.04E-04	4.12E-06	3.48E-06	4.00E-06	3.46E-06	5.1894E-04
520763.67	4258423.56	10976.73472	0.09963	0.10016	0.09668	0.10414	5.04E-04	4.08E-06	3.58E-06	3.96E-06	3.58E-06	5.1879E-04
519850.14	4258762.77	10972.44601	0.24861	0.36636	0.26133	0.35678	5.03E-04	1.02E-05	1.31E-05	1.07E-05	1.22E-05	5.4963E-04
520035.22	4259466.2	10971.5653	4.9616	0.10665	6.60344	0.10459	5.03E-04	2.03E-04	3.81E-06	2.70E-04	3.59E-06	9.8428E-04
519986.86	4258391.7	10939.36884	0.21056	1.85797	0.22008	1.69827	5.02E-04	8.62E-06	6.65E-05	9.01E-06	5.83E-05	6.4427E-04
520106.6	4258043.98	10933.64853	0.11136	11.88598	0.11285	13.52951	5.02E-04	4.56E-06	4.25E-04	4.62E-06	4.64E-04	1.4004E-03
520084.78	4259496.12	10925.16323	12.91227	0.10767	12.93859	0.10368	5.01E-04	5.29E-04	3.85E-06	5.30E-04	3.56E-06	1.5671E-03
520028.61	4258197.81	10921.1159	0.13257	4.06418	0.13911	3.49663	5.01E-04	5.43E-06	1.45E-04	5.70E-06	1.20E-04	7.7758E-04
519844.85	4258774.14	10914.81807	0.2451	0.35033	0.25735	0.34141	5.01E-04	1.00E-05	1.25E-05	1.05E-05	1.17E-05	5.4557E-04
520055.16	4258136.91	10910.03442	0.12288	9.65391	0.12877	6.98286	5.01E-04	5.03E-06	3.45E-04	5.27E-06	2.40E-04	1.0959E-03
520038.24	4258173.86	10909.75408	0.12835	5.2302	0.13504	4.34501	5.01E-04	5.26E-06	1.87E-04	5.53E-06	1.49E-04	8.4755E-04
519929.81	4258599.39	10907.35103	0.30641	0.79332	0.33505	0.75982	5.00E-04	1.25E-05	2.84E-05	1.37E-05	2.61E-05	5.8113E-04
520755.58	4258552.06	10891.38907	0.10274	0.10089	0.09945	0.10429	5.00E-04	4.21E-06	3.61E-06	4.07E-06	3.58E-06	5.1514E-04
520011.67	4258244.74	10882.57233	0.14255	2.84	0.14808	2.53522	4.99E-04	5.84E-06	1.02E-04	6.06E-06	8.70E-05	6.9979E-04
520045.14	4259476.18	10881.7947	6.88458	0.10619	10.69573	0.10386	4.99E-04	2.82E-04	3.80E-06	4.38E-04	3.57E-06	1.2264E-03
520750.81	4258513.33	10873.8756	0.10356	0.10271	0.1	0.10641	4.99E-04	4.24E-06	3.67E-06	4.09E-06	3.65E-06	5.1453E-04
519969.48	4258521.64	10859.61698	0.32418	1.34376	0.3537	1.24481	4.98E-04	1.33E-05	4.81E-05	1.45E-05	4.27E-05	6.1677E-04
520751.15	4258504.2	10849.85966	0.10339	0.10273	0.09984	0.1065	4.98E-04	4.23E-06	3.67E-06	4.09E-06	3.66E-06	5.1342E-04
520751.49	4258495.07	10848.92829	0.10322	0.10279	0.09971	0.10662	4.98E-04	4.23E-06	3.68E-06	4.08E-06	3.66E-06	5.1337E-04
520018.55	4258221.93	10840.01517	0.13683	3.24406	0.14273	2.85985	4.97E-04	5.60E-06	1.16E-04	5.84E-06	9.82E-05	7.2298E-04
520773.74	4258398.27	10838.64	0.09698	0.098	0.09423	0.10174	4.97E-04	3.97E-06	3.51E-06	3.86E-06	3.49E-06	5.1208E-04
519821.86	4258833.61	10830.06899	0.2343	0.28607	0.24455	0.27962	4.97E-04	9.59E-06	1.02E-05	1.00E-05	9.60E-06	5.3630E-04
519880.82	4258692.07	10826.97524	0.26444	0.48514	0.28031	0.47075	4.97E-04	1.08E-05	1.74E-05	1.15E-05	1.62E-05	5.5254E-04
520761.22	4258443	10810.47096	0.1004	0.1006	0.09734	0.10461	4.96E-04	4.11E-06	3.60E-06	3.99E-06	3.59E-06	5.1125E-04
520074.88	4259496.13	10808.20329	15.68911	0.10645	22.17807	0.10298	4.96E-04	6.42E-04	3.81E-06	9.08E-04	3.54E-06	2.0536E-03
520765.42	4258580.56	10800.78768	0.10056	0.09766	0.09762	0.10094	4.96E-04	4.12E-06	3.49E-06	4.00E-06	3.47E-06	5.1059E-04
519979.32	4258482.81	10795.64776	0.29536	1.59577	0.31754	1.45977	4.95E-04	1.21E-05	5.71E-05	1.30E-05	5.01E-05	6.2757E-04
519983.36	4258448.73	10794.27214	0.26067	1.72826	0.2754	1.57766	4.95E-04	1.07E-05	6.18E-05	1.13E-05	5.42E-05	6.3315E-04
519859.47	4258737.04	10786.78924	0.25076	0.40115	0.26451	0.3899	4.95E-04	1.03E-05	1.43E-05	1.08E-05	1.34E-05	5.4371E-04
520755.64	4258542.58	10784.31248	0.10261	0.10111	0.09927	0.10453	4.95E-04	4.20E-06	3.62E-06	4.06E-06	3.59E-06	5.1023E-04
519939.73	4258579.95	10772.59679	0.31305	0.89514	0.3427	0.85118	4.94E-04	1.28E-05	3.20E-05	1.40E-05	2.92E-05	5.8231E-04
520754.64	4258477.47	10772.49718	0.10229	0.10208	0.09891	0.10601	4.94E-04	4.19E-06	3.65E-06	4.05E-06	3.64E-06	5.0975E-04
519992.24	4258322.68	10771.63474	0.16858	2.03556	0.17524	1.85996	4.94E-04	6.90E-06	7.28E-05	7.18E-06	6.39E-05	6.4492E-04
520757.89	4258460.12	10768.89645	0.10138	0.10122	0.09813	0.10523	4.94E-04	4.15E-06	3.62E-06	4.02E-06	3.61E-06	5.0946E-04
519825.91	4258819.42	10761.01318	0.23451	0.29814	0.24524	0.29122	4.94E-04	9.60E-06	1.07E-05	1.00E-05	1.00E-05	5.3400E-04
520770.4	4258415.37	10753.70131	0.09799	0.09849	0.09516	0.10235	4.93E-04	4.01E-06	3.52E-06	3.90E-06	3.51E-06	5.0830E-04
520035.24	4259476.2	10753.56069	5.00497	0.10501	6.70911	0.10299	4.93E-04	2.05E-04	3.76E-06	2.75E-04	3.54E-06	9.8027E-04
520046	4258150.68	10750.72962	0.12375	6.66743	0.13012	5.30283	4.93E-04	5.07E-06	2.38E-04	5.33E-06	1.82E-04	9.2415E-04
520096.78	4258053.95	10750.35762	0.11157	18.01865	0.11367	18.14535	4.93E-04	4.57E-06	6.45E-04	4.65E-06	6.23E-04	1.7699E-03
519993.42	4258312.2	10719.6628	0.16365	2.07438	0.16998	1.89404	4.92E-04	6.70E-06	7.42E-05	6.96E-06	6.50E-05	6.4468E-04
520755.69	4258533.09	10701.34579	0.1025	0.10128	0.09911	0.10474	4.91E-04	4.20E-06	3.62E-06	4.06E-06	3.60E-06	5.0643E-04
520061.5	4258116.61	10697.18628	0.11884	13.65703	0.12402	8.64626	4.91E-04	4.87E-06	4.88E-04	5.08E-06	2.97E-04	1.2860E-03
520012.34	4258234.48	10694.52747	0.13866	2.86959	0.1441	2.5603	4.91E-04	5.68E-06	1.03E-04	5.90E-06	8.79E-05	6.9276E-04
519983.52	4258424.08	10688.57444	0.23499	1.75046	0.24662	1.60169	4.90E-04	9.62E-06	6.26E-05	1.01E-05	5.50E-05	6.2769E-04
520029.1	4258187.62	10688.22207	0.1291	4.10761	0.13555	3.52922	4.90E-04	5.29E-06	1.47E-04	5.55E-06	1.21E-04	7.6928E-04
520045.16	4259486.18	10665.26858	7.02856	0.10452	11.02098	0.10225	4.89E-04	2.88E-04	3.74E-06	4.51E-04	3.51E-06	1.2356E-03
520082.08	4259506.95	10656.25792	13.40689	0.10552	14.06741	0.10178	4.89E-04	5.49E-04	3.77E-06	5.76E-04	3.49E-06	1.6211E-03
520767.14	4258432.68	10654.39551	0.09893	0.09911	0.096	0.10304	4.89E-04	4.05E-06	3.55E-06	3.93E-06	3.54E-06	5.0387E-04
519907.12	4258636.77	10652.02122	0.28198	0.62453	0.30367	0.60476	4.89E-04	1.15E-05	2.23E-05	1.24E-05	2.08E-05	5.5577E-04
519994.47	4258301.78	10643.77811	0.15889	2.10997	0.16491	1.92504	4.88E-04	6.51E-06	7.55E-05	6.75E-06	6.61E-05	6.4313E-04
520755.74	4258523.61	10643.00193	0.10241	0.10135	0.09897	0.10488	4.88E-04	4.19E-06	3.63E-06	4.05E-06	3.60E-06	5.0375E-04
520106.64	4258033.98	10640.27187	0.10872	11.88694	0.11013	13.52701	4.88E-04	4.45E-06	4.25E-04	4.51E-06	4.64E-04	1.3867E-03
520055.42	4258126.82	10640.112	0.11978	9.74745	0.12545	7.01866	4.88E-04	4.90E-06	3.49E-04	5.14E-06	2.41E-04	1.0878E-03
520765.48	4258571.08	10636.57503	0.10045	0.09792	0.09747	0.10119	4.88E-04	4.11E-06	3.50E-06	3.99E-06	3.47E-06	5.0307E-04
520019.2	4258211.68	10635.23792	0.13323	3.28858	0.13909	2.89728	4.88E-04	5.45E-06	1.18E-04	5.69E-06	9.95E-05	7.1617E-04
519811.79	4258857.29	10635.08246	0.22796	0.26414	0.23698	0.25845	4.88E-04	9.33E-06	9.45E-06	9.70E-06	8.87E-06	5.2527E-04
519959.56	4258541.08	10634.53003	0.32166	1.16311	0.35129	1.08859	4.88E-04	1.32E-05	4.16E-05	1.44E-05	3.74E-05	5.9442E-04
519838.31	4258782.47	10628.09417	0.23761	0.33507	0.24905	0.32682	4.88E-04	9.73E-06	1.20E-05	1.02E-05	1.12E-05	5.3073E-04
519897.12	4258655.32	10616.61773	0.27333	0.56668	0.29202	0.55002	4.87E-04	1.12E-05	2.03E-05	1.20E-05	1.89E-05	5.4937E-04
519987.55	4258344.58	10613.32298	0.17786	1.89087	0.18501	1.73451	4.87E-04	7.28E-06	6.76E-05	7.58E-06	5.95E-05	6.2896E-04
520001.27	4258269.01	10603.63537	0.14734	2.35602	0.15261	2.13509	4.86E-04	6.03E-06	8.43E-05	6.25E-06	7.33E-05	6.5633E-04
519986.31	4258355.08	10601.84911	0.18343	1.85405	0.1909	1.70155	4.86E-04	7.51E-06	6.63E-05	7.82E-06	5.84E-05	6.2645E-04
519983.45	4258400	10601.2884	0.21338	1.76232	0.22303	1.61602	4.86E-04	8.74E-06	6.30E-05	9.13E-06	5.55E-05	6.2275E-04
519988.65	4258334.14	10594.41997	0.17247	1.92421	0.17931	1.76432	4.86E-04	7.06E-06	6.88E-05	7.34E-06	6.06E-05	6.2985E-04
519874.46	4258700.84	10575.77307	0.25635	0.46102	0.27196	0.44715	4.85E-04	1.05E-05	1.65E-05	1.11E-05	1.54E-05	5.3867E-04
520036.69	4258164.51	10563.71496	0.1245	4.99211	0.13097	4.17592	4.85E-04	5.10E-06	1.79E-04	5.36E-06	1.43E-04	8.1703E-04
519887.12	4258673.87	10555.25032	0.26503	0.51696	0.28131	0.50225	4.84E-04	1.09E-05	1.85E-05	1.15E-05	1.72E-05	5.4236E-04
519984.87	4258365.66	10551.81349	0.18914	1.81234	0.19695	1.66432	4.84E-04	7.74E-06	6.48E-05	8.06E-06	5.71E-05	6.2187E-04
519995.42	4258291.4	10547.68496	0.15431	2.14017	0.16	1.9521	4.84E-04	6.32E-06	7.66E-05	6.55E-06	6.70E-05	6.4034E-04
520072.18	4259506.97	10542.71872	14.75712	0.1043	25.19065	0.10106	4.84E-04	6.04E-04	3.73E-06	1.03E-03	3.47E-06	2.1265E-03
520035.26	4259486.2	10541.93905	5.07758	0.10338	6.82972	0.10139	4.84E-04	2.08E-04	3.70E-06	2.80E-04	3.48E-06	9.7836E-04
519949.65	4258560.52	10539.86989	0.3147	1.01372	0.34318	0.95744	4.84E-04	1.29E-05	3.63E-05	1.41E-05	3.29E-05	5.7961E-04
520777.17	4258407.27	10536.71452	0.09639	0.09686	0.09366	0.1006	4.83E-04	3.95E-06	3.46E-06	3.83E-06	3.45E-06	4.9810E-04
520758.06	4258486.46	10535.17352	0.10153	0.10109	0.09816	0.10489	4.83E-04	4.16E-06	3.62E-06	4.02E-06	3.60E-06	4.9873E-04
520062	4258109.76	10534.94741	0.11695	14.08256	0.12197	8.78526	4.83E-04	4.79E-06	5.04E-04	4.99E-06	3.02E-04	1.2984E-03
519829.12	4258803.25	10534.87652	0.2321	0.31072	0.24293	0.30336	4.83E-04	9.50E-06	1.11E-05	9.95E-06	1.04E-05	5.2430E-04
519852.99	4258745.53	10525.48493	0.24335	0.38257	0.25633	0.37215	4.83E-04	9.96E-06	1.37E-05	1.05E-05	1.28E-05	5.2981E-04
520764.59	4258451.87	10519.03891	0.09971	0.09955	0.09662	0.10348	4.83E-04	4.08E-06	3.56E-06	3.96E-06	3.55E-06	4.9775E-04
520761.29	4258469.05	10498.70058	0.10064	0.10026	0.09738	0.10415	4.82E-04	4.12E-06	3.59E-06	3.99E-06	3.58E-06	4.9693E-04
520046.34	4258140.55	10497.27864	0.12064	6.73129	0.1268	5.33984	4.82E-04	4.94E-06	2.41E-04	5.19E-06	1.83E-04	9.1582E-04
520765.53	4258561.6	10492.73178	0.10034	0.09815	0.0973	0.10141	4.81E-04	4.11E-06	3.51E-06	3.98E-06	3.48E-06	4.9647E-04
519814.99	4258841.1	10486.96361	0.22617	0.27495	0.23559	0.26894	4.81E-04	9.26E-06	9.83E-06	9.65E-06	9.23E-06	5.1910E-04
519969.44	4258511.95	10479.55788	0.31066	1.35671	0.33741	1.25662	4.81E-04	1.27E-05	4.85E-05	1.38E-05	4.31E-05	5.9899E-04
520002.15	4258258.66	10465.7646	0.14329	2.39178	0.14837	2.16553	4.80E-04	5.87E-06	8.56E-05	6.07E-06	7.43E-05	6.5199E-04
519979.85	4258457.26	10464.44738	0.26423	1.63585	0.27996	1.49764	4.80E-04	1.08E-05	5.85E-05	1.15E-05	5.14E-05	6.1230E-04
520096.82	4258043.95	10464.23976	0.10891	18.03618	0.11091	17.95999	4.80E-04	4.46E-06	6.45E-04	4.54E-06	6.17E-04	1.7508E-03
519868.49	4258710.57	10461.93637	0.25126	0.43893	0.26568	0.42624	4.80E-04	1.03E-05	1.57E-05	1.09E-05	1.46E-05	5.3147E-04
520029.55	4258177.44	10458.05669	0.12578	4.14291	0.13211	3.55467	4.80E-04	5.15E-06	1.48E-04	5.41E-06	1.22E-04	7.6058E-04
520045.18	4259496.18	10455.25736	7.16622	0.1029	11.48355	0.10067	4.80E-04	2.93E-04	3.68E-06	4.70E-04	3.46E-06	1.2504E-03
520082.1	4259516.95	10444.02112	13.05274	0.10388	13.52034	0.10022	4.79E-04	5.34E-04	3.72E-06	5.54E-04	3.44E-06	1.5743E-03
520773.85	4258424.44	10439.01492	0.09733	0.09746	0.09452	0.10128	4.79E-04	3.99E-06	3.49E-06	3.87E-06	3.48E-06	4.9374E-04
519996.27	4258281.06	10435.60227	0.14992	2.16925	0.15531	1.97764	4.79E-04	6.14E-06	7.76E-05	6.36E-06	6.79E-05	6.3675E-04
520019.8	4258201.44	10424.14289	0.12973	3.31428	0.13554	2.91303	4.78E-04	5.31E-06	1.19E-04	5.55E-06	1.00E-04	7.0766E-04
519919.85	4258609.13	10408.39853	0.28969	0.7171	0.31466	0.69075	4.78E-04	1.19E-05	2.56E-05	1.29E-05	2.37E-05	5.5163E-04
520781.19	4258599.97	10370.77127	0.0969	0.09327	0.09421	0.09637	4.76E-04	3.97E-06	3.34E-06	3.86E-06	3.31E-06	4.9026E-04
520765.58	4258552.11	10369.38629	0.10023	0.09836	0.09713	0.10162	4.76E-04	4.10E-06	3.52E-06	3.98E-06	3.49E-06	4.9082E-04
520106.67	4258023.98	10356.90929	0.10619	11.89394	0.10752	13.4786	4.75E-04	4.35E-06	4.25E-04	4.40E-06	4.63E-04	1.3721E-03
520760.8	4258513.71	10349.3448	0.10108	0.10006	0.09769	0.1036	4.75E-04	4.14E-06	3.58E-06	4.00E-06	3.56E-06	4.9008E-04
520770.62	4258441.81	10346.09765	0.09822	0.09809	0.09529	0.10195	4.75E-04	4.02E-06	3.51E-06	3.90E-06	3.50E-06	4.8959E-04
520035.28	4259496.2	10336.33645	5.16322	0.10178	6.98422	0.09984	4.74E-04	2.11E-04	3.64E-06	2.86E-04	3.43E-06	9.7865E-04
520072.2	4259516.97	10334.70885	14.37437	0.1027	23.54454	0.09953	4.74E-04	5.89E-04	3.67E-06	9.64E-04	3.42E-06	2.0338E-03
520037.12	4258154.35	10329.10641	0.12137	5.04232	0.1277	4.21132	4.74E-04	4.97E-06	1.80E-04	5.23E-06	1.45E-04	8.0901E-04
519980.06	4258432.48	10327.91799	0.23809	1.65945	0.25	1.5232	4.74E-04	9.75E-06	5.94E-05	1.02E-05	5.23E-05	6.0546E-04
520761.14	4258504.58	10326.32292	0.10093	0.10006	0.09755	0.10366	4.74E-04	4.13E-06	3.58E-06	3.99E-06	3.56E-06	4.8902E-04
520761.49	4258495.44	10324.6985	0.10077	0.10008	0.09742	0.10375	4.74E-04	4.13E-06	3.58E-06	3.99E-06	3.56E-06	4.8893E-04
520002.95	4258248.34	10317.26396	0.13941	2.4217	0.14432	2.19158	4.73E-04	5.71E-06	8.66E-05	5.91E-06	7.52E-05	6.4681E-04
520009.59	4258225.63	10303.97238	0.13381	2.71691	0.13889	2.43628	4.73E-04	5.48E-06	9.72E-05	5.69E-06	8.36E-05	6.6471E-04
519929.77	4258589.69	10299.41785	0.2967	0.80389	0.32387	0.76903	4.73E-04	1.21E-05	2.88E-05	1.33E-05	2.64E-05	5.5308E-04
519818.14	4258824.77	10292.5285	0.22395	0.28628	0.2337	0.27986	4.72E-04	9.17E-06	1.02E-05	9.57E-06	9.61E-06	5.1079E-04
519846.47	4258753.92	10272.66861	0.23627	0.36519	0.24831	0.35564	4.71E-04	9.67E-06	1.31E-05	1.02E-05	1.22E-05	5.1640E-04
520765.64	4258542.63	10267.75417	0.10013	0.09854	0.09697	0.10182	4.71E-04	4.10E-06	3.52E-06	3.97E-06	3.50E-06	4.8616E-04
519862.15	4258719.38	10258.22028	0.24466	0.41795	0.25808	0.4063	4.71E-04	1.00E-05	1.49E-05	1.06E-05	1.39E-05	5.2011E-04
520764.68	4258477.97	10251.97358	0.09988	0.09938	0.09665	0.10313	4.70E-04	4.09E-06	3.55E-06	3.96E-06	3.54E-06	4.8548E-04
520046.65	4258130.44	10250.01371	0.11765	6.78975	0.12362	5.37168	4.70E-04	4.82E-06	2.43E-04	5.06E-06	1.84E-04	9.0740E-04
520767.97	4258460.73	10246.91772	0.09901	0.09856	0.0959	0.10239	4.70E-04	4.05E-06	3.53E-06	3.93E-06	3.52E-06	4.8513E-04
520082.12	4259526.95	10237.74045	12.93918	0.10227	12.98519	0.0987	4.70E-04	5.30E-04	3.66E-06	5.32E-04	3.39E-06	1.5382E-03
519841.08	4258765.04	10233.92164	0.23305	0.34921	0.24424	0.34053	4.70E-04	9.54E-06	1.25E-05	1.00E-05	1.17E-05	5.1324E-04
520780.59	4258416.28	10233.32037	0.09575	0.09583	0.09307	0.09954	4.69E-04	3.92E-06	3.43E-06	3.81E-06	3.42E-06	4.8406E-04
520020.35	4258191.23	10223.83649	0.12644	3.35863	0.13221	2.95208	4.69E-04	5.18E-06	1.20E-04	5.41E-06	1.01E-04	7.0112E-04
519822.29	4258810.82	10212.61565	0.22424	0.2981	0.23433	0.29123	4.69E-04	9.18E-06	1.07E-05	9.59E-06	1.00E-05	5.0797E-04
520042.48	4259507.02	10203.14337	6.67455	0.10088	10.25519	0.09879	4.68E-04	2.73E-04	3.61E-06	4.20E-04	3.39E-06	1.1683E-03
520778.28	4258583.39	10203.08164	0.09743	0.09447	0.09472	0.0976	4.68E-04	3.99E-06	3.38E-06	3.88E-06	3.35E-06	4.8269E-04
520096.85	4258033.95	10194.0866	0.10638	18.05343	0.10826	18.0902	4.68E-04	4.36E-06	6.46E-04	4.43E-06	6.21E-04	1.7433E-03
520765.69	4258533.15	10189.31154	0.10004	0.09868	0.09682	0.102	4.67E-04	4.10E-06	3.53E-06	3.96E-06	3.50E-06	4.8256E-04
519959.52	4258531.38	10177.30844	0.30932	1.17559	0.33664	1.0997	4.67E-04	1.27E-05	4.20E-05	1.38E-05	3.78E-05	5.7317E-04
520059.08	4258101.95	10176.29182	0.11372	11.71354	0.11872	7.89602	4.67E-04	4.66E-06	4.19E-04	4.86E-06	2.71E-04	1.1664E-03
519976.34	4258465.79	10175.01483	0.26766	1.54944	0.2847	1.42297	4.67E-04	1.10E-05	5.54E-05	1.17E-05	4.89E-05	5.9370E-04
519969.4	4258502.25	10174.482	0.29781	1.36903	0.32207	1.26774	4.67E-04	1.22E-05	4.90E-05	1.32E-05	4.35E-05	5.8466E-04
520051.71	4258116.57	10164.12809	0.11537	8.22773	0.12097	6.20541	4.66E-04	4.72E-06	2.94E-04	4.95E-06	2.13E-04	9.8332E-04
520003.69	4258238.05	10161.88672	0.13568	2.44963	0.14047	2.21563	4.66E-04	5.56E-06	8.76E-05	5.75E-06	7.61E-05	6.4120E-04
519808.11	4258848.56	10160.47539	0.21843	0.26449	0.22707	0.2589	4.66E-04	8.94E-06	9.46E-06	9.30E-06	8.89E-06	5.0273E-04
519979.54	4258385.23	10135.8031	0.19762	1.67173	0.20584	1.54142	4.65E-04	8.09E-06	5.98E-05	8.43E-06	5.29E-05	5.9424E-04
520777.3	4258433.5	10135.73052	0.09665	0.09646	0.09386	0.10022	4.65E-04	3.96E-06	3.45E-06	3.84E-06	3.44E-06	4.7970E-04
520765.74	4258523.67	10133.90903	0.09995	0.09878	0.09669	0.10216	4.65E-04	4.09E-06	3.53E-06	3.96E-06	3.51E-06	4.8002E-04
520072.22	4259526.97	10133.05515	13.88786	0.10114	22.06855	0.09804	4.65E-04	5.69E-04	3.62E-06	9.04E-04	3.37E-06	1.9441E-03
520010.31	4258215.34	10129.31854	0.13035	2.75175	0.1354	2.46564	4.65E-04	5.34E-06	9.84E-05	5.54E-06	8.46E-05	6.5867E-04
520027.74	4258168.2	10124.38825	0.12198	3.95364	0.12807	3.40939	4.64E-04	4.99E-06	1.41E-04	5.24E-06	1.17E-04	7.3319E-04
519897.12	4258646.05	10113.0582	0.2663	0.5729	0.28508	0.55643	4.64E-04	1.09E-05	2.05E-05	1.17E-05	1.91E-05	5.2614E-04
520037.52	4258144.2	10095.20871	0.11836	5.0891	0.12456	4.24224	4.63E-04	4.85E-06	1.82E-04	5.10E-06	1.46E-04	8.0076E-04
519949.61	4258550.82	10093.60485	0.30621	1.02802	0.33318	0.96999	4.63E-04	1.25E-05	3.68E-05	1.36E-05	3.33E-05	5.5933E-04
520106.7	4258013.98	10089.12547	0.10377	11.89491	0.10501	13.54855	4.63E-04	4.25E-06	4.25E-04	4.30E-06	4.65E-04	1.3620E-03
519939.69	4258570.26	10089.12041	0.30001	0.90522	0.32637	0.86026	4.63E-04	1.23E-05	3.24E-05	1.34E-05	2.95E-05	5.5043E-04
520032.58	4259507.04	10088.69869	4.85894	0.09981	6.44808	0.09797	4.63E-04	1.99E-04	3.57E-06	2.64E-04	3.36E-06	9.3274E-04
519887.12	4258664.6	10078.4998	0.25839	0.52245	0.27449	0.5083	4.62E-04	1.06E-05	1.87E-05	1.12E-05	1.75E-05	5.2034E-04
520774.09	4258450.94	10058.92857	0.09752	0.0971	0.09458	0.10087	4.61E-04	3.99E-06	3.47E-06	3.87E-06	3.46E-06	4.7629E-04
519855.74	4258728.06	10042.19271	0.23794	0.39842	0.25057	0.38761	4.61E-04	9.74E-06	1.43E-05	1.03E-05	1.33E-05	5.0828E-04
520768.08	4258486.89	10033.0629	0.09915	0.09842	0.09592	0.10205	4.60E-04	4.06E-06	3.52E-06	3.93E-06	3.50E-06	4.7531E-04
520775.96	4258565.45	10033.04954	0.09785	0.09545	0.09501	0.0986	4.60E-04	4.01E-06	3.41E-06	3.89E-06	3.39E-06	4.7499E-04
519983.35	4258326.34	10031.90073	0.16415	1.77835	0.17031	1.64112	4.60E-04	6.72E-06	6.36E-05	6.97E-06	5.63E-05	5.9389E-04
520020.87	4258181.03	10020.27596	0.12326	3.38716	0.12898	2.97338	4.60E-04	5.05E-06	1.21E-04	5.28E-06	1.02E-04	6.9327E-04
520052.22	4258109.73	10018.80533	0.11359	8.39058	0.11904	6.29267	4.60E-04	4.65E-06	3.00E-04	4.87E-06	2.16E-04	9.8532E-04
519984.64	4258315.82	10017.04248	0.15953	1.81298	0.16547	1.67193	4.60E-04	6.53E-06	6.48E-05	6.78E-06	5.74E-05	5.9512E-04
519877.12	4258683.15	10009.35538	0.25051	0.47891	0.26507	0.46586	4.59E-04	1.03E-05	1.71E-05	1.09E-05	1.60E-05	5.1344E-04
520042.5	4259517.02	10006.70586	6.84583	0.09935	10.7863	0.0973	4.59E-04	2.80E-04	3.55E-06	4.42E-04	3.34E-06	1.1879E-03
519992.39	4258272.68	9994.83025	0.14395	2.03695	0.14895	1.86679	4.59E-04	5.89E-06	7.29E-05	6.10E-06	6.41E-05	6.0748E-04
520771.34	4258469.6	9994.017	0.09828	0.09769	0.09518	0.10139	4.59E-04	4.02E-06	3.49E-06	3.90E-06	3.48E-06	4.7340E-04
519976.61	4258440.89	9991.89084	0.24116	1.57546	0.25356	1.45005	4.58E-04	9.87E-06	5.64E-05	1.04E-05	4.98E-05	5.8480E-04
519834.56	4258773.44	9983.49861	0.2262	0.33428	0.23684	0.32613	4.58E-04	9.26E-06	1.20E-05	9.70E-06	1.12E-05	5.0014E-04
519811.3	4258832.31	9983.23171	0.2165	0.27511	0.22542	0.26917	4.58E-04	8.86E-06	9.84E-06	9.23E-06	9.24E-06	4.9519E-04
519985.78	4258305.36	9976.12458	0.15504	1.84378	0.16074	1.69941	4.58E-04	6.35E-06	6.59E-05	6.58E-06	5.83E-05	5.9491E-04
520078.01	4259538.19	9971.70159	14.22257	0.10006	14.94506	0.09678	4.57E-04	5.82E-04	3.58E-06	6.12E-04	3.32E-06	1.6586E-03
519825.48	4258794.6	9965.48379	0.22181	0.31015	0.2317	0.30298	4.57E-04	9.08E-06	1.11E-05	9.49E-06	1.04E-05	4.9726E-04
520010.98	4258205.08	9951.99143	0.12702	2.77954	0.13204	2.48754	4.57E-04	5.20E-06	9.94E-05	5.41E-06	8.54E-05	6.5201E-04
520784.02	4258425.28	9942.41132	0.09513	0.09479	0.09244	0.09847	4.56E-04	3.90E-06	3.39E-06	3.78E-06	3.38E-06	4.7059E-04
519909.89	4258618.87	9940.68631	0.27423	0.65229	0.29599	0.63125	4.56E-04	1.12E-05	2.33E-05	1.21E-05	2.17E-05	5.2441E-04
520096.88	4258023.95	9934.04371	0.10395	18.0718	0.10572	18.1656	4.56E-04	4.26E-06	6.46E-04	4.33E-06	6.24E-04	1.7344E-03
519972.83	4258474.32	9926.4727	0.2709	1.46845	0.2894	1.3531	4.55E-04	1.11E-05	5.25E-05	1.18E-05	4.65E-05	5.7733E-04
520059.11	4258091.95	9925.04438	0.11097	11.69128	0.11579	7.87756	4.55E-04	4.54E-06	4.18E-04	4.74E-06	2.70E-04	1.1533E-03
519976.62	4258416.58	9922.5313	0.21884	1.5909	0.22876	1.4674	4.55E-04	8.96E-06	5.69E-05	9.37E-06	5.04E-05	5.8083E-04
519969.36	4258492.55	9921.36641	0.28555	1.38068	0.30747	1.27815	4.55E-04	1.17E-05	4.94E-05	1.26E-05	4.39E-05	5.7272E-04
519986.81	4258294.95	9914.61432	0.1507	1.87096	0.15614	1.72373	4.55E-04	6.17E-06	6.69E-05	6.39E-06	5.92E-05	5.9353E-04
520028.23	4258158.01	9913.54666	0.11898	3.99708	0.12499	3.44306	4.55E-04	4.87E-06	1.43E-04	5.12E-06	1.18E-04	7.2598E-04
520032.6	4259517.04	9896.32076	4.95994	0.0983	6.63476	0.0965	4.54E-04	2.03E-04	3.52E-06	2.72E-04	3.31E-06	9.3559E-04
519993.35	4258262.29	9888.76579	0.14007	2.06373	0.14482	1.89033	4.54E-04	5.74E-06	7.38E-05	5.93E-06	6.49E-05	6.0406E-04
519980.21	4258337.62	9878.65998	0.168	1.69896	0.17426	1.57146	4.53E-04	6.88E-06	6.08E-05	7.13E-06	5.39E-05	5.8195E-04
520068.11	4259538.21	9870.62395	14.21053	0.09896	27.75039	0.09611	4.53E-04	5.82E-04	3.54E-06	1.14E-03	3.30E-06	2.1777E-03
520037.89	4258134.05	9869.63373	0.11549	5.1323	0.12153	4.26959	4.53E-04	4.73E-06	1.84E-04	4.98E-06	1.47E-04	7.9266E-04
519979.03	4258348.1	9865.72732	0.17304	1.66956	0.17955	1.54474	4.53E-04	7.08E-06	5.97E-05	7.35E-06	5.30E-05	5.7981E-04
520770.79	4258514.08	9861.72157	0.09868	0.09758	0.09547	0.10095	4.52E-04	4.04E-06	3.49E-06	3.91E-06	3.47E-06	4.6734E-04
520780.75	4258442.56	9852.89672	0.09598	0.09545	0.09317	0.09915	4.52E-04	3.93E-06	3.41E-06	3.81E-06	3.40E-06	4.6659E-04
519919.81	4258599.43	9843.87008	0.28104	0.72617	0.30522	0.69875	4.52E-04	1.15E-05	2.60E-05	1.25E-05	2.40E-05	5.2558E-04
520771.14	4258504.95	9839.16681	0.09855	0.09753	0.09533	0.10097	4.51E-04	4.04E-06	3.49E-06	3.90E-06	3.47E-06	4.6630E-04
520771.48	4258495.82	9837.53114	0.09841	0.09748	0.09521	0.10099	4.51E-04	4.03E-06	3.49E-06	3.90E-06	3.47E-06	4.6621E-04
519987.74	4258284.58	9835.6641	0.14653	1.89605	0.1517	1.74604	4.51E-04	6.00E-06	6.78E-05	6.21E-06	5.99E-05	5.9121E-04
520106.73	4258003.98	9834.53072	0.10146	11.89223	0.1026	13.68468	4.51E-04	4.15E-06	4.25E-04	4.20E-06	4.70E-04	1.3547E-03
519849.29	4258736.62	9822.04362	0.23127	0.38024	0.24322	0.37018	4.51E-04	9.47E-06	1.36E-05	9.96E-06	1.27E-05	4.9635E-04
519977.68	4258358.64	9821.03607	0.17821	1.63632	0.18497	1.5147	4.51E-04	7.30E-06	5.85E-05	7.57E-06	5.20E-05	5.7597E-04
519870.79	4258692	9816.54117	0.24364	0.4556	0.25757	0.44315	4.50E-04	9.98E-06	1.63E-05	1.05E-05	1.52E-05	5.0240E-04
520042.51	4259527.02	9815.9378	7.01281	0.09786	11.38372	0.09585	4.50E-04	2.87E-04	3.50E-06	4.66E-04	3.29E-06	1.2104E-03

519975.88	4258394.11	9805.55861	0.20022	1.58521	0.20852	1.46598	4.50E-04	8.20E-06	5.67E-05	8.54E-06	5.03E-05	5.7362E-04
519959.48	4258521.68	9800.85386	0.29761	1.1874	0.32273	1.11019	4.50E-04	1.22E-05	4.25E-05	1.32E-05	3.81E-05	5.5563E-04
520777.57	4258460.06	9792.3888	0.0968	0.09616	0.09385	0.09982	4.49E-04	3.96E-06	3.44E-06	3.84E-06	3.43E-06	4.6393E-04
520000.63	4258229.33	9786.83834	0.13091	2.31813	0.13535	2.10655	4.49E-04	5.36E-06	8.29E-05	5.54E-06	7.23E-05	6.1514E-04
520060.26	4258084.04	9783.85703	0.10921	12.47338	0.11384	8.17456	4.49E-04	4.47E-06	4.46E-04	4.66E-06	2.81E-04	1.1848E-03
520078.02	4259548.19	9780.24726	13.67845	0.09856	14.27527	0.09535	4.49E-04	5.60E-04	3.53E-06	5.84E-04	3.27E-06	1.6000E-03
520011.61	4258194.84	9774.10277	0.12385	2.8111	0.12885	2.51358	4.48E-04	5.07E-06	1.01E-04	5.28E-06	8.63E-05	6.4561E-04
520774.72	4258478.46	9768.6547	0.09757	0.09675	0.09447	0.10034	4.48E-04	3.99E-06	3.46E-06	3.87E-06	3.44E-06	4.6294E-04
519994.23	4258251.94	9765.24516	0.13633	2.08716	0.14086	1.91061	4.48E-04	5.58E-06	7.47E-05	5.77E-06	6.56E-05	5.9961E-04
519814.42	4258815.92	9761.40448	0.21414	0.28615	0.22325	0.2798	4.48E-04	8.77E-06	1.02E-05	9.14E-06	9.61E-06	4.8558E-04
519929.73	4258580	9737.53833	0.28716	0.81393	0.31238	0.77783	4.47E-04	1.18E-05	2.91E-05	1.28E-05	2.67E-05	5.2710E-04
520788.42	4258583.44	9733.13381	0.09504	0.0921	0.09249	0.09513	4.47E-04	3.89E-06	3.29E-06	3.79E-06	3.27E-06	4.6078E-04
520776.55	4258540.86	9730.70751	0.09752	0.09579	0.09451	0.09895	4.46E-04	3.99E-06	3.43E-06	3.87E-06	3.40E-06	4.6111E-04
519969.32	4258482.85	9716.63933	0.2739	1.39181	0.2936	1.28781	4.46E-04	1.12E-05	4.98E-05	1.20E-05	4.42E-05	5.6301E-04
520032.61	4259527.04	9709.45867	5.0545	0.09684	6.84375	0.09507	4.45E-04	2.07E-04	3.46E-06	2.80E-04	3.26E-06	9.3934E-04
520028.69	4258147.84	9706.57336	0.11609	4.03433	0.12203	3.47004	4.45E-04	4.75E-06	1.44E-04	5.00E-06	1.19E-04	7.1850E-04
520018.79	4258171.9	9697.86576	0.11949	3.22835	0.12496	2.84429	4.45E-04	4.89E-06	1.15E-04	5.12E-06	9.76E-05	6.6805E-04
519804.44	4258839.83	9686.40759	0.20935	0.26463	0.21754	0.2591	4.44E-04	8.57E-06	9.47E-06	8.91E-06	8.90E-06	4.8023E-04
520096.91	4258013.95	9683.71756	0.10161	18.0904	0.10328	18.227	4.44E-04	4.16E-06	6.47E-04	4.23E-06	6.26E-04	1.7255E-03
520049.29	4258101.92	9682.97867	0.11046	7.43598	0.11587	5.7418	4.44E-04	4.52E-06	2.66E-04	4.74E-06	1.97E-04	9.1660E-04
520068.12	4259548.21	9682.44278	16.11111	0.09748	25.7271	0.0947	4.44E-04	6.60E-04	3.49E-06	1.05E-03	3.25E-06	2.1640E-03
519818.67	4258802.23	9675.87551	0.21457	0.29765	0.22384	0.29091	4.44E-04	8.79E-06	1.06E-05	9.16E-06	9.99E-06	4.8249E-04
519864.7	4258701.43	9670.97579	0.23769	0.43422	0.25119	0.42223	4.44E-04	9.73E-06	1.55E-05	1.03E-05	1.45E-05	4.9373E-04
520787.45	4258434.29	9662.25981	0.09449	0.09378	0.09179	0.09742	4.43E-04	3.87E-06	3.35E-06	3.76E-06	3.34E-06	4.5761E-04
519995.03	4258241.62	9647.27085	0.1328	2.11694	0.13716	1.93654	4.43E-04	5.44E-06	7.57E-05	5.62E-06	6.65E-05	5.9585E-04
520001.43	4258219.01	9640.99006	0.12758	2.34414	0.13194	2.12809	4.42E-04	5.22E-06	8.38E-05	5.40E-06	7.31E-05	6.0984E-04
519897.12	4258636.77	9635.59389	0.25966	0.57906	0.27838	0.56262	4.42E-04	1.06E-05	2.07E-05	1.14E-05	1.93E-05	5.0412E-04
519887.12	4258655.32	9615.97693	0.25199	0.52789	0.26823	0.51403	4.41E-04	1.03E-05	1.89E-05	1.10E-05	1.76E-05	4.9899E-04
519949.56	4258541.12	9613.25704	0.29479	1.03852	0.31968	0.97966	4.41E-04	1.21E-05	3.71E-05	1.31E-05	3.36E-05	5.3698E-04
520785.55	4258566.75	9610.21114	0.0956	0.09314	0.09292	0.09618	4.41E-04	3.91E-06	3.33E-06	3.80E-06	3.30E-06	4.5525E-04
519842.8	4258745.07	9606.34751	0.22485	0.36324	0.23601	0.35395	4.41E-04	9.21E-06	1.30E-05	9.66E-06	1.22E-05	4.8473E-04
519939.65	4258560.56	9599.20249	0.29083	0.91612	0.31523	0.87023	4.40E-04	1.19E-05	3.28E-05	1.29E-05	2.99E-05	5.2785E-04
520012.18	4258184.61	9594.70575	0.12078	2.84047	0.12577	2.53661	4.40E-04	4.95E-06	1.02E-04	5.15E-06	8.71E-05	6.3897E-04
520078.04	4259558.19	9594.27016	13.29701	0.0971	13.63606	0.09396	4.40E-04	5.44E-04	3.47E-06	5.58E-04	3.23E-06	1.5496E-03
520784.2	4258451.63	9586.0977	0.0953	0.09451	0.09247	0.09812	4.40E-04	3.90E-06	3.38E-06	3.79E-06	3.37E-06	4.5423E-04
520106.76	4257993.98	9584.91434	0.09922	11.8949	0.10029	13.68228	4.40E-04	4.06E-06	4.25E-04	4.11E-06	4.70E-04	1.3431E-03
519877.12	4258673.87	9573.60401	0.24453	0.48377	0.25879	0.47135	4.39E-04	1.00E-05	1.73E-05	1.06E-05	1.62E-05	4.9331E-04
519837.31	4258755.94	9568.23654	0.22156	0.34788	0.23219	0.33923	4.39E-04	9.07E-06	1.24E-05	9.51E-06	1.16E-05	4.8164E-04
520038.4	4259538.26	9565.66084	6.23596	0.09581	9.40905	0.09395	4.39E-04	2.55E-04	3.43E-06	3.85E-04	3.23E-06	1.0861E-03
520778.1	4258487.33	9564.37232	0.09686	0.09581	0.09376	0.09929	4.39E-04	3.97E-06	3.43E-06	3.84E-06	3.41E-06	4.5344E-04
520781.04	4258469.19	9550.27142	0.09609	0.09523	0.09313	0.09878	4.38E-04	3.93E-06	3.41E-06	3.81E-06	3.39E-06	4.5269E-04
520060.29	4258074.04	9546.30997	0.10664	12.44701	0.11111	8.15151	4.38E-04	4.37E-06	4.45E-04	4.55E-06	2.80E-04	1.1719E-03
519858.39	4258710.33	9522.97999	0.23224	0.41387	0.24444	0.40304	4.37E-04	9.51E-06	1.48E-05	1.00E-05	1.38E-05	4.8505E-04
520783.03	4258549.27	9515.25567	0.09607	0.09404	0.09322	0.09711	4.37E-04	3.93E-06	3.36E-06	3.82E-06	3.33E-06	4.5099E-04
520780.1	4258532.72	9511.41173	0.09663	0.09509	0.09364	0.09822	4.36E-04	3.96E-06	3.40E-06	3.83E-06	3.37E-06	4.5093E-04
520019.35	4258161.68	9510.49903	0.11662	3.26852	0.12207	2.87756	4.36E-04	4.77E-06	1.17E-04	5.00E-06	9.88E-05	6.6180E-04
520068.14	4259558.21	9499.75991	15.78501	0.09604	23.91989	0.09332	4.36E-04	6.46E-04	3.44E-06	9.79E-04	3.20E-06	2.0682E-03
520029.13	4258137.67	9499.72082	0.11332	4.06927	0.11917	3.49439	4.36E-04	4.64E-06	1.46E-04	4.88E-06	1.20E-04	7.1087E-04
520002.17	4258208.72	9491.05378	0.1244	2.37366	0.12871	2.15308	4.35E-04	5.09E-06	8.49E-05	5.27E-06	7.39E-05	6.0461E-04
519807.6	4258823.53	9483.97154	0.2073	0.27496	0.21561	0.2691	4.35E-04	8.49E-06	9.83E-06	8.83E-06	9.24E-06	4.7150E-04
519959.44	4258511.99	9474.3596	0.28613	1.19796	0.30903	1.12	4.35E-04	1.17E-05	4.28E-05	1.27E-05	3.85E-05	5.4033E-04
519972.23	4258403	9473.71837	0.20279	1.50523	0.21117	1.39581	4.35E-04	8.30E-06	5.38E-05	8.65E-06	4.79E-05	5.5334E-04
520028.5	4259538.27	9463.30576	4.55887	0.09485	6.01299	0.09318	4.34E-04	1.87E-04	3.39E-06	2.46E-04	3.20E-06	8.7361E-04
520049.32	4258091.92	9453.36662	0.10785	7.42415	0.11308	5.7286	4.34E-04	4.42E-06	2.66E-04	4.63E-06	1.97E-04	9.0497E-04
519972.52	4258378.02	9450.30447	0.18572	1.51985	0.1928	1.41171	4.34E-04	7.60E-06	5.44E-05	7.89E-06	4.85E-05	5.5189E-04
520780.44	4258523.59	9448.97268	0.09649	0.09513	0.09347	0.09829	4.34E-04	3.95E-06	3.40E-06	3.83E-06	3.37E-06	4.4806E-04
520096.94	4258003.95	9444.07918	0.09937	18.1056	0.10094	18.34843	4.33E-04	4.07E-06	6.48E-04	4.13E-06	6.30E-04	1.7190E-03
519909.85	4258609.17	9426.16712	0.26659	0.65977	0.28772	0.63827	4.32E-04	1.09E-05	2.36E-05	1.18E-05	2.19E-05	5.0066E-04
520108.08	4257984.88	9417.26912	0.09751	11.35439	0.09847	13.21272	4.32E-04	3.99E-06	4.06E-04	4.03E-06	4.54E-04	1.2998E-03
519983.51	4258276.34	9414.48667	0.14066	1.78113	0.14545	1.6478	4.32E-04	5.76E-06	6.37E-05	5.96E-06	5.66E-05	5.6391E-04
520078.06	4259568.19	9413.69793	12.92113	0.09567	13.03476	0.0926	4.32E-04	5.29E-04	3.42E-06	5.34E-04	3.18E-06	1.5012E-03
519969.69	4258457.69	9411.29972	0.24709	1.42358	0.26139	1.31703	4.32E-04	1.01E-05	5.09E-05	1.07E-05	4.52E-05	5.4873E-04
520780.79	4258514.46	9407.48737	0.09637	0.09509	0.09332	0.09832	4.32E-04	3.95E-06	3.40E-06	3.82E-06	3.38E-06	4.4614E-04
519821.84	4258785.95	9404.81432	0.212	0.30938	0.22115	0.30232	4.31E-04	8.68E-06	1.11E-05	9.05E-06	1.04E-05	4.7065E-04
520790.88	4258443.29	9394.91741	0.09382	0.09287	0.09112	0.09643	4.31E-04	3.84E-06	3.32E-06	3.73E-06	3.31E-06	4.4523E-04
520038.42	4259548.26	9387.78631	6.40719	0.09441	9.86949	0.09258	4.31E-04	2.62E-04	3.38E-06	4.04E-04	3.18E-06	1.1037E-03
520781.13	4258505.32	9385.85562	0.09625	0.09502	0.09318	0.0983	4.31E-04	3.94E-06	3.40E-06	3.82E-06	3.37E-06	4.4513E-04
520781.47	4258496.19	9383.73054	0.09614	0.09493	0.09307	0.09829	4.31E-04	3.94E-06	3.40E-06	3.81E-06	3.37E-06	4.4502E-04
519830.82	4258764.41	9360.18907	0.21549	0.33297	0.22538	0.32498	4.29E-04	8.82E-06	1.19E-05	9.23E-06	1.12E-05	4.7055E-04
519975.86	4258319.45	9358.35243	0.15549	1.60027	0.16088	1.48798	4.29E-04	6.37E-06	5.72E-05	6.59E-06	5.11E-05	5.5062E-04
519977.1	4258308.95	9348.50648	0.15129	1.62839	0.15653	1.5133	4.29E-04	6.19E-06	5.82E-05	6.41E-06	5.20E-05	5.5169E-04
520789.18	4258558.43	9346.82036	0.09472	0.09246	0.09204	0.09545	4.29E-04	3.88E-06	3.31E-06	3.77E-06	3.28E-06	4.4304E-04
519974.47	4258330.01	9343.13279	0.1598	1.56974	0.16535	1.46035	4.29E-04	6.54E-06	5.61E-05	6.77E-06	5.01E-05	5.4824E-04
519852.02	4258719.08	9338.94971	0.22606	0.395	0.23772	0.38475	4.28E-04	9.26E-06	1.41E-05	9.73E-06	1.32E-05	4.7478E-04
519984.56	4258265.92	9338.34752	0.13697	1.80536	0.14153	1.66929	4.28E-04	5.61E-06	6.46E-05	5.79E-06	5.73E-05	5.6171E-04
520787.65	4258460.69	9337.84691	0.0946	0.09363	0.09177	0.09714	4.28E-04	3.87E-06	3.35E-06	3.76E-06	3.33E-06	4.4272E-04
520002.86	4258198.45	9335.21178	0.12132	2.3922	0.12558	2.16703	4.28E-04	4.97E-06	8.56E-05	5.14E-06	7.44E-05	5.9835E-04
520784.51	4258478.31	9331.38379	0.09538	0.09429	0.09241	0.09773	4.28E-04	3.91E-06	3.37E-06	3.78E-06	3.36E-06	4.4252E-04
520050.47	4258084.01	9330.49645	0.1062	7.74807	0.11126	5.91875	4.28E-04	4.35E-06	2.77E-04	4.56E-06	2.03E-04	9.1730E-04
519919.77	4258589.73	9325.94472	0.27263	0.73527	0.29571	0.70653	4.28E-04	1.12E-05	2.63E-05	1.21E-05	2.43E-05	5.0168E-04
520019.87	4258151.48	9324.93641	0.11385	3.30234	0.11927	2.90367	4.28E-04	4.66E-06	1.18E-04	4.88E-06	9.97E-05	6.5516E-04
520068.16	4259568.21	9322.18872	15.5962	0.09463	22.34603	0.09198	4.28E-04	6.39E-04	3.38E-06	9.15E-04	3.16E-06	1.9877E-03
520060.32	4258064.04	9316.86843	0.10417	12.42092	0.10848	8.11523	4.27E-04	4.27E-06	4.44E-04	4.44E-06	2.79E-04	1.1590E-03
519978.21	4258298.5	9316.75908	0.1472	1.65378	0.15228	1.53609	4.27E-04	6.03E-06	5.92E-05	6.23E-06	5.27E-05	5.5159E-04
520786.56	4258541.19	9289.57364	0.09521	0.09337	0.09237	0.09641	4.26E-04	3.90E-06	3.34E-06	3.78E-06	3.31E-06	4.4052E-04
520028.52	4259548.27	9288.97956	4.65018	0.09347	6.19428	0.09183	4.26E-04	1.90E-04	3.34E-06	2.54E-04	3.15E-06	8.7667E-04
519991.67	4258233.03	9288.29264	0.12811	2.00629	0.13216	1.8425	4.26E-04	5.25E-06	7.18E-05	5.41E-06	6.33E-05	5.7180E-04
519969.8	4258433.17	9286.65983	0.22411	1.44246	0.23461	1.33715	4.26E-04	9.18E-06	5.16E-05	9.61E-06	4.59E-05	5.4234E-04
520009.85	4258175.59	9284.92134	0.11707	2.71117	0.1218	2.43023	4.26E-04	4.79E-06	9.70E-05	4.99E-06	8.34E-05	6.1616E-04
519979.21	4258288.1	9266.24954	0.14324	1.67597	0.14813	1.55614	4.25E-04	5.86E-06	5.99E-05	6.07E-06	5.34E-05	5.5042E-04
519985.51	4258255.54	9242.89527	0.13339	1.82578	0.13772	1.68731	4.24E-04	5.46E-06	6.53E-05	5.64E-06	5.79E-05	5.5838E-04
519810.69	4258807.07	9239.13126	0.20486	0.28565	0.21321	0.27942	4.24E-04	8.39E-06	1.02E-05	8.73E-06	9.59E-06	4.6080E-04
519929.69	4258570.3	9230.2262	0.27779	0.82342	0.30089	0.78623	4.23E-04	1.14E-05	2.95E-05	1.23E-05	2.70E-05	5.0360E-04
519949.52	4258531.42	9226.61256	0.28431	1.04888	0.30744	0.98896	4.23E-04	1.16E-05	3.75E-05	1.26E-05	3.40E-05	5.1900E-04
519800.77	4258831.1	9215.91684	0.20072	0.2645	0.20835	0.25904	4.23E-04	8.22E-06	9.46E-06	8.53E-06	8.89E-06	4.5791E-04
520038.44	4259558.26	9214.92422	6.59381	0.09304	10.38266	0.09125	4.23E-04	2.70E-04	3.33E-06	4.25E-04	3.13E-06	1.1243E-03
519971.77	4258341.11	9212.19228	0.16361	1.51317	0.16924	1.40975	4.23E-04	6.70E-06	5.41E-05	6.93E-06	4.84E-05	5.3879E-04
520096.97	4257993.95	9211.90676	0.0972	18.12302	0.09869	18.37007	4.23E-04	3.98E-06	6.48E-04	4.04E-06	6.31E-04	1.7095E-03
519959.4	4258502.29	9196.64156	0.27507	1.20778	0.29593	1.12923	4.22E-04	1.13E-05	4.32E-05	1.21E-05	3.88E-05	5.2727E-04
520108.11	4257974.88	9191.18774	0.09545	11.34093	0.09632	13.25142	4.22E-04	3.91E-06	4.06E-04	3.94E-06	4.55E-04	1.2901E-03
520003.5	4258188.2	9182.01906	0.11839	2.42265	0.12264	2.19267	4.21E-04	4.85E-06	8.67E-05	5.02E-06	7.53E-05	5.9305E-04
520795.64	4258566.91	9179.07729	0.0933	0.09085	0.09079	0.09378	4.21E-04	3.82E-06	3.25E-06	3.72E-06	3.22E-06	4.3512E-04
520073.53	4259579.43	9176.91376	14.01962	0.09365	15.29984	0.09085	4.21E-04	5.74E-04	3.35E-06	6.26E-04	3.12E-06	1.6279E-03
519887.12	4258646.05	9174.82797	0.24589	0.53331	0.26231	0.51949	4.21E-04	1.01E-05	1.91E-05	1.07E-05	1.78E-05	4.7864E-04
519966.23	4258466.09	9173.17028	0.24986	1.35425	0.26537	1.25654	4.21E-04	1.02E-05	4.84E-05	1.09E-05	4.31E-05	5.3352E-04
519970.5	4258351.62	9172.05425	0.16829	1.48644	0.17415	1.38533	4.21E-04	6.89E-06	5.32E-05	7.13E-06	4.76E-05	5.3554E-04
519939.61	4258550.86	9170.87981	0.28145	0.9259	0.3042	0.87931	4.21E-04	1.15E-05	3.31E-05	1.25E-05	3.02E-05	5.0803E-04
519992.55	4258222.68	9169.81687	0.12493	2.03179	0.12884	1.86413	4.21E-04	5.12E-06	7.27E-05	5.28E-06	6.40E-05	5.6776E-04
519845.6	4258727.71	9156.44241	0.22008	0.3773	0.23109	0.36772	4.20E-04	9.01E-06	1.35E-05	9.46E-06	1.26E-05	4.6467E-04
519968.92	4258386.77	9154.02493	0.18797	1.44673	0.19508	1.34722	4.20E-04	7.70E-06	5.17E-05	7.99E-06	4.63E-05	5.3365E-04
519877.12	4258664.6	9152.52742	0.23879	0.48847	0.25301	0.47652	4.20E-04	9.78E-06	1.75E-05	1.04E-05	1.64E-05	4.7387E-04
519815.06	4258793.63	9150.26747	0.20541	0.29685	0.21388	0.29029	4.20E-04	8.41E-06	1.06E-05	8.76E-06	9.97E-06	4.5755E-04
519986.38	4258245.19	9149.26541	0.13	1.84963	0.13412	1.70791	4.20E-04	5.32E-06	6.62E-05	5.49E-06	5.86E-05	5.5536E-04
519968.57	4258411.89	9144.65833	0.20531	1.43072	0.21379	1.33004	4.20E-04	8.41E-06	5.12E-05	8.75E-06	4.57E-05	5.3354E-04
520794.31	4258452.29	9144.34753	0.09315	0.09201	0.09044	0.09548	4.20E-04	3.81E-06	3.29E-06	3.70E-06	3.28E-06	4.3361E-04
520020.36	4258141.29	9140.88848	0.11118	3.3309	0.11658	2.92466	4.19E-04	4.55E-06	1.19E-04	4.77E-06	1.00E-04	6.4824E-04
520787.99	4258487.44	9134.14999	0.09466	0.09339	0.0917	0.09671	4.19E-04	3.88E-06	3.34E-06	3.75E-06	3.32E-06	4.3335E-04
520028.53	4259558.27	9119.36458	4.75639	0.09212	6.38938	0.09052	4.18E-04	1.95E-04	3.30E-06	2.62E-04	3.11E-06	8.8114E-04
520010.47	4258165.34	9118.70179	0.1143	2.73877	0.11904	2.45173	4.18E-04	4.68E-06	9.80E-05	4.87E-06	8.42E-05	6.1003E-04
520050.5	4258074.01	9115.86746	0.10377	7.73284	0.10865	5.90757	4.18E-04	4.25E-06	2.77E-04	4.45E-06	2.03E-04	9.0632E-04
520791.1	4258469.75	9112.84737	0.09391	0.09274	0.09107	0.09614	4.18E-04	3.85E-06	3.32E-06	3.73E-06	3.30E-06	4.3227E-04
519867.12	4258683.15	9105.61893	0.23174	0.44955	0.24455	0.43844	4.18E-04	9.49E-06	1.61E-05	1.00E-05	1.51E-05	4.6838E-04
520063.63	4259579.45	9088.08683	14.7088	0.09262	29.17623	0.09021	4.17E-04	6.02E-04	3.31E-06	1.19E-03	3.10E-06	2.2202E-03
520098.29	4257984.85	9057.52745	0.09557	16.98966	0.09692	17.78398	4.16E-04	3.91E-06	6.08E-04	3.97E-06	6.11E-04	1.6417E-03
520059.57	4258053.82	9052.75742	0.10151	11.8343	0.10573	7.79413	4.15E-04	4.16E-06	4.23E-04	4.33E-06	2.68E-04	1.1147E-03
520038.45	4259568.26	9046.83487	6.78536	0.09171	10.95257	0.08995	4.15E-04	2.78E-04	3.28E-06	4.48E-04	3.09E-06	1.1477E-03
519993.36	4258212.35	9044.7432	0.12186	2.05745	0.12567	1.88502	4.15E-04	4.99E-06	7.36E-05	5.15E-06	6.47E-05	5.6340E-04
519899.89	4258618.91	9025.0365	0.25304	0.60311	0.2717	0.58573	4.14E-04	1.04E-05	2.16E-05	1.11E-05	2.01E-05	4.7722E-04
520790.44	4258523.96	9024.35512	0.09424	0.09274	0.09138	0.09577	4.14E-04	3.86E-06	3.32E-06	3.74E-06	3.29E-06	4.2823E-04
520073.55	4259589.43	9008.68365	13.47585	0.09231	14.54239	0.08957	4.13E-04	5.52E-04	3.30E-06	5.95E-04	3.08E-06	1.5669E-03
519966.38	4258441.47	9000.30575	0.22666	1.37529	0.23782	1.27769	4.13E-04	9.28E-06	4.92E-05	9.74E-06	4.39E-05	5.2499E-04
519803.9	4258814.74	8989.96271	0.19854	0.27457	0.20624	0.26877	4.12E-04	8.13E-06	9.82E-06	8.44E-06	9.23E-06	4.4806E-04
520790.78	4258514.83	8984.51318	0.09414	0.0927	0.09124	0.09578	4.12E-04	3.85E-06	3.32E-06	3.74E-06	3.29E-06	4.2639E-04
519959.36	4258492.59	8982.68706	0.26474	1.21761	0.28385	1.13808	4.12E-04	1.08E-05	4.36E-05	1.16E-05	3.91E-05	5.1719E-04
519839.13	4258736.23	8976.09505	0.21431	0.36067	0.22456	0.35181	4.12E-04	8.77E-06	1.29E-05	9.19E-06	1.21E-05	4.5475E-04
519962.78	4258474.49	8970.95114	0.25243	1.28892	0.26905	1.19979	4.12E-04	1.03E-05	4.61E-05	1.10E-05	4.12E-05	5.2021E-04
520108.14	4257964.88	8964.35861	0.09342	11.34151	0.09424	13.27536	4.11E-04	3.82E-06	4.06E-04	3.86E-06	4.56E-04	1.2804E-03
520791.12	4258505.7	8963.18617	0.09403	0.09262	0.09111	0.09576	4.11E-04	3.85E-06	3.31E-06	3.73E-06	3.29E-06	4.2539E-04
519860.91	4258692.29	8960.72871	0.22586	0.42876	0.23823	0.41796	4.11E-04	9.25E-06	1.53E-05	9.75E-06	1.43E-05	4.5979E-04
520791.46	4258496.57	8960.48903	0.09393	0.09255	0.09101	0.09575	4.11E-04	3.85E-06	3.31E-06	3.73E-06	3.29E-06	4.2526E-04
520028.55	4259568.27	8954.55006	4.86811	0.09081	6.60112	0.08924	4.11E-04	1.99E-04	3.25E-06	2.70E-04	3.06E-06	8.8673E-04
520011.05	4258155.12	8953.39691	0.11164	2.76509	0.11639	2.47229	4.11E-04	4.57E-06	9.89E-05	4.77E-06	8.49E-05	6.0388E-04
519909.81	4258599.47	8944.34895	0.25907	0.6676	0.27963	0.64511	4.10E-04	1.06E-05	2.39E-05	1.14E-05	2.21E-05	4.7843E-04
519833.53	4258746.84	8940.22306	0.21103	0.3457	0.22077	0.3374	4.10E-04	8.64E-06	1.24E-05	9.04E-06	1.16E-05	4.5179E-04
520063.65	4259589.45	8922.5916	14.4781	0.0913	26.94141	0.08894	4.09E-04	5.93E-04	3.27E-06	1.10E-03	3.05E-06	2.1116E-03
519994.11	4258202.06	8914.47694	0.11891	2.07672	0.12263	1.90169	4.09E-04	4.87E-06	7.43E-05	5.02E-06	6.53E-05	5.5844E-04
520797.74	4258461.3	8911.78299	0.09246	0.09122	0.08975	0.09457	4.09E-04	3.79E-06	3.26E-06	3.67E-06	3.25E-06	4.2283E-04
520794.56	4258478.82	8907.95756	0.0932	0.09189	0.09037	0.09517	4.09E-04	3.82E-06	3.29E-06	3.70E-06	3.27E-06	4.2275E-04
520050.53	4258064.01	8902.56692	0.10141	7.72122	0.10615	5.88472	4.08E-04	4.15E-06	2.76E-04	4.35E-06	2.02E-04	8.9514E-04
519949.48	4258521.73	8900.89283	0.27425	1.05857	0.29563	0.99771	4.08E-04	1.12E-05	3.79E-05	1.21E-05	3.43E-05	5.0380E-04
520796.45	4258541.79	8885.13853	0.09301	0.09106	0.09032	0.09397	4.08E-04	3.81E-06	3.26E-06	3.70E-06	3.23E-06	4.2162E-04
519974.63	4258280.01	8863.91661	0.13745	1.57454	0.14195	1.4677	4.07E-04	5.63E-06	5.63E-05	5.81E-06	5.04E-05	5.2481E-04
519818.2	4258777.3	8860.20399	0.20274	0.3082	0.21119	0.30131	4.06E-04	8.30E-06	1.10E-05	8.65E-06	1.03E-05	4.4481E-04
519965.32	4258395.52	8855.13286	0.19021	1.37884	0.19736	1.28693	4.06E-04	7.79E-06	4.93E-05	8.08E-06	4.42E-05	5.1563E-04
519919.73	4258580.04	8853.01449	0.26442	0.74371	0.28585	0.71401	4.06E-04	1.08E-05	2.66E-05	1.17E-05	2.45E-05	4.7980E-04
520073.56	4259599.43	8845.02578	13.07194	0.091	13.84045	0.08832	4.06E-04	5.35E-04	3.25E-06	5.67E-04	3.03E-06	1.5140E-03
520059.61	4258043.82	8843.50032	0.09925	11.81149	0.10333	7.76919	4.06E-04	4.06E-06	4.22E-04	4.23E-06	2.67E-04	1.1032E-03
520098.32	4257974.85	8843.1843	0.09356	16.98425	0.09482	17.83434	4.06E-04	3.83E-06	6.08E-04	3.88E-06	6.12E-04	1.6332E-03
519965.5	4258370.84	8831.42814	0.17497	1.38821	0.18107	1.29801	4.05E-04	7.16E-06	4.97E-05	7.41E-06	4.46E-05	5.1396E-04
519964.92	4258420.77	8827.45443	0.20778	1.36154	0.2165	1.26858	4.05E-04	8.51E-06	4.87E-05	8.86E-06	4.36E-05	5.1461E-04
519854.63	4258701.27	8825.564	0.22049	0.4092	0.23204	0.39907	4.05E-04	9.03E-06	1.46E-05	9.50E-06	1.37E-05	4.5177E-04
520033.93	4259579.5	8822.99983	5.95768	0.08984	8.87668	0.08821	4.05E-04	2.44E-04	3.21E-06	3.63E-04	3.03E-06	1.0184E-03
519975.76	4258269.55	8815.39873	0.13396	1.59552	0.13829	1.4868	4.04E-04	5.48E-06	5.71E-05	5.66E-06	5.10E-05	5.2369E-04
519982.71	4258236.72	8808.59411	0.1254	1.75547	0.12925	1.6264	4.04E-04	5.13E-06	6.28E-05	5.29E-06	5.58E-05	5.3317E-04
519959.32	4258482.89	8801.03942	0.25473	1.22719	0.2722	1.1463	4.04E-04	1.04E-05	4.39E-05	1.11E-05	3.94E-05	5.0860E-04
520011.6	4258144.9	8789.42364	0.10908	2.79117	0.11384	2.49159	4.03E-04	4.47E-06	9.98E-05	4.66E-06	8.55E-05	5.9774E-04
519994.81	4258191.78	8780.81851	0.11607	2.09722	0.11973	1.91837	4.03E-04	4.75E-06	7.50E-05	4.90E-06	6.59E-05	5.5338E-04
519929.65	4258560.6	8778.5465	0.26869	0.83179	0.28974	0.79415	4.03E-04	1.10E-05	2.98E-05	1.19E-05	2.73E-05	4.8262E-04
519827.08	4258755.38	8765.42683	0.20555	0.3311	0.21461	0.32341	4.02E-04	8.42E-06	1.18E-05	8.79E-06	1.11E-05	4.4229E-04
520063.66	4259599.45	8761.68017	14.19236	0.09002	24.9672	0.0877	4.02E-04	5.81E-04	3.22E-06	1.02E-03	3.01E-06	2.0116E-03
519887.12	4258636.77	8759.89005	0.24012	0.53865	0.2565	0.52481	4.02E-04	9.83E-06	1.93E-05	1.05E-05	1.80E-05	4.5950E-04
519968.41	4258312.53	8757.96979	0.14757	1.44984	0.15225	1.35662	4.02E-04	6.04E-06	5.19E-05	6.23E-06	4.66E-05	5.1251E-04
519939.57	4258541.16	8756.39624	0.27158	0.9346	0.29264	0.88749	4.02E-04	1.11E-05	3.34E-05	1.20E-05	3.05E-05	4.8873E-04
519969.61	4258302.05	8752.73214	0.14375	1.4742	0.14834	1.37828	4.02E-04	5.89E-06	5.27E-05	6.07E-06	4.73E-05	5.1357E-04
519797.1	4258822.37	8750.09706	0.19248	0.26416	0.19956	0.25876	4.01E-04	7.88E-06	9.45E-06	8.17E-06	8.88E-06	4.3582E-04
519877.12	4258655.32	8748.40032	0.23328	0.49313	0.24762	0.48145	4.01E-04	9.55E-06	1.76E-05	1.01E-05	1.65E-05	4.5522E-04
520108.17	4257954.88	8748.21794	0.09148	11.33367	0.09224	13.29763	4.01E-04	3.75E-06	4.05E-04	3.78E-06	4.57E-04	1.2708E-03
519976.79	4258259.14	8744.64003	0.13055	1.61333	0.13469	1.50286	4.01E-04	5.35E-06	5.77E-05	5.51E-06	5.16E-05	5.2135E-04
519967.08	4258323.07	8742.57837	0.1515	1.42495	0.1563	1.33387	4.01E-04	6.20E-06	5.10E-05	6.40E-06	4.58E-05	5.1046E-04
520001.59	4258169.01	8737.8633	0.11206	2.3344	0.11607	2.11718	4.01E-04	4.59E-06	8.35E-05	4.75E-06	7.27E-05	5.6640E-04
520024.03	4259579.51	8733.98286	4.34388	0.08899	5.70676	0.08751	4.01E-04	1.78E-04	3.18E-06	2.34E-04	3.00E-06	8.1840E-04
519806.97	4258798.23	8728.61323	0.19608	0.2848	0.2037	0.27874	4.00E-04	8.03E-06	1.02E-05	8.34E-06	9.57E-06	4.3658E-04
519970.69	4258291.62	8727.98354	0.14001	1.4953	0.1445	1.39727	4.00E-04	5.73E-06	5.35E-05	5.92E-06	4.80E-05	5.1353E-04
520798.01	4258487.88	8725.62464	0.0925	0.09105	0.08968	0.09422	4.00E-04	3.79E-06	3.26E-06	3.67E-06	3.23E-06	4.1427E-04
519867.12	4258673.87	8720.07195	0.22658	0.45368	0.2392	0.44317	4.00E-04	9.28E-06	1.62E-05	9.79E-06	1.52E-05	4.5057E-04
519983.67	4258226.34	8715.09671	0.12236	1.77951	0.12603	1.64661	4.00E-04	5.01E-06	6.37E-05	5.16E-06	5.65E-05	5.3018E-04
520802.86	4258550.38	8706.58068	0.09164	0.08952	0.08912	0.09235	3.99E-04	3.75E-06	3.20E-06	3.65E-06	3.17E-06	4.1321E-04
520801.16	4258470.3	8702.653	0.09178	0.09039	0.08907	0.09364	3.99E-04	3.76E-06	3.23E-06	3.65E-06	3.21E-06	4.1311E-04
519965.59	4258333.67	8702.088	0.15549	1.39713	0.16042	1.30851	3.99E-04	6.37E-06	5.00E-05	6.57E-06	4.49E-05	5.0707E-04
520073.58	4259609.43	8686.03294	12.69509	0.08972	13.16367	0.0871	3.98E-04	5.20E-04	3.21E-06	5.39E-04	2.99E-06	1.4635E-03

520800.09	4258533.47	8685.76217	0.09218	0.09037	0.0895	0.09325	3.98E-04	3.77E-06	3.23E-06	3.66E-06	3.20E-06	4.1236E-04
519848.29	4258710.1	8675.83386	0.21495	0.3909	0.22589	0.38128	3.98E-04	8.80E-06	1.40E-05	9.25E-06	1.31E-05	4.4315E-04
519977.73	4258248.76	8674.66154	0.12731	1.63443	0.13127	1.52116	3.98E-04	5.21E-06	5.85E-05	5.37E-06	5.22E-05	5.1925E-04
520033.94	4259589.5	8665.97333	6.10968	0.08858	9.29212	0.08698	3.98E-04	2.50E-04	3.17E-06	3.80E-04	2.99E-06	1.0343E-03
520049.79	4258053.79	8659.7136	0.09886	7.48118	0.10351	5.70835	3.97E-04	4.05E-06	2.68E-04	4.24E-06	1.96E-04	8.6914E-04
520059.64	4258033.82	8643.83059	0.09709	11.78613	0.10102	7.76828	3.97E-04	3.98E-06	4.22E-04	4.14E-06	2.67E-04	1.0929E-03
519811.44	4258785.04	8635.90186	0.1967	0.29577	0.20449	0.28938	3.96E-04	8.05E-06	1.06E-05	8.37E-06	9.93E-06	4.3314E-04
520098.35	4257964.85	8630.39604	0.09159	17.00253	0.0928	17.84891	3.96E-04	3.75E-06	6.08E-04	3.80E-06	6.13E-04	1.6244E-03
520800.43	4258524.34	8628.65184	0.09207	0.09043	0.08935	0.09333	3.96E-04	3.77E-06	3.23E-06	3.66E-06	3.20E-06	4.0973E-04
519984.55	4258215.99	8613.38912	0.11942	1.80161	0.12294	1.66492	3.95E-04	4.89E-06	6.44E-05	5.03E-06	5.72E-05	5.2669E-04
519949.44	4258512.03	8612.49906	0.26443	1.06738	0.28406	1.00591	3.95E-04	1.08E-05	3.82E-05	1.16E-05	3.45E-05	4.9029E-04
520063.68	4259609.45	8605.38064	13.80921	0.08876	23.1832	0.0865	3.95E-04	5.65E-04	3.17E-06	9.49E-04	2.97E-06	1.9156E-03
519963.34	4258344.59	8593.14387	0.15927	1.35759	0.16433	1.27261	3.94E-04	6.52E-06	4.86E-05	6.73E-06	4.37E-05	4.9974E-04
520002.23	4258158.76	8591.90534	0.1095	2.35647	0.11352	2.13449	3.94E-04	4.48E-06	8.43E-05	4.65E-06	7.33E-05	5.6088E-04
520800.77	4258515.21	8589.32955	0.09197	0.09041	0.08922	0.09336	3.94E-04	3.77E-06	3.23E-06	3.65E-06	3.21E-06	4.0792E-04
519899.85	4258609.21	8582.40452	0.24638	0.6095	0.26454	0.59174	3.94E-04	1.01E-05	2.18E-05	1.08E-05	2.03E-05	4.5678E-04
520024.04	4259589.51	8579.86585	4.41989	0.08775	5.86682	0.0863	3.94E-04	1.81E-04	3.14E-06	2.40E-04	2.96E-06	8.2091E-04
520801.11	4258506.07	8568.50003	0.09188	0.09034	0.08911	0.09334	3.93E-04	3.76E-06	3.23E-06	3.65E-06	3.20E-06	4.0695E-04
520801.46	4258496.94	8564.78883	0.09179	0.09026	0.08901	0.09331	3.93E-04	3.76E-06	3.23E-06	3.64E-06	3.20E-06	4.0677E-04
519961.94	4258379.47	8562.15274	0.1769	1.32553	0.18298	1.24218	3.93E-04	7.24E-06	4.74E-05	7.49E-06	4.26E-05	4.9761E-04
519961.72	4258404.27	8557.80579	0.19238	1.31535	0.1996	1.23018	3.93E-04	7.88E-06	4.70E-05	8.17E-06	4.22E-05	4.9795E-04
520108.2	4257944.88	8540.73115	0.0896	11.32107	0.09032	13.32047	3.92E-04	3.67E-06	4.05E-04	3.70E-06	4.57E-04	1.2614E-03
520073.6	4259619.43	8531.6094	12.22302	0.08848	12.508	0.08591	3.91E-04	5.00E-04	3.16E-06	5.12E-04	2.95E-06	1.4101E-03
519841.9	4258718.8	8529.83704	0.20969	0.37372	0.21988	0.36474	3.91E-04	8.59E-06	1.34E-05	9.00E-06	1.25E-05	4.3481E-04
519961.26	4258429.66	8527.47625	0.21018	1.2967	0.21936	1.21071	3.91E-04	8.61E-06	4.64E-05	8.98E-06	4.16E-05	4.9676E-04
519959.56	4258458.05	8515.8988	0.23155	1.25234	0.24464	1.16925	3.91E-04	9.48E-06	4.48E-05	1.00E-05	4.01E-05	4.9513E-04
520033.96	4259599.5	8513.27595	6.27546	0.08736	9.75832	0.08579	3.91E-04	2.57E-04	3.12E-06	4.00E-04	2.95E-06	1.0531E-03
520804.59	4258479.31	8513.18824	0.0911	0.08958	0.0884	0.09272	3.91E-04	3.73E-06	3.20E-06	3.62E-06	3.18E-06	4.0431E-04
519800.21	4258805.95	8506.61892	0.19026	0.27384	0.19731	0.26817	3.90E-04	7.79E-06	9.79E-06	8.08E-06	9.21E-06	4.2514E-04
519985.37	4258205.66	8505.2372	0.11658	1.82032	0.11996	1.68085	3.90E-04	4.77E-06	6.51E-05	4.91E-06	5.77E-05	5.2270E-04
520806.47	4258542.11	8500.1315	0.09084	0.08878	0.0883	0.09157	3.90E-04	3.72E-06	3.18E-06	3.62E-06	3.14E-06	4.0362E-04
519909.77	4258589.78	8498.54102	0.25168	0.67561	0.27152	0.65171	3.90E-04	1.03E-05	2.42E-05	1.11E-05	2.24E-05	4.5786E-04
519991.95	4258182.97	8492.74386	0.11246	2.00103	0.11588	1.83563	3.90E-04	4.60E-06	7.16E-05	4.74E-06	6.30E-05	5.3357E-04
520049.82	4258043.79	8466.39703	0.0967	7.46664	0.10121	5.69014	3.88E-04	3.96E-06	2.67E-04	4.14E-06	1.95E-04	8.5894E-04
520063.7	4259619.45	8453.44406	15.30187	0.08754	21.59285	0.08532	3.88E-04	6.27E-04	3.13E-06	8.84E-04	2.93E-06	1.9045E-03
520059.67	4258023.82	8453.28413	0.09503	11.7595	0.09879	7.78925	3.88E-04	3.89E-06	4.21E-04	4.04E-06	2.67E-04	1.0838E-03
520002.83	4258148.52	8445.72991	0.10702	2.37794	0.11107	2.15133	3.87E-04	4.38E-06	8.51E-05	4.55E-06	7.39E-05	5.5532E-04
520024.06	4259599.51	8429.9877	4.50212	0.08655	6.03702	0.08512	3.87E-04	1.84E-04	3.10E-06	2.47E-04	2.92E-06	8.2429E-04
520098.38	4257954.85	8429.70678	0.08972	16.99525	0.09085	17.89593	3.87E-04	3.67E-06	6.08E-04	3.72E-06	6.14E-04	1.6164E-03
519919.69	4258570.34	8423.22993	0.25631	0.75176	0.27599	0.72115	3.86E-04	1.05E-05	2.69E-05	1.13E-05	2.48E-05	4.5988E-04
519939.52	4258531.47	8413.37607	0.26239	0.94297	0.28203	0.89516	3.86E-04	1.07E-05	3.37E-05	1.15E-05	3.07E-05	4.7274E-04
519986.13	4258195.36	8391.78156	0.11384	1.83219	0.11709	1.69148	3.85E-04	4.66E-06	6.55E-05	4.79E-06	5.81E-05	5.1806E-04
519929.61	4258550.9	8380.75071	0.25984	0.8394	0.27918	0.80155	3.84E-04	1.06E-05	3.00E-05	1.14E-05	2.75E-05	4.6410E-04
519835.46	4258727.38	8379.70208	0.20448	0.35756	0.21394	0.34922	3.84E-04	8.37E-06	1.28E-05	8.76E-06	1.20E-05	4.2635E-04
519949.4	4258502.33	8372.37702	0.25504	1.07563	0.27306	1.01368	3.84E-04	1.04E-05	3.85E-05	1.12E-05	3.48E-05	4.7901E-04
519992.7	4258172.68	8367.20354	0.1099	2.01927	0.11328	1.85054	3.84E-04	4.50E-06	7.22E-05	4.64E-06	6.35E-05	5.2877E-04
519877.12	4258646.05	8364.76888	0.228	0.4978	0.24248	0.48617	3.84E-04	9.34E-06	1.78E-05	9.93E-06	1.67E-05	4.3752E-04
520033.98	4259609.5	8364.72698	6.42369	0.08616	10.26254	0.08462	3.84E-04	2.63E-04	3.08E-06	4.20E-04	2.91E-06	1.0729E-03
520070.31	4259629.84	8350.57319	12.64934	0.08693	13.73692	0.08452	3.83E-04	5.18E-04	3.11E-06	5.62E-04	2.90E-06	1.4695E-03
519867.12	4258664.6	8348.60193	0.22158	0.45773	0.23426	0.44762	3.83E-04	9.07E-06	1.64E-05	9.59E-06	1.54E-05	4.3342E-04
519973.75	4258240.42	8348.25058	0.12277	1.54942	0.12646	1.4464	3.83E-04	5.03E-06	5.54E-05	5.18E-06	4.97E-05	4.9828E-04
519829.76	4258737.74	8345.33736	0.20125	0.343	0.21017	0.33515	3.83E-04	8.24E-06	1.23E-05	8.61E-06	1.15E-05	4.2349E-04
520808.02	4258488.31	8343.84675	0.09041	0.08877	0.08773	0.0918	3.83E-04	3.70E-06	3.18E-06	3.59E-06	3.15E-06	3.9642E-04
519965.74	4258283.67	8341.81323	0.13429	1.4027	0.13834	1.31575	3.83E-04	5.50E-06	5.02E-05	5.66E-06	4.52E-05	4.8921E-04
520108.23	4257934.88	8341.03208	0.0878	11.30504	0.08846	13.32766	3.83E-04	3.59E-06	4.04E-04	3.62E-06	4.58E-04	1.2518E-03
519814.56	4258768.65	8336.43542	0.19406	0.30658	0.2018	0.29994	3.82E-04	7.95E-06	1.10E-05	8.26E-06	1.03E-05	4.1993E-04
519966.96	4258273.18	8317.23167	0.13101	1.42308	0.13498	1.33445	3.82E-04	5.36E-06	5.09E-05	5.53E-06	4.58E-05	4.8918E-04
519857.12	4258683.15	8313.33045	0.21515	0.42278	0.22661	0.41327	3.81E-04	8.81E-06	1.51E-05	9.28E-06	1.42E-05	4.2880E-04
519958.39	4258388.1	8301.57092	0.1789	1.26814	0.18499	1.19031	3.81E-04	7.32E-06	4.54E-05	7.57E-06	4.09E-05	4.8198E-04
519958.46	4258363.67	8293.29343	0.16532	1.27523	0.17057	1.19846	3.80E-04	6.77E-06	4.56E-05	6.98E-06	4.11E-05	4.8099E-04
519793.42	4258813.64	8291.55989	0.18463	0.26353	0.19115	0.25822	3.80E-04	7.56E-06	9.43E-06	7.83E-06	8.86E-06	4.1408E-04
520024.08	4259609.51	8284.14679	4.57352	0.08537	6.21031	0.08397	3.80E-04	1.87E-04	3.05E-06	2.54E-04	2.88E-06	8.2753E-04
520049.85	4258033.79	8280.59908	0.09463	7.45115	0.099	5.67487	3.80E-04	3.87E-06	2.67E-04	4.05E-06	1.95E-04	8.4917E-04
519968.07	4258262.74	8277.73503	0.12781	1.44114	0.13167	1.35084	3.80E-04	5.23E-06	5.15E-05	5.39E-06	4.64E-05	4.8831E-04
519974.78	4258230.01	8277.19192	0.11987	1.57246	0.1234	1.46573	3.80E-04	4.91E-06	5.62E-05	5.05E-06	5.03E-05	4.9627E-04
520060.41	4259629.86	8274.43994	14.2798	0.086	25.60142	0.08393	3.80E-04	5.85E-04	3.08E-06	1.05E-03	2.88E-06	2.0185E-03
519958.12	4258413.02	8267.84038	0.1945	1.25572	0.2019	1.17667	3.79E-04	7.96E-06	4.49E-05	8.27E-06	4.04E-05	4.8085E-04
520059.7	4258013.82	8262.04532	0.093	11.73031	0.09665	7.73232	3.79E-04	3.81E-06	4.20E-04	3.96E-06	2.65E-04	1.0718E-03
520810.42	4258524.71	8257.98298	0.08997	0.0881	0.08738	0.09089	3.79E-04	3.68E-06	3.15E-06	3.58E-06	3.12E-06	3.9239E-04
519957.6	4258438.55	8252.09557	0.21251	1.23575	0.22243	1.15629	3.79E-04	8.70E-06	4.42E-05	9.11E-06	3.97E-05	4.8030E-04
519993.41	4258162.4	8239.99635	0.10742	2.03771	0.1108	1.86525	3.78E-04	4.40E-06	7.29E-05	4.54E-06	6.40E-05	5.2389E-04
519889.89	4258618.95	8235.40739	0.23443	0.5597	0.25066	0.54512	3.78E-04	9.60E-06	2.00E-05	1.03E-05	1.87E-05	4.3642E-04
520098.41	4257944.85	8234.79901	0.0879	16.98183	0.08897	17.9227	3.78E-04	3.60E-06	6.07E-04	3.64E-06	6.15E-04	1.6078E-03
519803.25	4258789.38	8230.10061	0.18775	0.28367	0.19473	0.27778	3.78E-04	7.69E-06	1.01E-05	7.97E-06	9.54E-06	4.1292E-04
519969.08	4258252.33	8225.20857	0.1247	1.45875	0.12845	1.36647	3.77E-04	5.11E-06	5.22E-05	5.26E-06	4.69E-05	4.8681E-04
519961.01	4258305.6	8221.48515	0.14033	1.32253	0.14438	1.24371	3.77E-04	5.75E-06	4.73E-05	5.91E-06	4.27E-05	4.7885E-04
520033.99	4259619.5	8220.1895	6.4907	0.085	10.75897	0.08349	3.77E-04	2.66E-04	3.04E-06	4.41E-04	2.87E-06	1.0893E-03
520810.77	4258515.58	8219.78912	0.08988	0.08813	0.08726	0.09095	3.77E-04	3.68E-06	3.15E-06	3.57E-06	3.12E-06	3.9064E-04
519962.16	4258295.14	8218.2439	0.13682	1.34204	0.1408	1.26124	3.77E-04	5.60E-06	4.80E-05	5.76E-06	4.33E-05	4.7971E-04
519959.73	4258316.12	8205.40008	0.14391	1.30057	0.14803	1.22383	3.76E-04	5.89E-06	4.65E-05	6.06E-06	4.20E-05	4.7694E-04
520070.33	4259639.84	8204.8411	12.85691	0.08573	13.08477	0.08338	3.76E-04	5.26E-04	3.07E-06	5.36E-04	2.86E-06	1.4445E-03
520811.11	4258506.45	8198.90697	0.0898	0.08809	0.08716	0.09096	3.76E-04	3.68E-06	3.15E-06	3.57E-06	3.12E-06	3.8967E-04
519823.33	4258746.35	8198.42087	0.19626	0.32873	0.20456	0.32142	3.76E-04	8.04E-06	1.18E-05	8.38E-06	1.10E-05	4.1533E-04
519975.74	4258219.63	8197.1414	0.11705	1.59166	0.12042	1.48204	3.76E-04	4.79E-06	5.69E-05	4.93E-06	5.09E-05	4.9360E-04
520811.45	4258497.32	8194.78395	0.08972	0.08801	0.08708	0.09093	3.76E-04	3.67E-06	3.15E-06	3.57E-06	3.12E-06	3.8947E-04
519850.88	4258692.21	8181.65504	0.20967	0.40393	0.22076	0.39458	3.75E-04	8.58E-06	1.44E-05	9.04E-06	1.35E-05	4.2098E-04
519949.36	4258492.63	8180.97518	0.2462	1.08384	0.26284	1.02119	3.75E-04	1.01E-05	3.88E-05	1.08E-05	3.51E-05	4.7000E-04
519899.81	4258599.52	8172.26441	0.23984	0.61622	0.25753	0.59761	3.75E-04	9.82E-06	2.20E-05	1.05E-05	2.05E-05	4.3785E-04
519958.3	4258326.69	8167.12555	0.14755	1.27765	0.15179	1.20282	3.75E-04	6.04E-06	4.57E-05	6.21E-06	4.13E-05	4.7394E-04
519952.73	4258474.64	8153.56106	0.23579	1.1422	0.25062	1.07252	3.74E-04	9.65E-06	4.09E-05	1.03E-05	3.68E-05	4.7166E-04
520108.26	4257924.88	8149.80056	0.08606	11.28447	0.08667	13.35796	3.74E-04	3.52E-06	4.04E-04	3.55E-06	4.59E-04	1.2432E-03
520024.09	4259619.51	8142.1185	4.62133	0.08423	6.37637	0.08284	3.74E-04	1.89E-04	3.01E-06	2.61E-04	2.84E-06	8.2969E-04
519807.83	4258776.44	8138.62067	0.18849	0.29434	0.19566	0.28816	3.73E-04	7.72E-06	1.05E-05	8.01E-06	9.89E-06	4.0953E-04
519939.48	4258521.77	8134.10583	0.25381	0.9512	0.27213	0.90258	3.73E-04	1.04E-05	3.40E-05	1.11E-05	3.10E-05	4.5972E-04
520060.43	4259639.86	8131.62282	13.87968	0.08485	23.71832	0.08282	3.73E-04	5.68E-04	3.03E-06	9.71E-04	2.84E-06	1.9184E-03
519983	4258186.67	8113.86371	0.11027	1.74587	0.1133	1.61567	3.72E-04	4.51E-06	6.24E-05	4.64E-06	5.55E-05	4.9932E-04
519994.07	4258152.14	8111.30278	0.10504	2.05493	0.10842	1.87871	3.72E-04	4.30E-06	7.35E-05	4.44E-06	6.45E-05	5.1887E-04
519976.62	4258209.27	8109.26556	0.11432	1.60981	0.11753	1.49711	3.72E-04	4.68E-06	5.76E-05	4.81E-06	5.14E-05	4.9051E-04
519956.71	4258337.34	8106.90069	0.15126	1.25289	0.15565	1.18009	3.72E-04	6.19E-06	4.48E-05	6.37E-06	4.05E-05	4.6982E-04
520049.88	4258023.79	8100.21619	0.09263	7.43587	0.09686	5.65535	3.72E-04	3.79E-06	2.66E-04	3.97E-06	1.94E-04	8.3950E-04
519909.73	4258580.08	8098.02581	0.24457	0.68274	0.26295	0.6581	3.72E-04	1.00E-05	2.44E-05	1.08E-05	2.26E-05	4.3932E-04
520059.73	4258003.82	8083.33495	0.09108	11.7036	0.09459	7.74149	3.71E-04	3.73E-06	4.19E-04	3.87E-06	2.66E-04	1.0628E-03
519844.57	4258701.11	8064.82291	0.20482	0.38622	0.21513	0.37741	3.70E-04	8.39E-06	1.38E-05	8.81E-06	1.30E-05	4.1396E-04
520070.34	4259649.84	8063.69044	12.27416	0.08458	12.35062	0.08228	3.70E-04	5.03E-04	3.03E-06	5.06E-04	2.82E-06	1.3840E-03
520030.71	4259629.91	8048.6814	5.86285	0.08356	9.18232	0.08212	3.69E-04	2.40E-04	2.99E-06	3.76E-04	2.82E-06	9.9108E-04
520098.45	4257934.85	8048.01104	0.08615	16.94831	0.08716	17.92595	3.69E-04	3.53E-06	6.06E-04	3.57E-06	6.15E-04	1.5980E-03
519954.95	4258372.2	8045.71418	0.167	1.22088	0.17221	1.14975	3.69E-04	6.84E-06	4.37E-05	7.05E-06	3.95E-05	4.6615E-04
519919.65	4258560.64	8038.41786	0.24843	0.75874	0.26635	0.72786	3.69E-04	1.02E-05	2.71E-05	1.09E-05	2.50E-05	4.4199E-04
519796.51	4258797.17	8034.27281	0.18239	0.27282	0.18885	0.2673	3.69E-04	7.47E-06	9.76E-06	7.73E-06	9.18E-06	4.0273E-04
519954.84	4258396.74	8031.60228	0.18081	1.21359	0.18695	1.14104	3.68E-04	7.40E-06	4.34E-05	7.65E-06	3.92E-05	4.6611E-04
519929.57	4258541.21	8023.32854	0.25123	0.84654	0.26917	0.80842	3.68E-04	1.03E-05	3.03E-05	1.10E-05	2.78E-05	4.4744E-04
519949.32	4258482.94	8016.58202	0.23757	1.09177	0.25292	1.02821	3.68E-04	9.73E-06	3.91E-05	1.04E-05	3.53E-05	4.6222E-04
519977.44	4258198.95	8015.20808	0.11169	1.62338	0.11474	1.50909	3.68E-04	4.57E-06	5.81E-05	4.70E-06	5.18E-05	4.8687E-04
519983.82	4258176.34	8007.46689	0.10781	1.76759	0.11077	1.63371	3.67E-04	4.41E-06	6.32E-05	4.54E-06	5.61E-05	4.9563E-04
519953.95	4258447.43	8006.95622	0.21481	1.17847	0.22567	1.1053	3.67E-04	8.80E-06	4.22E-05	9.24E-06	3.79E-05	4.6548E-04
519877.12	4258636.77	8003.58857	0.22294	0.50246	0.23739	0.49075	3.67E-04	9.13E-06	1.80E-05	9.72E-06	1.68E-05	4.2086E-04
519867.12	4258655.32	7994.92981	0.21679	0.46177	0.22959	0.45188	3.67E-04	8.88E-06	1.65E-05	9.40E-06	1.55E-05	4.1710E-04
520060.44	4259649.86	7992.87876	13.05629	0.08373	21.94417	0.08174	3.67E-04	5.35E-04	2.99E-06	8.98E-04	2.81E-06	1.8056E-03
519954.52	4258421.77	7991.54412	0.19657	1.19975	0.20437	1.12622	3.67E-04	8.05E-06	4.29E-05	8.37E-06	3.87E-05	4.6463E-04
519857.12	4258673.87	7973.62767	0.21071	0.42632	0.22204	0.41739	3.66E-04	8.63E-06	1.52E-05	9.09E-06	1.43E-05	4.1311E-04
520020.81	4259629.93	7972.99576	4.24324	0.08281	5.71165	0.08149	3.66E-04	1.74E-04	2.96E-06	2.34E-04	2.80E-06	7.7914E-04
520108.3	4257914.88	7968.49903	0.08439	11.25308	0.08494	13.39592	3.66E-04	3.46E-06	4.03E-04	3.48E-06	4.60E-04	1.2349E-03
519838.21	4258709.89	7946.3763	0.2001	0.3696	0.20963	0.36135	3.65E-04	8.19E-06	1.32E-05	8.58E-06	1.24E-05	4.0697E-04
520049.91	4258013.79	7927.9075	0.09071	7.41896	0.09481	5.64438	3.64E-04	3.71E-06	2.65E-04	3.88E-06	1.94E-04	8.3046E-04
520070.36	4259659.84	7926.21375	11.86413	0.08345	11.62687	0.08121	3.64E-04	4.86E-04	2.98E-06	4.76E-04	2.79E-06	1.3312E-03
520059.76	4257993.82	7912.71333	0.08923	11.66949	0.09261	7.75046	3.63E-04	3.65E-06	4.17E-04	3.79E-06	2.66E-04	1.0539E-03
520030.72	4259639.91	7912.45533	5.9885	0.08245	9.58054	0.08104	3.63E-04	2.45E-04	2.95E-06	3.92E-04	2.78E-06	1.0062E-03
519964.79	4258244.12	7906.64665	0.1202	1.37871	0.12364	1.29528	3.63E-04	4.92E-06	4.93E-05	5.06E-06	4.45E-05	4.6651E-04
519984.59	4258166.04	7897.80866	0.10543	1.78349	0.10832	1.64656	3.62E-04	4.32E-06	6.38E-05	4.44E-06	5.65E-05	4.9141E-04
519939.44	4258512.07	7883.60014	0.24539	0.95867	0.26234	0.90951	3.62E-04	1.00E-05	3.43E-05	1.07E-05	3.12E-05	4.4799E-04
520098.48	4257924.85	7867.78037	0.08447	16.91475	0.08541	17.93534	3.61E-04	3.46E-06	6.05E-04	3.50E-06	6.16E-04	1.5887E-03
520060.46	4259659.86	7857.18692	13.14081	0.08261	20.70183	0.08066	3.60E-04	5.38E-04	2.95E-06	8.48E-04	2.77E-06	1.7519E-03
519965.9	4258233.67	7857.09264	0.11744	1.39963	0.12079	1.31331	3.60E-04	4.81E-06	5.01E-05	4.95E-06	4.51E-05	4.6537E-04
519889.85	4258609.26	7856.80545	0.2286	0.56521	0.24442	0.5503	3.60E-04	9.36E-06	2.02E-05	1.00E-05	1.89E-05	4.1893E-04
519956.86	4258287.34	7849.49494	0.13118	1.25864	0.1347	1.18681	3.60E-04	5.37E-06	4.50E-05	5.52E-06	4.07E-05	4.5677E-04
519958.16	4258276.81	7844.80856	0.12809	1.27695	0.13157	1.20384	3.60E-04	5.24E-06	4.57E-05	5.39E-06	4.13E-05	4.5754E-04
519789.75	4258804.91	7843.97199	0.1772	0.26261	0.18317	0.25743	3.60E-04	7.26E-06	9.39E-06	7.50E-06	8.84E-06	3.9285E-04
520020.82	4259639.93	7839.19433	4.29381	0.08172	5.83053	0.08042	3.60E-04	1.76E-04	2.92E-06	2.39E-04	2.76E-06	7.7986E-04
519810.93	4258760	7833.77852	0.18588	0.30467	0.19304	0.29829	3.59E-04	7.61E-06	1.09E-05	7.90E-06	1.02E-05	3.9605E-04
519959.35	4258266.34	7825.49647	0.12507	1.29399	0.12852	1.21943	3.59E-04	5.12E-06	4.63E-05	5.26E-06	4.19E-05	4.5755E-04
519831.79	4258718.53	7819.44011	0.19532	0.35394	0.20415	0.34619	3.59E-04	8.00E-06	1.27E-05	8.36E-06	1.19E-05	3.9964E-04
519951.44	4258380.73	7803.98326	0.16871	1.17077	0.1739	1.10426	3.58E-04	6.91E-06	4.19E-05	7.12E-06	3.79E-05	4.5185E-04
519951.42	4258356.51	7801.20926	0.1565	1.17549	0.16101	1.10988	3.58E-04	6.41E-06	4.20E-05	6.59E-06	3.81E-05	4.5105E-04
520061.08	4257984.72	7796.95998	0.08786	12.57583	0.09107	8.08682	3.58E-04	3.60E-06	4.50E-04	3.73E-06	2.78E-04	1.0925E-03
519966.93	4258223.26	7796.65888	0.11475	1.41792	0.11798	1.32869	3.58E-04	4.70E-06	5.07E-05	4.83E-06	4.56E-05	4.6356E-04
519899.77	4258589.82	7793.46269	0.23338	0.62311	0.25044	0.60332	3.58E-04	9.56E-06	2.23E-05	1.03E-05	2.07E-05	4.2036E-04
520070.38	4259669.84	7792.58681	11.1891	0.08236	10.84525	0.08016	3.58E-04	4.58E-04	2.95E-06	4.44E-04	2.75E-06	1.2654E-03
519960.43	4258255.9	7792.53952	0.12213	1.31109	0.12553	1.23445	3.58E-04	5.00E-06	4.69E-05	5.14E-06	4.24E-05	4.5692E-04
519950.29	4258456.32	7792.36118	0.21693	1.12379	0.22869	1.05701	3.57E-04	8.88E-06	4.02E-05	9.36E-06	3.63E-05	4.5223E-04
519825.99	4258728.64	7787.3185	0.1922	0.33975	0.20035	0.33249	3.57E-04	7.87E-06	1.22E-05	8.20E-06	1.14E-05	3.9691E-04
519985.31	4258155.76	7785.7848	0.10312	1.80024	0.10599	1.65983	3.57E-04	4.22E-06	6.44E-05	4.34E-06	5.70E-05	4.8713E-04
520108.33	4257904.88	7783.40837	0.08273	11.23977	0.08327	13.25046	3.57E-04	3.39E-06	4.02E-04	3.41E-06	4.55E-04	1.2208E-03
520030.74	4259649.91	7780.00179	6.03792	0.08137	9.934	0.07998	3.57E-04	2.47E-04	2.91E-06	4.07E-04	2.75E-06	1.0165E-03
519951.29	4258405.37	7766.60492	0.18267	1.16219	0.18898	1.09438	3.56E-04	7.48E-06	4.16E-05	7.74E-06	3.76E-05	4.5067E-04
520049.94	4258003.79	7761.59397	0.08887	7.40107	0.09284	5.63382	3.56E-04	3.64E-06	2.65E-04	3.80E-06	1.93E-04	8.2167E-04
519799.53	4258780.53	7748.2589	0.17989	0.28224	0.18631	0.27654	3.55E-04	7.37E-06	1.01E-05	7.63E-06	9.49E-06	3.9006E-04
519953.63	4258298.66	7737.57791	0.13366	1.21182	0.13712	1.14443	3.55E-04	5.47E-06	4.33E-05	5.61E-06	3.93E-05	4.4871E-04
519950.92	4258430.52	7734.64818	0.1986	1.14697	0.20704	1.07866	3.55E-04	8.13E-06	4.10E-05	8.48E-06	3.70E-05	4.4952E-04
519909.69	4258570.38	7731.21979	0.23749	0.68968	0.25443	0.66422	3.55E-04	9.72E-06	2.47E-05	1.04E-05	2.28E-05	4.2231E-04
519967.88	4258212.88	7727.58763	0.11213	1.43406	0.11522	1.3423	3.55E-04	4.59E-06	5.13E-05	4.72E-06	4.61E-05	4.6121E-04
520060.48	4259669.86	7725.79757	12.12741	0.08154	19.12624	0.07963	3.54E-04	4.97E-04	2.92E-06	7.83E-04	2.73E-06	1.6397E-03
519974.05	4258190.36	7722.25991	0.108	1.52912	0.11082	1.42444	3.54E-04	4.42E-06	5.47E-05	4.54E-06	4.89E-05	4.6684E-04
519952.4	4258309.15	7721.77481	0.13694	1.19316	0.14047	1.12766	3.54E-04	5.61E-06	4.27E-05	5.75E-06	3.87E-05	4.4701E-04
519929.52	4258531.51	7719.39321	0.24316	0.85345	0.25995	0.81488	3.54E-04	9.96E-06	3.05E-05	1.06E-05	2.80E-05	4.3325E-04
520020.84	4259649.93	7708.9769	4.31628	0.08065	5.93093	0.07937	3.54E-04	1.77E-04	2.88E-06	2.43E-04	2.72E-06	7.7885E-04
519919.61	4258550.94	7697.40646	0.24077	0.7652	0.25729	0.73418	3.53E-04	9.86E-06	2.74E-05	1.05E-05	2.52E-05	4.2611E-04
520098.51	4257914.85	7693.83434	0.08284	16.87668	0.08372	17.95734	3.53E-04	3.39E-06	6.04E-04	3.43E-06	6.16E-04	1.5799E-03
519951.04	4258319.7	7684.04633	0.14026	1.17342	0.1439	1.10967	3.53E-04	5.74E-06	4.20E-05	5.89E-06	3.81E-05	4.4423E-04
519939.4	4258502.37	7668.27757	0.23729	0.9656	0.25292	0.91605	3.52E-04	9.72E-06	3.45E-05	1.04E-05	3.14E-05	4.3786E-04
519819.59	4258737.33	7662.52603	0.18759	0.32592	0.19525	0.31905	3.52E-04	7.68E-06	1.17E-05	7.99E-06	1.10E-05	3.8983E-04
520070.39	4259679.84	7662.32317	10.52234	0.08129	10.00378	0.07913	3.52E-04	4.31E-04	2.91E-06	4.10E-04	2.72E-06	1.1976E-03
519867.12	4258646.05	7661.28698	0.2122	0.46582	0.22506	0.45598	3.51E-04	8.69E-06	1.67E-05	9.21E-06	1.57E-05	4.0170E-04
519804.21	4258767.85	7660.49919	0.18075	0.29259	0.18736	0.28665	3.51E-04	7.40E-06	1.05E-05	7.67E-06	9.84E-06	3.8683E-04
519974.94	4258180.01	7658.5557	0.1058	1.56121	0.10852	1.45342	3.51E-04	4.33E-06	5.58E-05	4.44E-06	4.99E-05	4.6587E-04
519968.76	4258202.53	7651.31122	0.1096	1.4482	0.11255	1.35428	3.51E-04	4.49E-06	5.18E-05	4.61E-06	4.65E-05	4.5842E-04
520030.76	4259659.91	7651.00781	6.06363	0.08031	10.24065	0.07895	3.51E-04	2.48E-04	2.87E-06	4.19E-04	2.71E-06	1.0242E-03
519857.12	4258664.6	7646.8962	0.20636	0.42983	0.21776	0.42125	3.51E-04	8.45E-06	1.54E-05	8.92E-06	1.45E-05	3.9803E-04
520061.11	4257974.72	7631.2623	0.08611	12.54583	0.0892	8.05195	3.50E-04	3.53E-06	4.49E-04	3.65E-06	2.76E-04	1.0825E-03
519949.53	4258330.31	7627.02844	0.14364	1.15244	0.14741	1.0905	3.50E-04	5.88E-06	4.12E-05	6.04E-06	3.74E-05	4.4049E-04
519847.12	4258683.15	7620.73307	0.20052	0.39828	0.21079	0.39019	3.50E-04	8.21E-06	1.42E-05	8.63E-06	1.34E-05	3.9411E-04
519946.63	4258465.21	7610.14057	0.2189	1.07228	0.23141	1.01154	3.49E-04	8.96E-06	3.84E-05	9.47E-06	3.47E-05	4.4066E-04
520108.36	4257894.88	7608.95571	0.08115	11.22094	0.08165	13.16284	3.49E-04	3.32E-06	4.01E-04	3.34E-06	4.52E-04	1.2090E-03
520049.97	4257993.79	7602.31309	0.0871	7.382	0.09093	5.62298	3.49E-04	3.57E-06	2.64E-04	3.72E-06	1.93E-04	8.1315E-04
520060.49	4259679.86	7597.18093	11.82832	0.08047	17.78204	0.0786	3.49E-04	4.84E-04	2.88E-06	7.28E-04	2.70E-06	1.5665E-03
520020.86	4259659.93	7582.09208	4.32531	0.07961	6.0043	0.07836	3.48E-04	1.77E-04	2.85E-06	2.46E-04	2.69E-06	7.7633E-04
519792.81	4258788.38	7576.41436	0.17495	0.27149	0.18087	0.26616	3.48E-04	7.16E-06	9.71E-06	7.41E-06	9.14E-06	3.8101E-04
519947.95	4258364.96	7575.64737	0.15798	1.12808	0.16243	1.0671	3.48E-04	6.47E-06	4.03E-05	6.65E-06	3.66E-05	4.3766E-04
519975.77	4258169.68	7565.19276	0.1035	1.57506	0.10611	1.4647	3.47E-04	4.24E-06	5.63E-05	4.34E-06	5.03E-05	4.6228E-04
519947.93	4258389.26	7557.3393	0.17037	1.12329	0.1756	1.06103	3.47E-04	6.98E-06	4.02E-05	7.19E-06	3.64E-05	4.3749E-04
519879.89	4258618.99	7547.71766	0.21791	0.52116	0.23232	0.50866	3.46E-04	8.92E-06	1.86E-05	9.51E-06	1.75E-05	4.0081E-04

520070.41	4259689.84	7535.60043	9.66126	0.08024	9.07552	0.07812	3.46E-04	3.96E-04	2.87E-06	3.72E-04	2.68E-06	1.1184E-03
520030.77	4259669.91	7525.25702	6.06188	0.07928	10.48165	0.07794	3.45E-04	2.48E-04	2.84E-06	4.29E-04	2.68E-06	1.0281E-03
520098.54	4257904.85	7523.51768	0.08125	16.84107	0.08209	17.7278	3.45E-04	3.33E-06	6.02E-04	3.36E-06	6.09E-04	1.5628E-03
519947.74	4258414	7506.52562	0.18441	1.11297	0.19106	1.04985	3.44E-04	7.55E-06	3.98E-05	7.82E-06	3.60E-05	4.3561E-04
519889.81	4258599.56	7504.24501	0.22283	0.57104	0.23829	0.55536	3.44E-04	9.12E-06	2.04E-05	9.76E-06	1.91E-05	4.0265E-04
520051.29	4257984.69	7500.62366	0.08581	7.75292	0.08947	5.82602	3.44E-04	3.51E-06	2.77E-04	3.66E-06	2.00E-04	8.2861E-04
519840.84	4258692.13	7500.25121	0.19542	0.38111	0.20537	0.37308	3.44E-04	8.00E-06	1.36E-05	8.41E-06	1.28E-05	3.8695E-04
519947.32	4258439.27	7498.61926	0.20054	1.09675	0.20978	1.03369	3.44E-04	8.21E-06	3.92E-05	8.59E-06	3.55E-05	4.3554E-04
519939.36	4258492.68	7490.50484	0.22961	0.97239	0.24409	0.92238	3.44E-04	9.40E-06	3.48E-05	9.99E-06	3.17E-05	4.2949E-04
519955.83	4258247.82	7488.45771	0.11769	1.23952	0.12078	1.17013	3.44E-04	4.82E-06	4.43E-05	4.95E-06	4.02E-05	4.3783E-04
520060.51	4259689.86	7472.35959	12.35362	0.07944	15.97227	0.07761	3.43E-04	5.06E-04	2.84E-06	6.54E-04	2.66E-06	1.5081E-03
519929.48	4258521.81	7472.04466	0.23573	0.86039	0.25149	0.82117	3.43E-04	9.65E-06	3.08E-05	1.03E-05	2.82E-05	4.2172E-04
519976.54	4258159.37	7468.49598	0.10127	1.59187	0.1038	1.47802	3.43E-04	4.15E-06	5.69E-05	4.25E-06	5.07E-05	4.5872E-04
520061.14	4257964.73	7465.92086	0.08439	12.53169	0.0874	7.96796	3.43E-04	3.46E-06	4.48E-04	3.58E-06	2.74E-04	1.0713E-03
519942.98	4258474.09	7460.44872	0.22066	1.02424	0.23374	0.96883	3.42E-04	9.03E-06	3.66E-05	9.57E-06	3.33E-05	4.3077E-04
520020.87	4259669.93	7458.42197	4.30148	0.0786	6.02906	0.07736	3.42E-04	1.76E-04	2.81E-06	2.47E-04	2.66E-06	7.7062E-04
519957.02	4258237.34	7455.10803	0.11505	1.25354	0.11809	1.18289	3.42E-04	4.71E-06	4.48E-05	4.84E-06	4.06E-05	4.3702E-04
520108.39	4257884.88	7452.15466	0.07968	11.1791	0.0801	13.45922	3.42E-04	3.26E-06	4.00E-04	3.28E-06	4.62E-04	1.2104E-03
519899.73	4258580.12	7447.23844	0.2271	0.62933	0.243	0.60876	3.42E-04	9.30E-06	2.25E-05	9.95E-06	2.09E-05	4.0432E-04
519958.12	4258226.9	7412.3993	0.11249	1.2724	0.11549	1.19867	3.40E-04	4.61E-06	4.55E-05	4.73E-06	4.12E-05	4.3606E-04
520070.43	4259699.84	7412.1206	8.76311	0.07921	8.11911	0.07714	3.40E-04	3.59E-04	2.83E-06	3.32E-04	2.65E-06	1.0368E-03
519786.08	4258796.19	7409.45156	0.17016	0.26143	0.17565	0.2564	3.40E-04	6.97E-06	9.35E-06	7.19E-06	8.80E-06	3.7224E-04
519834.51	4258700.97	7405.26362	0.1912	0.36503	0.20028	0.35754	3.40E-04	7.83E-06	1.31E-05	8.20E-06	1.23E-05	3.8110E-04
520030.79	4259679.91	7402.81775	6.02065	0.07827	10.63062	0.07696	3.40E-04	2.47E-04	2.80E-06	4.35E-04	2.64E-06	1.0268E-03
519909.65	4258560.68	7400.9787	0.23062	0.69562	0.24607	0.66997	3.40E-04	9.44E-06	2.49E-05	1.01E-05	2.30E-05	4.0694E-04
519949.36	4258280.45	7398.30495	0.1252	1.15315	0.12818	1.09189	3.39E-04	5.13E-06	4.12E-05	5.25E-06	3.75E-05	4.2853E-04
519919.57	4258541.25	7397.17552	0.2334	0.7713	0.24881	0.74008	3.39E-04	9.56E-06	2.76E-05	1.02E-05	2.54E-05	4.1211E-04
519950.63	4258269.94	7396.27518	0.12236	1.16845	0.12531	1.10609	3.39E-04	5.01E-06	4.18E-05	5.13E-06	3.80E-05	4.2923E-04
519965.1	4258194.05	7392.99394	0.10614	1.37479	0.10887	1.28937	3.39E-04	4.35E-06	4.92E-05	4.46E-06	4.43E-05	4.4142E-04
519947.98	4258291	7385.58057	0.12809	1.13611	0.13112	1.07611	3.39E-04	5.24E-06	4.06E-05	5.37E-06	3.69E-05	4.2703E-04
519951.78	4258259.47	7380.21868	0.11957	1.1828	0.12251	1.11917	3.39E-04	4.90E-06	4.23E-05	5.02E-06	3.84E-05	4.2923E-04
520098.57	4257894.85	7360.38047	0.07972	16.80408	0.08051	17.65778	3.38E-04	3.26E-06	6.01E-04	3.30E-06	6.06E-04	1.5515E-03
519959.13	4258216.49	7359.86411	0.10999	1.28683	0.11291	1.21096	3.38E-04	4.50E-06	4.60E-05	4.62E-06	4.16E-05	4.3438E-04
519944.48	4258373.4	7355.07039	0.1595	1.08467	0.16392	1.02734	3.37E-04	6.53E-06	3.88E-05	6.71E-06	3.53E-05	4.2475E-04
519807.29	4258751.35	7354.38277	0.1782	0.30238	0.18484	0.29631	3.37E-04	7.30E-06	1.08E-05	7.57E-06	1.02E-05	3.7326E-04
520060.53	4259699.86	7350.70615	11.03371	0.07844	13.78763	0.07663	3.37E-04	4.52E-04	2.81E-06	5.65E-04	2.63E-06	1.3590E-03
519867.12	4258636.77	7348.19059	0.20777	0.46984	0.22054	0.45997	3.37E-04	8.51E-06	1.68E-05	9.03E-06	1.58E-05	3.8725E-04
520051.32	4257974.69	7341.8536	0.08411	7.74161	0.08768	5.7963	3.37E-04	3.44E-06	2.77E-04	3.59E-06	1.99E-04	8.1976E-04
519944.17	4258349.89	7341.14922	0.14851	1.08414	0.15236	1.02808	3.37E-04	6.08E-06	3.88E-05	6.24E-06	3.53E-05	4.2319E-04
519939.32	4258482.98	7339.40504	0.22212	0.97896	0.23557	0.92837	3.37E-04	9.09E-06	3.50E-05	9.65E-06	3.19E-05	4.2235E-04
520020.89	4259679.93	7337.93586	4.26608	0.07761	6.00125	0.07639	3.37E-04	1.75E-04	2.78E-06	2.46E-04	2.62E-06	7.6244E-04
519857.12	4258655.32	7337.49849	0.20217	0.43335	0.21366	0.42495	3.37E-04	8.28E-06	1.55E-05	8.75E-06	1.46E-05	3.8375E-04
519966.06	4258183.67	7320.35955	0.10385	1.38871	0.10644	1.30093	3.36E-04	4.25E-06	4.97E-05	4.36E-06	4.47E-05	4.3879E-04
519847.12	4258673.87	7319.09416	0.19661	0.40136	0.20686	0.39375	3.36E-04	8.05E-06	1.44E-05	8.47E-06	1.35E-05	3.8018E-04
519944.42	4258397.79	7313.99113	0.17201	1.07845	0.17738	1.02	3.36E-04	7.04E-06	3.86E-05	7.26E-06	3.50E-05	4.2345E-04
520061.17	4257954.73	7310.8214	0.08276	12.51636	0.08567	7.92699	3.35E-04	3.39E-06	4.48E-04	3.51E-06	2.72E-04	1.0621E-03
519828.13	4258709.69	7300.58246	0.18686	0.34987	0.19522	0.34282	3.35E-04	7.65E-06	1.25E-05	7.99E-06	1.18E-05	3.7486E-04
519960.07	4258206.12	7299.85257	0.10757	1.29919	0.11038	1.22165	3.35E-04	4.40E-06	4.65E-05	4.52E-06	4.19E-05	4.3224E-04
519943.72	4258448.02	7295.5875	0.20244	1.04922	0.21248	0.99127	3.35E-04	8.29E-06	3.75E-05	8.70E-06	3.40E-05	4.2326E-04
520108.42	4257874.88	7294.95778	0.07823	11.14128	0.07859	13.46663	3.35E-04	3.20E-06	3.99E-04	3.22E-06	4.62E-04	1.2019E-03
520070.44	4259709.84	7291.81665	7.8666	0.07821	7.16082	0.07618	3.35E-04	3.22E-04	2.80E-06	2.93E-04	2.62E-06	9.5523E-04
519795.81	4258771.68	7286.06244	0.1725	0.28047	0.1784	0.275	3.34E-04	7.06E-06	1.00E-05	7.30E-06	9.44E-06	3.6811E-04
519945.11	4258302.18	7285.52685	0.13054	1.0999	0.13356	1.04325	3.34E-04	5.34E-06	3.93E-05	5.47E-06	3.58E-05	4.2022E-04
520030.81	4259689.91	7283.4377	5.95256	0.07728	10.62462	0.07599	3.34E-04	2.44E-04	2.76E-06	4.35E-04	2.61E-06	1.0183E-03
519944.18	4258422.63	7265.33986	0.18617	1.06677	0.19338	1.0079	3.33E-04	7.62E-06	3.82E-05	7.92E-06	3.46E-05	4.2162E-04
519822.21	4258719.55	7263.2403	0.18372	0.33605	0.19137	0.32941	3.33E-04	7.52E-06	1.20E-05	7.84E-06	1.13E-05	3.7191E-04
519929.44	4258512.11	7250.41231	0.22846	0.86679	0.24314	0.82706	3.33E-04	9.35E-06	3.10E-05	9.96E-06	2.84E-05	4.1134E-04
519943.8	4258312.7	7245.5484	0.13354	1.08136	0.13665	1.02675	3.32E-04	5.47E-06	3.87E-05	5.60E-06	3.52E-05	4.1740E-04
519966.95	4258173.32	7242.70025	0.10164	1.40442	0.10411	1.31378	3.32E-04	4.16E-06	5.02E-05	4.26E-06	4.51E-05	4.3604E-04
520060.54	4259709.86	7232.0975	9.57358	0.07745	11.39704	0.07568	3.32E-04	3.92E-04	2.77E-06	4.67E-04	2.60E-06	1.1958E-03
519879.85	4258609.3	7223.1348	0.21279	0.52594	0.22682	0.51317	3.31E-04	8.71E-06	1.88E-05	9.29E-06	1.76E-05	3.8581E-04
520020.91	4259689.93	7220.32485	4.23336	0.07662	5.89534	0.07543	3.31E-04	1.73E-04	2.74E-06	2.41E-04	2.59E-06	7.5130E-04
520098.6	4257884.85	7205.4782	0.07825	16.76329	0.07899	17.90194	3.31E-04	3.20E-06	6.00E-04	3.23E-06	6.15E-04	1.5512E-03
519800.59	4258759.26	7203.83546	0.17346	0.29053	0.17957	0.28486	3.30E-04	7.10E-06	1.04E-05	7.35E-06	9.78E-06	3.6512E-04
519942.36	4258323.29	7193.9934	0.13665	1.06376	0.13987	1.01069	3.30E-04	5.60E-06	3.80E-05	5.73E-06	3.47E-05	4.1412E-04
520051.35	4257964.69	7188.96235	0.08247	7.73221	0.08594	5.754	3.30E-04	3.38E-06	2.77E-04	3.52E-06	1.98E-04	8.1082E-04
519889.77	4258589.86	7179.15401	0.21716	0.57694	0.23205	0.56028	3.29E-04	8.89E-06	2.06E-05	9.50E-06	1.92E-05	3.8763E-04
520070.46	4259719.84	7174.61957	7.01039	0.07723	6.10521	0.07524	3.29E-04	2.87E-04	2.76E-06	2.50E-04	2.58E-06	8.7151E-04
520030.82	4259699.91	7167.03323	5.803	0.07632	10.28282	0.07505	3.29E-04	2.38E-04	2.73E-06	4.21E-04	2.58E-06	9.9274E-04
520061.2	4257944.73	7161.83804	0.08119	12.50865	0.08399	7.89996	3.29E-04	3.32E-06	4.47E-04	3.44E-06	2.71E-04	1.0540E-03
519967.78	4258162.99	7160.47962	0.09949	1.41739	0.10184	1.32414	3.29E-04	4.07E-06	5.07E-05	4.17E-06	4.55E-05	4.3291E-04
519815.84	4258728.3	7158.04355	0.17948	0.32266	0.18665	0.3163	3.28E-04	7.35E-06	1.15E-05	7.64E-06	1.09E-05	3.6579E-04
520108.45	4257864.88	7139.47084	0.0768	11.12303	0.07713	13.48321	3.28E-04	3.14E-06	3.98E-04	3.16E-06	4.63E-04	1.1946E-03
519789.12	4258779.6	7136.56743	0.16794	0.26993	0.1734	0.26478	3.27E-04	6.88E-06	9.66E-06	7.10E-06	9.09E-06	3.6013E-04
519899.69	4258570.42	7132.0117	0.2209	0.63516	0.2355	0.61399	3.27E-04	9.04E-06	2.27E-05	9.64E-06	2.11E-05	3.8969E-04
519941	4258381.84	7128.48	0.16095	1.04298	0.1654	0.98911	3.27E-04	6.59E-06	3.73E-05	6.77E-06	3.40E-05	4.1167E-04
519919.52	4258531.55	7128.30961	0.22634	0.77709	0.24082	0.74557	3.27E-04	9.27E-06	2.78E-05	9.86E-06	2.56E-05	3.9955E-04
519940.51	4258358.78	7126.60966	0.14992	1.04099	0.15371	0.98862	3.27E-04	6.14E-06	3.72E-05	6.29E-06	3.39E-05	4.1056E-04
519940.12	4258456.77	7117.77234	0.20417	1.00401	0.21488	0.95107	3.27E-04	8.36E-06	3.59E-05	8.80E-06	3.27E-05	4.1227E-04
520060.56	4259719.86	7116.51655	9.41125	0.07647	8.79644	0.07474	3.26E-04	3.85E-04	2.74E-06	3.60E-04	2.57E-06	1.0773E-03
519909.61	4258550.99	7106.01266	0.22393	0.70103	0.23817	0.67534	3.26E-04	9.17E-06	2.51E-05	9.75E-06	2.32E-05	3.9319E-04
520020.92	4259699.93	7105.73378	4.13191	0.07567	5.67516	0.07449	3.26E-04	1.69E-04	2.71E-06	2.32E-04	2.56E-06	7.3280E-04
519946.87	4258251.51	7089.2089	0.11519	1.11977	0.11782	1.06127	3.25E-04	4.72E-06	4.01E-05	4.82E-06	3.64E-05	4.1127E-04
519940.91	4258406.32	7078.23637	0.17362	1.03602	0.17933	0.98108	3.25E-04	7.11E-06	3.71E-05	7.34E-06	3.37E-05	4.0993E-04
519948.14	4258241	7071.80097	0.1127	1.13203	0.11533	1.07291	3.24E-04	4.61E-06	4.05E-05	4.72E-06	3.68E-05	4.1110E-04
520070.48	4259729.84	7060.3235	6.05315	0.07624	5.06903	0.0743	3.24E-04	2.48E-04	2.73E-06	2.08E-04	2.55E-06	7.8458E-04
519929.4	4258502.42	7057.31073	0.22143	0.87268	0.23503	0.8326	3.24E-04	9.07E-06	3.12E-05	9.62E-06	2.86E-05	4.0226E-04
520030.84	4259709.91	7053.6341	5.5637	0.07537	9.42302	0.07413	3.24E-04	2.28E-04	2.70E-06	3.86E-04	2.54E-06	9.4247E-04
520098.63	4257874.85	7052.88558	0.07682	16.73272	0.07751	17.80573	3.24E-04	3.15E-06	5.99E-04	3.17E-06	6.11E-04	1.5397E-03
519956.16	4258197.75	7052.29513	0.10416	1.23749	0.10677	1.16579	3.24E-04	4.26E-06	4.43E-05	4.37E-06	4.00E-05	4.1647E-04
519940.63	4258431.27	7049.6439	0.18794	1.02314	0.19587	0.96837	3.23E-04	7.70E-06	3.66E-05	8.02E-06	3.32E-05	4.0898E-04
519857.12	4258646.05	7047.08079	0.19814	0.43687	0.20964	0.42852	3.23E-04	8.11E-06	1.56E-05	8.58E-06	1.47E-05	3.7034E-04
520051.38	4257954.69	7044.25264	0.0809	7.72073	0.08427	5.72403	3.23E-04	3.31E-06	2.76E-04	3.45E-06	1.97E-04	8.0261E-04
519949.3	4258230.54	7043.99405	0.11027	1.14736	0.11291	1.08615	3.23E-04	4.51E-06	4.10E-05	4.62E-06	3.73E-05	4.1063E-04
519847.12	4258664.6	7031.70107	0.1928	0.40443	0.20313	0.39711	3.23E-04	7.89E-06	1.45E-05	8.32E-06	1.36E-05	3.6691E-04
520061.23	4257934.73	7022.27566	0.07969	12.49498	0.08238	7.88064	3.22E-04	3.26E-06	4.47E-04	3.37E-06	2.71E-04	1.0463E-03
519837.12	4258683.15	7011.43725	0.18749	0.37582	0.19676	0.36895	3.22E-04	7.68E-06	1.34E-05	8.06E-06	1.27E-05	3.6351E-04
519950.38	4258220.1	7007.04133	0.10788	1.16161	0.11052	1.09815	3.21E-04	4.42E-06	4.15E-05	4.53E-06	3.77E-05	4.0966E-04
520060.58	4259729.86	7003.96195	7.60776	0.07552	6.63057	0.07382	3.21E-04	3.11E-04	2.70E-06	2.71E-04	2.53E-06	9.0954E-04
520020.94	4259709.93	6994.13656	3.97908	0.07474	5.34059	0.07358	3.21E-04	1.63E-04	2.67E-06	2.19E-04	2.53E-06	7.0766E-04
519957.17	4258187.34	6993.89141	0.10196	1.24977	0.10446	1.17621	3.21E-04	4.17E-06	4.47E-05	4.28E-06	4.04E-05	4.1440E-04
519782.41	4258787.46	6989.80186	0.1635	0.25999	0.16855	0.25514	3.21E-04	6.69E-06	9.30E-06	6.90E-06	8.76E-06	3.5233E-04
519941.9	4258273.54	6989.53392	0.11966	1.06072	0.12216	1.00792	3.21E-04	4.90E-06	3.79E-05	5.00E-06	3.46E-05	4.0311E-04
519943.13	4258263.04	6988.77989	0.11703	1.07344	0.11951	1.01965	3.21E-04	4.79E-06	3.84E-05	4.89E-06	3.50E-05	4.0372E-04
520108.48	4257854.88	6988.40894	0.07542	11.11171	0.07571	13.5012	3.21E-04	3.09E-06	3.97E-04	3.10E-06	4.64E-04	1.1878E-03
519940.57	4258284.08	6977.16028	0.12234	1.04669	0.12489	0.9949	3.20E-04	5.01E-06	3.74E-05	5.11E-06	3.42E-05	4.0182E-04
519936.52	4258465.52	6968.46208	0.2057	0.96133	0.2169	0.91301	3.20E-04	8.42E-06	3.44E-05	8.88E-06	3.13E-05	4.0273E-04
519951.39	4258209.7	6962.04122	0.10556	1.17329	0.10816	1.10827	3.19E-04	4.32E-06	4.20E-05	4.43E-06	3.80E-05	4.0817E-04
519869.89	4258619.04	6955.69117	0.20335	0.48636	0.21606	0.47583	3.19E-04	8.33E-06	1.74E-05	8.85E-06	1.63E-05	3.7002E-04
519939.1	4258294.67	6949.12788	0.12504	1.03102	0.12766	0.98038	3.19E-04	5.12E-06	3.69E-05	5.23E-06	3.37E-05	3.9969E-04
520030.86	4259719.91	6943.07596	5.23477	0.07445	7.69295	0.07323	3.19E-04	2.14E-04	2.66E-06	3.15E-04	2.51E-06	8.5303E-04
519937.14	4258342.72	6933.04035	0.14107	1.00503	0.14433	0.9568	3.18E-04	5.78E-06	3.59E-05	5.91E-06	3.28E-05	3.9856E-04
519958.12	4258176.96	6930.01766	0.09983	1.26058	0.10221	1.18524	3.18E-04	4.09E-06	4.51E-05	4.18E-06	4.07E-05	4.1199E-04
519879.81	4258599.6	6920.93133	0.20772	0.53092	0.2214	0.51755	3.18E-04	8.50E-06	1.90E-05	9.07E-06	1.78E-05	3.7185E-04
519936.85	4258367.66	6908.22123	0.15133	1.00057	0.15508	0.95139	3.17E-04	6.20E-06	3.58E-05	6.35E-06	3.27E-05	3.9793E-04
520098.66	4257864.85	6906.06529	0.07543	16.70805	0.07608	17.80475	3.17E-04	3.09E-06	5.98E-04	3.12E-06	6.11E-04	1.5319E-03
520051.41	4257944.69	6904.34889	0.07938	7.71012	0.08265	5.69441	3.17E-04	3.25E-06	2.76E-04	3.38E-06	1.95E-04	7.9467E-04
519830.82	4258692.06	6903.48021	0.18282	0.36017	0.19176	0.35332	3.17E-04	7.49E-06	1.29E-05	7.85E-06	1.21E-05	3.5707E-04
519803.65	4258742.7	6902.42292	0.17102	0.2997	0.17717	0.29403	3.17E-04	7.00E-06	1.07E-05	7.25E-06	1.01E-05	3.5174E-04
519919.48	4258521.85	6896.436	0.21965	0.78275	0.23327	0.75082	3.16E-04	8.99E-06	2.80E-05	9.55E-06	2.58E-05	3.8871E-04
519929.36	4258492.72	6891.26245	0.21466	0.87826	0.22728	0.83788	3.16E-04	8.79E-06	3.14E-05	9.31E-06	2.88E-05	3.9443E-04
520020.96	4259719.93	6885.35314	3.77202	0.07384	4.8716	0.0727	3.16E-04	1.54E-04	2.64E-06	1.99E-04	2.50E-06	6.7493E-04
519889.73	4258580.16	6881.70142	0.21162	0.58216	0.22546	0.56492	3.16E-04	8.66E-06	2.08E-05	9.23E-06	1.94E-05	3.7383E-04
520061.27	4257924.73	6876.5578	0.07819	12.51659	0.08081	7.82316	3.15E-04	3.20E-06	4.48E-04	3.31E-06	2.69E-04	1.0383E-03
520109.07	4257845.4	6862.65779	0.07422	10.8825	0.07447	13.27905	3.15E-04	3.04E-06	3.89E-04	3.05E-06	4.56E-04	1.1661E-03
519959.01	4258166.61	6861.37852	0.09775	1.27097	0.10002	1.1937	3.15E-04	4.00E-06	4.55E-05	4.10E-06	4.10E-05	4.0933E-04
519936.58	4258305.7	6859.64722	0.12743	1.00253	0.13008	0.95456	3.15E-04	5.22E-06	3.59E-05	5.33E-06	3.28E-05	3.9388E-04
519937.4	4258414.86	6854.10334	0.17518	0.99536	0.1814	0.94396	3.14E-04	7.17E-06	3.56E-05	7.43E-06	3.24E-05	3.9706E-04
519937.08	4258439.9	6853.01603	0.18961	0.98139	0.19827	0.93084	3.14E-04	7.76E-06	3.51E-05	8.12E-06	3.20E-05	3.9734E-04
519932.92	4258474.27	6847.08039	0.20707	0.92151	0.21862	0.87712	3.14E-04	8.48E-06	3.30E-05	8.95E-06	3.01E-05	3.9463E-04
519899.65	4258560.73	6846.78683	0.21483	0.64028	0.22819	0.61891	3.14E-04	8.80E-06	2.29E-05	9.34E-06	2.12E-05	3.7641E-04
519792.08	4258762.84	6845.44117	0.16556	0.27833	0.17096	0.27316	3.14E-04	6.78E-06	9.96E-06	7.00E-06	9.38E-06	3.4717E-04
519909.57	4258541.29	6841.76415	0.21742	0.70612	0.23071	0.68036	3.14E-04	8.90E-06	2.53E-05	9.45E-06	2.34E-05	3.8085E-04
520030.87	4259729.91	6835.18141	4.69454	0.07355	5.81229	0.07234	3.14E-04	1.92E-04	2.63E-06	2.38E-04	2.48E-06	7.4889E-04
519824.46	4258700.84	6821.15903	0.17901	0.34547	0.18708	0.33912	3.13E-04	7.33E-06	1.24E-05	7.66E-06	1.16E-05	3.5193E-04
519935.2	4258316.25	6803.31048	0.13022	0.98557	0.13296	0.9395	3.12E-04	5.33E-06	3.53E-05	5.44E-06	3.23E-05	3.9040E-04
520020.97	4259729.93	6779.0976	3.50959	0.07296	4.24388	0.07183	3.11E-04	1.44E-04	2.61E-06	1.74E-04	2.47E-06	6.3355E-04
519818.44	4258710.45	6775.0508	0.17577	0.33203	0.18319	0.32595	3.11E-04	7.20E-06	1.19E-05	7.50E-06	1.12E-05	3.4859E-04
519857.12	4258636.77	6774.93955	0.19423	0.44035	0.2056	0.43199	3.11E-04	7.95E-06	1.58E-05	8.42E-06	1.48E-05	3.5777E-04
520051.45	4257934.69	6772.9714	0.07794	7.70002	0.08109	5.6744	3.11E-04	3.19E-06	2.75E-04	3.32E-06	1.95E-04	7.8747E-04
519796.98	4258750.66	6770.78106	0.16663	0.28816	0.1723	0.28281	3.11E-04	6.82E-06	1.03E-05	7.05E-06	9.71E-06	3.4452E-04
520098.69	4257854.85	6764.69323	0.0741	16.6903	0.0747	17.90184	3.10E-04	3.03E-06	5.97E-04	3.06E-06	6.15E-04	1.5280E-03
519847.12	4258655.32	6760.62979	0.18911	0.40751	0.19951	0.40034	3.10E-04	7.74E-06	1.46E-05	8.17E-06	1.37E-05	3.5440E-04
519929.32	4258483.02	6750.74658	0.20816	0.8837	0.21992	0.84298	3.10E-04	8.52E-06	3.16E-05	9.00E-06	2.89E-05	3.8779E-04
520061.3	4257914.73	6747.90029	0.0768	12.48265	0.07929	7.78197	3.10E-04	3.14E-06	4.46E-04	3.25E-06	2.67E-04	1.0296E-03
519837.12	4258673.87	6743.65715	0.18403	0.37851	0.19334	0.37204	3.09E-04	7.53E-06	1.35E-05	7.92E-06	1.28E-05	3.5115E-04
519933.52	4258351.5	6737.12968	0.14232	0.96742	0.14552	0.92209	3.09E-04	5.83E-06	3.46E-05	5.96E-06	3.17E-05	3.8713E-04
519947.21	4258201.44	6723.43418	0.1022	1.11549	0.10457	1.05584	3.08E-04	4.18E-06	3.99E-05	4.28E-06	3.62E-05	3.9307E-04
520109.1	4257835.4	6721.4025	0.07292	10.87196	0.07314	13.28876	3.08E-04	2.99E-06	3.89E-04	2.99E-06	4.56E-04	1.1594E-03
519785.42	4258770.81	6715.25508	0.16132	0.26806	0.16635	0.26314	3.08E-04	6.61E-06	9.59E-06	6.81E-06	9.03E-06	3.4012E-04
519937.91	4258255.21	6709.98283	0.11272	1.01511	0.11488	0.96592	3.08E-04	4.62E-06	3.63E-05	4.70E-06	3.32E-05	3.8663E-04
519939.25	4258244.67	6706.96273	0.11037	1.02959	0.11256	0.97872	3.08E-04	4.52E-06	3.68E-05	4.61E-06	3.36E-05	3.8726E-04
519919.44	4258512.15	6693.21181	0.21324	0.7881	0.22598	0.75577	3.07E-04	8.73E-06	2.82E-05	9.25E-06	2.59E-05	3.7919E-04
519940.49	4258234.17	6692.66358	0.10806	1.03976	0.11026	0.98841	3.07E-04	4.42E-06	3.72E-05	4.51E-06	3.39E-05	3.8711E-04
519812.1	4258719.27	6688.95029	0.17194	0.31902	0.17877	0.31322	3.07E-04	7.04E-06	1.14E-05	7.32E-06	1.08E-05	3.4340E-04
519933.2	4258376.55	6687.75553	0.15271	0.96224	0.15652	0.91596	3.07E-04	6.25E-06	3.44E-05	6.41E-06	3.14E-05	3.8535E-04
519934.06	4258398.72	6686.42221	0.16381	0.96627	0.16872	0.91838	3.07E-04	6.71E-06	3.46E-05	6.91E-06	3.15E-05	3.8647E-04
519933.53	4258448.53	6680.16481	0.19116	0.94164	0.20043	0.8952	3.06E-04	7.83E-06	3.37E-05	8.21E-06	3.07E-05	3.8692E-04
519948.29	4258191	6678.914	0.1001	1.12772	0.10243	1.06613	3.06E-04	4.10E-06	4.03E-05	4.19E-06	3.66E-05	3.9165E-04
519869.85	4258609.34	6674.73418	0.19879	0.49053	0.2112	0.47974	3.06E-04	8.14E-06	1.75E-05	8.65E-06	1.65E-05	3.5703E-04
519941.64	4258223.71	6669.51613	0.10581	1.05323	0.10804	0.99992	3.06E-04	4.33E-06	3.77E-05	4.42E-06	3.43E-05	3.8674E-04
520099.28	4257845.37	6646.00528	0.07294	16.23426	0.07348	17.62373	3.05E-04	2.99E-06	5.81E-04	3.01E-06	6.05E-04	1.4966E-03
519933.89	4258423.39	6645.81783	0.17671	0.95671	0.18356	0.90878	3.05E-04	7.24E-06	3.42E-05	7.52E-06	3.12E-05	3.8507E-04
519879.77	4258589.9	6642.26969	0.20271	0.53598	0.21586	0.52181	3.05E-04	8.30E-06	1.92E-05	8.84E-06	1.79E-05	3.5896E-04
519942.7	4258213.29	6637.47578	0.10359	1.06442	0.10585	1.00952	3.05E-04	4.24E-06	3.81E-05	4.33E-06	3.47E-05	3.8582E-04
520051.48	4257924.69	6636.62113	0.07649	7.69478	0.07957	5.62806	3.04E-04	3.13E-06	2.75E-04	3.26E-06	1.93E-04	7.7931E-04
519949.3	4258180.6	6628.14285	0.09805	1.13783	0.10031	1.07465	3.04E-04	4.01E-06	4.07E-05	4.11E-06	3.69E-05	3.8980E-04
519934.48	4258266.61	6617.77871	0.11452	0.97931	0.1166	0.93326	3.04E-04	4.69E-06	3.50E-05	4.77E-06	3.20E-05	3.8014E-04
519889.69	4258570.47	6609.55894	0.20615	0.58729	0.21891	0.56945	3.03E-04	8.44E-06	2.10E-05	8.96E-06	1.95E-05	3.6119E-04
519933.18	4258277.14	6605.23075	0.11699	0.96715	0.11912	0.9221	3.03E-04	4.79E-06	3.46E-05	4.88E-06	3.17E-05	3.7895E-04
519909.52	4258531.59	6602.4969	0.2112	0.71096	0.22372	0.68503	3.03E-04	8.65E-06	2.54E-05	9.16E-06	2.35E-05	3.6967E-04
520061.33	4257904.73	6601.00667	0.07534	12.51625	0.07781	7.62588	3.03E-04	3.08E-06	4.48E-04	3.19E-06	2.62E-04	1.0186E-03
519899.61	4258551.03	6589.06176	0.20886	0.64488	0.22116	0.62349	3.02E-04	8.55E-06	2.31E-05	9.06E-06	2.14E-05	3.6437E-04
519778.73	4258778.73	6586.79177	0.1572	0.2583	0.16186	0.25364	3.02E-04	6.44E-06	9.24E-06	6.63E-06	8.71E-06	3.3320E-04
520109.13	4257825.4	6582.3607	0.07164	10.87252	0.07184	13.30118	3.02E-04	2.93E-06	3.89E-04	2.94E-06	4.57E-04	1.1534E-03
519931.77	4258287.71	6579.66495	0.1195	0.95479	0.12171	0.91051	3.02E-04	4.89E-06	3.42E-05	4.98E-06	3.13E-05	3.7715E-04
519950.25	4258170.22	6572.20171	0.09606	1.14748	0.09824	1.08257	3.02E-04	3.93E-06	4.10E-05	4.02E-06	3.72E-05	3.8768E-04
519930.1	4258335.56	6563.31487	0.13424	0.93438	0.13699	0.89244	3.01E-04	5.50E-06	3.34E-05	5.61E-06	3.06E-05	3.7628E-04
519929.91	4258360.28	6540.61697	0.14359	0.93222	0.14676	0.88935	3.00E-04	5.88E-06	3.33E-05	6.01E-06	3.05E-05	3.7584E-04
519930.21	4258298.34	6538.21575	0.12202	0.93992	0.12431	0.89688	3.00E-04	5.00E-06	3.36E-05	5.09E-06	3.08E-05	3.7446E-04
519929.98	4258457.16	6532.58888	0.19252	0.90368	0.20221	0.86121	3.00E-04	7.88E-06	3.23E-05	8.28E-06	2.96E-05	3.7775E-04
519919.4	4258502.46	6514.75323	0.20706	0.79307	0.21892	0.76044	2.99E-04	8.48E-06	2.84E-05	8.96E-06	2.61E-05	3.7080E-04
520099.31	4257835.37	6513.06941	0.07168	16.2281	0.07218	17.73974	2.99E-04	2.93E-06	5.80E-04	2.96E-06	6.09E-04	1.4942E-03
520051.51	4257914.69	6512.71472	0.07514	7.68083	0.07811	5.60226	2.99E-04	3.08E-06	2.75E-04	3.20E-06	1.92E-04	7.7213E-04
519847.12	4258646.05	6506.27876	0.18553	0.4106	0.19592	0.40345	2.98E-04	7.60E-06	1.47E-05	8.02E-06	1.39E-05	3.4265E-04
519837.12	4258664.6	6489.78995	0.18065	0.38121	0.19006	0.37496	2.98E-04	7.40E-06	1.36E-05	7.78E-06	1.29E-05	3.3943E-04
519800.01	4258734.05	6477.41583	0.16428	0.2967	0.17009	0.29147	2.97E-04	6.73E-06	1.06E-05	6.96E-06	1.00E-05	3.3148E-04
519930.58	4258407.17	6476.73182	0.1652	0.93048	0.17058	0.88542	2.97E-04	6.76E-06	3.33E-05	6.98E-06	3.04E-05	3.7457E-04
519827.12	4258683.15	6472.73074	0.17581	0.35518	0.18421	0.34934	2.97E-04	7.20E-06	1.27E-05	7.54E-06	1.20E-05	3.3639E-04
520061.36	4257894.73	6468.81887	0.07398	12.4928	0.07638	7.51336	2.97E-04	3.03E-06	4.47E-04	3.13E-06	2.58E-04	1.0077E-03

519929.54	4258385.44	6468.69579	0.15406	0.92588	0.15807	0.88219	2.97E-04	6.31E-06	3.31E-05	6.47E-06	3.03E-05	3.7296E-04
519930.38	4258431.92	6456.49702	0.17815	0.91976	0.18567	0.87532	2.96E-04	7.29E-06	3.29E-05	7.60E-06	3.01E-05	3.7406E-04
519928.05	4258309.22	6456.39314	0.12435	0.91778	0.12669	0.8769	2.96E-04	5.09E-06	3.28E-05	5.19E-06	3.01E-05	3.6942E-04
520109.16	4257815.4	6446.81247	0.0704	10.87249	0.07059	13.21919	2.96E-04	2.88E-06	3.89E-04	2.89E-06	4.54E-04	1.1443E-03
519859.89	4258619.08	6437.83788	0.19035	0.45497	0.20162	0.4461	2.95E-04	7.79E-06	1.63E-05	8.26E-06	1.53E-05	3.4299E-04
519788.36	4258753.99	6427.32647	0.15901	0.27602	0.16407	0.27112	2.95E-04	6.51E-06	9.87E-06	6.72E-06	9.31E-06	3.2728E-04
519869.81	4258599.64	6413.80519	0.19428	0.49488	0.2064	0.48354	2.94E-04	7.95E-06	1.77E-05	8.45E-06	1.66E-05	3.4496E-04
519926.43	4258465.8	6410.55874	0.19373	0.86818	0.20373	0.82908	2.94E-04	7.93E-06	3.11E-05	8.34E-06	2.85E-05	3.6989E-04
519938.26	4258205.13	6408.20397	0.10027	1.01237	0.10229	0.96167	2.94E-04	4.11E-06	3.62E-05	4.19E-06	3.30E-05	3.7152E-04
519909.48	4258521.89	6392.2602	0.20527	0.7157	0.21709	0.68947	2.93E-04	8.40E-06	2.56E-05	8.89E-06	2.37E-05	3.5983E-04
519879.73	4258580.2	6386.59745	0.19782	0.54049	0.21004	0.52583	2.93E-04	8.10E-06	1.93E-05	8.60E-06	1.81E-05	3.4709E-04
519926.52	4258344.25	6385.20361	0.13537	0.90165	0.13807	0.86201	2.93E-04	5.54E-06	3.23E-05	5.65E-06	2.96E-05	3.6598E-04
520099.34	4257825.37	6383.98464	0.07045	16.22589	0.07092	17.80294	2.93E-04	2.88E-06	5.80E-04	2.90E-06	6.11E-04	1.4902E-03
519939.41	4258194.67	6376.04332	0.09827	1.02282	0.10031	0.97068	2.93E-04	4.02E-06	3.66E-05	4.11E-06	3.33E-05	3.7056E-04
520051.54	4257904.69	6375.94371	0.07374	7.67788	0.07667	5.49728	2.93E-04	3.02E-06	2.75E-04	3.14E-06	1.89E-04	7.6203E-04
519820.79	4258692	6374.99961	0.17151	0.34085	0.17958	0.33502	2.92E-04	7.02E-06	1.22E-05	7.35E-06	1.15E-05	3.3054E-04
519793.36	4258742.07	6363.03174	0.16022	0.28543	0.16552	0.28048	2.92E-04	6.56E-06	1.02E-05	6.78E-06	9.63E-06	3.2510E-04
519889.65	4258560.77	6360.81428	0.20075	0.59164	0.21241	0.57366	2.92E-04	8.22E-06	2.12E-05	8.70E-06	1.97E-05	3.4959E-04
519930.37	4258248.34	6360.26945	0.10806	0.93836	0.10984	0.8949	2.92E-04	4.42E-06	3.36E-05	4.50E-06	3.07E-05	3.6501E-04
519919.36	4258492.76	6359.25106	0.20109	0.79771	0.21211	0.76486	2.92E-04	8.23E-06	2.85E-05	8.68E-06	2.63E-05	3.6346E-04
519931.68	4258237.81	6358.54552	0.10588	0.95027	0.10767	0.90553	2.92E-04	4.34E-06	3.40E-05	4.41E-06	3.11E-05	3.6554E-04
519899.57	4258541.33	6351.19955	0.20312	0.64921	0.21464	0.6278	2.91E-04	8.32E-06	2.32E-05	8.79E-06	2.16E-05	3.5326E-04
519928.95	4258258.91	6350.60933	0.11025	0.92431	0.11204	0.88245	2.91E-04	4.51E-06	3.31E-05	4.59E-06	3.03E-05	3.6381E-04
520061.39	4257884.73	6348.45699	0.0727	12.51728	0.07501	7.53349	2.91E-04	2.98E-06	4.48E-04	3.07E-06	2.59E-04	1.0037E-03
519932.89	4258227.32	6346.47612	0.10373	0.95786	0.10553	0.91287	2.91E-04	4.25E-06	3.43E-05	4.32E-06	3.13E-05	3.6533E-04
519926.3	4258369.06	6339.5932	0.14481	0.89843	0.14803	0.8579	2.91E-04	5.93E-06	3.21E-05	6.06E-06	2.95E-05	3.6443E-04
519940.48	4258184.24	6337.14972	0.09631	1.03207	0.09834	0.97858	2.91E-04	3.94E-06	3.69E-05	4.03E-06	3.36E-05	3.6922E-04
519814.67	4258701.35	6331.80584	0.16853	0.32768	0.17574	0.32228	2.90E-04	6.90E-06	1.17E-05	7.20E-06	1.11E-05	3.2737E-04
519934.02	4258216.87	6326.86661	0.10164	0.96971	0.10349	0.92301	2.90E-04	4.16E-06	3.47E-05	4.24E-06	3.17E-05	3.6504E-04
520109.19	4257805.4	6320.84576	0.06922	10.86594	0.06937	13.30176	2.90E-04	2.83E-06	3.89E-04	2.84E-06	4.57E-04	1.1410E-03
519781.72	4258762.02	6314.98047	0.1551	0.26589	0.15975	0.26125	2.90E-04	6.35E-06	9.51E-06	6.54E-06	8.97E-06	3.2109E-04
519922.87	4258474.43	6312.0087	0.19472	0.83441	0.2049	0.79841	2.90E-04	7.97E-06	2.98E-05	8.39E-06	2.74E-05	3.6320E-04
519941.48	4258173.84	6292.4766	0.0944	1.04121	0.0964	0.98606	2.89E-04	3.87E-06	3.72E-05	3.95E-06	3.39E-05	3.6759E-04
519926.87	4258440.45	6288.57288	0.1795	0.88439	0.18757	0.84342	2.89E-04	7.35E-06	3.16E-05	7.68E-06	2.90E-05	3.6413E-04
519927.11	4258415.61	6280.25352	0.16654	0.89631	0.17251	0.85409	2.88E-04	6.82E-06	3.21E-05	7.06E-06	2.93E-05	3.6339E-04
519847.12	4258636.77	6268.8978	0.18204	0.41364	0.1923	0.40647	2.88E-04	7.45E-06	1.48E-05	7.87E-06	1.40E-05	3.3168E-04
519925.83	4258270.19	6259.78338	0.11198	0.895	0.11375	0.85575	2.87E-04	4.58E-06	3.20E-05	4.66E-06	2.94E-05	3.5782E-04
520099.37	4257815.37	6258.72695	0.06926	16.22535	0.06969	17.83727	2.87E-04	2.84E-06	5.80E-04	2.85E-06	6.12E-04	1.4856E-03
520051.57	4257894.69	6258.52668	0.07246	7.66659	0.0753	5.4807	2.87E-04	2.97E-06	2.74E-04	3.08E-06	1.88E-04	7.5556E-04
519808.35	4258710.24	6257.58902	0.16497	0.31504	0.17156	0.30987	2.87E-04	6.75E-06	1.13E-05	7.02E-06	1.06E-05	3.2277E-04
519925.89	4258394.32	6255.64156	0.15539	0.89121	0.15976	0.85005	2.87E-04	6.36E-06	3.19E-05	6.54E-06	2.92E-05	3.6096E-04
519837.12	4258655.32	6251.64521	0.17737	0.38393	0.18683	0.37777	2.87E-04	7.26E-06	1.37E-05	7.65E-06	1.30E-05	3.2843E-04
519924.46	4258280.74	6240.46558	0.11433	0.88497	0.11617	0.84639	2.86E-04	4.68E-06	3.17E-05	4.76E-06	2.91E-05	3.5645E-04
519827.12	4258673.87	6234.44855	0.17272	0.35755	0.18121	0.35202	2.86E-04	7.07E-06	1.28E-05	7.42E-06	1.21E-05	3.2539E-04
519923.06	4258328.41	6232.51941	0.12801	0.87227	0.13033	0.83513	2.86E-04	5.24E-06	3.12E-05	5.34E-06	2.87E-05	3.5638E-04
519919.32	4258483.06	6231.77005	0.19541	0.8023	0.2057	0.76917	2.86E-04	8.00E-06	2.87E-05	8.42E-06	2.64E-05	3.5743E-04
520061.42	4257874.73	6228.35784	0.07145	12.50541	0.07368	7.49474	2.86E-04	2.93E-06	4.47E-04	3.02E-06	2.57E-04	9.9629E-04
519909.44	4258512.2	6206.4964	0.19961	0.72021	0.21073	0.69366	2.85E-04	8.17E-06	2.58E-05	8.63E-06	2.38E-05	3.5112E-04
519922.97	4258291.34	6204.98188	0.11669	0.87439	0.11863	0.83638	2.85E-04	4.78E-06	3.13E-05	4.86E-06	2.87E-05	3.5430E-04
519775.06	4258770	6203.85644	0.15129	0.25632	0.15556	0.25191	2.85E-04	6.19E-06	9.17E-06	6.37E-06	8.65E-06	3.1500E-04
520109.23	4257795.4	6201.34808	0.0681	10.84914	0.0682	13.2989	2.85E-04	2.79E-06	3.88E-04	2.79E-06	4.57E-04	1.1347E-03
519922.95	4258352.94	6200.02403	0.13647	0.86999	0.13913	0.83257	2.84E-04	5.59E-06	3.11E-05	5.70E-06	2.86E-05	3.5543E-04
519859.85	4258609.38	6193.48644	0.18626	0.45865	0.19732	0.4495	2.84E-04	7.63E-06	1.64E-05	8.08E-06	1.54E-05	3.3169E-04
519802.96	4258717.25	6182.07643	0.16184	0.30497	0.16795	0.3	2.84E-04	6.63E-06	1.09E-05	6.88E-06	1.03E-05	3.1833E-04
519869.77	4258589.94	6172.34012	0.18982	0.4993	0.20148	0.48723	2.83E-04	7.77E-06	1.79E-05	8.25E-06	1.67E-05	3.3378E-04
519921.33	4258302	6152.27984	0.11904	0.86026	0.12103	0.82356	2.82E-04	4.87E-06	3.08E-05	4.96E-06	2.83E-05	3.5113E-04
519879.69	4258570.51	6149.92484	0.19295	0.54498	0.20426	0.52977	2.82E-04	7.90E-06	1.95E-05	8.36E-06	1.82E-05	3.3609E-04
519923.36	4258448.98	6143.09017	0.18072	0.85066	0.18919	0.81302	2.82E-04	7.40E-06	3.04E-05	7.75E-06	2.79E-05	3.5532E-04
520051.6	4257884.69	6140.59962	0.07121	7.65046	0.07397	5.4346	2.82E-04	2.92E-06	2.74E-04	3.03E-06	1.87E-04	7.4788E-04
519899.52	4258531.63	6140.45795	0.19765	0.65335	0.20856	0.63182	2.82E-04	8.09E-06	2.34E-05	8.54E-06	2.17E-05	3.4340E-04
520099.41	4257805.37	6137.702	0.06811	16.21707	0.0685	17.88632	2.82E-04	2.79E-06	5.80E-04	2.80E-06	6.14E-04	1.4813E-03
519922.68	4258377.85	6137.28598	0.14604	0.86655	0.14946	0.82809	2.82E-04	5.98E-06	3.10E-05	6.12E-06	2.84E-05	3.5309E-04
519889.61	4258551.07	6125.11874	0.19531	0.59543	0.20601	0.57751	2.81E-04	8.00E-06	2.13E-05	8.43E-06	1.98E-05	3.3856E-04
520061.45	4257864.73	6111.72111	0.07023	12.47987	0.07239	7.45351	2.80E-04	2.88E-06	4.46E-04	2.96E-06	2.56E-04	9.8851E-04
519929.31	4258208.83	6106.07691	0.09835	0.91936	0.09995	0.87662	2.80E-04	4.03E-06	3.29E-05	4.09E-06	3.01E-05	3.5123E-04
519923.64	4258424.05	6099.46161	0.16782	0.86341	0.17438	0.82414	2.80E-04	6.87E-06	3.09E-05	7.14E-06	2.83E-05	3.5302E-04
519930.53	4258198.34	6082.58285	0.09644	0.92771	0.09808	0.88392	2.79E-04	3.95E-06	3.32E-05	4.02E-06	3.03E-05	3.5055E-04
519796.37	4258725.4	6082.51532	0.15801	0.29338	0.16355	0.28867	2.79E-04	6.47E-06	1.05E-05	6.70E-06	9.91E-06	3.1262E-04
520109.26	4257785.4	6077.96375	0.06696	10.87062	0.06705	13.30878	2.79E-04	2.74E-06	3.89E-04	2.75E-06	4.57E-04	1.1301E-03
519919.52	4258337.01	6066.22065	0.12901	0.84283	0.13127	0.80772	2.78E-04	5.28E-06	3.01E-05	5.37E-06	2.77E-05	3.4684E-04
519931.66	4258187.88	6056.91333	0.09458	0.93733	0.09627	0.89218	2.78E-04	3.87E-06	3.35E-05	3.94E-06	3.06E-05	3.4985E-04
519922.23	4258403.21	6051.37079	0.15668	0.85799	0.16157	0.81936	2.78E-04	6.42E-06	3.07E-05	6.62E-06	2.81E-05	3.4947E-04
519922.87	4258241.44	6040.50316	0.1037	0.87068	0.10516	0.8317	2.77E-04	4.25E-06	3.11E-05	4.31E-06	2.86E-05	3.4537E-04
519924.15	4258230.93	6039.33421	0.10168	0.87755	0.10311	0.83848	2.77E-04	4.16E-06	3.14E-05	4.22E-06	2.88E-05	3.4563E-04
519909.4	4258502.5	6039.26254	0.1941	0.72435	0.20447	0.69756	2.77E-04	7.95E-06	2.59E-05	8.37E-06	2.39E-05	3.4325E-04
519784.64	4258745.14	6036.21288	0.15292	0.27329	0.15761	0.2688	2.77E-04	6.26E-06	9.78E-06	6.45E-06	9.23E-06	3.0865E-04
519921.49	4258252	6030.97077	0.10575	0.85773	0.10721	0.82055	2.77E-04	4.33E-06	3.07E-05	4.39E-06	2.82E-05	3.4426E-04
519925.33	4258220.45	6029.43099	0.09969	0.88582	0.10113	0.84588	2.77E-04	4.08E-06	3.17E-05	4.14E-06	2.90E-05	3.4557E-04
519837.12	4258646.05	6029.2572	0.17418	0.38664	0.18361	0.38049	2.77E-04	7.13E-06	1.38E-05	7.52E-06	1.31E-05	3.1815E-04
520051.63	4257874.69	6026.30812	0.06999	7.62966	0.07267	5.38786	2.76E-04	2.87E-06	2.73E-04	2.98E-06	1.85E-04	7.4019E-04
519919.85	4258457.51	6020.80372	0.18179	0.81863	0.19051	0.78405	2.76E-04	7.44E-06	2.93E-05	7.80E-06	2.69E-05	3.4766E-04
520099.44	4257795.37	6019.5978	0.06699	16.21919	0.06735	17.85708	2.76E-04	2.74E-06	5.80E-04	2.76E-06	6.13E-04	1.4749E-03
519932.72	4258177.46	6019.34744	0.09274	0.94332	0.09444	0.89709	2.76E-04	3.80E-06	3.37E-05	3.87E-06	3.08E-05	3.4836E-04
519919.37	4258361.63	6012.27523	0.13754	0.83982	0.14026	0.8044	2.76E-04	5.63E-06	3.00E-05	5.74E-06	2.76E-05	3.4486E-04
520172.84	4257692.52	6011.40844	0.06294	3.36277	0.06206	2.90458	2.76E-04	2.58E-06	1.20E-04	2.54E-06	9.97E-05	5.0091E-04
519827.12	4258664.6	6010.33995	0.1697	0.35994	0.1783	0.35456	2.76E-04	6.95E-06	1.29E-05	7.30E-06	1.22E-05	3.1504E-04
519919.99	4258262.61	5999.32658	0.10773	0.84301	0.10923	0.8075	2.75E-04	4.41E-06	3.02E-05	4.47E-06	2.77E-05	3.4200E-04
520061.48	4257854.73	5998.70329	0.06905	12.44024	0.07114	7.41443	2.75E-04	2.83E-06	4.45E-04	2.91E-06	2.55E-04	9.8046E-04
519817.12	4258683.15	5994.48074	0.16528	0.33617	0.17291	0.3312	2.75E-04	6.77E-06	1.20E-05	7.08E-06	1.14E-05	3.1226E-04
519789.75	4258733.47	5982.55073	0.15424	0.28242	0.15926	0.27794	2.74E-04	6.32E-06	1.01E-05	6.52E-06	9.54E-06	3.0695E-04
519849.89	4258619.12	5980.35301	0.17863	0.42661	0.18874	0.41908	2.74E-04	7.31E-06	1.53E-05	7.73E-06	1.44E-05	3.1906E-04
519859.81	4258599.68	5968.33217	0.18224	0.4624	0.19301	0.4528	2.74E-04	7.46E-06	1.65E-05	7.90E-06	1.55E-05	3.2126E-04
520109.29	4257775.4	5954.35152	0.06583	10.902	0.06592	12.95111	2.73E-04	2.70E-06	3.90E-04	2.70E-06	4.45E-04	1.1131E-03
519899.48	4258521.94	5950.21669	0.19241	0.65734	0.20274	0.63562	2.73E-04	7.88E-06	2.35E-05	8.30E-06	2.18E-05	3.3450E-04
519869.73	4258580.25	5950.03427	0.18542	0.50348	0.19638	0.49078	2.73E-04	7.59E-06	1.80E-05	8.04E-06	1.68E-05	3.2347E-04
519919.07	4258386.63	5938.90916	0.14722	0.83548	0.15097	0.79925	2.72E-04	6.03E-06	2.99E-05	6.18E-06	2.74E-05	3.4200E-04
519778.03	4258753.24	5938.20466	0.14928	0.26345	0.15359	0.25914	2.72E-04	6.11E-06	9.42E-06	6.29E-06	8.90E-06	3.0315E-04
519920.16	4258432.49	5936.40918	0.16902	0.8316	0.17605	0.79543	2.72E-04	6.92E-06	2.97E-05	7.21E-06	2.73E-05	3.4353E-04
519879.65	4258560.81	5932.04483	0.18818	0.5489	0.19858	0.53349	2.72E-04	7.70E-06	1.96E-05	8.13E-06	1.83E-05	3.2593E-04
519916.01	4258321.27	5926.95631	0.12223	0.81568	0.12418	0.78263	2.72E-04	5.00E-06	2.92E-05	5.08E-06	2.69E-05	3.3805E-04
519916.34	4258466.04	5921.05148	0.18271	0.78843	0.19159	0.7565	2.72E-04	7.48E-06	2.82E-05	7.84E-06	2.60E-05	3.4114E-04
520051.66	4257864.69	5918.74349	0.06883	7.60149	0.07143	5.36554	2.72E-04	2.82E-06	2.72E-04	2.92E-06	1.84E-04	7.3338E-04
519917.18	4258273.76	5917.48786	0.10942	0.8203	0.11094	0.7866	2.71E-04	4.48E-06	2.93E-05	4.54E-06	2.70E-05	3.3685E-04
519810.89	4258692.25	5916.15397	0.16147	0.32317	0.16882	0.31814	2.71E-04	6.61E-06	1.16E-05	6.91E-06	1.09E-05	3.0743E-04
519889.57	4258541.37	5913.69721	0.19017	0.59905	0.20018	0.58117	2.71E-04	7.79E-06	2.14E-05	8.20E-06	2.00E-05	3.2867E-04
520099.47	4257785.37	5904.31568	0.06589	16.22502	0.06622	17.71991	2.71E-04	2.70E-06	5.80E-04	2.71E-06	6.08E-04	1.4650E-03
519915.74	4258284.33	5898.93965	0.11172	0.81392	0.11333	0.78049	2.71E-04	4.57E-06	2.91E-05	4.64E-06	2.68E-05	3.3575E-04
519909.36	4258492.8	5894.34839	0.18884	0.72826	0.1985	0.70127	2.70E-04	7.73E-06	2.60E-05	8.13E-06	2.41E-05	3.3640E-04
519915.98	4258345.62	5892.75822	0.12996	0.81424	0.1322	0.78113	2.70E-04	5.32E-06	2.91E-05	5.41E-06	2.68E-05	3.3702E-04
520172.87	4257682.52	5888.27556	0.06192	3.40753	0.06109	2.736	2.70E-04	2.54E-06	1.22E-04	2.50E-06	9.39E-05	4.9099E-04
520060.13	4257845.25	5868.54183	0.06778	11.39669	0.06986	7.00797	2.69E-04	2.78E-06	4.08E-04	2.86E-06	2.41E-04	9.2311E-04
520163.05	4257692.49	5864.90075	0.06218	4.37655	0.06146	3.63197	2.69E-04	2.55E-06	1.57E-04	2.52E-06	1.25E-04	5.5536E-04
519804.61	4258701.21	5862.46581	0.15848	0.31091	0.165	0.30629	2.69E-04	6.49E-06	1.11E-05	6.76E-06	1.05E-05	3.0384E-04
519918.57	4258412.1	5859.73106	0.15793	0.82556	0.16334	0.78985	2.69E-04	6.47E-06	2.95E-05	6.69E-06	2.71E-05	3.3863E-04
519914.17	4258294.97	5851.67177	0.11392	0.80369	0.1156	0.77087	2.68E-04	4.66E-06	2.87E-05	4.73E-06	2.65E-05	3.3307E-04
520109.32	4257765.4	5846.53238	0.0648	10.93101	0.06485	13.28524	2.68E-04	2.65E-06	3.91E-04	2.66E-06	4.56E-04	1.1206E-03
519912.83	4258474.57	5841.56923	0.18339	0.75952	0.19234	0.73007	2.68E-04	7.51E-06	2.72E-05	7.88E-06	2.51E-05	3.3561E-04
519771.39	4258761.27	5841.19614	0.14573	0.25408	0.14966	0.24997	2.68E-04	5.97E-06	9.09E-06	6.13E-06	8.58E-06	2.9775E-04
519915.8	4258370.31	5826.47261	0.13862	0.8113	0.14152	0.77764	2.67E-04	5.68E-06	2.90E-05	5.79E-06	2.67E-05	3.3449E-04
519837.12	4258636.77	5822.66797	0.17106	0.38929	0.18035	0.38314	2.67E-04	7.00E-06	1.39E-05	7.38E-06	1.32E-05	3.0860E-04
519920.36	4258212.52	5816.32834	0.09644	0.8411	0.09766	0.80397	2.67E-04	3.95E-06	3.01E-05	4.00E-06	2.76E-05	3.3248E-04
520051.7	4257854.7	5813.08554	0.0677	7.57142	0.07021	5.33075	2.67E-04	2.77E-06	2.71E-04	2.87E-06	1.83E-04	7.2617E-04
519799.29	4258708.54	5806.0431	0.15573	0.30112	0.16171	0.29671	2.66E-04	6.38E-06	1.08E-05	6.62E-06	1.02E-05	3.0032E-04
519921.64	4258202	5804.22899	0.09463	0.84922	0.09589	0.81114	2.66E-04	3.87E-06	3.04E-05	3.93E-06	2.78E-05	3.3231E-04
519827.12	4258655.32	5801.31106	0.16677	0.36234	0.17541	0.35702	2.66E-04	6.83E-06	1.30E-05	7.18E-06	1.23E-05	3.0538E-04
519916.69	4258440.94	5793.48501	0.17013	0.80112	0.17749	0.768	2.66E-04	6.97E-06	2.87E-05	7.27E-06	2.64E-05	3.3505E-04
520099.5	4257775.37	5792.23342	0.06483	16.23586	0.06513	17.52899	2.66E-04	2.65E-06	5.81E-04	2.67E-06	6.02E-04	1.4536E-03
519922.84	4258191.52	5784.94191	0.09285	0.85652	0.09415	0.81746	2.65E-04	3.80E-06	3.06E-05	3.85E-06	2.81E-05	3.3176E-04
519817.12	4258673.87	5782.55004	0.16249	0.33827	0.17026	0.33353	2.65E-04	6.65E-06	1.21E-05	6.97E-06	1.15E-05	3.0247E-04
519899.44	4258512.24	5779.73895	0.18738	0.66117	0.19715	0.63919	2.65E-04	7.67E-06	2.36E-05	8.07E-06	2.19E-05	3.2650E-04
519909.32	4258483.1	5776.0431	0.18388	0.73229	0.19294	0.70502	2.65E-04	7.53E-06	2.62E-05	7.90E-06	2.42E-05	3.3082E-04
519912.5	4258329.8	5771.00602	0.12311	0.78905	0.125	0.75784	2.65E-04	5.04E-06	2.82E-05	5.12E-06	2.60E-05	3.2916E-04
519849.85	4258609.42	5769.93113	0.17499	0.42972	0.18487	0.42202	2.65E-04	7.16E-06	1.54E-05	7.57E-06	1.45E-05	3.0931E-04
519923.96	4258181.07	5763.12141	0.09112	0.86451	0.09248	0.82426	2.64E-04	3.73E-06	3.09E-05	3.79E-06	2.83E-05	3.3114E-04
520060.16	4257835.25	5762.08946	0.06667	11.34629	0.06868	6.9518	2.64E-04	2.73E-06	4.06E-04	2.81E-06	2.39E-04	9.1440E-04
519859.77	4258589.99	5758.54202	0.17824	0.46623	0.18863	0.456	2.64E-04	7.30E-06	1.67E-05	7.72E-06	1.57E-05	3.1154E-04
519915.46	4258395.41	5747.79105	0.14837	0.80575	0.15257	0.77174	2.64E-04	6.07E-06	2.88E-05	6.25E-06	2.65E-05	3.3133E-04
520163.08	4257682.49	5746.96348	0.06118	4.6188	0.0605	3.41863	2.64E-04	2.50E-06	1.65E-04	2.48E-06	1.17E-04	5.5121E-04
519915.4	4258234.54	5746.74097	0.09964	0.80835	0.1008	0.77367	2.64E-04	4.08E-06	2.89E-05	4.13E-06	2.66E-05	3.2733E-04
519916.65	4258224.04	5746.31655	0.09776	0.81421	0.09888	0.77919	2.64E-04	4.00E-06	2.91E-05	4.05E-06	2.68E-05	3.2755E-04
520109.35	4257755.4	5743.41427	0.06381	10.96995	0.06381	13.33335	2.63E-04	2.61E-06	3.92E-04	2.61E-06	4.58E-04	1.1188E-03
519869.69	4258570.55	5742.85232	0.18107	0.50732	0.19119	0.49418	2.63E-04	7.41E-06	1.81E-05	7.83E-06	1.70E-05	3.1382E-04
519914.06	4258245.08	5737.96596	0.10155	0.79924	0.10275	0.76557	2.63E-04	4.16E-06	2.86E-05	4.21E-06	2.63E-05	3.2648E-04
519879.61	4258551.11	5731.71636	0.18354	0.55239	0.19319	0.53697	2.63E-04	7.51E-06	1.98E-05	7.91E-06	1.84E-05	3.1658E-04
519889.52	4258531.68	5725.39543	0.18533	0.60255	0.19484	0.58462	2.63E-04	7.59E-06	2.16E-05	7.98E-06	2.01E-05	3.1986E-04
519912.44	4258354.23	5721.54258	0.13095	0.78775	0.13326	0.75618	2.62E-04	5.36E-06	2.82E-05	5.46E-06	2.60E-05	3.2745E-04
519792.73	4258716.75	5716.97495	0.15213	0.28986	0.15755	0.28564	2.62E-04	6.23E-06	1.04E-05	6.45E-06	9.81E-06	2.9514E-04
519912.61	4258255.67	5712.31185	0.10342	0.78621	0.10466	0.75424	2.62E-04	4.23E-06	2.81E-05	4.29E-06	2.59E-05	3.2460E-04
520150.97	4257693.59	5702.29378	0.06136	6.40139	0.06079	5.10373	2.62E-04	2.51E-06	2.29E-04	2.49E-06	1.75E-04	6.7080E-04
520050.34	4257845.22	5688.75422	0.06645	7.12149	0.06896	5.05945	2.61E-04	2.72E-06	2.55E-04	2.82E-06	1.74E-04	6.9495E-04
520099.53	4257765.37	5684.99866	0.0638	16.25375	0.06407	17.59112	2.61E-04	2.61E-06	5.81E-04	2.62E-06	6.04E-04	1.4513E-03
519914.92	4258420.98	5678.67584	0.15901	0.79413	0.16489	0.76147	2.61E-04	6.51E-06	2.84E-05	6.75E-06	2.61E-05	3.2834E-04
519913.22	4258449.38	5671.7849	0.17108	0.77236	0.17867	0.74187	2.60E-04	7.00E-06	2.76E-05	7.32E-06	2.55E-05	3.2763E-04
519780.92	4258736.29	5671.47397	0.14722	0.27029	0.15167	0.26626	2.60E-04	6.03E-06	9.67E-06	6.21E-06	9.14E-06	2.9124E-04
519911.03	4258266.31	5667.28984	0.10517	0.77174	0.10646	0.74111	2.60E-04	4.31E-06	2.76E-05	4.36E-06	2.54E-05	3.2172E-04
520060.19	4257825.25	5658.83994	0.06559	11.29114	0.06754	6.88869	2.60E-04	2.69E-06	4.04E-04	2.77E-06	2.36E-04	9.0543E-04
519908.79	4258314.55	5639.43114	0.11692	0.76318	0.11854	0.73364	2.59E-04	4.79E-06	2.73E-05	4.85E-06	2.52E-05	3.2085E-04
520109.38	4257745.4	5636.76328	0.06281	11.08177	0.06279	13.39505	2.59E-04	2.57E-06	3.96E-04	2.57E-06	4.60E-04	1.1200E-03
519912.22	4258379	5633.89166	0.13957	0.78259	0.14276	0.75108	2.58E-04	5.71E-06	2.80E-05	5.85E-06	2.58E-05	3.2381E-04
519786.13	4258724.88	5628.41917	0.14861	0.27919	0.15349	0.27516	2.58E-04	6.08E-06	9.99E-06	6.28E-06	9.45E-06	2.9002E-04
519899.4	4258502.54	5624.42767	0.18249	0.66468	0.19164	0.64247	2.58E-04	7.47E-06	2.38E-05	7.85E-06	2.21E-05	3.1919E-04
519908.99	4258338.33	5608.75925	0.12395	0.7632	0.12582	0.73375	2.57E-04	5.08E-06	2.73E-05	5.15E-06	2.52E-05	3.2003E-04
519827.12	4258646.05	5607.05421	0.16392	0.3647	0.1725	0.35941	2.57E-04	6.71E-06	1.30E-05	7.06E-06	1.23E-05	2.9640E-04
519908.53	4258277.33	5603.05568	0.10698	0.7568	0.1083	0.72747	2.57E-04	4.38E-06	2.71E-05	4.43E-06	2.50E-05	3.1792E-04
520151	4257683.59	5588.13825	0.06037	7.61393	0.05984	4.84238	2.56E-04	2.47E-06	2.72E-04	2.45E-06	1.66E-04	6.9988E-04
520050.37	4257835.22	5588.0365	0.06538	7.08363	0.06782	5.00782	2.56E-04	2.68E-06	2.53E-04	2.78E-06	1.72E-04	6.8712E-04
519774.33	4258744.45	5586.16736	0.14383	0.26068	0.14785	0.2568	2.56E-04	5.89E-06	9.32E-06	6.05E-06	8.82E-06	2.8637E-04
519817.12	4258664.6	5584.90083	0.1598	0.34039	0.16766	0.33575	2.56E-04	6.54E-06	1.22E-05	6.86E-06	1.15E-05	2.9333E-04
520099.56	4257755.37	5581.44768	0.0628	16.28456	0.06304	17.74561	2.56E-04	2.57E-06	5.82E-04	2.58E-06	6.09E-04	1.4529E-03
519839.89	4258619.16	5575.02784	0.16805	0.40085	0.17717	0.39443	2.56E-04	6.88E-06	1.43E-05	7.25E-06	1.35E-05	2.9779E-04
519907.02	4258287.93	5574.88912	0.10916	0.75171	0.11055	0.7224	2.56E-04	4.47E-06	2.69E-05	4.53E-06	2.48E-05	3.1645E-04
519849.81	4258599.73	5572.6712	0.17137	0.43301	0.18103	0.42488	2.56E-04	7.02E-06	1.55E-05	7.41E-06	1.46E-05	3.0017E-04
519909.74	4258457.82	5570.68945	0.17191	0.7452	0.17965	0.71697	2.56E-04	7.04E-06	2.67E-05	7.36E-06	2.46E-05	3.2124E-04
519807.12	4258683.15	5567.22548	0.15569	0.31864	0.16269	0.31437	2.55E-04	6.37E-06	1.14E-05	6.66E-06	1.08E-05	2.9064E-04
519859.73	4258580.29	5562.72329	0.1743	0.46976	0.18402	0.45902	2.55E-04	7.14E-06	1.68E-05	7.53E-06	1.58E-05	3.0244E-04
519889.48	4258521.98	5561.2212	0.18087	0.60621	0.19	0.58805	2.55E-04	7.41E-06	2.17E-05	7.78E-06	2.02E-05	3.1219E-04
520141.18	4257693.56	5560.61506	0.06057	8.72218	0.06012	7.15562	2.55E-04	2.48E-06	3.12E-04	2.46E-06	2.46E-04	8.1769E-04
520060.22	4257815.25	5557.80161	0.06454	11.23243	0.06643	6.81382	2.55E-04	2.64E-06	4.02E-04	2.72E-06	2.34E-04	8.9604E-04
519869.65	4258560.85	5550.2249	0.1768	0.51073	0.18613	0.4974	2.55E-04	7.24E-06	1.83E-05	7.62E-06	1.71E-05	3.0484E-04
519908.89	4258362.83	5550.11267	0.13193	0.76234	0.13442	0.73221	2.55E-04	5.40E-06	2.73E-05	5.50E-06	2.51E-05	3.1794E-04
519911.84	4258404.19	5548.20442	0.14921	0.77484	0.15384	0.74381	2.55E-04	6.11E-06	2.77E-05	6.30E-06	2.55E-05	3.2020E-04
519879.57	4258541.41	5547.00402	0.17906	0.55553	0.18811	0.54018	2.54E-04	7.33E-06	1.99E-05	7.70E-06	1.85E-05	3.0793E-04
519911.41	4258216.21	5541.49149	0.09454	0.77289	0.09547	0.74023	2.54E-04	3.87E-06	2.76E-05	3.91E-06	2.54E-05	3.1507E-04
519912.76	4258205.67	5538.22425	0.09283	0.78033	0.09376	0.7468	2.54E-04	3.80E-06	2.79E-05	3.84E-06	2.56E-05	3.1527E-04
520109.41	4257735.4	5532.5567	0.06183	11.26847	0.0618	13.5215	2.54E-04	2.53E-06	4.03E-04	2.53E-06	4.64E-04	1.1261E-03
519914.02	4258195.16	5527.28621	0.09114	0.78691	0.09209	0.75254	2.54E-04	3.73E-06	2.81E-05	3.77E-06	2.58E-05	3.1507E-04
519911.26	4258429.87	5523.32958	0.1601	0.76488	0.16639	0.73485	2.53E-04	6.56E-06	2.74E-05	6.81E-06	2.52E-05	3.1935E-04
519915.19	4258184.69	5511.52927	0.08949	0.79339	0.09048	0.75806	2.53E-04	3.66E-06	2.84E-05	3.70E-06	2.60E-05	3.1463E-04
519767.72	4258752.54	5500.15061	0.14049	0.25162	0.14418	0.24784	2.52E-04	5.75E-06	9.00E-06	5.90E-06	8.51E-06	2.8150E-04
519800.86	4258692.18	5493.30072	0.15213	0.30664	0.15884	0.30231	2.52E-04	6.23E-06	1.10E-05	6.50E-06	1.04E-05	2.8610E-04

520050.4	4257825.22	5490.44184	0.06434	7.04157	0.06671	4.95263	2.52E-04	2.63E-06	2.52E-04	2.73E-06	1.70E-04	6.7915E-04
519899.36	4258492.84	5488.95467	0.17782	0.66805	0.18639	0.64563	2.52E-04	7.28E-06	2.39E-05	7.63E-06	2.22E-05	3.1280E-04
519905.14	4258323.44	5486.45789	0.11775	0.73813	0.11932	0.71024	2.52E-04	4.82E-06	2.64E-05	4.89E-06	2.44E-05	3.1220E-04
520099.59	4257745.37	5479.06295	0.06182	16.34475	0.06204	17.56877	2.51E-04	2.53E-06	5.85E-04	2.54E-06	6.03E-04	1.4442E-03
519907.96	4258227.62	5476.53414	0.09583	0.75369	0.09676	0.72207	2.51E-04	3.92E-06	2.70E-05	3.96E-06	2.48E-05	3.1089E-04
519906.65	4258238.15	5467.9205	0.09761	0.74568	0.09859	0.71509	2.51E-04	4.00E-06	2.67E-05	4.04E-06	2.45E-05	3.1011E-04
519908.65	4258387.69	5460.97686	0.14068	0.75698	0.1443	0.72712	2.51E-04	5.76E-06	2.71E-05	5.91E-06	2.50E-05	3.1425E-04
520060.25	4257805.25	5459.3937	0.06352	11.16845	0.06534	6.73218	2.50E-04	2.60E-06	3.99E-04	2.68E-06	2.31E-04	8.8634E-04
519795.63	4258699.83	5459.23628	0.14995	0.29719	0.15596	0.2932	2.50E-04	6.14E-06	1.06E-05	6.39E-06	1.01E-05	2.8368E-04
520170.95	4257642.88	5453.89353	0.05827	2.89536	0.0575	2.31914	2.50E-04	2.39E-06	1.04E-04	2.35E-06	7.96E-05	4.3814E-04
520141.21	4257683.56	5452.50819	0.05962	11.84626	0.05918	6.82771	2.50E-04	2.44E-06	4.24E-04	2.42E-06	2.34E-04	9.1314E-04
519905.25	4258248.72	5448.6237	0.09939	0.73499	0.1004	0.70589	2.50E-04	4.07E-06	2.63E-05	4.11E-06	2.42E-05	3.0868E-04
519905.48	4258346.86	5444.62937	0.12478	0.73862	0.12671	0.71069	2.50E-04	5.11E-06	2.64E-05	5.19E-06	2.44E-05	3.1090E-04
520131.41	4257694.33	5431.5384	0.05987	10.61099	0.0595	10.11863	2.49E-04	2.45E-06	3.80E-04	2.44E-06	3.47E-04	9.8100E-04
520109.44	4257725.4	5430.28869	0.06087	11.5751	0.06083	13.75119	2.49E-04	2.49E-06	4.14E-04	2.49E-06	4.72E-04	1.1402E-03
519902.8	4258474.7	5428.78609	0.17317	0.6952	0.18115	0.67071	2.49E-04	7.09E-06	2.49E-05	7.42E-06	2.30E-05	3.1146E-04
519827.12	4258636.77	5427.08861	0.16113	0.36701	0.16955	0.36173	2.49E-04	6.60E-06	1.31E-05	6.94E-06	1.24E-05	2.8807E-04
519903.72	4258259.33	5407.32299	0.10106	0.72252	0.10212	0.69482	2.48E-04	4.14E-06	2.58E-05	4.18E-06	2.39E-05	3.0609E-04
519889.44	4258512.28	5406.55235	0.17644	0.60957	0.18513	0.59116	2.48E-04	7.22E-06	2.18E-05	7.58E-06	2.03E-05	3.0494E-04
519817.12	4258655.32	5401.68744	0.15719	0.34249	0.16506	0.33791	2.48E-04	6.44E-06	1.23E-05	6.76E-06	1.16E-05	2.8486E-04
520050.43	4257815.22	5394.57826	0.06332	6.99578	0.06563	4.88816	2.47E-04	2.59E-06	2.50E-04	2.69E-06	1.68E-04	6.7082E-04
519907.6	4258438.76	5393.22521	0.16112	0.73734	0.16772	0.70963	2.47E-04	6.60E-06	2.64E-05	6.87E-06	2.44E-05	3.1163E-04
519839.85	4258609.46	5391.60087	0.16478	0.40352	0.17369	0.39697	2.47E-04	6.75E-06	1.44E-05	7.11E-06	1.36E-05	2.8928E-04
519908.23	4258412.97	5389.24585	0.15039	0.74848	0.15552	0.71958	2.47E-04	6.16E-06	2.68E-05	6.37E-06	2.47E-05	3.1125E-04
519849.77	4258590.03	5388.73294	0.16776	0.43642	0.17709	0.42767	2.47E-04	6.87E-06	1.56E-05	7.25E-06	1.47E-05	2.9164E-04
519789.09	4258708.1	5382.79455	0.14668	0.28618	0.15204	0.28245	2.47E-04	6.01E-06	1.02E-05	6.23E-06	9.70E-06	2.7912E-04
520099.62	4257735.37	5381.43297	0.06088	16.44561	0.06107	17.75572	2.47E-04	2.49E-06	5.88E-04	2.50E-06	6.10E-04	1.4497E-03
519899.32	4258483.15	5380.60232	0.17351	0.6717	0.18158	0.64894	2.47E-04	7.10E-06	2.40E-05	7.43E-06	2.23E-05	3.0770E-04
519859.69	4258570.59	5380.39528	0.17038	0.47323	0.17942	0.46202	2.47E-04	6.98E-06	1.69E-05	7.35E-06	1.59E-05	2.9395E-04
519807.12	4258673.87	5380.0187	0.15322	0.32049	0.16032	0.31641	2.47E-04	6.27E-06	1.15E-05	6.56E-06	1.09E-05	2.8199E-04
519901.75	4258307.4	5379.89848	0.11194	0.71632	0.11327	0.6897	2.47E-04	4.58E-06	2.56E-05	4.64E-06	2.37E-05	3.0534E-04
519879.52	4258531.72	5376.33212	0.17473	0.55848	0.18332	0.54315	2.47E-04	7.15E-06	2.00E-05	7.51E-06	1.86E-05	2.9994E-04
519905.35	4258371.44	5376.26146	0.13286	0.73739	0.13564	0.70891	2.47E-04	5.44E-06	2.64E-05	5.55E-06	2.43E-05	3.0836E-04
519869.61	4258551.15	5372.27507	0.17265	0.51372	0.18131	0.50042	2.46E-04	7.07E-06	1.84E-05	7.42E-06	1.72E-05	2.9652E-04
520060.28	4257795.25	5364.17896	0.06253	11.09676	0.06429	6.64288	2.46E-04	2.56E-06	3.97E-04	2.63E-06	2.28E-04	8.7626E-04
519902.07	4258270	5357.1414	0.10269	0.7099	0.10377	0.68331	2.46E-04	4.20E-06	2.54E-05	4.25E-06	2.35E-05	3.0308E-04
520170.99	4257632.88	5354.13037	0.05741	2.76676	0.05666	2.19976	2.46E-04	2.35E-06	9.90E-05	2.32E-06	7.55E-05	4.2479E-04
519777.19	4258727.45	5333.2605	0.14186	0.26709	0.1462	0.2635	2.45E-04	5.81E-06	9.55E-06	5.99E-06	9.05E-06	2.7507E-04
520109.48	4257715.4	5328.55012	0.05992	12.08479	0.05987	13.99482	2.44E-04	2.45E-06	4.32E-04	2.45E-06	4.80E-04	1.1621E-03
520161.17	4257642.85	5327.99353	0.0576	3.98627	0.05694	2.83425	2.44E-04	2.36E-06	1.43E-04	2.33E-06	9.73E-05	4.8901E-04
520131.44	4257684.33	5327.58768	0.05893	14.70756	0.05858	10.42492	2.44E-04	2.41E-06	5.26E-04	2.40E-06	3.58E-04	1.1332E-03
519901.48	4258332.33	5325.45035	0.11852	0.71344	0.12008	0.68723	2.44E-04	4.85E-06	2.55E-05	4.92E-06	2.36E-05	3.0320E-04
519899.88	4258280.9	5316.40564	0.10469	0.70308	0.10582	0.67693	2.44E-04	4.29E-06	2.51E-05	4.33E-06	2.32E-05	3.0091E-04
519782.52	4258716.28	5302.61057	0.14336	0.2758	0.14819	0.27222	2.43E-04	5.87E-06	9.86E-06	6.07E-06	9.35E-06	2.7442E-04
520050.46	4257805.22	5300.87792	0.06233	6.94488	0.06457	4.81615	2.43E-04	2.55E-06	2.48E-04	2.64E-06	1.65E-04	6.6214E-04
520121.62	4257694.29	5295.39672	0.05906	12.38549	0.0588	13.06101	2.43E-04	2.42E-06	4.43E-04	2.41E-06	4.48E-04	1.1392E-03
519903.88	4258209.33	5287.07896	0.09106	0.72035	0.09176	0.69047	2.43E-04	3.73E-06	2.58E-05	3.76E-06	2.37E-05	2.9952E-04
519905.07	4258396.38	5286.99712	0.14164	0.73102	0.1457	0.70323	2.43E-04	5.80E-06	2.61E-05	5.97E-06	2.41E-05	3.0461E-04
520099.66	4257725.37	5285.43556	0.05995	16.61795	0.06012	17.73963	2.42E-04	2.45E-06	5.94E-04	2.46E-06	6.09E-04	1.4508E-03
519905.2	4258198.8	5282.65749	0.08945	0.72597	0.09013	0.69535	2.42E-04	3.66E-06	2.60E-05	3.69E-06	2.39E-05	2.9955E-04
519902.47	4258219.9	5281.51115	0.09268	0.71386	0.09342	0.68476	2.42E-04	3.79E-06	2.55E-05	3.82E-06	2.35E-05	2.9897E-04
519901.97	4258355.39	5281.40031	0.12562	0.71535	0.12772	0.68878	2.42E-04	5.14E-06	2.56E-05	5.23E-06	2.36E-05	3.0191E-04
519903.95	4258447.64	5279.8542	0.16198	0.71106	0.16875	0.68549	2.42E-04	6.63E-06	2.54E-05	6.91E-06	2.35E-05	3.0474E-04
519906.43	4258188.31	5272.35569	0.08787	0.73118	0.08856	0.6998	2.42E-04	3.60E-06	2.62E-05	3.63E-06	2.40E-05	2.9929E-04
520060.31	4257785.25	5271.55166	0.06156	11.01676	0.06327	6.54327	2.42E-04	2.52E-06	3.94E-04	2.59E-06	2.25E-04	8.6565E-04
519770.63	4258735.67	5258.43585	0.13871	0.25774	0.14259	0.25427	2.41E-04	5.68E-06	9.22E-06	5.84E-06	8.73E-06	2.7071E-04
519889.4	4258502.58	5257.38938	0.17198	0.6124	0.18014	0.59384	2.41E-04	7.04E-06	2.19E-05	7.38E-06	2.04E-05	2.9791E-04
519904.62	4258421.76	5247.38309	0.15149	0.723	0.15703	0.69608	2.41E-04	6.20E-06	2.59E-05	6.43E-06	2.39E-05	3.0313E-04
519898.13	4258316.2	5237.35146	0.11268	0.69375	0.11398	0.66857	2.40E-04	4.61E-06	2.48E-05	4.67E-06	2.30E-05	2.9733E-04
520109.51	4257705.4	5236.34251	0.05904	12.97293	0.05896	14.90548	2.40E-04	2.42E-06	4.64E-04	2.41E-06	5.12E-04	1.2208E-03
520161.2	4257632.85	5231.76963	0.05676	3.6372	0.05611	2.63495	2.40E-04	2.32E-06	1.30E-04	2.30E-06	9.05E-05	4.6520E-04
519817.12	4258646.05	5231.69251	0.15462	0.34456	0.16242	0.34	2.40E-04	6.33E-06	1.23E-05	6.65E-06	1.17E-05	2.7700E-04
519839.81	4258599.77	5219.38762	0.1615	0.40646	0.17025	0.39947	2.39E-04	6.61E-06	1.45E-05	6.97E-06	1.37E-05	2.8129E-04
519899.28	4258231.21	5219.25772	0.09392	0.69757	0.09472	0.6694	2.39E-04	3.85E-06	2.50E-05	3.88E-06	2.30E-05	2.9511E-04
519879.48	4258522.02	5218.84974	0.17053	0.56125	0.1787	0.54587	2.39E-04	6.98E-06	2.01E-05	7.32E-06	1.87E-05	2.9255E-04
519849.73	4258580.33	5216.80181	0.1642	0.43963	0.17298	0.43035	2.39E-04	6.72E-06	1.57E-05	7.08E-06	1.48E-05	2.8364E-04
519829.89	4258619.2	5214.18465	0.15845	0.37735	0.16672	0.37187	2.39E-04	6.49E-06	1.35E-05	6.83E-06	1.28E-05	2.7879E-04
520050.49	4257795.22	5210.6365	0.06137	6.8861	0.06355	4.73976	2.39E-04	2.51E-06	2.46E-04	2.60E-06	1.63E-04	6.5320E-04
519859.65	4258560.89	5209.82374	0.16655	0.47617	0.17487	0.46482	2.39E-04	6.82E-06	1.70E-05	7.16E-06	1.60E-05	2.8599E-04
519901.81	4258380.04	5206.66578	0.13377	0.71334	0.13692	0.68657	2.39E-04	5.48E-06	2.55E-05	5.61E-06	2.36E-05	2.9904E-04
519869.57	4258541.46	5206.19266	0.16864	0.51643	0.17679	0.50322	2.39E-04	6.90E-06	1.85E-05	7.24E-06	1.73E-05	2.8874E-04
519807.12	4258664.6	5205.83624	0.1508	0.32236	0.15799	0.31836	2.39E-04	6.17E-06	1.15E-05	6.47E-06	1.09E-05	2.7394E-04
519897.91	4258241.76	5202.42018	0.09559	0.68793	0.09642	0.66132	2.39E-04	3.91E-06	2.46E-05	3.95E-06	2.27E-05	2.9385E-04
520121.65	4257684.29	5196.98659	0.05816	16.62935	0.0579	13.67336	2.38E-04	2.38E-06	5.95E-04	2.37E-06	4.69E-04	1.3074E-03
520099.69	4257715.37	5192.78668	0.05906	16.93762	0.0592	17.94943	2.38E-04	2.42E-06	6.06E-04	2.42E-06	6.16E-04	1.4651E-03
520149.08	4257643.96	5186.7296	0.05686	6.74462	0.05631	3.82387	2.38E-04	2.33E-06	2.41E-04	2.31E-06	1.31E-04	6.1511E-04
519900.29	4258456.53	5186.21635	0.16266	0.68597	0.16953	0.66231	2.38E-04	6.66E-06	2.45E-05	6.94E-06	2.27E-05	2.9881E-04
519797.12	4258683.15	5185.51777	0.14698	0.30242	0.15338	0.29873	2.38E-04	6.02E-06	1.08E-05	6.28E-06	1.03E-05	2.7127E-04
519764.04	4258743.81	5183.19988	0.1356	0.24886	0.13908	0.2455	2.38E-04	5.55E-06	8.90E-06	5.69E-06	8.43E-06	2.6637E-04
520060.34	4257775.25	5181.43474	0.06062	10.92579	0.06228	6.43071	2.38E-04	2.48E-06	3.91E-04	2.55E-06	2.21E-04	8.5432E-04
519896.43	4258252.35	5172.4779	0.09725	0.67911	0.09812	0.65358	2.37E-04	3.98E-06	2.43E-05	4.02E-06	2.24E-05	2.9203E-04
519897.82	4258341.21	5163.5989	0.11928	0.69013	0.12093	0.66526	2.37E-04	4.88E-06	2.47E-05	4.95E-06	2.28E-05	2.9426E-04
520109.54	4257695.4	5143.64936	0.05816	14.65391	0.05807	15.99828	2.36E-04	2.38E-06	5.24E-04	2.38E-06	5.49E-04	1.3141E-03
519894.71	4258300.26	5141.5642	0.10732	0.67375	0.10841	0.64951	2.36E-04	4.39E-06	2.41E-05	4.44E-06	2.23E-05	2.9112E-04
519901.5	4258405.07	5132.13555	0.14265	0.70694	0.14716	0.68099	2.35E-04	5.84E-06	2.53E-05	6.03E-06	2.34E-05	2.9598E-04
519898.46	4258363.92	5131.93006	0.12661	0.69488	0.12901	0.66924	2.35E-04	5.18E-06	2.49E-05	5.28E-06	2.30E-05	2.9374E-04
519889.36	4258492.89	5126.46323	0.16774	0.61509	0.17537	0.59637	2.35E-04	6.87E-06	2.20E-05	7.18E-06	2.05E-05	2.9172E-04
519894.84	4258263	5124.80306	0.0988	0.66776	0.09969	0.64342	2.35E-04	4.05E-06	2.39E-05	4.08E-06	2.21E-05	2.8922E-04
520050.52	4257785.22	5123.30913	0.06044	6.81865	0.06256	4.65281	2.35E-04	2.47E-06	2.44E-04	2.56E-06	1.60E-04	6.4371E-04
519896.63	4258465.41	5116.01031	0.16327	0.66249	0.17027	0.64043	2.35E-04	6.68E-06	2.37E-05	6.97E-06	2.20E-05	2.9405E-04
519901	4258430.54	5112.65063	0.15235	0.69778	0.15815	0.67303	2.35E-04	6.24E-06	2.50E-05	6.48E-06	2.31E-05	2.9534E-04
520099.72	4257705.37	5101.71724	0.05818	17.5361	0.0583	18.04929	2.34E-04	2.38E-06	6.27E-04	2.39E-06	6.20E-04	1.4857E-03
520149.12	4257633.96	5095.83945	0.05604	5.26393	0.05549	3.38387	2.34E-04	2.29E-06	1.88E-04	2.27E-06	1.16E-04	5.4281E-04
520060.38	4257765.25	5093.01715	0.05971	10.83271	0.06131	6.30497	2.34E-04	2.44E-06	3.87E-04	2.51E-06	2.16E-04	8.4254E-04
519894.51	4258325.01	5090.75504	0.11341	0.67209	0.11472	0.64824	2.34E-04	4.64E-06	2.40E-05	4.70E-06	2.23E-05	2.8919E-04
519893.11	4258273.7	5082.02602	0.10055	0.65994	0.10145	0.63634	2.33E-04	4.12E-06	2.36E-05	4.15E-06	2.18E-05	2.8688E-04
519785.45	4258699.45	5075.2046	0.14149	0.28247	0.14693	0.27908	2.33E-04	5.79E-06	1.01E-05	6.02E-06	9.58E-06	2.6433E-04
519817.12	4258636.77	5073.6588	0.15208	0.34659	0.15976	0.34203	2.33E-04	6.23E-06	1.24E-05	6.54E-06	1.17E-05	2.6968E-04
519879.44	4258512.32	5073.0554	0.16648	0.56398	0.17427	0.54845	2.33E-04	6.82E-06	2.02E-05	7.14E-06	1.88E-05	2.8570E-04
520139.3	4257643.93	5066.13413	0.05617	9.17068	0.05569	4.83437	2.32E-04	2.30E-06	3.28E-04	2.28E-06	1.66E-04	7.3100E-04
519892.98	4258474.3	5061.46595	0.16365	0.63985	0.17074	0.61936	2.32E-04	6.70E-06	2.29E-05	6.99E-06	2.13E-05	2.9005E-04
519839.77	4258590.07	5058.01824	0.15824	0.40943	0.16669	0.4019	2.32E-04	6.48E-06	1.46E-05	6.82E-06	1.38E-05	2.7380E-04
519849.69	4258570.63	5055.58624	0.16067	0.44254	0.1688	0.43291	2.32E-04	6.58E-06	1.58E-05	6.91E-06	1.49E-05	2.7612E-04
519829.85	4258609.51	5053.87735	0.15548	0.37972	0.1636	0.37409	2.32E-04	6.37E-06	1.36E-05	6.70E-06	1.28E-05	2.7135E-04
520109.57	4257685.4	5051.24348	0.05729	18.11687	0.05719	16.14073	2.32E-04	2.35E-06	6.48E-04	2.34E-06	5.54E-04	1.4386E-03
519869.53	4258531.76	5050.98463	0.16477	0.51894	0.1725	0.5058	2.32E-04	6.75E-06	1.86E-05	7.06E-06	1.74E-05	2.8147E-04
519859.61	4258551.2	5050.06105	0.16282	0.47876	0.17055	0.46742	2.32E-04	6.67E-06	1.71E-05	6.98E-06	1.60E-05	2.7851E-04
519896.37	4258202.44	5046.52187	0.08775	0.67106	0.08826	0.64371	2.32E-04	3.59E-06	2.40E-05	3.61E-06	2.21E-05	2.8483E-04
519898.27	4258388.65	5045.23844	0.13467	0.69031	0.13824	0.66525	2.31E-04	5.51E-06	2.47E-05	5.66E-06	2.28E-05	2.9017E-04
519807.12	4258655.32	5045.12689	0.14845	0.32421	0.15563	0.32026	2.31E-04	6.08E-06	1.16E-05	6.37E-06	1.10E-05	2.6650E-04
519895	4258213	5044.96186	0.08929	0.66667	0.08985	0.63993	2.31E-04	3.66E-06	2.38E-05	3.68E-06	2.20E-05	2.8460E-04
519897.66	4258191.92	5041.85514	0.08623	0.67543	0.08671	0.64737	2.31E-04	3.53E-06	2.42E-05	3.55E-06	2.22E-05	2.8478E-04
520050.56	4257775.22	5038.20556	0.05953	6.7432	0.06159	4.55385	2.31E-04	2.44E-06	2.41E-04	2.52E-06	1.56E-04	6.3364E-04
519893.52	4258223.6	5032.12637	0.0908	0.66181	0.09144	0.63541	2.31E-04	3.72E-06	2.37E-05	3.74E-06	2.18E-05	2.8381E-04
519773.47	4258718.6	5023.96459	0.13689	0.26374	0.14118	0.26059	2.30E-04	5.60E-06	9.43E-06	5.78E-06	8.95E-06	2.6026E-04
519797.12	4258673.87	5020.42155	0.14477	0.30406	0.15126	0.30053	2.30E-04	5.93E-06	1.09E-05	6.19E-06	1.03E-05	2.6364E-04
519889.32	4258483.19	5015.82869	0.16376	0.6179	0.17093	0.599	2.30E-04	6.71E-06	2.21E-05	7.00E-06	2.06E-05	2.8649E-04
520099.75	4257695.37	5013.91724	0.05733	18.73064	0.05742	18.30026	2.30E-04	2.35E-06	6.70E-04	2.35E-06	6.28E-04	1.5330E-03
520060.41	4257755.25	5006.5467	0.05881	10.7165	0.06037	6.15462	2.30E-04	2.41E-06	3.83E-04	2.47E-06	2.11E-04	8.2918E-04
519778.9	4258707.69	5005.64155	0.13847	0.2723	0.14328	0.26914	2.30E-04	5.67E-06	9.74E-06	5.87E-06	9.24E-06	2.6016E-04
519891.12	4258308.98	5004.655	0.10795	0.65265	0.10901	0.62985	2.30E-04	4.42E-06	2.33E-05	4.46E-06	2.16E-05	2.8345E-04
519897.39	4258439.32	4999.58673	0.15313	0.67401	0.1591	0.65114	2.29E-04	6.27E-06	2.41E-05	6.51E-06	2.24E-05	2.8862E-04
519894.17	4258350.1	4998.92315	0.11998	0.66736	0.12181	0.64382	2.29E-04	4.91E-06	2.39E-05	4.99E-06	2.21E-05	2.8521E-04
519897.92	4258413.76	4989.16585	0.14357	0.68352	0.14845	0.65945	2.29E-04	5.88E-06	2.44E-05	6.08E-06	2.26E-05	2.8794E-04
520139.33	4257633.93	4978.67429	0.05537	6.42921	0.05489	4.0221	2.28E-04	2.27E-06	2.30E-04	2.25E-06	1.38E-04	6.0097E-04
519890.59	4258234.79	4973.43861	0.09203	0.646	0.09271	0.6212	2.28E-04	3.77E-06	2.31E-05	3.80E-06	2.13E-05	2.8017E-04
519894.95	4258372.45	4963.07302	0.1273	0.67179	0.13002	0.64796	2.28E-04	5.21E-06	2.40E-05	5.32E-06	2.22E-05	2.8451E-04
519766.94	4258726.88	4956.53647	0.13393	0.25464	0.13775	0.25159	2.27E-04	5.48E-06	9.11E-06	5.64E-06	8.64E-06	2.5627E-04
520129.53	4257644.69	4954.94196	0.05554	10.86743	0.05513	5.82343	2.27E-04	2.27E-06	3.89E-04	2.26E-06	2.00E-04	8.2049E-04
520050.59	4257765.22	4954.64642	0.05865	6.65111	0.06065	4.43773	2.27E-04	2.40E-06	2.38E-04	2.48E-06	1.52E-04	6.2245E-04
519889.16	4258245.37	4949.56427	0.0936	0.638	0.09431	0.61434	2.27E-04	3.83E-06	2.28E-05	3.86E-06	2.11E-05	2.7868E-04
519890.89	4258333.81	4939.75483	0.1141	0.651	0.1155	0.6284	2.27E-04	4.67E-06	2.33E-05	4.73E-06	2.16E-05	2.8089E-04
519879.4	4258502.62	4934.56208	0.16252	0.56645	0.16989	0.55077	2.26E-04	6.65E-06	2.03E-05	6.96E-06	1.89E-05	2.7917E-04
520099.78	4257685.37	4927.36788	0.05649	21.40745	0.05656	17.37709	2.26E-04	2.31E-06	7.66E-04	2.32E-06	5.97E-04	1.5930E-03
520060.44	4257745.25	4922.76009	0.05794	10.57235	0.05945	5.97246	2.26E-04	2.37E-06	3.78E-04	2.43E-06	2.05E-04	8.1385E-04
519887.66	4258293.12	4918.49098	0.103	0.63567	0.10391	0.61312	2.26E-04	4.22E-06	2.27E-05	4.25E-06	2.10E-05	2.7791E-04
519887.62	4258255.99	4909.9268	0.09513	0.62925	0.09586	0.60669	2.25E-04	3.90E-06	2.25E-05	3.92E-06	2.08E-05	2.7641E-04
519839.73	4258580.37	4906.36282	0.15502	0.41215	0.16294	0.40417	2.25E-04	6.35E-06	1.47E-05	6.67E-06	1.39E-05	2.6673E-04
519869.48	4258522.06	4905.52177	0.16099	0.52104	0.16832	0.50801	2.25E-04	6.59E-06	1.86E-05	6.89E-06	1.74E-05	2.7462E-04
519849.65	4258560.94	4903.46845	0.15722	0.44501	0.16469	0.43528	2.25E-04	6.44E-06	1.59E-05	6.74E-06	1.49E-05	2.6900E-04
519829.81	4258599.81	4902.88962	0.15252	0.38229	0.16048	0.37626	2.25E-04	6.24E-06	1.37E-05	6.57E-06	1.29E-05	2.6434E-04
519893.78	4258448.1	4900.70855	0.15371	0.65113	0.15978	0.63002	2.25E-04	6.29E-06	2.33E-05	6.54E-06	2.16E-05	2.8259E-04
519859.57	4258541.5	4899.50746	0.1592	0.4811	0.16648	0.46984	2.25E-04	6.52E-06	1.72E-05	6.82E-06	1.61E-05	2.7145E-04
519807.12	4258646.05	4896.2286	0.14614	0.32603	0.15323	0.32209	2.25E-04	5.98E-06	1.17E-05	6.27E-06	1.11E-05	2.5961E-04
519819.89	4258619.25	4891.11679	0.14969	0.35589	0.15724	0.35117	2.24E-04	6.13E-06	1.27E-05	6.44E-06	1.21E-05	2.6175E-04
519894.73	4258397.25	4889.82136	0.13548	0.66768	0.13944	0.64452	2.24E-04	5.55E-06	2.39E-05	5.71E-06	2.21E-05	2.8160E-04
519760.37	4258735.08	4888.82848	0.131	0.246	0.1344	0.24302	2.24E-04	5.36E-06	8.80E-06	5.50E-06	8.34E-06	2.5230E-04
520050.62	4257755.22	4872.35194	0.05778	6.53993	0.05973	4.30174	2.24E-04	2.37E-06	2.34E-04	2.45E-06	1.48E-04	6.0995E-04
520129.56	4257634.69	4870.14298	0.05475	7.36893	0.05434	4.6029	2.23E-04	2.24E-06	2.64E-04	2.22E-06	1.58E-04	6.4950E-04
519887.53	4258317.71	4867.63233	0.1086	0.63304	0.10968	0.61138	2.23E-04	4.45E-06	2.26E-05	4.49E-06	2.10E-05	2.7589E-04
519797.12	4258664.6	4867.08882	0.14259	0.30571	0.14915	0.30224	2.23E-04	5.84E-06	1.09E-05	6.11E-06	1.04E-05	2.5655E-04
519885.96	4258266.67	4863.96653	0.09668	0.62087	0.09741	0.59913	2.23E-04	3.96E-06	2.22E-05	3.99E-06	2.06E-05	2.7387E-04
519894.35	4258422.45	4854.41331	0.14431	0.66049	0.14943	0.63845	2.23E-04	5.91E-06	2.36E-05	6.12E-06	2.19E-05	2.8028E-04
519890.51	4258358.99	4850.08206	0.12094	0.64819	0.12309	0.62575	2.23E-04	4.95E-06	2.32E-05	5.04E-06	2.15E-05	2.7717E-04
520060.47	4257735.25	4838.22676	0.05707	10.40157	0.05855	5.73766	2.22E-04	2.34E-06	3.72E-04	2.40E-06	1.97E-04	7.9573E-04
520119.74	4257644.66	4837.318	0.05483	11.73883	0.0545	6.34923	2.22E-04	2.24E-06	4.20E-04	2.23E-06	2.18E-04	8.6426E-04
519890.16	4258456.88	4828.21624	0.15427	0.62981	0.16044	0.61008	2.22E-04	6.32E-06	2.25E-05	6.57E-06	2.09E-05	2.7787E-04
519888.9	4258195.54	4826.07505	0.08465	0.62701	0.08501	0.60165	2.21E-04	3.47E-06	2.24E-05	3.48E-06	2.07E-05	2.7144E-04
519887.55	4258206.08	4822.09345	0.08607	0.62231	0.08649	0.59771	2.21E-04	3.52E-06	2.23E-05	3.54E-06	2.05E-05	2.7107E-04
519891.44	4258380.98	4817.50796	0.12821	0.65203	0.13135	0.62951	2.21E-04	5.25E-06	2.33E-05	5.38E-06	2.16E-05	2.7658E-04
519886.11	4258216.67	4813.75052	0.08751	0.61989	0.08802	0.59545	2.21E-04	3.58E-06	2.22E-05	3.60E-06	2.04E-05	2.7065E-04
519879.36	4258492.93	4809.35629	0.15869	0.56872	0.16561	0.55291	2.21E-04	6.50E-06	2.03E-05	6.78E-06	1.90E-05	2.7325E-04
519781.81	4258690.8	4796.12534	0.13662	0.27872	0.14214	0.27557	2.20E-04	5.59E-06	9.97E-06	5.82E-06	9.46E-06	2.5088E-04
519884.57	4258227.29	4794.05464	0.08894	0.61325	0.0895	0.58974	2.20E-04	3.64E-06	2.19E-05	3.66E-06	2.02E-05	2.6943E-04
520050.65	4257745.22	4792.34865	0.05694	6.40236	0.05884	4.1387	2.20E-04	2.33E-06	2.29E-04	2.41E-06	1.42E-04	5.9569E-04
519884.1	4258301.78	4791.67599	0.10357	0.61544	0.10444	0.59445	2.20E-04	4.24E-06	2.20E-05	4.28E-06	2.04E-05	2.7077E-04
519887.27	4258342.61	4788.12954	0.11478	0.63082	0.11636	0.60933	2.20E-04	4.70E-06	2.26E-05	4.76E-06	2.09E-05	2.7262E-04
519869.44	4258512.36	4770.58189	0.15737	0.5234	0.1644	0.51024	2.19E-04	6.44E-06	1.87E-05	6.73E-06	1.75E-05	2.6828E-04
519886.55	4258465.67	4769.32688	0.15464	0.60926	0.16089	0.59089	2.19E-04	6.33E-06	2.18E-05	6.59E-06	2.03E-05	2.7380E-04
519839.69	4258570.67	4763.0889	0.15183	0.41483	0.1592	0.40647	2.19E-04	6.22E-06	1.48E-05	6.52E-06	1.40E-05	2.6005E-04
519829.77	4258590.11	4760.97176	0.14956	0.38493	0.15726	0.37839	2.18E-04	6.12E-06	1.38E-05	6.44E-06	1.30E-05	2.5775E-04
519849.61	4258551.24	4759.38889	0.15385	0.44722	0.16078	0.43752	2.18E-04	6.30E-06	1.60E-05	6.58E-06	1.50E-05	2.6225E-04
520060.5	4257725.25	4758.89458	0.05625	10.16386	0.05768	5.45139	2.18E-04	2.30E-06	3.64E-04	2.36E-06	1.87E-04	7.7369E-04
519807.12	4258636.77	4757.7101	0.14383	0.32781	0.15082	0.32387	2.18E-04	5.89E-06	1.17E-05	6.18E-06	1.11E-05	2.5318E-04
519859.53	4258531.8	4757.49235	0.1557	0.48323	0.16263	0.47204	2.18E-04	6.37E-06	1.73E-05	6.66E-06	1.62E-05	2.6479E-04
519891.19	4258405.86	4756.87477	0.13638	0.64709	0.14071	0.6254	2.18E-04	5.58E-06	2.31E-05	5.76E-06	2.15E-05	2.7420E-04
520119.77	4257634.66	4756.32202	0.05406	7.8718	0.05373	4.83563	2.18E-04	2.21E-06	2.82E-04	2.20E-06	1.66E-04	6.7020E-04
519819.85	4258609.55	4750.92249	0.14701	0.3579	0.1544	0.35307	2.18E-04	6.02E-06	1.28E-05	6.32E-06	1.21E-05	2.5523E-04
519769.75	4258709.75	4740.32326	0.1322	0.26034	0.13654	0.25753	2.17E-04	5.41E-06	9.31E-06	5.59E-06	8.84E-06	2.4663E-04
519890.77	4258431.14	4739.37474	0.14498	0.63875	0.15025	0.61843	2.17E-04	5.94E-06	2.28E-05	6.15E-06	2.12E-05	2.7360E-04
519881.91	4258238.38	4739.11882	0.09016	0.60043	0.09074	0.57827	2.17E-04	3.69E-06	2.15E-05	3.72E-06	1.99E-05	2.6616E-04
519775.28	4258699.1	4733.27977	0.13382	0.26878	0.13871	0.26591	2.17E-04	5.48E-06	9.61E-06	5.68E-06	9.13E-06	2.4706E-04
519883.94	4258326.43	4728.14673	0.10924	0.61421	0.11041	0.59356	2.17E-04	4.47E-06	2.20E-05	4.52E-06	2.04E-05	2.6826E-04
519882.94	4258474.45	4725.57925	0.15486	0.58956	0.1612	0.57247	2.17E-04	6.34E-06	2.11E-05	6.60E-06	1.97E-05	2.7048E-04
519797.12	4258655.32	4725.30273	0.14046	0.30735	0.147	0.3039	2.17E-04	5.75E-06	1.10E-05	6.02E-06	1.04E-05	2.4998E-04
520050.68	4257735.22	4713.08409	0.0561	6.23067	0.05796	3.94142	2.16E-04	2.30E-06	2.23E-04	2.37E-06	1.35E-04	5.7907E-04
519880.42	4258248.98	4707.72097	0.09163	0.59311	0.09222	0.57191	2.16E-04	3.75E-06	2.12E-05	3.78E-06	1.96E-05	2.6436E-04
519880.46	4258286.36	4706.08036	0.09898	0.59826	0.0997	0.57757	2.16E-04	4.05E-06	2.14E-05	4.08E-06	1.98E-05	2.6527E-04
520107.66	4257645.77	4704.74759	0.05401	13.21639	0.05385	6.53769	2.16E-04	2.21E-06	4.73E-04	2.20E-06	2.24E-04	9.1744E-04
519886.85	4258367.87	4704.42742	0.12184	0.6293	0.12438	0.60787	2.16E-04	4.99E-06	2.25E-05	5.09E-06	2.09E-05	2.6929E-04

519879.32	4258483.23	4700.47527	0.15505	0.57095	0.16153	0.555	2.16E-04	6.35E-06	2.04E-05	6.61E-06	1.91E-05	2.6809E-04
520060.53	4257715.25	4681.49453	0.05544	9.83815	0.05683	5.07588	2.15E-04	2.27E-06	3.52E-04	2.33E-06	1.74E-04	7.4553E-04
519763.24	4258718.09	4680.8441	0.12947	0.25142	0.13326	0.24877	2.15E-04	5.30E-06	8.99E-06	5.46E-06	8.54E-06	2.4304E-04
519887.93	4258389.51	4674.44912	0.12901	0.63214	0.13253	0.61108	2.14E-04	5.28E-06	2.26E-05	5.43E-06	2.10E-05	2.6875E-04
519880.54	4258310.43	4663.87262	0.10417	0.59771	0.10506	0.57773	2.14E-04	4.27E-06	2.14E-05	4.30E-06	1.98E-05	2.6375E-04
519878.81	4258259.63	4661.41098	0.09306	0.585	0.09364	0.56476	2.14E-04	3.81E-06	2.09E-05	3.83E-06	1.94E-05	2.6181E-04
519887.2	4258439.83	4647.24839	0.14564	0.61857	0.15103	0.59958	2.13E-04	5.96E-06	2.21E-05	6.18E-06	2.06E-05	2.6806E-04
519869.4	4258502.67	4645.89149	0.15392	0.52577	0.16065	0.51239	2.13E-04	6.30E-06	1.88E-05	6.58E-06	1.76E-05	2.6242E-04
520050.71	4257725.22	4637.13174	0.0553	6.00652	0.05711	3.69932	2.13E-04	2.26E-06	2.15E-04	2.34E-06	1.27E-04	5.5919E-04
519883.65	4258351.41	4634.06165	0.11536	0.61074	0.11722	0.59048	2.13E-04	4.72E-06	2.18E-05	4.80E-06	2.03E-05	2.6424E-04
519887.65	4258414.47	4630.07672	0.13712	0.62657	0.14169	0.60654	2.12E-04	5.61E-06	2.24E-05	5.80E-06	2.08E-05	2.6707E-04
520107.69	4257635.77	4628.28664	0.05327	8.4976	0.05309	4.77496	2.12E-04	2.18E-06	3.04E-04	2.17E-06	1.64E-04	6.8457E-04
519839.65	4258560.98	4626.83009	0.1487	0.41698	0.15548	0.40853	2.12E-04	6.09E-06	1.49E-05	6.37E-06	1.40E-05	2.5366E-04
519829.73	4258580.41	4626.54466	0.14664	0.38739	0.15388	0.3804	2.12E-04	6.00E-06	1.39E-05	6.30E-06	1.31E-05	2.5148E-04
519859.48	4258522.1	4623.23369	0.15231	0.48519	0.15894	0.47403	2.12E-04	6.24E-06	1.74E-05	6.51E-06	1.63E-05	2.5848E-04
519849.57	4258541.54	4622.45572	0.15057	0.44926	0.15711	0.43962	2.12E-04	6.16E-06	1.61E-05	6.43E-06	1.51E-05	2.5583E-04
519880.14	4258199.16	4622.21412	0.08309	0.58416	0.0834	0.56104	2.12E-04	3.40E-06	2.09E-05	3.41E-06	1.93E-05	2.5903E-04
519784.63	4258673.69	4620.12954	0.13519	0.28526	0.14098	0.28229	2.12E-04	5.54E-06	1.02E-05	5.77E-06	9.69E-06	2.4316E-04
519756.7	4258726.35	4618.30897	0.12668	0.24302	0.13009	0.2404	2.12E-04	5.19E-06	8.69E-06	5.33E-06	8.25E-06	2.3934E-04
519819.81	4258599.85	4618.19252	0.14431	0.3602	0.15158	0.35498	2.12E-04	5.91E-06	1.29E-05	6.21E-06	1.22E-05	2.4906E-04
519878.73	4258209.72	4610.99204	0.08443	0.58003	0.0848	0.55762	2.12E-04	3.46E-06	2.07E-05	3.47E-06	1.91E-05	2.5836E-04
520060.56	4257705.25	4606.37598	0.05466	9.36872	0.05601	4.59109	2.11E-04	2.24E-06	3.35E-04	2.29E-06	1.58E-04	7.0859E-04
519809.89	4258619.29	4600.10303	0.14167	0.33622	0.14859	0.33212	2.11E-04	5.80E-06	1.20E-05	6.08E-06	1.14E-05	2.4636E-04
519797.12	4258646.05	4594.75738	0.13836	0.30895	0.14482	0.30551	2.11E-04	5.67E-06	1.11E-05	5.93E-06	1.05E-05	2.4393E-04
519877.23	4258220.33	4590.66411	0.08574	0.57676	0.08621	0.55457	2.11E-04	3.51E-06	2.06E-05	3.53E-06	1.90E-05	2.5732E-04
520097.87	4257645.74	4589.17209	0.05325	13.38336	0.05328	5.66338	2.11E-04	2.18E-06	4.79E-04	2.18E-06	1.94E-04	8.8804E-04
519880.35	4258335.16	4589.13129	0.1099	0.59645	0.11126	0.57675	2.11E-04	4.50E-06	2.13E-05	4.56E-06	1.98E-05	2.6073E-04
519876.77	4258295.33	4587.11759	0.09958	0.5811	0.1003	0.56139	2.10E-04	4.08E-06	2.08E-05	4.11E-06	1.93E-05	2.5869E-04
519883.62	4258448.52	4571.37316	0.14615	0.59916	0.15164	0.58139	2.10E-04	5.98E-06	2.14E-05	6.21E-06	2.00E-05	2.6331E-04
519875.62	4258230.98	4566.52265	0.08711	0.56853	0.08757	0.54773	2.10E-04	3.57E-06	2.03E-05	3.59E-06	1.88E-05	2.5580E-04
520050.74	4257715.22	4563.54471	0.05452	5.70967	0.05628	3.40611	2.09E-04	2.23E-06	2.04E-04	2.30E-06	1.17E-04	5.3507E-04
519883.2	4258376.76	4556.71447	0.12262	0.60989	0.12555	0.58984	2.09E-04	5.02E-06	2.18E-05	5.14E-06	2.02E-05	2.6128E-04
519778.17	4258682.15	4554.94664	0.13235	0.27498	0.13769	0.27221	2.09E-04	5.42E-06	9.84E-06	5.64E-06	9.35E-06	2.3921E-04
520107.72	4257625.77	4552.71353	0.05254	5.96601	0.05234	3.61165	2.09E-04	2.15E-06	2.13E-04	2.14E-06	1.24E-04	5.5055E-04
519884.42	4258398.05	4538.06693	0.12973	0.6126	0.13356	0.59314	2.08E-04	5.31E-06	2.19E-05	5.47E-06	2.04E-05	2.6125E-04
519876.98	4258319.08	4532.69976	0.10474	0.58049	0.10573	0.56144	2.08E-04	4.29E-06	2.08E-05	4.33E-06	1.93E-05	2.5661E-04
520060.59	4257695.25	4532.40613	0.05389	8.67277	0.0552	3.99918	2.08E-04	2.21E-06	3.10E-04	2.26E-06	1.37E-04	6.5991E-04
519869.36	4258492.97	4529.30533	0.15048	0.52773	0.15683	0.5142	2.08E-04	6.16E-06	1.89E-05	6.42E-06	1.77E-05	2.5691E-04
519884.11	4258423.07	4515.20061	0.13773	0.60676	0.14246	0.58827	2.07E-04	5.64E-06	2.17E-05	5.83E-06	2.02E-05	2.6052E-04
519873.22	4258241.96	4514.93519	0.08831	0.55911	0.08877	0.5392	2.07E-04	3.62E-06	2.00E-05	3.63E-06	1.85E-05	2.5290E-04
520097.9	4257635.74	4514.80896	0.05251	8.15428	0.05253	4.11655	2.07E-04	2.15E-06	2.92E-04	2.15E-06	1.41E-04	6.4442E-04
519873.42	4258279.22	4512.69717	0.09517	0.5637	0.09573	0.54466	2.07E-04	3.90E-06	2.02E-05	3.92E-06	1.87E-05	2.5371E-04
519880.05	4258457.2	4512.1099	0.14655	0.58064	0.15213	0.56399	2.07E-04	6.00E-06	2.08E-05	6.23E-06	1.94E-05	2.5937E-04
519880.02	4258360.21	4501.27199	0.11631	0.59477	0.11853	0.57546	2.07E-04	4.76E-06	2.13E-05	4.85E-06	1.98E-05	2.5716E-04
519829.69	4258570.72	4498.74189	0.14374	0.38968	0.15047	0.38237	2.06E-04	5.89E-06	1.39E-05	6.16E-06	1.31E-05	2.4551E-04
519859.44	4258512.41	4497.46069	0.14904	0.48715	0.15543	0.47592	2.06E-04	6.10E-06	1.74E-05	6.36E-06	1.63E-05	2.5256E-04
519839.61	4258551.28	4496.30002	0.14564	0.41886	0.15193	0.41045	2.06E-04	5.96E-06	1.50E-05	6.22E-06	1.41E-05	2.4754E-04
519819.77	4258590.15	4492.7195	0.14163	0.36249	0.14864	0.35681	2.06E-04	5.80E-06	1.30E-05	6.09E-06	1.22E-05	2.4322E-04
519849.53	4258531.84	4492.01431	0.1474	0.45115	0.15366	0.44155	2.06E-04	6.04E-06	1.61E-05	6.29E-06	1.52E-05	2.4971E-04
520050.77	4257705.22	4490.79654	0.05376	5.31856	0.05547	3.06676	2.06E-04	2.20E-06	1.90E-04	2.27E-06	1.05E-04	5.0602E-04
519771.67	4258690.5	4487.7496	0.12948	0.26527	0.13442	0.26262	2.06E-04	5.30E-06	9.49E-06	5.50E-06	9.02E-06	2.3520E-04
519809.85	4258609.59	4477.82481	0.13923	0.33805	0.14603	0.33381	2.05E-04	5.70E-06	1.21E-05	5.98E-06	1.15E-05	2.4067E-04
519766.03	4258700.91	4476.51688	0.12758	0.25692	0.13216	0.25423	2.05E-04	5.22E-06	9.19E-06	5.41E-06	8.73E-06	2.3393E-04
519871.67	4258252.59	4475.38355	0.08969	0.5525	0.09014	0.53337	2.05E-04	3.67E-06	1.98E-05	3.69E-06	1.83E-05	2.5076E-04
519797.12	4258636.77	4473.7978	0.13627	0.3105	0.14263	0.30707	2.05E-04	5.58E-06	1.11E-05	5.84E-06	1.05E-05	2.3832E-04
519876.47	4258465.89	4464.86384	0.14677	0.56265	0.15244	0.54713	2.05E-04	6.01E-06	2.01E-05	6.24E-06	1.88E-05	2.5600E-04
519873.09	4258304.29	4459.83184	0.10011	0.56327	0.10087	0.54473	2.05E-04	4.10E-06	2.01E-05	4.13E-06	1.87E-05	2.5169E-04
520060.63	4257685.25	4459.24021	0.05314	7.6374	0.05441	3.37605	2.05E-04	2.18E-06	2.73E-04	2.23E-06	1.16E-04	5.9807E-04
519787.36	4258656.36	4457.9352	0.13352	0.29196	0.13949	0.28891	2.05E-04	5.47E-06	1.04E-05	5.71E-06	9.92E-06	2.3606E-04
519876.76	4258343.88	4448.17379	0.11051	0.5789	0.11214	0.56021	2.04E-04	4.52E-06	2.07E-05	4.59E-06	1.92E-05	2.5313E-04
520097.93	4257625.74	4442.50073	0.0518	5.53467	0.0518	3.12906	2.04E-04	2.12E-06	1.98E-04	2.12E-06	1.07E-04	5.1345E-04
519872.9	4258474.58	4435.41964	0.14696	0.54565	0.15276	0.53112	2.03E-04	6.02E-06	1.95E-05	6.25E-06	1.82E-05	2.5351E-04
519759.55	4258709.31	4426.40771	0.12517	0.24824	0.12912	0.2458	2.03E-04	5.12E-06	8.88E-06	5.29E-06	8.44E-06	2.3080E-04
519871.37	4258202.78	4422.60091	0.08152	0.5447	0.0818	0.52368	2.03E-04	3.34E-06	1.95E-05	3.35E-06	1.80E-05	2.4705E-04
519869.32	4258483.27	4420.58663	0.14711	0.52945	0.15306	0.51583	2.03E-04	6.02E-06	1.89E-05	6.27E-06	1.77E-05	2.5174E-04
520050.81	4257695.22	4420.5163	0.05301	4.81166	0.05468	2.70871	2.03E-04	2.17E-06	1.72E-04	2.24E-06	9.30E-05	4.7231E-04
519880.57	4258431.68	4420.07131	0.1383	0.58817	0.14314	0.57095	2.03E-04	5.66E-06	2.10E-05	5.86E-06	1.96E-05	2.5495E-04
519880.91	4258406.58	4420.04466	0.13047	0.59461	0.13457	0.57642	2.03E-04	5.34E-06	2.13E-05	5.51E-06	1.98E-05	2.5469E-04
519879.54	4258385.65	4416.96941	0.12338	0.59131	0.12668	0.57265	2.03E-04	5.05E-06	2.12E-05	5.19E-06	1.97E-05	2.5369E-04
519869.91	4258213.37	4405.85927	0.08277	0.54202	0.08312	0.52132	2.02E-04	3.39E-06	1.94E-05	3.40E-06	1.79E-05	2.4621E-04
519873.42	4258327.74	4402.23871	0.10533	0.56431	0.10651	0.54611	2.02E-04	4.31E-06	2.02E-05	4.36E-06	1.87E-05	2.4957E-04
519869.76	4258288.1	4402.16979	0.09573	0.54947	0.09632	0.53099	2.02E-04	3.92E-06	1.97E-05	3.94E-06	1.82E-05	2.4771E-04
519780.97	4258664.98	4395.85791	0.13084	0.28134	0.13647	0.27853	2.02E-04	5.36E-06	1.01E-05	5.59E-06	9.56E-06	2.3224E-04
519868.35	4258224	4381.77522	0.08404	0.53669	0.08441	0.51678	2.01E-04	3.44E-06	1.92E-05	3.46E-06	1.77E-05	2.4486E-04
519859.4	4258502.71	4379.62971	0.14586	0.48898	0.15197	0.47762	2.01E-04	5.97E-06	1.75E-05	6.22E-06	1.64E-05	2.4701E-04
519829.65	4258561.02	4375.67471	0.1409	0.39145	0.14706	0.3841	2.01E-04	5.77E-06	1.40E-05	6.02E-06	1.32E-05	2.3973E-04
519819.73	4258580.46	4373.37667	0.13896	0.36472	0.14559	0.35859	2.01E-04	5.69E-06	1.30E-05	5.96E-06	1.23E-05	2.3765E-04
519753.03	4258717.62	4372.10832	0.12265	0.23995	0.12608	0.23767	2.01E-04	5.02E-06	8.58E-06	5.16E-06	8.16E-06	2.2751E-04
519839.57	4258541.58	4371.23129	0.14266	0.42059	0.1486	0.41223	2.01E-04	5.84E-06	1.50E-05	6.08E-06	1.42E-05	2.4167E-04
519849.48	4258522.15	4367.81373	0.14433	0.4529	0.15036	0.4433	2.00E-04	5.91E-06	1.62E-05	6.16E-06	1.52E-05	2.4387E-04
519876.4	4258369.02	4366.61948	0.11709	0.57792	0.11969	0.55963	2.00E-04	4.79E-06	2.07E-05	4.90E-06	1.92E-05	2.4991E-04
519809.81	4258599.89	4360.87578	0.13678	0.34007	0.14346	0.33547	2.00E-04	5.60E-06	1.22E-05	5.87E-06	1.15E-05	2.3522E-04
520050.84	4257685.22	4349.84048	0.05227	4.20248	0.05391	2.36895	2.00E-04	2.14E-06	1.50E-04	2.21E-06	8.13E-05	4.3555E-04
519866.67	4258234.68	4349.36172	0.08531	0.52975	0.08567	0.51086	2.00E-04	3.49E-06	1.89E-05	3.51E-06	1.75E-05	2.4303E-04
519877.03	4258440.28	4339.01346	0.13874	0.57027	0.14365	0.55422	1.99E-04	5.68E-06	2.04E-05	5.88E-06	1.90E-05	2.5005E-04
519799.89	4258619.33	4337.55388	0.13431	0.31813	0.14066	0.31453	1.99E-04	5.50E-06	1.14E-05	5.76E-06	1.08E-05	2.3243E-04
519774.53	4258673.49	4333.35922	0.12817	0.27128	0.13341	0.26869	1.99E-04	5.25E-06	9.70E-06	5.46E-06	9.22E-06	2.2844E-04
519869.4	4258313.25	4330.59221	0.10065	0.54689	0.10153	0.52929	1.99E-04	4.12E-06	1.96E-05	4.16E-06	1.82E-05	2.4469E-04
519866.37	4258272.08	4327.69683	0.09158	0.53172	0.092	0.51401	1.99E-04	3.75E-06	1.90E-05	3.77E-06	1.76E-05	2.4273E-04
519873.17	4258352.61	4310.33549	0.11113	0.56216	0.11308	0.54454	1.98E-04	4.55E-06	2.01E-05	4.63E-06	1.87E-05	2.4573E-04
519877.4	4258415.11	4309.45263	0.13108	0.57689	0.13535	0.55999	1.98E-04	5.37E-06	2.06E-05	5.54E-06	1.92E-05	2.4848E-04
519864.54	4258245.55	4299.24466	0.08649	0.52182	0.08683	0.5037	1.97E-04	3.54E-06	1.87E-05	3.56E-06	1.73E-05	2.4029E-04
519866.11	4258296.99	4287.76717	0.09628	0.53466	0.09693	0.51695	1.97E-04	3.94E-06	1.91E-05	3.97E-06	1.77E-05	2.4150E-04
519875.89	4258394.53	4285.18656	0.12404	0.57291	0.12761	0.55571	1.97E-04	5.08E-06	2.05E-05	5.22E-06	1.91E-05	2.4647E-04
519873.49	4258448.89	4273.04409	0.13905	0.55309	0.14403	0.53811	1.96E-04	5.69E-06	1.98E-05	5.90E-06	1.85E-05	2.4589E-04
519869.86	4258336.39	4272.47501	0.10594	0.54882	0.10737	0.5315	1.96E-04	4.34E-06	1.96E-05	4.40E-06	1.82E-05	2.4262E-04
519768.05	4258681.91	4270.88926	0.12551	0.26176	0.13036	0.25934	1.96E-04	5.14E-06	9.36E-06	5.34E-06	8.90E-06	2.2468E-04
519859.36	4258493.01	4265.19398	0.1427	0.49053	0.14849	0.47906	1.96E-04	5.84E-06	1.75E-05	6.08E-06	1.64E-05	2.4159E-04
519819.69	4258570.76	4258.494	0.13632	0.36675	0.14248	0.36031	1.95E-04	5.58E-06	1.31E-05	5.83E-06	1.24E-05	2.3227E-04
519829.61	4258551.32	4257.12037	0.13811	0.39315	0.14385	0.38579	1.95E-04	5.65E-06	1.41E-05	5.89E-06	1.32E-05	2.3416E-04
519783.67	4258647.59	4253.65179	0.1292	0.28776	0.1349	0.28486	1.95E-04	5.29E-06	1.03E-05	5.52E-06	9.78E-06	2.2603E-04
519762.31	4258692.06	4252.44885	0.12366	0.25348	0.12814	0.25112	1.95E-04	5.06E-06	9.07E-06	5.25E-06	8.62E-06	2.2309E-04
519839.53	4258531.88	4250.95863	0.13978	0.42221	0.14547	0.41389	1.95E-04	5.72E-06	1.51E-05	5.96E-06	1.42E-05	2.3602E-04
519849.44	4258512.45	4249.97586	0.14137	0.45458	0.1472	0.44492	1.95E-04	5.79E-06	1.63E-05	6.03E-06	1.53E-05	2.3833E-04
519809.77	4258590.2	4249.80862	0.13433	0.34211	0.14079	0.33707	1.95E-04	5.50E-06	1.22E-05	5.76E-06	1.16E-05	2.3005E-04
519872.78	4258377.82	4232.6129	0.11776	0.5608	0.12069	0.5438	1.94E-04	4.82E-06	2.01E-05	4.94E-06	1.87E-05	2.4268E-04
519862.61	4258206.39	4231.48306	0.07995	0.51019	0.08022	0.49069	1.94E-04	3.27E-06	1.82E-05	3.28E-06	1.68E-05	2.3578E-04
519799.85	4258609.63	4229.7244	0.13208	0.3198	0.13834	0.31603	1.94E-04	5.41E-06	1.14E-05	5.66E-06	1.08E-05	2.2741E-04
519862.75	4258280.89	4229.12653	0.09212	0.51891	0.09258	0.50173	1.94E-04	3.77E-06	1.86E-05	3.79E-06	1.72E-05	2.3737E-04
519869.94	4258457.5	4226.96904	0.13935	0.53696	0.14443	0.52284	1.94E-04	5.71E-06	1.92E-05	5.91E-06	1.79E-05	2.4270E-04
519873.89	4258423.64	4213.08971	0.13157	0.55964	0.13594	0.54395	1.93E-04	5.39E-06	2.00E-05	5.57E-06	1.87E-05	2.4293E-04
519861.09	4258217.01	4209.08557	0.08114	0.50604	0.08143	0.48719	1.93E-04	3.32E-06	1.81E-05	3.33E-06	1.67E-05	2.3459E-04
519865.71	4258322.22	4204.03236	0.10124	0.53186	0.10233	0.51505	1.93E-04	4.15E-06	1.90E-05	4.19E-06	1.77E-05	2.3791E-04
519789.93	4258629.07	4201.72767	0.1296	0.30002	0.13547	0.29691	1.93E-04	5.31E-06	1.07E-05	5.55E-06	1.02E-05	2.2454E-04
519777.3	4258656.27	4194.4603	0.12671	0.27741	0.13211	0.27473	1.92E-04	5.19E-06	9.92E-06	5.41E-06	9.43E-06	2.2239E-04
519866.4	4258466.1	4192.84573	0.13952	0.52133	0.14471	0.50811	1.92E-04	5.71E-06	1.86E-05	5.93E-06	1.74E-05	2.4009E-04
519755.85	4258700.52	4192.53086	0.12102	0.245	0.12517	0.24264	1.92E-04	4.96E-06	8.76E-06	5.12E-06	8.33E-06	2.1952E-04
519869.58	4258361.33	4185.12565	0.11191	0.54745	0.11421	0.53081	1.92E-04	4.58E-06	1.96E-05	4.68E-06	1.82E-05	2.3907E-04
519859.47	4258227.66	4179.35828	0.08234	0.50015	0.08262	0.4822	1.92E-04	3.37E-06	1.79E-05	3.38E-06	1.66E-05	2.3294E-04
519862.86	4258474.71	4172.75118	0.13964	0.50641	0.14497	0.49401	1.91E-04	5.72E-06	1.81E-05	5.94E-06	1.70E-05	2.3816E-04
519862.45	4258305.88	4170.11171	0.09681	0.51964	0.09758	0.50283	1.91E-04	3.96E-06	1.86E-05	4.00E-06	1.73E-05	2.3513E-04
520058.71	4257645.62	4167.69053	0.05016	2.92811	0.05137	1.74632	1.91E-04	2.05E-06	1.05E-04	2.10E-06	6.00E-05	3.6005E-04
519872.23	4258403.42	4165.24308	0.12465	0.55552	0.12843	0.53963	1.91E-04	5.10E-06	1.99E-05	5.26E-06	1.85E-05	2.3985E-04
519859.32	4258483.31	4162.74439	0.13967	0.49201	0.14512	0.48042	1.91E-04	5.72E-06	1.76E-05	5.94E-06	1.65E-05	2.3673E-04
519859.32	4258264.95	4156.97802	0.08821	0.50238	0.08853	0.48569	1.91E-04	3.61E-06	1.80E-05	3.62E-06	1.67E-05	2.3259E-04
519819.65	4258561.06	4147.169	0.13373	0.36836	0.13939	0.36184	1.90E-04	5.48E-06	1.32E-05	5.71E-06	1.24E-05	2.2704E-04
519749.35	4258708.89	4144.56978	0.11874	0.23692	0.12233	0.23479	1.90E-04	4.86E-06	8.47E-06	5.01E-06	8.06E-06	2.1655E-04
519866.3	4258345.05	4143.27527	0.10653	0.53369	0.10827	0.51733	1.90E-04	4.36E-06	1.91E-05	4.43E-06	1.78E-05	2.3573E-04
519809.73	4258580.5	4142.8893	0.1319	0.34406	0.138	0.33862	1.90E-04	5.40E-06	1.23E-05	5.65E-06	1.16E-05	2.2505E-04
519857.72	4258238.37	4141.53687	0.08353	0.49453	0.08379	0.47723	1.90E-04	3.42E-06	1.77E-05	3.43E-06	1.64E-05	2.3093E-04
519849.4	4258502.75	4138.78267	0.1385	0.45616	0.14412	0.44639	1.90E-04	5.67E-06	1.63E-05	5.90E-06	1.53E-05	2.3309E-04
519829.57	4258541.62	4136.67272	0.13523	0.3943	0.14058	0.38708	1.90E-04	5.54E-06	1.41E-05	5.76E-06	1.33E-05	2.2847E-04
519839.48	4258522.19	4135.42047	0.13699	0.4237	0.14249	0.41539	1.90E-04	5.61E-06	1.52E-05	5.83E-06	1.43E-05	2.3058E-04
519770.89	4258664.84	4134.97597	0.12421	0.2676	0.12929	0.26512	1.90E-04	5.09E-06	9.57E-06	5.29E-06	9.10E-06	2.1876E-04
519870.38	4258432.17	4130.97221	0.13198	0.54322	0.13642	0.52858	1.90E-04	5.40E-06	1.94E-05	5.59E-06	1.81E-05	2.3809E-04
519799.81	4258599.93	4127.00352	0.12984	0.32158	0.136	0.31748	1.89E-04	5.32E-06	1.15E-05	5.57E-06	1.09E-05	2.2263E-04
519859.12	4258289.71	4121.93993	0.09263	0.50647	0.09318	0.48976	1.89E-04	3.79E-06	1.81E-05	3.82E-06	1.68E-05	2.3164E-04
519869.16	4258386.62	4107.64485	0.1184	0.54456	0.12163	0.52876	1.88E-04	4.85E-06	1.95E-05	4.98E-06	1.82E-05	2.3591E-04
520058.74	4257635.62	4104.91196	0.0495	2.4012	0.05067	1.52317	1.88E-04	2.03E-06	8.59E-05	2.07E-06	5.23E-05	3.3061E-04
519789.89	4258619.37	4100.41114	0.12755	0.30143	0.13335	0.29826	1.88E-04	5.22E-06	1.08E-05	5.46E-06	1.02E-05	2.1982E-04
519862.02	4258331.18	4074.81257	0.10179	0.51689	0.10314	0.50095	1.87E-04	4.17E-06	1.85E-05	4.22E-06	1.72E-05	2.3102E-04
519764.44	4258673.31	4074.7917	0.12171	0.2583	0.12646	0.256	1.87E-04	4.98E-06	9.24E-06	5.18E-06	8.79E-06	2.1513E-04
520048.92	4257645.58	4070.74567	0.04937	2.12672	0.05093	1.39333	1.87E-04	2.02E-06	7.61E-05	2.09E-06	4.78E-05	3.1477E-04
519779.97	4258638.81	4070.21172	0.12509	0.28353	0.13049	0.28079	1.87E-04	5.12E-06	1.01E-05	5.34E-06	9.64E-06	2.1698E-04
519866.87	4258440.7	4063.36958	0.1323	0.52755	0.13681	0.51384	1.86E-04	5.42E-06	1.89E-05	5.60E-06	1.76E-05	2.3395E-04
519865.99	4258370.06	4060.51281	0.11256	0.53234	0.1152	0.51674	1.86E-04	4.61E-06	1.90E-05	4.72E-06	1.77E-05	2.3240E-04
519855.72	4258273.7	4059.13764	0.08866	0.48982	0.08901	0.47377	1.86E-04	3.63E-06	1.75E-05	3.64E-06	1.63E-05	2.2729E-04
519868.57	4258412.31	4058.66696	0.12517	0.53875	0.12909	0.52404	1.86E-04	5.12E-06	1.93E-05	5.29E-06	1.80E-05	2.3388E-04
519758.58	4258683.21	4047.56971	0.11984	0.25006	0.12426	0.24786	1.86E-04	4.91E-06	8.94E-06	5.09E-06	8.51E-06	2.1314E-04
519858.79	4258314.76	4044.36817	0.09727	0.50463	0.09822	0.48881	1.86E-04	3.98E-06	1.80E-05	4.02E-06	1.68E-05	2.2838E-04
519853.84	4258210.01	4044.09141	0.07838	0.47786	0.07863	0.4598	1.86E-04	3.21E-06	1.71E-05	3.22E-06	1.58E-05	2.2484E-04
520058.78	4257625.62	4043.93085	0.04886	1.99942	0.05	1.33716	1.86E-04	2.00E-06	7.15E-05	2.05E-06	4.59E-05	3.0700E-04
519809.69	4258570.8	4039.39043	0.12949	0.3458	0.13515	0.34008	1.85E-04	5.30E-06	1.24E-05	5.53E-06	1.17E-05	2.2020E-04
519819.61	4258551.36	4038.94735	0.13119	0.36981	0.13646	0.36329	1.85E-04	5.37E-06	1.32E-05	5.59E-06	1.25E-05	2.2196E-04
519849.36	4258493.05	4035.05445	0.13571	0.45764	0.14109	0.44771	1.85E-04	5.56E-06	1.64E-05	5.78E-06	1.54E-05	2.2819E-04
519829.53	4258531.93	4031.16769	0.13276	0.39597	0.13796	0.38871	1.85E-04	5.44E-06	1.42E-05	5.65E-06	1.33E-05	2.2353E-04
519799.77	4258590.24	4028.17992	0.1276	0.32341	0.13356	0.31889	1.85E-04	5.22E-06	1.16E-05	5.47E-06	1.09E-05	2.1801E-04
519839.44	4258512.49	4024.93863	0.1343	0.42518	0.13965	0.41681	1.85E-04	5.50E-06	1.52E-05	5.72E-06	1.43E-05	2.2539E-04
519852.27	4258220.65	4020.19017	0.07954	0.47282	0.07976	0.45565	1.84E-04	3.26E-06	1.69E-05	3.27E-06	1.56E-05	2.2352E-04
519862.74	4258353.7	4017.37248	0.10711	0.5191	0.10916	0.50374	1.84E-04	4.39E-06	1.86E-05	4.47E-06	1.73E-05	2.2903E-04
519773.64	4258647.56	4014.06255	0.12277	0.27349	0.12792	0.27092	1.84E-04	5.03E-06	9.78E-06	5.24E-06	9.30E-06	2.1351E-04
519855.49	4258298.53	4011.79595	0.09312	0.49361	0.09381	0.47753	1.84E-04	3.81E-06	1.77E-05	3.84E-06	1.64E-05	2.2576E-04
519863.36	4258449.23	4010.32567	0.13252	0.51253	0.13711	0.49967	1.84E-04	5.43E-06	1.83E-05	5.61E-06	1.72E-05	2.3051E-04
520048.96	4257635.58	4010.23818	0.04873	1.8269	0.05025	1.24384	1.84E-04	2.00E-06	6.53E-05	2.06E-06	4.27E-05	2.9608E-04
519789.85	4258609.67	4005.19333	0.12551	0.30291	0.13124	0.29957	1.84E-04	5.14E-06	1.08E-05	5.37E-06	1.03E-05	2.1538E-04
519852.28	4258257.82	3994.80436	0.08499	0.47449	0.08523	0.45865	1.83E-04	3.48E-06	1.70E-05	3.49E-06	1.57E-05	2.2296E-04
519752.15	4258691.73	3993.62169	0.11745	0.24175	0.12151	0.23966	1.83E-04	4.81E-06	8.65E-06	4.98E-06	8.23E-06	2.0988E-04
519865.54	4258395.42	3990.59922	0.11894	0.52837	0.12235	0.51381	1.83E-04	4.87E-06	1.89E-05	5.01E-06	1.76E-05	2.2950E-04
519850.58	4258231.33	3984.27299	0.08066	0.46723	0.08085	0.4508	1.83E-04	3.30E-06	1.67E-05	3.31E-06	1.55E-05	2.2159E-04
519779.93	4258629.11	3974.28089	0.1232	0.28474	0.12853	0.282	1.82E-04	5.04E-06	1.02E-05	5.26E-06	9.68E-06	2.1251E-04
519859.85	4258457.76	3974.11909	0.13272	0.49832	0.13742	0.4862	1.82E-04	5.43E-06	1.78E-05	5.63E-06	1.67E-05	2.2790E-04
519864.92	4258421.19	3965.35485	0.12559	0.52264	0.12959	0.50898	1.82E-04	5.14E-06	1.87E-05	5.31E-06	1.75E-05	2.2854E-04
519852.12	4258282.45	3962.84296	0.08917	0.47859	0.0896	0.46302	1.82E-04	3.65E-06	1.71E-05	3.67E-06	1.59E-05	2.2214E-04
519767.25	4258656.19	3956.80263	0.12044	0.26392	0.12531	0.26153	1.82E-04	4.93E-06	9.44E-06	5.13E-06	8.98E-06	2.1001E-04
520048.99	4257625.58	3951.69879	0.04811	1.57968	0.04959	1.11508	1.81E-04	1.97E-06	5.65E-05	2.03E-06	3.83E-05	2.8008E-04
519856.34	4258466.29	3946.86408	0.13277	0.48439	0.13757	0.47305	1.81E-04	5.44E-06	1.73E-05	5.63E-06	1.62E-05	2.2571E-04
519858.33	4258340.14	3945.93776	0.10231	0.50222	0.10396	0.48723	1.81E-04	4.19E-06	1.80E-05	4.26E-06	1.67E-05	2.2417E-04
519862.4	4258378.78	3942.90861	0.11317	0.51772	0.11609	0.50315	1.81E-04	4.63E-06	1.85E-05	4.75E-06	1.73E-05	2.2607E-04
519809.65	4258561.1	3938.37828	0.12712	0.34726	0.13234	0.34143	1.81E-04	5.20E-06	1.24E-05	5.42E-06	1.17E-05	2.1545E-04
519745.68	4258700.16	3937.86506	0.11501	0.23388	0.11876	0.2318	1.81E-04	4.71E-06	8.37E-06	4.86E-06	7.96E-06	2.0656E-04
519849.32	4258483.36	3935.90557	0.13294	0.45881	0.13802	0.44877	1.81E-04	5.44E-06	1.64E-05	5.65E-06	1.54E-05	2.2348E-04
519852.83	4258474.82	3934.20221	0.13282	0.47121	0.13775	0.46057	1.80E-04	5.44E-06	1.69E-05	5.64E-06	1.58E-05	2.2424E-04
519799.73	4258580.54	3932.62656	0.12538	0.32511	0.131	0.32021	1.80E-04	5.13E-06	1.16E-05	5.36E-06	1.10E-05	2.1354E-04
519819.57	4258541.67	3931.90811	0.12864	0.37085	0.13358	0.36443	1.80E-04	5.27E-06	1.33E-05	5.47E-06	1.25E-05	2.1690E-04
519829.48	4258522.23	3923.37976	0.13024	0.39736	0.13529	0.39007	1.80E-04	5.33E-06	1.42E-05	5.54E-06	1.34E-05	2.1847E-04
519855.14	4258323.65	3923.01739	0.09778	0.49099	0.09899	0.47599	1.80E-04	4.00E-06	1.76E-05	4.05E-06	1.63E-05	2.2194E-04
519839.4	4258502.79	3919.92276	0.1317	0.42658	0.13689	0.41809	1.80E-04	5.39E-06	1.53E-05	5.60E-06	1.44E-05	2.2045E-04
519789.81	4258599.98	3914.20615	0.12346	0.30449	0.1291	0.30083	1.80E-04	5.05E-06	1.09E-05	5.29E-06	1.03E-05	2.1114E-04
519851.86	4258307.34	3899.53159	0.09362	0.48046	0.09449	0.46522	1.79E-04	3.83E-06	1.72E-05	3.87E-06	1.60E-05	2.1976E-04
519760.82	4258664.72	3899.1662	0.1181	0.25484	0.12268	0.25262	1.79E-04	4.84E-06	9.12E-06	5.02E-06	8.67E-06	2.0653E-04

519859.18	4258362.36	3898.80145	0.10772	0.50542	0.11009	0.49105	1.79E-04	4.41E-06	1.81E-05	4.51E-06	1.69E-05	2.2272E-04
519848.7	4258266.51	3890.18915	0.08516	0.46024	0.08542	0.44511	1.78E-04	3.49E-06	1.65E-05	3.50E-06	1.53E-05	2.1720E-04
519861.26	4258430.08	3889.53006	0.12596	0.50749	0.13004	0.49469	1.78E-04	5.16E-06	1.82E-05	5.32E-06	1.70E-05	2.2406E-04
519779.89	4258619.41	3884.80268	0.12132	0.28599	0.1266	0.28318	1.78E-04	4.97E-06	1.02E-05	5.18E-06	9.72E-06	2.0833E-04
519861.92	4258404.22	3881.35452	0.11937	0.51269	0.1229	0.4993	1.78E-04	4.89E-06	1.83E-05	5.03E-06	1.71E-05	2.2347E-04
519845.08	4258213.63	3871.03495	0.07689	0.44749	0.07706	0.43102	1.78E-04	3.15E-06	1.60E-05	3.16E-06	1.48E-05	2.1470E-04
519754.86	4258674.36	3864.59018	0.11622	0.24668	0.12054	0.24458	1.77E-04	4.76E-06	8.82E-06	4.94E-06	8.40E-06	2.0421E-04
519848.52	4258291.2	3862.82987	0.08966	0.46781	0.09025	0.45269	1.77E-04	3.67E-06	1.67E-05	3.70E-06	1.55E-05	2.1686E-04
519845.09	4258251.01	3852.12449	0.08216	0.45081	0.08235	0.43556	1.77E-04	3.36E-06	1.61E-05	3.37E-06	1.50E-05	2.1454E-04
519769.97	4258638.85	3851.2079	0.119	0.26954	0.1239	0.26708	1.77E-04	4.87E-06	9.64E-06	5.07E-06	9.17E-06	2.0544E-04
519809.61	4258551.41	3839.34812	0.1248	0.34855	0.12966	0.34269	1.76E-04	5.11E-06	1.25E-05	5.31E-06	1.18E-05	2.1079E-04
519799.69	4258570.84	3838.98827	0.12318	0.32661	0.12838	0.32147	1.76E-04	5.04E-06	1.17E-05	5.26E-06	1.10E-05	2.0914E-04
519843.45	4258224.29	3838.50622	0.07796	0.44222	0.0781	0.42652	1.76E-04	3.19E-06	1.58E-05	3.20E-06	1.46E-05	2.1295E-04
519819.53	4258531.97	3830.04031	0.12632	0.37224	0.1311	0.36581	1.76E-04	5.17E-06	1.33E-05	5.37E-06	1.26E-05	2.1213E-04
519858.81	4258387.51	3829.87012	0.11368	0.50306	0.11679	0.48958	1.76E-04	4.65E-06	1.80E-05	4.78E-06	1.68E-05	2.1994E-04
519857.6	4258438.96	3827.62517	0.12622	0.49288	0.13038	0.48089	1.76E-04	5.17E-06	1.76E-05	5.34E-06	1.65E-05	2.2025E-04
519789.77	4258590.28	3825.58183	0.1214	0.30613	0.12687	0.30205	1.76E-04	4.97E-06	1.09E-05	5.19E-06	1.04E-05	2.0700E-04
519854.64	4258349.11	3824.37037	0.1029	0.48877	0.10487	0.47473	1.75E-04	4.21E-06	1.75E-05	4.29E-06	1.63E-05	2.1774E-04
519839.36	4258493.09	3821.08391	0.12917	0.4278	0.13416	0.41918	1.75E-04	5.29E-06	1.53E-05	5.49E-06	1.44E-05	2.1578E-04
519829.44	4258512.53	3819.53858	0.12778	0.39855	0.1327	0.39123	1.75E-04	5.23E-06	1.43E-05	5.43E-06	1.34E-05	2.1359E-04
519748.46	4258682.95	3811.68278	0.11396	0.23856	0.11798	0.23657	1.75E-04	4.67E-06	8.53E-06	4.83E-06	8.12E-06	2.0102E-04
519845.12	4258275.2	3806.93919	0.0858	0.45191	0.08615	0.43724	1.75E-04	3.51E-06	1.62E-05	3.53E-06	1.50E-05	2.1287E-04
519851.48	4258332.54	3806.91152	0.09834	0.47848	0.09985	0.46424	1.75E-04	4.03E-06	1.71E-05	4.09E-06	1.59E-05	2.1582E-04
519779.85	4258609.72	3801.37457	0.11945	0.28726	0.12468	0.2843	1.74E-04	4.89E-06	1.03E-05	5.10E-06	9.76E-06	2.0443E-04
519763.61	4258647.54	3796.03309	0.11682	0.26024	0.12148	0.25792	1.74E-04	4.78E-06	9.31E-06	4.97E-06	8.85E-06	2.0207E-04
519858.29	4258413.02	3794.19963	0.11984	0.49854	0.12349	0.48594	1.74E-04	4.91E-06	1.78E-05	5.06E-06	1.67E-05	2.1855E-04
519855.61	4258371.01	3789.78736	0.10834	0.49268	0.11099	0.47911	1.74E-04	4.44E-06	1.76E-05	4.54E-06	1.64E-05	2.1692E-04
519848.24	4258316.16	3786.64588	0.0941	0.46777	0.09521	0.45333	1.74E-04	3.85E-06	1.67E-05	3.90E-06	1.56E-05	2.1377E-04
519853.95	4258447.85	3779.39162	0.12638	0.47881	0.13062	0.46759	1.73E-04	5.17E-06	1.71E-05	5.35E-06	1.61E-05	2.1709E-04
519769.93	4258629.15	3766.65337	0.11727	0.27061	0.12212	0.26814	1.73E-04	4.80E-06	9.68E-06	5.00E-06	9.21E-06	2.0149E-04
519841.41	4258259.97	3763.11288	0.08257	0.44022	0.08281	0.42551	1.73E-04	3.38E-06	1.57E-05	3.39E-06	1.46E-05	2.0977E-04
519742.01	4258691.44	3761.35006	0.11177	0.23081	0.11542	0.22895	1.73E-04	4.58E-06	8.26E-06	4.73E-06	7.86E-06	1.9798E-04
519844.92	4258299.95	3757.41441	0.09012	0.45649	0.0909	0.44196	1.72E-04	3.69E-06	1.63E-05	3.72E-06	1.52E-05	2.1130E-04
519850.29	4258456.74	3748.82258	0.12653	0.46556	0.13089	0.45498	1.72E-04	5.18E-06	1.67E-05	5.36E-06	1.56E-05	2.1480E-04
519799.65	4258561.14	3746.78149	0.12101	0.32787	0.12581	0.32262	1.72E-04	4.95E-06	1.17E-05	5.15E-06	1.11E-05	2.0480E-04
519809.57	4258541.71	3741.65627	0.12253	0.34964	0.12714	0.34382	1.72E-04	5.02E-06	1.25E-05	5.21E-06	1.18E-05	2.0619E-04
519757.2	4258656.12	3740.99133	0.11464	0.25137	0.11903	0.24921	1.72E-04	4.69E-06	8.99E-06	4.87E-06	8.56E-06	1.9874E-04
519789.73	4258580.58	3739.59975	0.11936	0.30764	0.12452	0.30321	1.72E-04	4.89E-06	1.10E-05	5.10E-06	1.04E-05	2.0296E-04
519819.48	4258522.27	3729.36377	0.12398	0.37345	0.12866	0.36697	1.71E-04	5.08E-06	1.34E-05	5.27E-06	1.26E-05	2.0740E-04
519839.32	4258483.4	3727.95584	0.12666	0.42878	0.1314	0.42003	1.71E-04	5.19E-06	1.53E-05	5.38E-06	1.44E-05	2.1135E-04
519855.22	4258396.23	3727.12778	0.11412	0.48904	0.11737	0.47653	1.71E-04	4.67E-06	1.75E-05	4.81E-06	1.64E-05	2.1432E-04
519846.63	4258465.62	3723.7055	0.12643	0.45224	0.13088	0.44239	1.71E-04	5.18E-06	1.62E-05	5.36E-06	1.52E-05	2.1274E-04
519829.4	4258502.83	3720.18332	0.1254	0.39972	0.13019	0.3923	1.71E-04	5.13E-06	1.43E-05	5.33E-06	1.35E-05	2.0891E-04
519779.81	4258600.02	3720.16493	0.11758	0.28857	0.1227	0.28533	1.71E-04	4.81E-06	1.03E-05	5.02E-06	9.80E-06	2.0063E-04
519841.55	4258283.89	3720.13908	0.08638	0.44329	0.08688	0.42899	1.71E-04	3.54E-06	1.59E-05	3.56E-06	1.47E-05	2.0835E-04
519842.98	4258474.51	3719.36844	0.12653	0.4402	0.13113	0.43095	1.71E-04	5.18E-06	1.57E-05	5.37E-06	1.48E-05	2.1173E-04
519854.67	4258421.83	3716.57041	0.12019	0.4847	0.12393	0.47288	1.71E-04	4.92E-06	1.73E-05	5.07E-06	1.62E-05	2.1408E-04
519850.96	4258358.07	3712.37918	0.10352	0.4764	0.1058	0.46317	1.70E-04	4.24E-06	1.70E-05	4.33E-06	1.59E-05	2.1183E-04
519838.04	4258243.88	3711.70273	0.07935	0.42694	0.07949	0.41239	1.70E-04	3.25E-06	1.53E-05	3.25E-06	1.42E-05	2.0622E-04
519751.14	4258665.52	3701.77493	0.1128	0.2433	0.11694	0.24128	1.70E-04	4.62E-06	8.70E-06	4.79E-06	8.28E-06	1.9622E-04
519836.31	4258217.24	3700.71905	0.07541	0.4192	0.07552	0.40413	1.70E-04	3.09E-06	1.50E-05	3.09E-06	1.39E-05	2.0483E-04
519847.82	4258341.42	3689.02888	0.09884	0.46571	0.10064	0.45238	1.69E-04	4.05E-06	1.67E-05	4.12E-06	1.55E-05	2.0960E-04
519769.89	4258619.46	3688.05895	0.11554	0.2717	0.12036	0.26916	1.69E-04	4.73E-06	9.72E-06	4.93E-06	9.24E-06	1.9782E-04
519852.05	4258379.67	3680.66653	0.10882	0.47956	0.11168	0.46692	1.69E-04	4.46E-06	1.72E-05	4.57E-06	1.60E-05	2.1107E-04
519844.61	4258324.97	3669.95039	0.09453	0.45517	0.09591	0.44164	1.68E-04	3.87E-06	1.63E-05	3.93E-06	1.52E-05	2.0761E-04
519837.73	4258268.92	3669.40876	0.08297	0.42964	0.08329	0.41551	1.68E-04	3.40E-06	1.54E-05	3.41E-06	1.43E-05	2.0479E-04
519799.61	4258551.45	3655.68616	0.11888	0.32897	0.12335	0.32369	1.68E-04	4.87E-06	1.18E-05	5.05E-06	1.11E-05	2.0051E-04
519789.69	4258570.88	3654.88025	0.11734	0.30895	0.12212	0.30429	1.68E-04	4.80E-06	1.11E-05	5.00E-06	1.04E-05	1.9898E-04
519841.32	4258308.7	3650.60525	0.09056	0.44469	0.09157	0.43095	1.67E-04	3.71E-06	1.59E-05	3.75E-06	1.48E-05	2.0564E-04
519759.97	4258638.89	3650.49082	0.11334	0.25657	0.11781	0.2543	1.67E-04	4.64E-06	9.18E-06	4.82E-06	8.73E-06	1.9485E-04
519744.76	4258674.16	3649.80706	0.11067	0.23536	0.11456	0.23345	1.67E-04	4.53E-06	8.42E-06	4.69E-06	8.01E-06	1.9310E-04
519851.05	4258430.63	3649.64506	0.1204	0.47103	0.1242	0.45999	1.67E-04	4.93E-06	1.68E-05	5.09E-06	1.58E-05	2.1009E-04
519809.53	4258532.01	3645.58448	0.12033	0.35064	0.12476	0.34484	1.67E-04	4.93E-06	1.25E-05	5.11E-06	1.18E-05	2.0167E-04
519779.77	4258590.32	3640.62353	0.11567	0.29014	0.12067	0.28646	1.67E-04	4.74E-06	1.04E-05	4.94E-06	9.83E-06	1.9691E-04
519851.63	4258404.96	3634.02745	0.11449	0.47551	0.11783	0.46387	1.67E-04	4.69E-06	1.70E-05	4.82E-06	1.59E-05	2.0917E-04
519819.44	4258512.57	3631.58891	0.12173	0.37447	0.12629	0.36796	1.67E-04	4.98E-06	1.34E-05	5.17E-06	1.26E-05	2.0279E-04
519834.39	4258252.77	3627.41814	0.07972	0.41724	0.07991	0.40321	1.66E-04	3.26E-06	1.49E-05	3.27E-06	1.38E-05	2.0172E-04
519829.36	4258493.14	3626.07207	0.1231	0.40083	0.12775	0.39326	1.66E-04	5.04E-06	1.43E-05	5.23E-06	1.35E-05	2.0447E-04
519837.97	4258292.57	3623.46539	0.08682	0.4333	0.08752	0.41952	1.66E-04	3.55E-06	1.55E-05	3.58E-06	1.44E-05	2.0328E-04
519769.85	4258609.76	3613.77736	0.11382	0.27284	0.1186	0.27014	1.66E-04	4.66E-06	9.76E-06	4.86E-06	9.27E-06	1.9434E-04
519847.27	4258367.04	3600.47184	0.10403	0.46369	0.10656	0.45138	1.65E-04	4.26E-06	1.66E-05	4.36E-06	1.55E-05	2.0589E-04
519753.59	4258647.53	3598.12457	0.11131	0.24792	0.11552	0.2458	1.65E-04	4.56E-06	8.87E-06	4.73E-06	8.44E-06	1.9167E-04
519738.34	4258682.71	3598.09712	0.10853	0.22781	0.11217	0.22597	1.65E-04	4.44E-06	8.15E-06	4.59E-06	7.76E-06	1.9002E-04
519847.43	4258439.43	3596.37869	0.12052	0.45791	0.12438	0.4476	1.65E-04	4.93E-06	1.64E-05	5.09E-06	1.54E-05	2.0677E-04
519830.99	4258236.75	3580.65147	0.0767	0.40473	0.0768	0.39081	1.64E-04	3.14E-06	1.45E-05	3.14E-06	1.34E-05	1.9845E-04
519848.49	4258388.32	3580.44337	0.10923	0.4669	0.11225	0.45509	1.64E-04	4.47E-06	1.67E-05	4.60E-06	1.56E-05	2.0566E-04
519759.93	4258629.19	3576.90525	0.11176	0.25748	0.11618	0.25523	1.64E-04	4.58E-06	9.21E-06	4.76E-06	8.76E-06	1.9141E-04
519844.17	4258350.31	3574.7567	0.09931	0.45334	0.10139	0.44093	1.64E-04	4.07E-06	1.62E-05	4.15E-06	1.51E-05	2.0357E-04
519834.04	4258277.87	3574.40273	0.08337	0.41959	0.08385	0.406	1.64E-04	3.41E-06	1.50E-05	3.43E-06	1.39E-05	1.9978E-04
519789.65	4258561.19	3570.58477	0.11535	0.31005	0.11976	0.30527	1.64E-04	4.72E-06	1.11E-05	4.90E-06	1.05E-05	1.9501E-04
519799.57	4258541.75	3565.28315	0.1168	0.32988	0.12103	0.32463	1.64E-04	4.78E-06	1.18E-05	4.96E-06	1.11E-05	1.9625E-04
519779.73	4258580.62	3562.53845	0.11379	0.2915	0.11851	0.28746	1.63E-04	4.66E-06	1.04E-05	4.85E-06	9.87E-06	1.9325E-04
519843.81	4258448.23	3557.67199	0.12056	0.44538	0.1245	0.43567	1.63E-04	4.94E-06	1.59E-05	5.10E-06	1.50E-05	2.0414E-04
519848.04	4258413.68	3557.28045	0.11485	0.46308	0.11829	0.45208	1.63E-04	4.70E-06	1.66E-05	4.84E-06	1.55E-05	2.0483E-04
519747.42	4258656.67	3554.09694	0.10948	0.23993	0.11346	0.23793	1.63E-04	4.48E-06	8.58E-06	4.65E-06	8.17E-06	1.8893E-04
519840.98	4258333.79	3554.01108	0.09493	0.4428	0.09657	0.43022	1.63E-04	3.89E-06	1.58E-05	3.95E-06	1.48E-05	2.0150E-04
519809.48	4258522.31	3551.03593	0.11819	0.35156	0.1225	0.34576	1.63E-04	4.84E-06	1.26E-05	5.02E-06	1.19E-05	1.9721E-04
519830.73	4258261.65	3543.45299	0.08013	0.40843	0.08042	0.3948	1.63E-04	3.28E-06	1.46E-05	3.29E-06	1.36E-05	1.9730E-04
519769.81	4258600.06	3541.73759	0.11209	0.27406	0.11679	0.27107	1.62E-04	4.59E-06	9.80E-06	4.78E-06	9.31E-06	1.9097E-04
519837.72	4258317.45	3540.66997	0.09096	0.43318	0.09223	0.42028	1.62E-04	3.72E-06	1.55E-05	3.78E-06	1.44E-05	1.9986E-04
519829.32	4258483.44	3538.18745	0.12084	0.40169	0.1253	0.39399	1.62E-04	4.95E-06	1.44E-05	5.13E-06	1.35E-05	2.0030E-04
519819.4	4258502.88	3537.47111	0.11956	0.37541	0.12401	0.36883	1.62E-04	4.90E-06	1.34E-05	5.08E-06	1.27E-05	1.9836E-04
519840.19	4258457.03	3532.41746	0.12055	0.4334	0.1246	0.42425	1.62E-04	4.94E-06	1.55E-05	5.10E-06	1.46E-05	2.0216E-04
519832.94	4258474.64	3525.45211	0.12073	0.41172	0.12505	0.40362	1.62E-04	4.94E-06	1.47E-05	5.12E-06	1.39E-05	2.0039E-04
519834.4	4258301.26	3523.02316	0.08725	0.42351	0.08819	0.41029	1.62E-04	3.57E-06	1.51E-05	3.61E-06	1.41E-05	1.9805E-04
519836.57	4258465.84	3522.38442	0.12062	0.42225	0.12479	0.41364	1.62E-04	4.94E-06	1.51E-05	5.11E-06	1.42E-05	2.0095E-04
519759.89	4258619.5	3507.90104	0.11018	0.25843	0.11457	0.25611	1.61E-04	4.51E-06	9.24E-06	4.69E-06	8.79E-06	1.8817E-04
519741.06	4258665.38	3503.66993	0.10748	0.23219	0.11125	0.23028	1.61E-04	4.40E-06	8.31E-06	4.56E-06	7.91E-06	1.8591E-04
519827.36	4258245.58	3502.41414	0.07706	0.39617	0.07722	0.38271	1.61E-04	3.16E-06	1.42E-05	3.16E-06	1.31E-05	1.9431E-04
519843.58	4258376	3494.04002	0.10446	0.45113	0.10716	0.43972	1.60E-04	4.28E-06	1.61E-05	4.39E-06	1.51E-05	2.0020E-04
519844.45	4258422.41	3490.61464	0.11507	0.45054	0.11857	0.44023	1.60E-04	4.71E-06	1.61E-05	4.85E-06	1.51E-05	2.0094E-04
519844.93	4258396.98	3490.15044	0.1096	0.45435	0.1127	0.44338	1.60E-04	4.49E-06	1.63E-05	4.61E-06	1.52E-05	2.0070E-04
519789.61	4258551.49	3486.42193	0.11339	0.31099	0.1175	0.30618	1.60E-04	4.64E-06	1.11E-05	4.81E-06	1.05E-05	1.9104E-04
519779.69	4258570.93	3485.47186	0.11193	0.29264	0.11631	0.28838	1.60E-04	4.58E-06	1.05E-05	4.76E-06	9.90E-06	1.8962E-04
519830.36	4258286.82	3479.73459	0.0838	0.41014	0.08448	0.39706	1.60E-04	3.43E-06	1.47E-05	3.46E-06	1.36E-05	1.9484E-04
519799.53	4258532.05	3475.42276	0.11478	0.33057	0.11881	0.32539	1.59E-04	4.70E-06	1.18E-05	4.86E-06	1.12E-05	1.9200E-04
519769.77	4258590.36	3469.75195	0.11034	0.2754	0.11491	0.272	1.59E-04	4.52E-06	9.85E-06	4.70E-06	9.34E-06	1.8760E-04
519749.97	4258638.93	3468.59106	0.10812	0.24446	0.11215	0.24238	1.59E-04	4.43E-06	8.74E-06	4.59E-06	8.32E-06	1.8522E-04
519840.51	4258359.2	3467.07227	0.09977	0.44159	0.10208	0.43003	1.59E-04	4.08E-06	1.58E-05	4.18E-06	1.48E-05	1.9789E-04
519823.94	4258229.63	3461.66712	0.07425	0.38475	0.07434	0.37136	1.59E-04	3.04E-06	1.38E-05	3.04E-06	1.27E-05	1.9141E-04
519809.44	4258512.62	3458.90112	0.11613	0.35242	0.12034	0.34658	1.59E-04	4.75E-06	1.26E-05	4.93E-06	1.19E-05	1.9287E-04
519734.66	4258673.98	3454.06173	0.1055	0.22479	0.10903	0.22299	1.58E-04	4.32E-06	8.04E-06	4.46E-06	7.66E-06	1.8295E-04
519827.08	4258270.54	3453.61868	0.0805	0.39918	0.08094	0.38608	1.58E-04	3.30E-06	1.43E-05	3.31E-06	1.33E-05	1.9259E-04
519819.36	4258493.18	3447.56711	0.11745	0.37631	0.12179	0.36959	1.58E-04	4.81E-06	1.35E-05	4.99E-06	1.27E-05	1.9411E-04
519759.85	4258609.8	3442.80668	0.10863	0.25923	0.11291	0.25684	1.58E-04	4.45E-06	9.27E-06	4.62E-06	8.82E-06	1.8511E-04
519837.36	4258342.6	3442.74205	0.0953	0.43106	0.09721	0.41934	1.58E-04	3.90E-06	1.54E-05	3.98E-06	1.44E-05	1.9564E-04
519834.12	4258326.19	3434.25465	0.09137	0.42237	0.09291	0.41027	1.58E-04	3.74E-06	1.51E-05	3.80E-06	1.41E-05	1.9429E-04
519840.86	4258431.13	3433.35948	0.11517	0.43835	0.11873	0.42872	1.58E-04	4.72E-06	1.57E-05	4.86E-06	1.47E-05	1.9749E-04
519823.73	4258254.4	3422.75229	0.07744	0.38807	0.0777	0.375	1.57E-04	3.17E-06	1.39E-05	3.18E-06	1.29E-05	1.9014E-04
519830.82	4258309.95	3421.84187	0.08765	0.41314	0.08884	0.40068	1.57E-04	3.59E-06	1.48E-05	3.64E-06	1.38E-05	1.9275E-04
519743.7	4258647.82	3421.21408	0.1063	0.23656	0.11011	0.23458	1.57E-04	4.35E-06	8.46E-06	4.51E-06	8.05E-06	1.8233E-04
519779.65	4258561.23	3407.97734	0.11009	0.29362	0.11413	0.28922	1.56E-04	4.51E-06	1.05E-05	4.67E-06	9.93E-06	1.8596E-04
519841.37	4258405.63	3407.63991	0.10982	0.44195	0.11298	0.43177	1.56E-04	4.50E-06	1.58E-05	4.63E-06	1.48E-05	1.9609E-04
519749.93	4258629.24	3403.365	0.10665	0.24526	0.11066	0.24317	1.56E-04	4.37E-06	8.77E-06	4.53E-06	8.35E-06	1.8216E-04
519789.57	4258541.79	3402.40903	0.11148	0.31178	0.11536	0.30698	1.56E-04	4.56E-06	1.12E-05	4.72E-06	1.05E-05	1.8707E-04
519769.73	4258580.67	3399.34654	0.10861	0.27659	0.11293	0.27286	1.56E-04	4.45E-06	9.89E-06	4.62E-06	9.37E-06	1.8429E-04
519839.89	4258384.96	3393.95008	0.10479	0.43865	0.10761	0.42811	1.56E-04	4.29E-06	1.57E-05	4.41E-06	1.47E-05	1.9479E-04
519837.27	4258439.86	3389.57149	0.11519	0.42663	0.11881	0.41758	1.56E-04	4.72E-06	1.53E-05	4.86E-06	1.43E-05	1.9468E-04
519799.49	4258522.35	3386.87476	0.11282	0.33144	0.11677	0.32622	1.55E-04	4.62E-06	1.19E-05	4.78E-06	1.12E-05	1.8784E-04
519820.34	4258238.4	3385.43821	0.07456	0.37645	0.0747	0.36354	1.55E-04	3.05E-06	1.35E-05	3.06E-06	1.25E-05	1.8737E-04
519826.67	4258295.78	3381.11355	0.08421	0.40101	0.08514	0.38847	1.55E-04	3.45E-06	1.43E-05	3.49E-06	1.33E-05	1.8973E-04
519759.81	4258600.1	3376.9489	0.10699	0.26057	0.1113	0.25777	1.55E-04	4.38E-06	9.32E-06	4.56E-06	8.85E-06	1.8204E-04
519737.37	4258656.59	3372.5475	0.10444	0.22902	0.10805	0.22711	1.55E-04	4.28E-06	8.19E-06	4.42E-06	7.80E-06	1.7941E-04
519809.4	4258502.92	3369.51521	0.11413	0.3532	0.11826	0.3473	1.55E-04	4.67E-06	1.26E-05	4.84E-06	1.19E-05	1.8866E-04
519836.86	4258368.08	3367.5497	0.1002	0.43044	0.1027	0.41964	1.54E-04	4.10E-06	1.54E-05	4.20E-06	1.44E-05	1.9261E-04
519819.32	4258483.48	3363.12117	0.11539	0.37697	0.11957	0.37015	1.54E-04	4.72E-06	1.35E-05	4.90E-06	1.27E-05	1.9011E-04
519823.42	4258279.43	3362.48989	0.08088	0.39026	0.08152	0.37769	1.54E-04	3.31E-06	1.40E-05	3.34E-06	1.30E-05	1.8784E-04
519833.68	4258448.58	3360.26963	0.11518	0.41556	0.11889	0.40701	1.54E-04	4.72E-06	1.49E-05	4.87E-06	1.40E-05	1.9258E-04
519822.91	4258474.76	3348.99263	0.11534	0.38596	0.11942	0.37878	1.54E-04	4.72E-06	1.38E-05	4.89E-06	1.30E-05	1.9007E-04
519830.09	4258457.31	3344.92387	0.11521	0.40518	0.11904	0.39709	1.53E-04	4.72E-06	1.45E-05	4.87E-06	1.36E-05	1.9118E-04
519833.73	4258351.42	3344.58825	0.09582	0.42109	0.09797	0.41011	1.53E-04	3.92E-06	1.51E-05	4.01E-06	1.41E-05	1.9052E-04
519837.81	4258414.29	3343.93242	0.11011	0.43103	0.11336	0.42135	1.53E-04	4.51E-06	1.54E-05	4.64E-06	1.45E-05	1.9245E-04
519826.5	4258466.03	3342.9893	0.11531	0.39546	0.11927	0.38785	1.53E-04	4.72E-06	1.41E-05	4.88E-06	1.33E-05	1.9043E-04
519749.89	4258619.54	3342.37489	0.1052	0.24609	0.10919	0.24394	1.53E-04	4.31E-06	8.80E-06	4.47E-06	8.37E-06	1.7930E-04
519820.1	4258263.23	3338.1905	0.07779	0.37967	0.0782	0.36709	1.53E-04	3.19E-06	1.36E-05	3.20E-06	1.26E-05	1.8572E-04
519830.52	4258334.94	3331.32794	0.09178	0.41205	0.09358	0.40072	1.53E-04	3.76E-06	1.47E-05	3.83E-06	1.38E-05	1.8892E-04
519779.61	4258551.53	3330.14848	0.10829	0.29444	0.11205	0.29	1.53E-04	4.43E-06	1.05E-05	4.59E-06	9.96E-06	1.8229E-04
519769.69	4258570.97	3328.89253	0.1069	0.27757	0.11089	0.27363	1.53E-04	4.38E-06	9.93E-06	4.54E-06	9.39E-06	1.8096E-04
519730.99	4258665.25	3324.08192	0.10257	0.2218	0.10599	0.21999	1.53E-04	4.20E-06	7.93E-06	4.34E-06	7.55E-06	1.7653E-04
519827.25	4258318.64	3321.60976	0.08804	0.40331	0.08949	0.39158	1.52E-04	3.60E-06	1.44E-05	3.66E-06	1.34E-05	1.8753E-04
519789.53	4258532.09	3318.5155	0.10962	0.31247	0.11335	0.30768	1.52E-04	4.49E-06	1.12E-05	4.64E-06	1.06E-05	1.8312E-04
519759.77	4258590.4	3312.14888	0.10537	0.26173	0.10956	0.25856	1.52E-04	4.31E-06	9.36E-06	4.49E-06	8.88E-06	1.7899E-04
519816.73	4258247.16	3309.76065	0.0749	0.36899	0.07515	0.35646	1.52E-04	3.07E-06	1.32E-05	3.08E-06	1.22E-05	1.8342E-04
519836.2	4258393.93	3309.54537	0.10517	0.42772	0.1081	0.41775	1.52E-04	4.31E-06	1.53E-05	4.43E-06	1.43E-05	1.9021E-04
519739.97	4258638.98	3301.68056	0.10326	0.23316	0.1069	0.23122	1.51E-04	4.23E-06	8.34E-06	4.38E-06	7.94E-06	1.7636E-04
519799.44	4258512.66	3299.75993	0.11091	0.33222	0.1148	0.32694	1.51E-04	4.54E-06	1.19E-05	4.70E-06	1.12E-05	1.8374E-04
519834.25	4258422.94	3285.72557	0.11024	0.41986	0.11355	0.41077	1.51E-04	4.51E-06	1.50E-05	4.65E-06	1.41E-05	1.8903E-04
519809.36	4258493.22	3283.75118	0.11219	0.35389	0.11623	0.34789	1.51E-04	4.59E-06	1.27E-05	4.76E-06	1.19E-05	1.8461E-04
519749.85	4258609.84	3283.32016	0.10373	0.24701	0.10771	0.24467	1.51E-04	4.25E-06	8.84E-06	4.41E-06	8.40E-06	1.7652E-04
519822.99	4258304.73	3281.99145	0.08459	0.39165	0.08579	0.37976	1.51E-04	3.46E-06	1.40E-05	3.51E-06	1.30E-05	1.8459E-04
519833.2	4258376.97	3272.87904	0.10056	0.41939	0.10319	0.40933	1.50E-04	4.12E-06	1.50E-05	4.23E-06	1.41E-05	1.8755E-04
519819.76	4258288.31	3269.17207	0.08126	0.38171	0.08213	0.36971	1.50E-04	3.33E-06	1.37E-05	3.36E-06	1.27E-05	1.8302E-04
519769.65	4258561.27	3257.51774	0.1052	0.27844	0.10888	0.27436	1.49E-04	4.31E-06	9.96E-06	4.46E-06	9.42E-06	1.7759E-04
519733.67	4258647.8	3254.71167	0.10152	0.22581	0.10497	0.22394	1.49E-04	4.16E-06	8.08E-06	4.30E-06	7.69E-06	1.7354E-04
519816.47	4258272.05	3251.94584	0.07814	0.37175	0.07875	0.35966	1.49E-04	3.20E-06	1.33E-05	3.22E-06	1.23E-05	1.8126E-04
519779.57	4258541.83	3251.8307	0.10652	0.29509	0.11008	0.29066	1.49E-04	4.36E-06	1.06E-05	4.51E-06	9.98E-06	1.7859E-04
519830.1	4258360.23	3248.91577	0.09623	0.41092	0.09856	0.40063	1.49E-04	3.94E-06	1.47E-05	4.04E-06	1.38E-05	1.8548E-04
519759.73	4258580.71	3248.27166	0.10378	0.26277	0.10772	0.25928	1.49E-04	4.25E-06	9.40E-06	4.41E-06	8.90E-06	1.7598E-04
519739.93	4258629.28	3244.14896	0.10191	0.23386	0.10553	0.23191	1.49E-04	4.17E-06	8.36E-06	4.32E-06	7.96E-06	1.7366E-04
519830.69	4258431.6	3239.26099	0.11028	0.40906	0.11365	0.40054	1.49E-04	4.52E-06	1.46E-05	4.65E-06	1.38E-05	1.8616E-04
519789.49	4258522.4	3235.24141	0.10781	0.31316	0.11146	0.30834	1.48E-04	4.41E-06	1.12E-05	4.56E-06	1.06E-05	1.7919E-04
519832.52	4258402.89	3233.77683	0.1054	0.41638	0.1084	0.40705	1.48E-04	4.32E-06	1.49E-05	4.44E-06	1.40E-05	1.8598E-04
519826.92	4258343.69	3230.44832	0.09215	0.40183	0.09415	0.39131	1.48E-04	3.77E-06	1.44E-05	3.85E-06	1.34E-05	1.8364E-04
519813.12	4258255.93	3227.64487	0.0752	0.36096	0.07559	0.34893	1.48E-04	3.08E-06	1.29E-05	3.09E-06	1.20E-05	1.7914E-04
519749.81	4258600.14	3225.51257	0.10225	0.24797	0.10617	0.24536	1.48E-04	4.19E-06	8.87E-06	4.35E-06	8.42E-06	1.7381E-04
519823.67	4258327.33	3222.8321	0.08841	0.39363	0.09011	0.38266	1.48E-04	3.62E-06	1.41E-05	3.69E-06	1.31E-05	1.8238E-04
519799.4	4258502.96	3214.80733	0.10907	0.33286	0.11289	0.32751	1.47E-04	4.47E-06	1.19E-05	4.62E-06	1.12E-05	1.7973E-04
519727.32	4258656.52	3207.21888	0.09976	0.21878	0.10303	0.21698	1.47E-04	4.08E-06	7.83E-06	4.22E-06	7.45E-06	1.7072E-04
519827.13	4258440.25	3205.23115	0.11026	0.39873	0.1137	0.39066	1.47E-04	4.51E-06	1.43E-05	4.66E-06	1.34E-05	1.8389E-04
519809.32	4258483.52	3202.65533	0.1103	0.35443	0.11421	0.34831	1.47E-04	4.52E-06	1.27E-05	4.68E-06	1.20E-05	1.8076E-04
519739.89	4258619.58	3190.35147	0.10056	0.23457	0.10418	0.23256	1.46E-04	4.12E-06	8.39E-06	4.27E-06	7.98E-06	1.7112E-04
519812.88	4258474.87	3187.99184	0.11032	0.36257	0.11417	0.35612	1.46E-04	4.52E-06	1.30E-05	4.67E-06	1.22E-05	1.8065E-04
519829.54	4258385.86	3186.84736	0.10086	0.40885	0.10359	0.39942	1.46E-04	4.13E-06	1.46E-05	4.24E-06	1.37E-05	1.8291E-04
519769.61	4258551.57	3185.36684	0.10353	0.27915	0.10696	0.27501	1.46E-04	4.24E-06	9.98E-06	4.38E-06	9.44E-06	1.7418E-04
519759.69	4258571.01	3184.0193	0.1022	0.26364	0.10584	0.25994	1.46E-04	4.18E-06	9.43E-06	4.33E-06	8.92E-06	1.7295E-04
519819.31	4258313.68	3183.33079	0.08497	0.38184	0.0864	0.37077	1.46E-04	3.48E-06	1.37E-05	3.54E-06	1.27E-05	1.7945E-04
519823.57	4258448.9	3183.2995	0.11021	0.38886	0.11374	0.38123	1.46E-04	4.51E-06	1.39E-05	4.66E-06	1.31E-05	1.8221E-04
519816.44	4258466.21	3177.10636	0.11029	0.37097	0.11404	0.36417	1.46E-04	4.52E-06	1.33E-05	4.67E-06	1.25E-05	1.8072E-04
519816.11	4258297.2	3175.19198	0.08162	0.37299	0.08274	0.36163	1.46E-04	3.34E-06	1.33E-05	3.39E-06	1.24E-05	1.7816E-04
519820.01	4258457.56	3174.50747	0.11022	0.37965	0.11386	0.37243	1.46E-04	4.51E-06	1.36E-05	4.66E-06	1.28E-05	1.8118E-04

519779.53	4258532.14	3173.33058	0.10481	0.29567	0.10823	0.29124	1.46E-04	4.29E-06	1.06E-05	4.43E-06	1.00E-05	1.7488E-04
519828.83	4258411.85	3169.94453	0.1056	0.40579	0.10867	0.39698	1.45E-04	4.32E-06	1.45E-05	4.45E-06	1.36E-05	1.8235E-04
519749.77	4258590.45	3167.13969	0.10076	0.24899	0.10456	0.24602	1.45E-04	4.13E-06	8.91E-06	4.28E-06	8.45E-06	1.7106E-04
519812.84	4258280.88	3162.95795	0.07847	0.36325	0.07929	0.35176	1.45E-04	3.21E-06	1.30E-05	3.25E-06	1.21E-05	1.7664E-04
519826.47	4258369.05	3157.39343	0.09657	0.40087	0.09904	0.39125	1.45E-04	3.95E-06	1.43E-05	4.06E-06	1.34E-05	1.8063E-04
519789.44	4258512.7	3152.68636	0.10605	0.31375	0.10964	0.30889	1.45E-04	4.34E-06	1.12E-05	4.49E-06	1.06E-05	1.7530E-04
519729.97	4258639.02	3147.82864	0.09872	0.2226	0.10202	0.22077	1.44E-04	4.04E-06	7.96E-06	4.18E-06	7.58E-06	1.6818E-04
519809.51	4258264.7	3143.23386	0.0755	0.35301	0.07606	0.34153	1.44E-04	3.09E-06	1.26E-05	3.11E-06	1.17E-05	1.7476E-04
519823.32	4258352.44	3137.75841	0.09252	0.39243	0.09471	0.38256	1.44E-04	3.79E-06	1.40E-05	3.88E-06	1.31E-05	1.7879E-04
519739.85	4258609.88	3137.15306	0.09919	0.23539	0.10281	0.23319	1.44E-04	4.06E-06	8.42E-06	4.21E-06	8.01E-06	1.6862E-04
519799.36	4258493.26	3132.87642	0.10729	0.33341	0.11104	0.32798	1.44E-04	4.39E-06	1.19E-05	4.55E-06	1.13E-05	1.7586E-04
519820.1	4258336.02	3123.69275	0.08871	0.38369	0.0906	0.37355	1.43E-04	3.63E-06	1.37E-05	3.71E-06	1.28E-05	1.7720E-04
519759.65	4258561.31	3118.09684	0.10063	0.26437	0.10398	0.26054	1.43E-04	4.12E-06	9.46E-06	4.26E-06	8.94E-06	1.6983E-04
519825.14	4258420.82	3115.79065	0.1057	0.39532	0.10883	0.38703	1.43E-04	4.33E-06	1.41E-05	4.46E-06	1.33E-05	1.7916E-04
519769.57	4258541.88	3112.33325	0.1019	0.27971	0.10515	0.27556	1.43E-04	4.17E-06	1.00E-05	4.31E-06	9.46E-06	1.7073E-04
519825.89	4258394.74	3111.14301	0.10112	0.39892	0.10393	0.38998	1.43E-04	4.14E-06	1.43E-05	4.26E-06	1.34E-05	1.7879E-04
519749.73	4258580.75	3108.54853	0.09928	0.24991	0.10286	0.24664	1.43E-04	4.06E-06	8.94E-06	4.21E-06	8.47E-06	1.6830E-04
519723.65	4258647.79	3102.68024	0.09709	0.21574	0.1002	0.21398	1.42E-04	3.98E-06	7.72E-06	4.10E-06	7.35E-06	1.6549E-04
519729.93	4258629.32	3096.78987	0.09746	0.22321	0.10076	0.22135	1.42E-04	3.99E-06	7.98E-06	4.13E-06	7.60E-06	1.6577E-04
519779.49	4258522.44	3094.79419	0.10313	0.29623	0.10648	0.29177	1.42E-04	4.22E-06	1.06E-05	4.36E-06	1.00E-05	1.7118E-04
519739.81	4258600.19	3084.94291	0.09782	0.23626	0.10139	0.23377	1.42E-04	4.01E-06	8.45E-06	4.15E-06	8.03E-06	1.6616E-04
519815.62	4258322.63	3083.06096	0.08527	0.37205	0.08692	0.36181	1.41E-04	3.49E-06	1.33E-05	3.56E-06	1.24E-05	1.7422E-04
519812.45	4258306.09	3081.34338	0.08196	0.3642	0.08331	0.35355	1.41E-04	3.36E-06	1.30E-05	3.41E-06	1.21E-05	1.7330E-04
519809.21	4258289.7	3074.06559	0.07881	0.35552	0.07987	0.34461	1.41E-04	3.23E-06	1.27E-05	3.27E-06	1.18E-05	1.7208E-04
519822.85	4258377.86	3073.02504	0.09686	0.39122	0.09943	0.38219	1.41E-04	3.97E-06	1.40E-05	4.07E-06	1.31E-05	1.7614E-04
519789.4	4258503	3071.90012	0.10435	0.31423	0.10789	0.30933	1.41E-04	4.27E-06	1.12E-05	4.42E-06	1.06E-05	1.7148E-04
519821.45	4258429.78	3071.88207	0.10568	0.38505	0.10886	0.37729	1.41E-04	4.33E-06	1.38E-05	4.46E-06	1.30E-05	1.7644E-04
519805.91	4258273.47	3058.4204	0.0758	0.34539	0.07657	0.33446	1.40E-04	3.10E-06	1.24E-05	3.14E-06	1.15E-05	1.7039E-04
519799.32	4258483.56	3054.96761	0.10555	0.33383	0.10921	0.32829	1.40E-04	4.32E-06	1.19E-05	4.47E-06	1.13E-05	1.7216E-04
519759.61	4258551.61	3050.95794	0.09908	0.26497	0.10221	0.26108	1.40E-04	4.06E-06	9.48E-06	4.18E-06	8.96E-06	1.6665E-04
519819.72	4258361.19	3049.52275	0.09284	0.38324	0.09516	0.374	1.40E-04	3.80E-06	1.37E-05	3.90E-06	1.28E-05	1.7415E-04
519749.69	4258571.05	3049.34233	0.09781	0.25068	0.10112	0.24719	1.40E-04	4.00E-06	8.97E-06	4.14E-06	8.49E-06	1.6550E-04
519729.89	4258619.62	3048.95626	0.09622	0.22384	0.09951	0.22191	1.40E-04	3.94E-06	8.01E-06	4.07E-06	7.62E-06	1.6352E-04
519822.23	4258403.63	3045.84909	0.1013	0.38899	0.10418	0.38057	1.40E-04	4.15E-06	1.39E-05	4.27E-06	1.31E-05	1.7513E-04
519817.76	4258438.75	3041.44003	0.10562	0.3753	0.10888	0.36796	1.40E-04	4.32E-06	1.34E-05	4.46E-06	1.26E-05	1.7437E-04
519769.53	4258532.18	3038.49978	0.10031	0.28018	0.10344	0.27602	1.39E-04	4.11E-06	1.00E-05	4.24E-06	9.48E-06	1.6724E-04
519803.01	4258474.6	3038.30511	0.10561	0.34146	0.10922	0.33562	1.39E-04	4.32E-06	1.22E-05	4.47E-06	1.15E-05	1.7192E-04
519739.77	4258590.49	3032.6857	0.09645	0.23711	0.09989	0.23432	1.39E-04	3.95E-06	8.48E-06	4.09E-06	8.04E-06	1.6370E-04
519816.52	4258344.71	3029.49519	0.08899	0.37435	0.09103	0.36494	1.39E-04	3.64E-06	1.34E-05	3.73E-06	1.25E-05	1.7228E-04
519814.08	4258447.71	3024.75443	0.10559	0.3662	0.10894	0.35925	1.39E-04	4.32E-06	1.31E-05	4.46E-06	1.23E-05	1.7299E-04
519806.7	4258465.64	3024.00925	0.10558	0.3493	0.10912	0.34313	1.39E-04	4.32E-06	1.25E-05	4.47E-06	1.18E-05	1.7180E-04
519810.39	4258456.67	3018.51572	0.10555	0.35747	0.10899	0.35091	1.38E-04	4.32E-06	1.28E-05	4.46E-06	1.20E-05	1.7210E-04
519779.44	4258512.74	3016.54848	0.10151	0.29669	0.1048	0.29219	1.38E-04	4.16E-06	1.06E-05	4.29E-06	1.00E-05	1.6748E-04
519719.97	4258639.06	3007.03079	0.0945	0.21269	0.09748	0.21097	1.38E-04	3.87E-06	7.61E-06	3.99E-06	7.24E-06	1.6067E-04
519729.85	4258609.93	3001.78637	0.09495	0.22455	0.09825	0.22244	1.38E-04	3.89E-06	8.03E-06	4.02E-06	7.64E-06	1.6130E-04
519819.22	4258386.68	2997.44564	0.09709	0.38198	0.09974	0.37341	1.38E-04	3.98E-06	1.37E-05	4.08E-06	1.28E-05	1.7206E-04
519789.36	4258493.3	2993.61313	0.1027	0.31466	0.10619	0.30967	1.37E-04	4.20E-06	1.13E-05	4.35E-06	1.06E-05	1.6778E-04
519818.57	4258412.51	2991.91503	0.10142	0.37941	0.10437	0.37145	1.37E-04	4.15E-06	1.36E-05	4.27E-06	1.28E-05	1.7201E-04
519808.79	4258314.97	2988.9146	0.08227	0.35568	0.08385	0.34573	1.37E-04	3.37E-06	1.27E-05	3.43E-06	1.19E-05	1.6852E-04
519749.65	4258561.35	2988.21505	0.09636	0.25132	0.0994	0.24769	1.37E-04	3.95E-06	8.99E-06	4.07E-06	8.50E-06	1.6260E-04
519811.94	4258331.59	2987.52236	0.08557	0.36302	0.08741	0.35352	1.37E-04	3.50E-06	1.30E-05	3.58E-06	1.21E-05	1.6927E-04
519805.58	4258298.53	2984.91734	0.07913	0.34756	0.08042	0.3373	1.37E-04	3.24E-06	1.24E-05	3.29E-06	1.16E-05	1.6749E-04
519759.57	4258541.92	2982.55918	0.09757	0.26544	0.10053	0.26153	1.37E-04	3.99E-06	9.49E-06	4.12E-06	8.98E-06	1.6342E-04
519739.73	4258580.79	2978.40776	0.09507	0.23796	0.09832	0.23485	1.37E-04	3.89E-06	8.51E-06	4.03E-06	8.06E-06	1.6114E-04
519802.3	4258282.24	2973.82093	0.07611	0.33807	0.0771	0.32771	1.36E-04	3.12E-06	1.21E-05	3.16E-06	1.13E-05	1.6605E-04
519816.12	4258369.94	2966.7726	0.0931	0.37415	0.09551	0.36548	1.36E-04	3.81E-06	1.34E-05	3.91E-06	1.25E-05	1.6976E-04
519769.49	4258522.48	2964.2809	0.09876	0.28059	0.10182	0.27642	1.36E-04	4.04E-06	1.00E-05	4.17E-06	9.49E-06	1.6373E-04
519719.93	4258629.36	2961.32865	0.09332	0.21322	0.09632	0.21146	1.36E-04	3.82E-06	7.63E-06	3.94E-06	7.26E-06	1.5851E-04
519729.81	4258600.23	2954.48878	0.09368	0.22532	0.09693	0.22294	1.36E-04	3.84E-06	8.06E-06	3.97E-06	7.65E-06	1.5906E-04
519812.95	4258353.4	2948.39118	0.08935	0.36643	0.09154	0.35753	1.35E-04	3.66E-06	1.31E-05	3.75E-06	1.23E-05	1.6805E-04
519814.92	4258421.4	2945.97962	0.10144	0.36994	0.10443	0.36246	1.35E-04	4.15E-06	1.32E-05	4.28E-06	1.24E-05	1.6926E-04
519779.4	4258503.04	2939.60021	0.09994	0.29705	0.10319	0.29251	1.35E-04	4.09E-06	1.06E-05	4.23E-06	1.00E-05	1.6385E-04
519815.59	4258395.49	2931.53107	0.09727	0.37282	0.09998	0.36473	1.34E-04	3.98E-06	1.33E-05	4.09E-06	1.25E-05	1.6843E-04
519749.61	4258551.66	2925.80423	0.09493	0.25181	0.09775	0.24812	1.34E-04	3.89E-06	9.01E-06	4.00E-06	8.52E-06	1.5964E-04
519739.69	4258571.09	2923.81192	0.09371	0.23862	0.0967	0.2353	1.34E-04	3.84E-06	8.54E-06	3.96E-06	8.08E-06	1.5855E-04
519789.32	4258483.61	2918.87987	0.10111	0.31498	0.10452	0.30989	1.34E-04	4.14E-06	1.13E-05	4.28E-06	1.06E-05	1.6424E-04
519719.89	4258619.66	2917.92442	0.09215	0.21379	0.09517	0.21192	1.34E-04	3.77E-06	7.65E-06	3.90E-06	7.28E-06	1.5646E-04
519759.53	4258532.22	2913.08694	0.0961	0.26583	0.09895	0.2619	1.34E-04	3.93E-06	9.51E-06	4.05E-06	8.99E-06	1.6013E-04
519811.26	4258430.29	2910.74808	0.10137	0.36078	0.10442	0.35373	1.34E-04	4.15E-06	1.29E-05	4.28E-06	1.21E-05	1.6701E-04
519729.77	4258590.53	2906.49996	0.0924	0.22609	0.09554	0.2234	1.33E-04	3.78E-06	8.09E-06	3.91E-06	7.67E-06	1.5680E-04
519792.98	4258474.72	2902.46025	0.10121	0.32189	0.10462	0.31655	1.33E-04	4.14E-06	1.15E-05	4.28E-06	1.09E-05	1.6397E-04
519808.26	4258340.54	2900.87464	0.0859	0.35497	0.08791	0.34605	1.33E-04	3.52E-06	1.27E-05	3.60E-06	1.19E-05	1.6478E-04
519801.95	4258307.35	2896.45383	0.07942	0.33963	0.08092	0.33004	1.33E-04	3.25E-06	1.21E-05	3.31E-06	1.13E-05	1.6293E-04
519805.14	4258323.86	2895.43434	0.08253	0.34707	0.08429	0.33786	1.33E-04	3.38E-06	1.24E-05	3.45E-06	1.16E-05	1.6368E-04
519798.69	4258291	2893.4263	0.07646	0.33175	0.0777	0.32187	1.33E-04	3.13E-06	1.19E-05	3.18E-06	1.11E-05	1.6197E-04
519812.52	4258378.69	2891.97589	0.09332	0.36556	0.09581	0.35737	1.33E-04	3.82E-06	1.31E-05	3.92E-06	1.23E-05	1.6577E-04
519769.44	4258512.78	2890.08566	0.09726	0.28092	0.10027	0.27672	1.33E-04	3.98E-06	1.00E-05	4.11E-06	9.50E-06	1.6023E-04
519807.6	4258439.17	2889.96733	0.10136	0.35234	0.10448	0.34565	1.33E-04	4.15E-06	1.26E-05	4.28E-06	1.19E-05	1.6548E-04
519796.64	4258465.83	2886.48232	0.10124	0.32901	0.1046	0.32337	1.32E-04	4.15E-06	1.18E-05	4.28E-06	1.11E-05	1.6372E-04
519803.95	4258448.06	2879.66366	0.10133	0.34425	0.10454	0.33792	1.32E-04	4.15E-06	1.23E-05	4.28E-06	1.16E-05	1.6446E-04
519800.29	4258456.95	2879.60006	0.10131	0.33653	0.1046	0.33055	1.32E-04	4.15E-06	1.20E-05	4.28E-06	1.13E-05	1.6393E-04
519811.97	4258404.31	2875.9916	0.0974	0.36403	0.10017	0.35637	1.32E-04	3.99E-06	1.30E-05	4.10E-06	1.22E-05	1.6529E-04
519719.85	4258609.97	2875.95867	0.09098	0.2144	0.09399	0.21237	1.32E-04	3.73E-06	7.67E-06	3.85E-06	7.29E-06	1.5448E-04
519739.65	4258561.4	2867.32588	0.09236	0.23915	0.09511	0.2357	1.32E-04	3.78E-06	8.55E-06	3.89E-06	8.09E-06	1.5587E-04
519779.36	4258493.35	2864.76398	0.09842	0.29738	0.10163	0.29276	1.31E-04	4.03E-06	1.06E-05	4.16E-06	1.01E-05	1.6031E-04
519809.37	4258362.09	2864.31754	0.08955	0.35764	0.09181	0.34934	1.31E-04	3.67E-06	1.28E-05	3.76E-06	1.20E-05	1.6362E-04
519749.57	4258541.96	2861.71573	0.09352	0.25219	0.0962	0.24848	1.31E-04	3.83E-06	9.02E-06	3.94E-06	8.53E-06	1.5661E-04
519729.73	4258580.83	2857.42892	0.09112	0.22679	0.09407	0.22382	1.31E-04	3.73E-06	8.11E-06	3.85E-06	7.68E-06	1.5447E-04
519759.49	4258522.52	2842.90424	0.09467	0.26611	0.09745	0.26218	1.30E-04	3.88E-06	9.52E-06	3.99E-06	9.00E-06	1.5681E-04
519719.81	4258600.27	2832.99718	0.0898	0.21508	0.09277	0.21278	1.30E-04	3.68E-06	7.69E-06	3.80E-06	7.30E-06	1.5245E-04
519808.34	4258413.13	2830.53639	0.09745	0.35539	0.10028	0.34814	1.30E-04	3.99E-06	1.27E-05	4.11E-06	1.20E-05	1.6262E-04
519808.92	4258387.44	2825.80695	0.09349	0.35732	0.09605	0.34953	1.30E-04	3.83E-06	1.28E-05	3.93E-06	1.20E-05	1.6218E-04
519804.57	4258349.49	2817.66144	0.08617	0.34695	0.0883	0.33858	1.29E-04	3.53E-06	1.24E-05	3.62E-06	1.16E-05	1.6045E-04
519769.4	4258503.09	2816.88657	0.09581	0.2812	0.09878	0.27696	1.29E-04	3.92E-06	1.01E-05	4.04E-06	9.51E-06	1.5677E-04
519795.08	4258299.77	2809.28941	0.07674	0.32457	0.07818	0.31531	1.29E-04	3.14E-06	1.16E-05	3.20E-06	1.08E-05	1.5766E-04
519798.31	4258316.18	2809.10817	0.07968	0.33198	0.08136	0.32303	1.29E-04	3.26E-06	1.19E-05	3.33E-06	1.11E-05	1.5843E-04
519739.61	4258551.7	2808.96413	0.09103	0.23955	0.09358	0.23604	1.29E-04	3.73E-06	8.57E-06	3.83E-06	8.10E-06	1.5310E-04
519801.48	4258332.75	2808.41602	0.08279	0.33915	0.08469	0.33057	1.29E-04	3.39E-06	1.21E-05	3.47E-06	1.13E-05	1.5918E-04
519729.69	4258571.14	2806.97181	0.08986	0.22736	0.09257	0.22419	1.29E-04	3.68E-06	8.13E-06	3.79E-06	7.70E-06	1.5208E-04
519749.53	4258532.26	2796.19653	0.09216	0.25249	0.09473	0.24877	1.28E-04	3.77E-06	9.03E-06	3.88E-06	8.54E-06	1.5351E-04
519805.8	4258370.78	2792.89069	0.08978	0.34987	0.09212	0.34199	1.28E-04	3.68E-06	1.25E-05	3.77E-06	1.17E-05	1.5984E-04
519779.32	4258483.65	2792.8555	0.09694	0.29762	0.10011	0.2929	1.28E-04	3.97E-06	1.06E-05	4.10E-06	1.01E-05	1.5690E-04
519804.71	4258421.94	2792.19074	0.09742	0.34691	0.10029	0.34009	1.28E-04	3.99E-06	1.24E-05	4.11E-06	1.17E-05	1.6028E-04
519719.77	4258590.57	2789.38747	0.08861	0.21575	0.09147	0.21316	1.28E-04	3.63E-06	7.72E-06	3.75E-06	7.32E-06	1.5038E-04
519782.95	4258474.83	2775.18149	0.09708	0.30388	0.10026	0.29895	1.27E-04	3.97E-06	1.09E-05	4.11E-06	1.03E-05	1.5653E-04
519759.44	4258512.82	2772.40317	0.09328	0.26633	0.09601	0.26239	1.27E-04	3.82E-06	9.53E-06	3.93E-06	9.01E-06	1.5348E-04
519805.32	4258396.19	2768.95893	0.09362	0.34922	0.09623	0.34182	1.27E-04	3.83E-06	1.25E-05	3.94E-06	1.17E-05	1.5903E-04
519801.09	4258430.76	2767.76415	0.09741	0.33909	0.10035	0.3326	1.27E-04	3.99E-06	1.21E-05	4.11E-06	1.14E-05	1.5862E-04
519786.58	4258466.02	2759.76419	0.09716	0.31037	0.10033	0.30516	1.27E-04	3.98E-06	1.11E-05	4.11E-06	1.05E-05	1.5628E-04
519729.65	4258561.44	2754.63201	0.08861	0.22779	0.09108	0.2245	1.26E-04	3.63E-06	8.15E-06	3.73E-06	7.71E-06	1.4959E-04
519797.46	4258439.57	2751.9701	0.09735	0.33142	0.10035	0.32528	1.26E-04	3.99E-06	1.19E-05	4.11E-06	1.12E-05	1.5737E-04
519739.57	4258542	2748.93208	0.08973	0.23984	0.09213	0.23631	1.26E-04	3.67E-06	8.58E-06	3.77E-06	8.11E-06	1.5025E-04
519790.2	4258457.2	2748.34177	0.0972	0.31702	0.10032	0.31153	1.26E-04	3.98E-06	1.13E-05	4.11E-06	1.07E-05	1.5621E-04
519769.36	4258493.39	2745.20507	0.09439	0.28143	0.09735	0.27712	1.26E-04	3.86E-06	1.01E-05	3.99E-06	9.51E-06	1.5338E-04
519793.83	4258448.39	2744.8329	0.09725	0.32397	0.10031	0.31816	1.26E-04	3.98E-06	1.16E-05	4.11E-06	1.09E-05	1.5653E-04
519719.73	4258580.87	2743.75184	0.08741	0.21637	0.0901	0.2135	1.26E-04	3.58E-06	7.74E-06	3.69E-06	7.33E-06	1.4821E-04
519800.89	4258358.44	2738.78764	0.08639	0.33904	0.08859	0.33117	1.26E-04	3.54E-06	1.21E-05	3.63E-06	1.14E-05	1.5631E-04
519749.49	4258522.56	2729.76505	0.09083	0.25268	0.09334	0.24896	1.25E-04	3.72E-06	9.04E-06	3.82E-06	8.55E-06	1.5036E-04
519797.82	4258341.63	2728.42498	0.08306	0.33186	0.08507	0.32378	1.25E-04	3.40E-06	1.19E-05	3.48E-06	1.11E-05	1.5504E-04
519802.22	4258379.46	2727.82757	0.08996	0.34239	0.09237	0.33488	1.25E-04	3.68E-06	1.22E-05	3.78E-06	1.15E-05	1.5636E-04
519791.47	4258308.54	2726.87924	0.07699	0.31763	0.07861	0.30897	1.25E-04	3.15E-06	1.14E-05	3.22E-06	1.06E-05	1.5344E-04
519794.68	4258325	2724.28544	0.07991	0.32449	0.08173	0.31617	1.25E-04	3.27E-06	1.16E-05	3.35E-06	1.09E-05	1.5406E-04
519801.72	4258404.94	2721.73848	0.09368	0.34127	0.09635	0.33425	1.25E-04	3.84E-06	1.22E-05	3.94E-06	1.15E-05	1.5633E-04
519759.4	4258503.13	2702.59159	0.09192	0.26656	0.09464	0.26256	1.24E-04	3.76E-06	9.53E-06	3.87E-06	9.01E-06	1.5018E-04
519729.61	4258551.74	2700.05906	0.08737	0.2281	0.08965	0.22476	1.24E-04	3.58E-06	8.16E-06	3.67E-06	7.72E-06	1.4700E-04
519719.69	4258571.18	2696.82986	0.08623	0.21687	0.0887	0.2138	1.24E-04	3.53E-06	7.76E-06	3.63E-06	7.34E-06	1.4598E-04
519739.53	4258532.3	2687.08403	0.08845	0.24006	0.09077	0.23652	1.23E-04	3.62E-06	8.59E-06	3.72E-06	8.12E-06	1.4732E-04
519798.12	4258413.69	2682.66609	0.09369	0.33349	0.09639	0.32684	1.23E-04	3.84E-06	1.19E-05	3.95E-06	1.12E-05	1.5401E-04
519769.32	4258483.69	2676.02857	0.09302	0.28159	0.09595	0.27719	1.23E-04	3.81E-06	1.01E-05	3.93E-06	9.52E-06	1.5010E-04
519798.65	4258388.15	2670.26624	0.09007	0.33493	0.09254	0.32778	1.23E-04	3.69E-06	1.20E-05	3.79E-06	1.13E-05	1.5322E-04
519797.21	4258367.39	2667.46098	0.08657	0.33157	0.08884	0.32413	1.22E-04	3.54E-06	1.19E-05	3.64E-06	1.11E-05	1.5255E-04
519749.44	4258512.87	2662.79248	0.08953	0.25281	0.09201	0.24907	1.22E-04	3.67E-06	9.04E-06	3.77E-06	8.55E-06	1.4719E-04
519772.92	4258474.94	2657.33289	0.09317	0.28722	0.09613	0.28265	1.22E-04	3.81E-06	1.03E-05	3.94E-06	9.70E-06	1.4964E-04
519794.17	4258350.52	2653.82894	0.08329	0.32487	0.08539	0.31723	1.22E-04	3.41E-06	1.16E-05	3.50E-06	1.09E-05	1.5117E-04
519794.52	4258422.44	2652.1601	0.09363	0.32594	0.09637	0.31966	1.22E-04	3.83E-06	1.17E-05	3.95E-06	1.10E-05	1.5209E-04
519719.65	4258561.48	2648.29639	0.08507	0.21721	0.08731	0.21404	1.21E-04	3.48E-06	7.77E-06	3.57E-06	7.35E-06	1.4367E-04
519787.87	4258317.31	2647.03964	0.07723	0.31086	0.07898	0.30276	1.21E-04	3.16E-06	1.11E-05	3.23E-06	1.04E-05	1.4935E-04
519791.05	4258333.83	2645.42798	0.08014	0.31756	0.08206	0.30976	1.21E-04	3.28E-06	1.14E-05	3.36E-06	1.06E-05	1.5000E-04
519729.57	4258542.04	2643.51711	0.08616	0.22831	0.0883	0.22495	1.21E-04	3.53E-06	8.17E-06	3.62E-06	7.72E-06	1.4431E-04
519776.52	4258466.19	2638.99566	0.09323	0.29295	0.09619	0.28815	1.21E-04	3.82E-06	1.05E-05	3.94E-06	9.89E-06	1.4920E-04
519759.36	4258493.43	2633.91542	0.09061	0.26674	0.09332	0.26267	1.21E-04	3.71E-06	9.54E-06	3.82E-06	9.02E-06	1.4693E-04
519790.92	4258431.19	2632.59872	0.09356	0.3188	0.09636	0.31283	1.21E-04	3.83E-06	1.14E-05	3.95E-06	1.07E-05	1.5070E-04
519780.12	4258457.44	2627.22227	0.09334	0.29909	0.09627	0.29402	1.21E-04	3.82E-06	1.07E-05	3.94E-06	1.01E-05	1.4909E-04
519739.49	4258522.61	2624.15856	0.08722	0.2402	0.08948	0.23664	1.20E-04	3.57E-06	8.59E-06	3.66E-06	8.12E-06	1.4434E-04
519787.32	4258439.94	2623.05705	0.0935	0.31202	0.09636	0.30635	1.20E-04	3.83E-06	1.12E-05	3.95E-06	1.05E-05	1.4979E-04
519783.72	4258448.69	2622.52095	0.09345	0.30554	0.09636	0.30016	1.20E-04	3.83E-06	1.09E-05	3.95E-06	1.03E-05	1.4932E-04
519795.07	4258396.84	2621.38852	0.09014	0.32763	0.09266	0.32083	1.20E-04	3.69E-06	1.17E-05	3.79E-06	1.10E-05	1.5048E-04
519793.52	4258376.35	2603.58669	0.08671	0.32449	0.08904	0.31737	1.19E-04	3.55E-06	1.16E-05	3.65E-06	1.09E-05	1.4915E-04
519719.61	4258551.78	2597.32998	0.08393	0.21745	0.08598	0.21422	1.19E-04	3.44E-06	7.78E-06	3.52E-06	7.35E-06	1.4125E-04
519749.4	4258503.17	2596.10117	0.08828	0.25295	0.09074	0.24917	1.19E-04	3.61E-06	9.05E-06	3.72E-06	8.55E-06	1.4404E-04
519729.53	4258532.35	2585.10238	0.08498	0.22843	0.08704	0.22506	1.19E-04	3.48E-06	8.17E-06	3.56E-06	7.73E-06	1.4154E-04
519790.51	4258359.41	2583.28654	0.08345	0.31789	0.08561	0.31066	1.19E-04	3.42E-06	1.14E-05	3.51E-06	1.07E-05	1.4747E-04
519791.5	4258405.53	2579.86089	0.09014	0.32036	0.09269	0.31391	1.18E-04	3.69E-06	1.15E-05	3.80E-06	1.08E-05	1.4808E-04
519787.42	4258342.66	2573.31031	0.08036	0.31114	0.08236	0.30374	1.18E-04	3.29E-06	1.11E-05	3.37E-06	1.04E-05	1.4628E-04
519784.26	4258326.08	2570.38637	0.07743	0.30439	0.07928	0.2968	1.18E-04	3.17E-06	1.09E-05	3.25E-06	1.02E-05	1.4542E-04
519759.32	4258483.73	2567.38439	0.08933	0.26685	0.09204	0.26268	1.18E-04	3.66E-06	9.54E-06	3.77E-06	9.02E-06	1.4378E-04
519739.44	4258512.91	2560.32911	0.08601	0.24026	0.08824	0.23669	1.17E-04	3.52E-06	8.59E-06	3.61E-06	8.13E-06	1.4132E-04
519762.9	4258475.04	2548.20231	0.08951	0.27203	0.09225	0.26772	1.17E-04	3.66E-06	9.73E-06	3.78E-06	9.19E-06	1.4327E-04
519789.84	4258385.3	2548.17805	0.0868	0.31728	0.08916	0.31054	1.17E-04	3.55E-06	1.13E-05	3.65E-06	1.07E-05	1.4612E-04
519787.92	4258414.22	2546.47371	0.09008	0.31332	0.09266	0.30722	1.17E-04	3.69E-06	1.12E-05	3.79E-06	1.05E-05	1.4606E-04
519719.57	4258542.08	2543.85403	0.08279	0.2176	0.08472	0.21435	1.17E-04	3.39E-06	7.78E-06	3.47E-06	7.36E-06	1.3871E-04
519766.47	4258466.35	2530.37646	0.08961	0.27713	0.09237	0.27264	1.16E-04	3.67E-06	9.91E-06	3.78E-06	9.36E-06	1.4281E-04
519749.36	4258493.47	2529.99234	0.08705	0.25306	0.08952	0.24921	1.16E-04	3.56E-06	9.05E-06	3.67E-06	8.56E-06	1.4091E-04
519729.49	4258522.65	2525.34666	0.08383	0.2285	0.08583	0.22512	1.16E-04	3.43E-06	8.17E-06	3.51E-06	7.73E-06	1.3871E-04
519784.35	4258422.91	2524.13649	0.09004	0.30673	0.09265	0.30092	1.16E-04	3.69E-06	1.10E-05	3.79E-06	1.03E-05	1.4458E-04
519786.86	4258368.29	2519.84952	0.08358	0.31117	0.08579	0.30429	1.16E-04	3.42E-06	1.11E-05	3.51E-06	1.04E-05	1.4412E-04
519770.05	4258457.67	2514.57164	0.08967	0.28251	0.09242	0.2778	1.15E-04	3.67E-06	1.01E-05	3.78E-06	9.54E-06	1.4246E-04
519780.77	4258431.6	2510.47683	0.08997	0.30038	0.09263	0.29484	1.15E-04	3.68E-06	1.07E-05	3.79E-06	1.01E-05	1.4352E-04
519773.62	4258448.98	2504.43037	0.08972	0.28807	0.09244	0.28308	1.15E-04	3.67E-06	1.03E-05	3.78E-06	9.72E-06	1.4238E-04
519783.79	4258351.48	2504.38108	0.08052	0.3047	0.08257	0.29769	1.15E-04	3.30E-06	1.09E-05	3.38E-06	1.02E-05	1.4269E-04
519777.2	4258440.29	2503.86965	0.08985	0.29413	0.09255	0.28887	1.15E-04	3.68E-06	1.05E-05	3.79E-06	9.92E-06	1.4278E-04
519786.16	4258394.25	2501.61541	0.08684	0.31041	0.08925	0.30399	1.15E-04	3.56E-06	1.11E-05	3.65E-06	1.04E-05	1.4352E-04
519780.65	4258334.84	2497.902	0.07762	0.29836	0.07954	0.29117	1.15E-04	3.18E-06	1.07E-05	3.26E-06	1.00E-05	1.4170E-04
519739.4	4258503.21	2496.61173	0.08484	0.2403	0.08706	0.2367	1.15E-04	3.47E-06	8.60E-06	3.56E-06	8.13E-06	1.3830E-04
519719.53	4258532.39	2488.75978	0.08169	0.21767	0.08353	0.21442	1.14E-04	3.34E-06	7.79E-06	3.42E-06	7.36E-06	1.3609E-04
519749.32	4258483.77	2465.6966	0.08586	0.2531	0.08834	0.24916	1.13E-04	3.52E-06	9.05E-06	3.62E-06	8.55E-06	1.3786E-04
519729.45	4258512.95	2464.59666	0.0827	0.22851	0.08469	0.22512	1.13E-04	3.39E-06	8.17E-06	3.47E-06	7.73E-06	1.3583E-04
519783.2	4258377.18	2463.79622	0.08366	0.30456	0.0859	0.29801	1.13E-04	3.43E-06	1.09E-05	3.52E-06	1.02E-05	1.4110E-04
519782.47	4258403.2	2461.82593	0.08681	0.3035	0.08924	0.29742	1.13E-04	3.55E-06	1.09E-05	3.65E-06	1.02E-05	1.4122E-04
519753.01	4258474.82	2445.89051	0.08605	0.25805	0.08858	0.25396	1.12E-04	3.52E-06	9.23E-06	3.63E-06	8.72E-06	1.3731E-04
519780.16	4258360.31	2440.81364	0.08062	0.29831	0.08271	0.29165	1.12E-04	3.30E-06	1.07E-05	3.39E-06	1.00E-05	1.3935E-04
519739.36	4258493.51	2433.20432	0.0837	0.24032	0.08593	0.23667	1.12E-04	3.43E-06	8.60E-06	3.52E-06	8.13E-06	1.3530E-04
519719.49	4258522.69	2432.0626	0.08061	0.21767	0.08241	0.21442	1.12E-04	3.30E-06	7.79E-06	3.37E-06	7.36E-06	1.3340E-04
519778.79	4258412.16	2431.35582	0.08675	0.29692	0.08919	0.29116	1.12E-04	3.55E-06	1.06E-05	3.65E-06	1.00E-05	1.3937E-04
519777.04	4258343.61	2430.21622	0.07776	0.29237	0.07974	0.28555	1.11E-04	3.18E-06	1.05E-05	3.26E-06	9.80E-06	1.3820E-04
519756.69	4258465.87	2427.93142	0.08622	0.26306	0.08879	0.2588	1.11E-04	3.53E-06	9.41E-06	3.64E-06	8.88E-06	1.3685E-04
519779.54	4258386.06	2414.27571	0.08368	0.298	0.08594	0.29178	1.11E-04	3.43E-06	1.07E-05	3.52E-06	1.00E-05	1.3838E-04
519760.37	4258456.92	2413.74048	0.08635	0.26818	0.08894	0.26371	1.11E-04	3.54E-06	9.59E-06	3.64E-06	9.05E-06	1.3656E-04
519775.11	4258421.11	2411.17304	0.08668	0.2907	0.08916	0.28521	1.11E-04	3.55E-06	1.04E-05	3.65E-06	9.79E-06	1.3801E-04
519729.4	4258503.25	2403.52773	0.08161	0.22845	0.08359	0.22504	1.10E-04	3.34E-06	8.17E-06	3.42E-06	7.73E-06	1.3293E-04

519771.42	4258430.06	2399.8724	0.0866	0.28472	0.08911	0.2795	1.10E-04	3.55E-06	1.02E-05	3.65E-06	9.60E-06	1.3708E-04
519764.06	4258447.97	2399.81748	0.08638	0.27328	0.08894	0.26859	1.10E-04	3.54E-06	9.77E-06	3.64E-06	9.22E-06	1.3627E-04
519767.74	4258439.01	2395.58991	0.08648	0.27884	0.08901	0.27388	1.10E-04	3.54E-06	9.97E-06	3.64E-06	9.40E-06	1.3647E-04
519776.53	4258369.13	2382.50395	0.08067	0.292	0.08278	0.28569	1.09E-04	3.30E-06	1.04E-05	3.39E-06	9.81E-06	1.3625E-04
519719.45	4258512.99	2374.25395	0.07957	0.21762	0.08134	0.21436	1.09E-04	3.26E-06	7.78E-06	3.33E-06	7.36E-06	1.3066E-04
519775.89	4258394.95	2372.55906	0.08365	0.29165	0.08593	0.28575	1.09E-04	3.42E-06	1.04E-05	3.52E-06	9.81E-06	1.3603E-04
519739.32	4258483.82	2371.17797	0.08259	0.2403	0.08484	0.23657	1.09E-04	3.38E-06	8.60E-06	3.47E-06	8.12E-06	1.3236E-04
519773.44	4258352.38	2368.06425	0.07786	0.28625	0.07985	0.27979	1.09E-04	3.19E-06	1.02E-05	3.27E-06	9.61E-06	1.3494E-04
519742.98	4258474.93	2350.48331	0.08277	0.24486	0.0851	0.24098	1.08E-04	3.39E-06	8.76E-06	3.48E-06	8.27E-06	1.3174E-04
519729.36	4258493.56	2343.09279	0.08055	0.22837	0.08253	0.22493	1.07E-04	3.30E-06	8.17E-06	3.38E-06	7.72E-06	1.3006E-04
519772.23	4258403.84	2342.16965	0.08365	0.28582	0.08596	0.28018	1.07E-04	3.42E-06	1.02E-05	3.52E-06	9.62E-06	1.3424E-04
519772.9	4258377.96	2333.6632	0.08071	0.28615	0.08285	0.28012	1.07E-04	3.30E-06	1.02E-05	3.39E-06	9.62E-06	1.3361E-04
519746.64	4258466.04	2332.51522	0.08295	0.24945	0.08533	0.24542	1.07E-04	3.40E-06	8.92E-06	3.49E-06	8.43E-06	1.3125E-04
519768.57	4258412.72	2319.96276	0.08361	0.28014	0.08595	0.27474	1.06E-04	3.42E-06	1.00E-05	3.52E-06	9.43E-06	1.3283E-04
519750.29	4258457.16	2317.139	0.08311	0.25415	0.08552	0.24994	1.06E-04	3.40E-06	9.09E-06	3.50E-06	8.58E-06	1.3088E-04
519719.4	4258503.29	2316.07056	0.07855	0.21749	0.08032	0.21422	1.06E-04	3.22E-06	7.78E-06	3.29E-06	7.35E-06	1.2790E-04
519769.83	4258361.15	2309.39887	0.07789	0.2803	0.0799	0.27417	1.06E-04	3.19E-06	1.00E-05	3.27E-06	9.41E-06	1.3185E-04
519753.95	4258448.27	2305.51174	0.08323	0.2589	0.08564	0.25448	1.06E-04	3.41E-06	9.26E-06	3.51E-06	8.74E-06	1.3068E-04
519764.92	4258421.61	2303.79627	0.08351	0.27442	0.08586	0.2693	1.06E-04	3.42E-06	9.82E-06	3.52E-06	9.25E-06	1.3169E-04
519757.6	4258439.38	2297.40502	0.08332	0.26385	0.08572	0.2592	1.05E-04	3.41E-06	9.44E-06	3.51E-06	8.90E-06	1.3066E-04
519761.26	4258430.5	2296.18568	0.0834	0.26897	0.08577	0.26409	1.05E-04	3.41E-06	9.62E-06	3.51E-06	9.07E-06	1.3096E-04
519769.27	4258386.78	2293.43835	0.08074	0.28058	0.08291	0.2748	1.05E-04	3.31E-06	1.00E-05	3.39E-06	9.43E-06	1.3139E-04
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519732.95	4258475.03	2262.28749	0.07969	0.23247	0.08178	0.22882	1.04E-04	3.26E-06	8.32E-06	3.35E-06	7.86E-06	1.2657E-04
519765.63	4258395.61	2260.89422	0.08074	0.27516	0.08292	0.26962	1.04E-04	3.31E-06	9.84E-06	3.40E-06	9.26E-06	1.2952E-04
519766.22	4258369.92	2260.71855	0.07795	0.27495	0.07998	0.26907	1.04E-04	3.19E-06	9.83E-06	3.27E-06	9.24E-06	1.2926E-04
519719.36	4258493.6	2258.25475	0.07756	0.21731	0.07933	0.21403	1.04E-04	3.18E-06	7.77E-06	3.25E-06	7.35E-06	1.2515E-04
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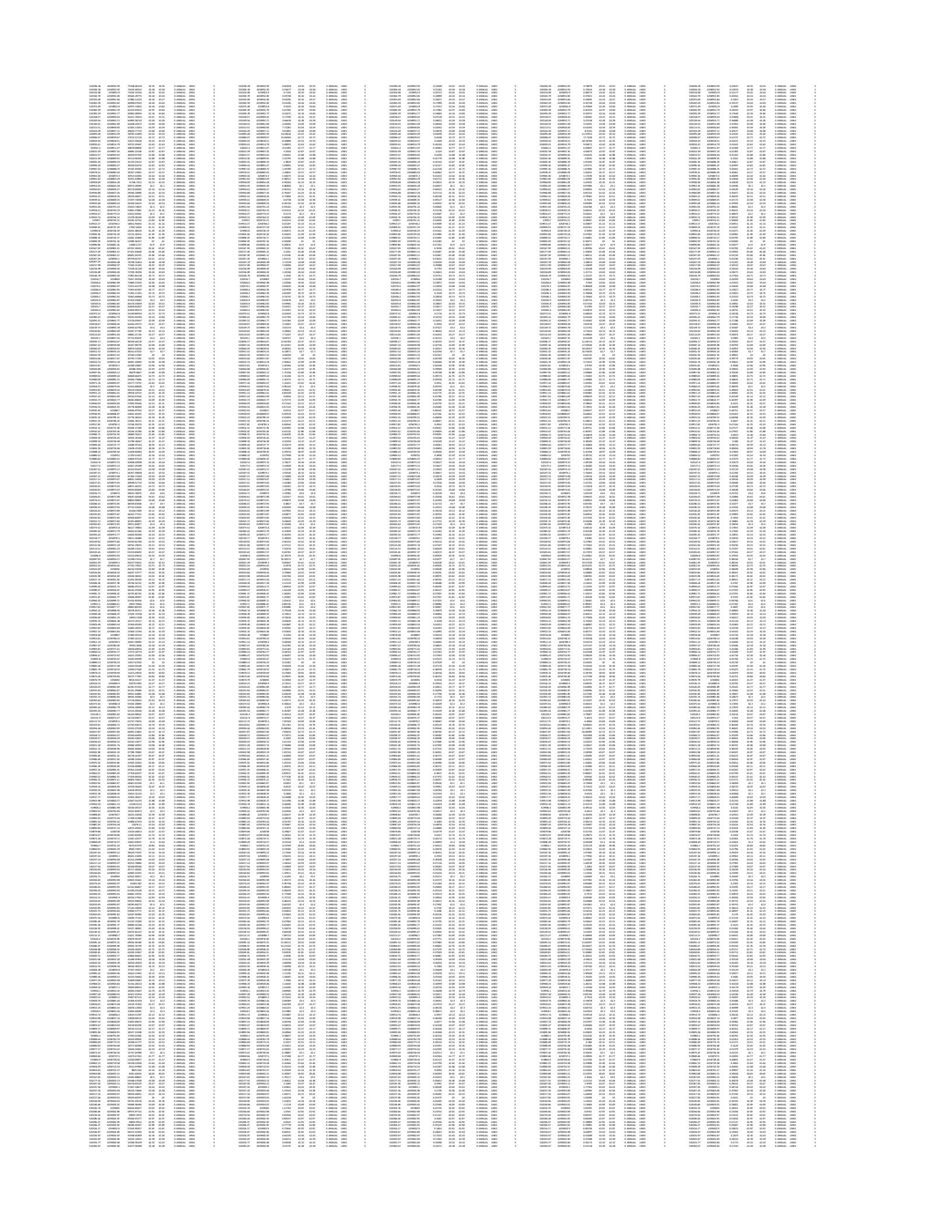
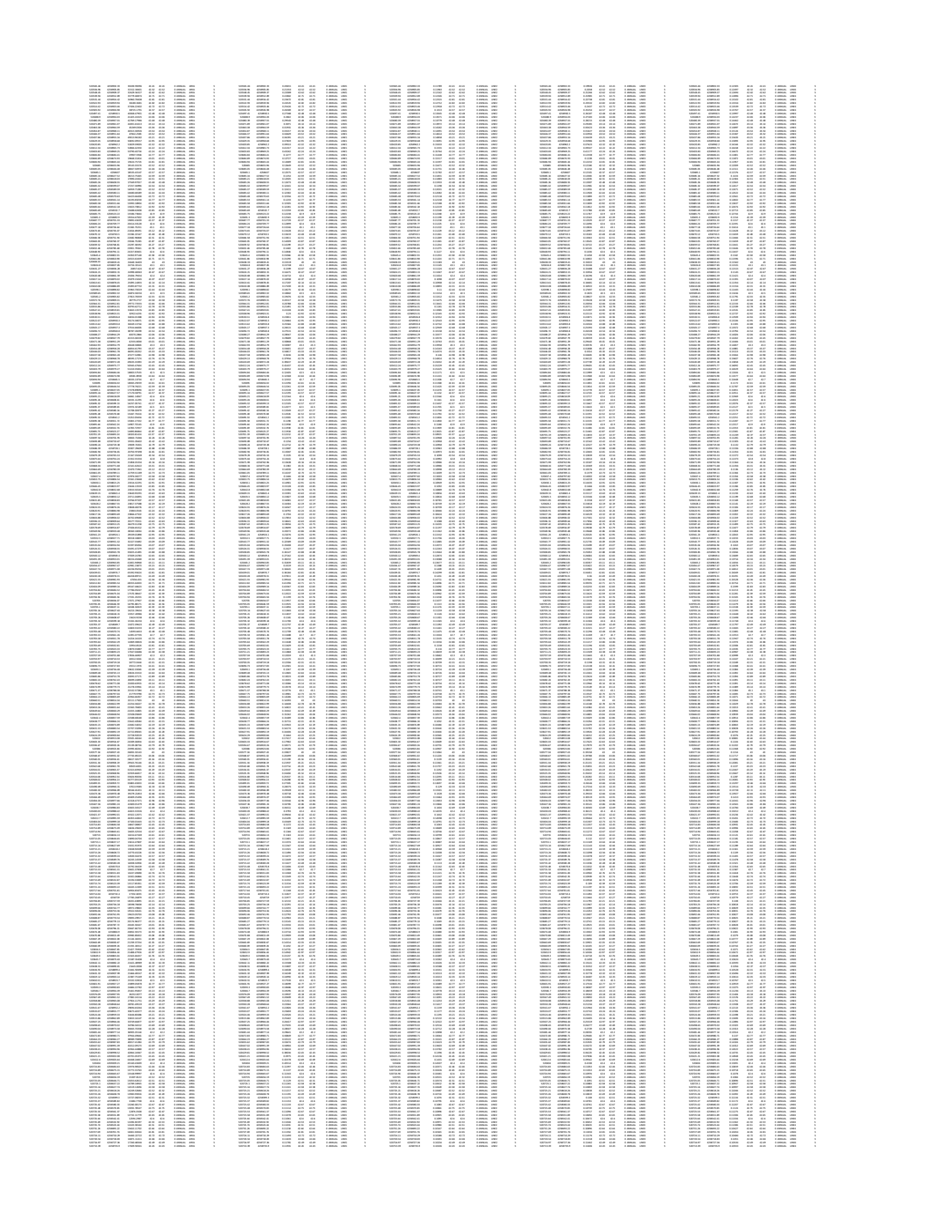
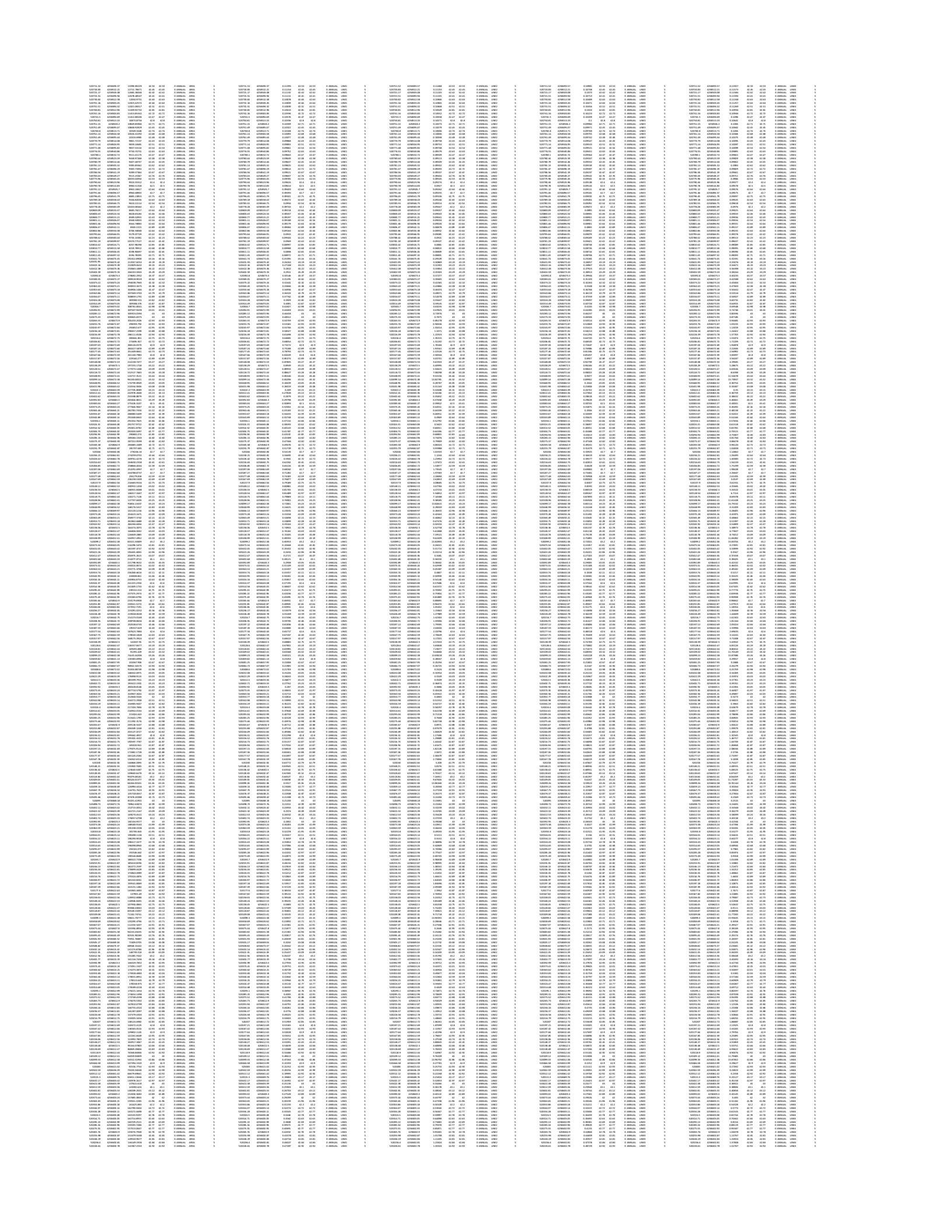
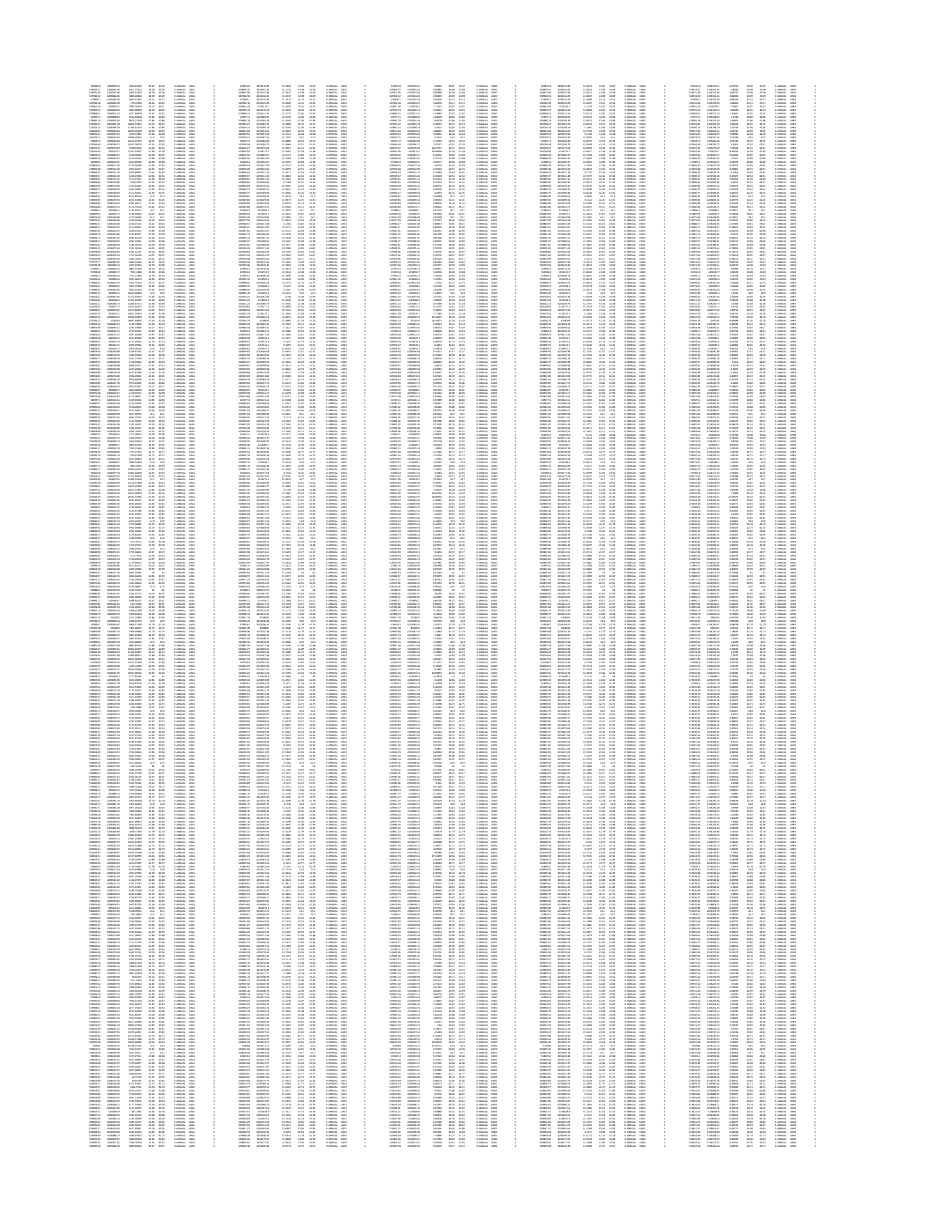
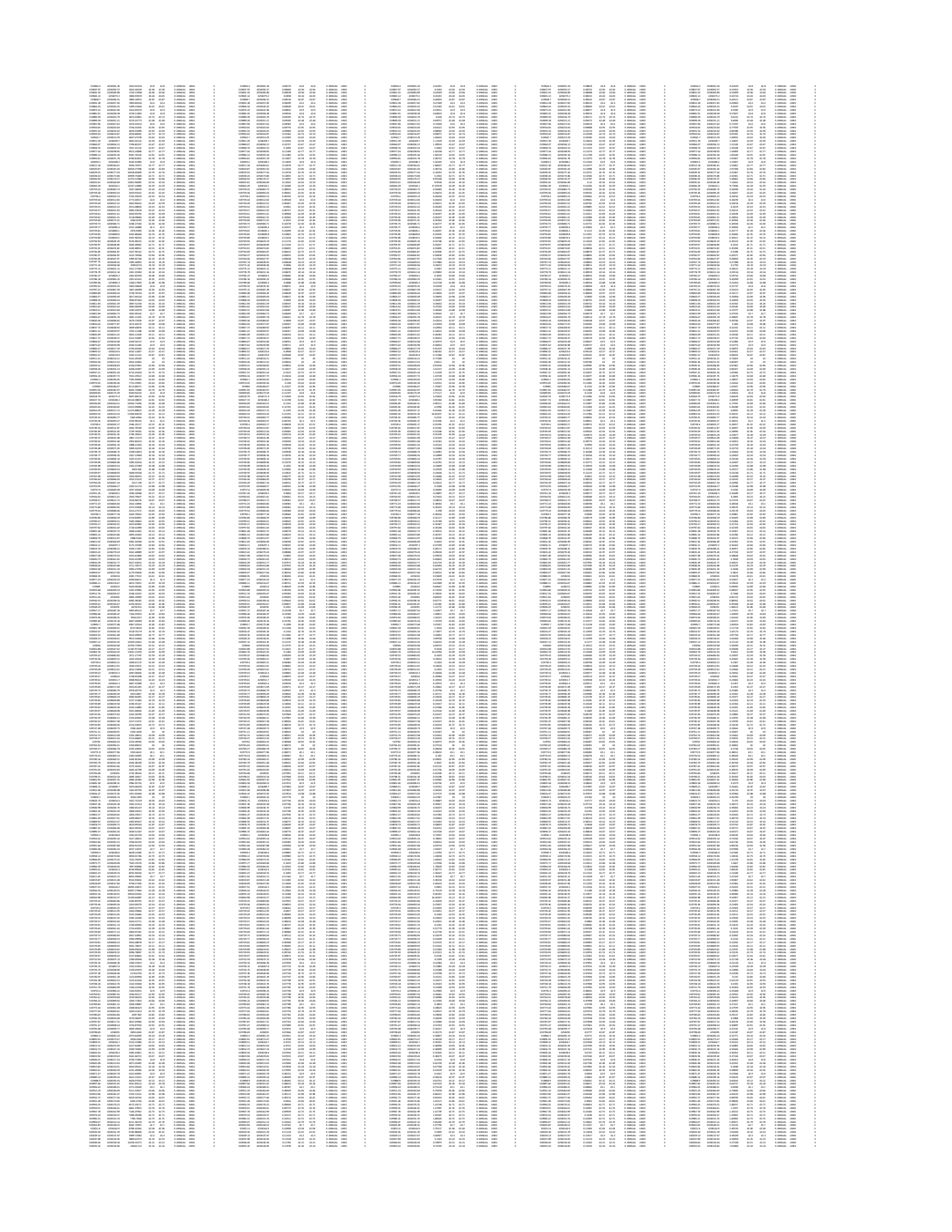
519762	4258404.43	2234.38784	0.08068	0.26972	0.08287	0.26444	1.03E-04	3.30E-06	9.65E-06	3.39E-06	9.08E-06	1.2793E-04
519740.22	4258457.38	2227.21575	0.08004	0.24107	0.08226	0.23709	1.02E-04	3.28E-06	8.62E-06	3.37E-06	8.14E-06	1.2559E-04
519762.61	4258378.68	2220.06425	0.07799	0.26988	0.08004	0.26423	1.02E-04	3.19E-06	9.65E-06	3.28E-06	9.07E-06	1.2705E-04
519758.37	4258413.26	2214.66665	0.08057	0.26434	0.08277	0.25933	1.02E-04	3.30E-06	9.46E-06	3.39E-06	8.90E-06	1.2665E-04
519743.85	4258448.56	2214.54633	0.08019	0.24554	0.08244	0.24136	1.02E-04	3.28E-06	8.78E-06	3.38E-06	8.29E-06	1.2533E-04
519747.48	4258439.73	2206.4442	0.08033	0.25001	0.08258	0.24564	1.01E-04	3.29E-06	8.94E-06	3.38E-06	8.43E-06	1.2527E-04
519754.74	4258422.08	2205.28914	0.08051	0.25942	0.08272	0.25462	1.01E-04	3.30E-06	9.28E-06	3.39E-06	8.74E-06	1.2588E-04
519751.11	4258430.91	2203.2458	0.08043	0.25467	0.08267	0.25007	1.01E-04	3.29E-06	9.11E-06	3.38E-06	8.59E-06	1.2545E-04
519719.32	4258483.9	2201.16208	0.0766	0.21711	0.07838	0.2138	1.01E-04	3.14E-06	7.77E-06	3.21E-06	7.34E-06	1.2244E-04
519759.01	4258387.45	2184.93117	0.07798	0.26481	0.08005	0.25941	1.00E-04	3.19E-06	9.47E-06	3.28E-06	8.91E-06	1.2509E-04
519722.93	4258475.13	2180.00946	0.07678	0.2209	0.07865	0.21748	1.00E-04	3.14E-06	7.90E-06	3.22E-06	7.47E-06	1.2175E-04
519726.54	4258466.36	2160.15815	0.07695	0.22484	0.07891	0.22126	9.91E-05	3.15E-06	8.04E-06	3.23E-06	7.60E-06	1.2112E-04
519755.4	4258396.22	2156.92051	0.07794	0.25985	0.08001	0.25468	9.90E-05	3.19E-06	9.29E-06	3.28E-06	8.74E-06	1.2346E-04
519730.15	4258457.6	2143.41654	0.07712	0.22883	0.07915	0.22509	9.83E-05	3.16E-06	8.18E-06	3.24E-06	7.73E-06	1.2065E-04
519751.79	4258404.99	2136.22348	0.07787	0.25498	0.07995	0.25003	9.80E-05	3.19E-06	9.12E-06	3.27E-06	8.58E-06	1.2217E-04
519733.75	4258448.83	2129.43933	0.07729	0.23288	0.07935	0.22896	9.77E-05	3.16E-06	8.33E-06	3.25E-06	7.86E-06	1.2030E-04
519748.18	4258413.76	2122.55666	0.07778	0.25023	0.07986	0.2455	9.74E-05	3.18E-06	8.95E-06	3.27E-06	8.43E-06	1.2121E-04
519737.36	4258440.06	2119.6705	0.07744	0.23708	0.07953	0.23296	9.72E-05	3.17E-06	8.48E-06	3.26E-06	8.00E-06	1.2015E-04
519744.58	4258422.52	2115.61456	0.07769	0.24571	0.07977	0.24119	9.71E-05	3.18E-06	8.79E-06	3.27E-06	8.28E-06	1.2058E-04
519740.97	4258431.29	2114.83994	0.07757	0.24131	0.07966	0.237	9.70E-05	3.18E-06	8.63E-06	3.26E-06	8.14E-06	1.2023E-04
CONCUNIT ug/	m^3											
DEPUNIT g/m^	2											











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A.3 - Additional Air Quality and Greenhouse Gas Emissions Supporting Information

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Stonebridge Project Construction Parameters

Phase 1: Site Work for the entire site area to be developed, paving of internal streets/on-street parking areas, and construction of the Stormwater Treatment Area

Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days
Demolition	Demolition	4/1/2021	4/28/2021	5	20
Site Preparation	Site Preparation	4/29/2021	5/12/2021	5	10
Grading	Grading	5/13/2021	6/23/2021	5	30
Stormwater Treatment Area	Building Construction	5/13/2021	9/29/2021	5	100
Paving	Paving	6/24/2021	9/29/2021	5	70

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8	81	0.73
Demolition	Excavators	3	8	158	0.38
Demolition	Rubber Tired Dozers	2	8	247	0.4
Site Preparation	Rubber Tired Dozers	3	8	247	0.4
Site Preparation	Tractors/Loaders/Backhoes	4	8	97	0.37
Grading	Excavators	2	8	158	0.38
Grading	Graders	1	8	187	0.41
Grading	Rubber Tired Dozers	1	8	247	0.4
Grading	Scrapers	2	8	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8	97	0.37
Stormwater Treatment Area	Cranes	1	7	231	0.29
Stormwater Treatment Area	Forklifts	3	8	89	0.2
Stormwater Treatment Area	Generator Sets	1	8	84	0.74
Stormwater Treatment Area	Tractors/Loaders/Backhoes	3	7	97	0.37
Stormwater Treatment Area	Welders	1	8	46	0.45
Paving	Pavers	2	8	130	0.42
Paving	Paving Equipment	2	8	132	0.36
Paving	Rollers	2	8	80	0.38

Trips and VMT

Phase Name	Worker Trip Number	Vendor Trip Number	Hauling Trip Number
Demolition	15	0	17
Site Preparation	18	0	0
Grading	20	0	138
Stormwater Treatment Area	337	132	0
Paving	15	0	0

Phase 2: Building Construction of Homes 1-21

Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days
Building Construction	Building Construction	9/30/2021	8/3/2022	5	220
Paving	Paving	8/4/2022	8/17/2022	5	10
Architectural Coating	Architectural Coating	8/18/2022	8/31/2022	5	10

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	2.8	231	0.29
Building Construction	Forklifts	3	3.2	89	0.2
Building Construction	Generator Sets	1	3.2	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	2.8	97	0.37
Building Construction	Welders	1	3.2	46	0.45
Paving	Cement and Mortar Mixers	1	8	9	0.56
Paving	Pavers	1	8	130	0.42
Paving	Paving Equipment	1	8	132	0.36
Paving	Rollers	2	8	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8	97	0.37
Architectural Coating	Air Compressors	1	6	78	0.48

Trips and VMT

Phase Name	Worker Trip Number	Vendor Trip Number	Hauling Trip Number
Building Construction	8	2	0
Paving	15	0	0
Architectural Coating	2	0	0

Phase 3: Building Construction of Homes 22-42

Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days
Building Construction	Building Construction	4/13/2021	2/14/2022	5	220
Paving	Paving	2/15/2022	2/28/2022	5	10
Architectural Coating	Architectural Coating	3/1/2022	3/14/2022	5	10

OffRoad Equipment

Phase Name	Offroad Equipment Type	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	2.8	231	0.29
Building Construction	Forklifts	3.2	89	0.2
Building Construction	Generator Sets	3.2	84	0.74
Building Construction	Tractors/Loaders/Backhoes	2.8	97	0.37
Building Construction	Welders	3.2	46	0.45
Paving	Cement and Mortar Mixers	8	9	0.56
Paving	Pavers	8	130	0.42
Paving	Paving Equipment	8	132	0.36
Paving	Rollers	8	80	0.38
Paving	Tractors/Loaders/Backhoes	8	97	0.37
Architectural Coating	Air Compressors	6	78	0.48

Trips and VMT

Phase Name	Worker Trip Number	Vendor Trip Number	Hauling Trip Number
Building Construction	8	2	0
Paving	15	0	0
Architectural Coating	2	0	0

Phase 4: Building Construction of Homes 43-63

Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days
Building Construction	Building Construction	10/25/2021	8/26/2022	5	220
Paving	Paving	8/27/2022	9/9/2022	5	10
Architectural Coating	Architectural Coating	9/10/2022	9/23/2022	5	10

OffRoad Equipment

Phase Name	Offroad Equipment Type	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	2.8	231	0.29
Building Construction	Forklifts	3.2	89	0.2
Building Construction	Generator Sets	3.2	84	0.74
Building Construction	Tractors/Loaders/Backhoes	2.8	97	0.37
Building Construction	Welders	3.2	46	0.45
Paving	Cement and Mortar Mixers	8	9	0.56
Paving	Pavers	8	130	0.42
Paving	Paving Equipment	8	132	0.36
Paving	Rollers	8	80	0.38
Paving	Tractors/Loaders/Backhoes	8	97	0.37
Architectural Coating	Air Compressors	6	78	0.48

Trips and VMT

Phase Name	Worker Trip Number	Vendor Trip Number	Hauling Trip Number
Building Construction	8	2	0
Paving	15	0	0
Architectural Coating	2	0	0

Phase 5: Building Construction of Homes 64-84

Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days
Building Construction	Building Construction	5/6/2022	3/9/2023	5	220
Paving	Paving	3/10/2023	3/23/2023	5	10
Architectural Coating	Architectural Coating	3/24/2023	4/6/2023	5	10

OffRoad Equipment

Phase Name	Offroad Equipment Type	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	2.8	231	0.29
Building Construction	Forklifts	3.2	89	0.2
Building Construction	Generator Sets	3.2	84	0.74
Building Construction	Tractors/Loaders/Backhoes	2.8	97	0.37
Building Construction	Welders	3.2	46	0.45
Paving	Cement and Mortar Mixers	8	9	0.56
Paving	Pavers	8	130	0.42
Paving	Paving Equipment	8	132	0.36
Paving	Rollers	8	80	0.38
Paving	Tractors/Loaders/Backhoes	8	97	0.37
Architectural Coating	Air Compressors	6	78	0.48

Trips and VMT

Phase Name	Worker Trip Number	Vendor Trip Number	Hauling Trip Number
Building Construction	8	2	0
Paving	15	0	0
Architectural Coating	2	0	0

Phase 6: Building Construction of Homes 85-105

Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days
Building Construction	Building Construction	11/17/2022	9/20/2023	5	220
Paving	Paving	9/21/2023	10/4/2023	5	10
Architectural Coating	Architectural Coating	10/5/2023	10/18/2023	5	10

OffRoad Equipment

Phase Name	Offroad Equipment Type	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	2.8	231	0.29
Building Construction	Forklifts	3.2	89	0.2
Building Construction	Generator Sets	3.2	84	0.74
Building Construction	Tractors/Loaders/Backhoes	2.8	97	0.37
Building Construction	Welders	3.2	46	0.45
Paving	Cement and Mortar Mixers	8	9	0.56
Paving	Pavers	8	130	0.42
Paving	Paving Equipment	8	132	0.36
Paving	Rollers	8	80	0.38
Paving	Tractors/Loaders/Backhoes	8	97	0.37
Architectural Coating	Air Compressors	6	78	0.48

Trips and VMT

Phase Name	Worker Trip Number	Vendor Trip Number	Hauling Trip Number
Building Construction	8	2	0
Paving	15	0	0
Architectural Coating	2	0	0

Stonebridge Project Additional Construction Parameters

Estimation of Demolition Debris

Buildings

Debris Generation for Buildings (cy)

Approximate Size	Area (sq ft)	~H (ft)	Stories	Cubic Feet	/27	*0.33	Cubic Yards	
Existing building	1,824	15	1	27360	1013.333	334.4	334	
Total Building	1,824						334	cy

Removal of Hardscape

Approximate Size	1	sq-feet	Hardscape	110467
Thickness	4	inches	Softscape	109484
Volume	0	cu-ft		
Volume	0	cy		

Conversion Weight of Impervious: 2,700 lbs/cy

Weight of Impervious: 0.0166667 tons of debris

Conversion of Tons of Debris to Cubic Yards

Conversion Factor	1 cy = 0.5 tons	
Impervious	0.033333333	cy

Total

Removal of surfaces	0	cy
Total Building	334	cy
Total	**334**	**cy**

Removal of surfaces	0	tons of debris
Total Building	167	tons of debris
Total	**167**	**tons of debris**

Notes: cy = cubic yards; ft= feet; ~ = approximate; lbs = pounds; sq-feet = square feet; cu-ft = cubic feet

Sources of factors:

Federal Emergency Management Agency (FEMA). 2010. Debris Estimating Field Guide. September. Website: https://www.fema.gov/pdf/government/grant/pa/fema_329_debris_estimating.pdf. Accessed February 2019.

DownEaster. 2015. Material Weight – Pounds per Cubic Yard. June 9. Website: https://downeastermfg.com/wp-content/uploads/2015/.../Cubic_Yardage_Chart-D.pdf. Accessed February 2019.

	Duration			
	CalEEMod Defaults	FCS Revisions	Difference	Data Entry Fields Look Like This-->
Building Construction	440	1,100	660	Everything else is auto calculated

CalEEMod Defaults					
Building Construction					
Equipment	**Amount**	**Usage Hours**	**Horsepower**	**Load Factor**	**HP Hours**
Cranes	1	7	231	0.29	3,080
Forklifts	3	8	89	0.20	10,560
Generator Sets	1	8	84	0.74	3,520
Tractors/Loaders/Backhoes	3	7	97	0.37	9,240
Welders	1	8	46	0.45	3,520
				Total	**29,920**

FCS Revisions						Cross-Check	
Building Construction						**Cross-Check**	
Equipment	**Amount**	**Usage Hours**	**Horsepower**	**Load Factor**	**HP Hours**	**Goal HP Hours**	**Difference**
Cranes	1	2.80	231	0.29	3,080	3,080	-
Forklifts	3	3.20	89	0.20	10,560	10,560	-
Generator Sets	1	3.20	84	0.74	3,520	3,520	-
Tractors/Loaders/Backhoes	3	2.80	97	0.37	9,240	9,240	-
Welders	1	3.20	46	0.45	3,520	3,520	-
				Total	**29,920**	29,920	-

Stonebridge Project CO2 Intensity Factor

PG&E Electricity Emissions Factors

Year	lbs CO_2e/MWh
2020-2029	390.65
2030	292.24

2017 Electricity Emissions Factor

Emissions Factors	t/kWh	Share of Portfolio	t/kWh	t/MWh	lbs/MWh
RPS sources	-	33%	-		
Natural Gas	0.000459	20%	0.00009170		
Nuclear	0.000002	27%	0.00000043		
Coal	0.001037	0%	-		
Unspecified Sources	0.000427	20%	0.00008550		
Total	-	100%	0.00017763	0.18	**391.60**

Power Content Label

PG&E 2017	%	Source
RPS sources	33%	*California Energy Commission (CEC). 2018. Pacific Gas and Electric Company Power Content Label 2008. July. Website: https://ww2.energy.ca.gov/pcl/labels/2017_labels/PG_and_E_2017_PCL.pdf. Accessed Janaury 15, 2020.*
Natural Gas	20%	
Nuclear	27%	
Coal	0%	
Unspecified Sources	20%	
Total	100%	

Natural Gas Facility Emissions Factor Calculation

Natural Gas Emissions Factor

	CO_2	CH_4	N_2O	CO_2e	Source
kg per mmBtu	53.06	-	-	-	*Environmental Protection Agency (EPA). 2018. Emission Factors for Greenhouse Gas Inventories. March 9. Website: https://www.epa.gov/sites/production/files/2018-03/documents/emission-factors_mar_2018_0.pdf. Accessed January 15, 2020.*
g per mmBtu	53,060	1.00	0.10	-	
t per mmBtu	0.05	0.00	0.00	-	Calculated
t CO_2e per mmBtu	0.05	0.00	0.00	0.05	Calculated
t CO_2e per GJ	-	-	-	0.06	Calculated

Heat Rates

Value	Units	Source	Notes
7,755	btu/kWh	*California Energy Commission (CEC). 2017. Thermal Efficiency of Natural Gas-Fired Generation in California: 2016 Update. February. Website: http://www.energy.ca.gov/2017publications/CEC-200-2017-003/CEC-200-2017-003.pdf. Accessed January 15, 2020.*	Table 1, State Average w/o Cogeneration (per last paragraph on pg 4)
0.00818196	GJ/kWh	Converted in Google: GJ per btu	

Natural Gas Facility Emissions Factor

Natural gas emissions factor	0.06	t CO_2e per GJ
Natural gas facility heat rate	0.00818196	GJ/kWh
Natural Gas Facility Emissions Factor	0.000458507	t CO_2e per kWh

Nuclear Emissions Factor

Nuclear GHG Emissions	0.40	gCO2e/MJ	*California Air Resource Board. 2009. Detailed California-Modified GREET Pathway for California Average and Marginal Electricity. February 27. Website: https://www.arb.ca.gov/fuels/lcfs/022709lcfs_elec.pdf. Accessed January 15, 2020.*
Nuclear Emissions Factor	0.00000159	t/kWh	

Unspecified Electricity Source Emissions Factor Calculation

ARB California GHG Inventory Electricity Emissions Factors

2014	CO_2	CH_4	N_2O	CO_2e	Units	Source
Pacific Northwest (PNW)	427	0.008117	0.00094388	427.4774042	g/kWh	*California Air Resource Board. 2016. Annex 1B. Electricity Production - Imports (IPCC 1A1a) to the Technical Support Document for California's 2000-2014 Greenhouse Gas Emission Inventory. March 30. Website: https://www.arb.ca.gov/cc/inventory/doc/methods_00-14/annex_1b_electricity_production_imports.pdf. Accessed January 15, 2020.*
Pacific Southwest (PSW)	427	0.008117	0.00094388	427.4774042	g/kWh	
PNW and PSW	-	-	-	0.000427477	t/kWh	-

Other/Unspecified Emissions Factor

Unspecified Electricity Emissions Factor	0.000427	t CO_2e per kWh

Coal Electricity Source Emissions Factor Calculation

ARB California GHG Inventory Electricity Emissions Factors

2007	CO_2	CH_4	N_2O	CO_2e	Units	Source
Coal Electricity Source Emissions Factor Calculation	1033	0.011	0.0153	1037.3625	g/kWh	*California Air Resource Board. 2016. Annex 1B. Electricity Production - Imports (IPCC 1A1a) to the Technical Support Document for California's 2000-2014 Greenhouse Gas Emission Inventory. March 30. Website: https://www.arb.ca.gov/cc/inventory/doc/methods_00-14/annex_1b_electricity_production_imports.pdf. Accessed January 15, 2020.*
Total	-	-	-	0.001037363	t/kWh	-

Coal Emissions Factor

Unspecified Electricity Emissions Factor	0.001037	t CO_2e per kWh

2020-2029 and 2030 Electricity Emissions Factors

Non-RPS Energy	Year	PG&E RPS Position	Notes	Source
89.0%	2008	11.0%		*California Energy Commission (CEC). 2018. Power Content Label 2008 PG&E Power Mix. Website: https://ww2.energy.ca.gov/pcl/labels/2008_labels/PG%20and%20E%20pcl%202008.pdf. Accessed January 15, 2020.*
67.0%	2020-2029	33.0%		
50.0%	2030	50.0%		

Estimated Power Content Label Sources

PG&E	2017	Share of Non-RPS in 2017	2020-2029	Share of Non-RPS in 2020-2029	2030
RPS	33.0%	-	33.0%	-	50.0%
Natural Gas	20.0%	22%	20.0%	29.9%	14.9%
Nuclear	27.0%	30%	27.0%	40.3%	20.1%
Coal	0.0%	0%	0.0%	0.0%	0.0%
Unspecified Sources	20.0%	22%	20.0%	29.9%	14.9%
Total	100%	75%	100%	100.0%	100%

2020-2029					
Emissions Factors	**t/kWh**	**Share of Portfolio**	**t/kWh**	**t/MWh**	**lbs/MWh**
RPS	-	33.0%	-		
Natural Gas	0.000459	20.0%	0.000092		
Nuclear	0.000002	27.0%			
Coal	0.001037	0.0%	-		
Unspecified	0.000427	20.0%	0.000085		
Total	-	100.0%	0.000177	0.18	**390.65**

2030					
Emissions Factors	**t/kWh**	**Share of Portfolio**	**t/kWh**	**t/MWh**	**lbs/MWh**
RPS	-	50.0%	-		
Natural Gas	0.000459	14.9%	0.000068		
Nuclear	0.000002	20.1%	0.000000		
Coal	0.001037	0.0%	-		
Unspecified	0.000427	14.9%	0.000064		
Total	-	100.0%	0.000133	0.13	**292.24**

CONVERSION FACTORS

Conversions

GJ	mmBtu
1	0.947817
g	kg
1	1,000
g	t
1	0.000001
lb	t
2,204.62	1
kW	MW
1	0.001

GWP Factors

CO_2	1
CH_4	28
N_2O	265

ABBREVIATIONS

RPS	Renewable Portfolio Standard
GWP	Global Warming Potential
CO2e	Carbon Dioxide Equivalent
CO_2	Carbon Dioxide
CH_4	Methane
N_2O	Nitrous Oxide
lbs CO_2e/MWh	Pounds Carbon Dioxide Equivalent/Mega-Watt Hour
t/kWh	tonnes/kilo-Watt hour
t/MWh	tonnes/Mega-Watt Hour
lbs/MWh	pounds/Mega-Watt Hour
kg per mmBtu	kilograms per million British Thermal Unit
g per mmBtu	grams per million British Thermal Unit
t per mmBtu	tonnes per million British Thermal Unit
t CO_2e per mmBtu	tonnes Carbon Dioxide Equivalent per million British Thermal Unit
t CO_2e per GJ	tonnes Carbon Dioxide Equivalent per Gigajoule
btu/kWh	British Thermal Unit/kilo-Watt hour
GJ/kWh	Gigajoule/kilo-Watt hour
t CO_2e per kWh	tonnes Carbon Dioxide Equivalent per kilo-Watt hour
gCO2e/MJ	grams Carbon Dioxide Equivalent/Megajoule
t/kWh	tonnes/kilo-Watt hour
g/kWh	grams/kilo-Watt hour

Version: July 2018

2017 POWER CONTENT LABEL

Pacific Gas and Electric Company

ENERGY RESOURCES	Power Mix	2017 CA Power Mix**
Eligible Renewable	**33%**	**29%**
Biomass & biowaste	4%	2%
Geothermal	5%	4%
Eligible hydroelectric	3%	3%
Solar	13%	10%
Wind	8%	10%
Coal	**0%**	**4%**
Large Hydroelectric	**18%**	**15%**
Natural Gas	**20%**	**34%**
Nuclear	**27%**	**9%**
Other	**0%**	**<1%**
Unspecified sources of power*	**2%**	**9%**
TOTAL	**100%**	**100%**

* "Unspecified sources of power" means electricity from transactions that are not traceable to specific generation sources.
** Percentages are estimated annually by the California Energy Commission based on the electricity sold to California consumers during the identified year.

For specific information about this electricity product, contact:	**Pacific Gas and Electric Company** **415-973-0640**
For general information about the Power Content Label, please visit:	http://www.energy.ca.gov/pcl/
For additional questions, please contact the California Energy Commission at:	844-454-2906

Bay Area Air Quality Management District

Roadway Screening Analysis Calculator

County specific tables containing estimates of risk and hazard impacts from roadways in the Bay Area.

INSTRUCTIONS:

Input the site-specific characteristics of your project by using the drop down menu in the "Search Parameter" box. We recommend that this analysis be used for roadways with 10,000 AADT and above.

• County: Select the County where the project is located. The calculator is only applicable for projects within the nine Bay Area counties.

• Roadway Direction: Select the orientation that best matches the roadway. If the roadway orientation is neither clearly north-south nor east-west, use the highest values predicted from either orientation.

• Side of the Roadway: Identify on which side of the roadway the project is located.

• Distance from Roadway: Enter the distance in feet from the nearest edge of the roadway to the project site. The calculator estimates values for distances greater than 10 feet and less than 1000 feet. For distances greater than 1000 feet, the user can choose to extrapolate values using a distribution curve or apply 1000 feet values for greater distances.

• Annual Average Daily Traffic (ADT): Enter the annual average daily traffic on the roadway. These data may be collected from the city or the county (if the area is unincorporated).

When the user has completed the data entries, the screening level PM2.5 annual average concentration and the cancer risk results will appear in the Results Box on the right. Please note that the roadway tool is not applicable for California State Highways and the District refers the user to the Highway Screening Analysis Tool at: http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Tools-and-Methodology.aspx.

Notes and References listed below the Search Boxes

Search Parameters

County	Sonoma
Roadway Direction	North-South
Side of the Roadway	East
Distance from Roadway	10 feet
Annual Average Daily Traffic (ADT)	19,408

Results

Sonoma County

NORTH-SOUTH DIRECTIONAL ROADWAY

PM2.5 annual average

0.453 ($\mu g/m^3$)

Cancer Risk

17.45 (per million)

Data for Sonoma County based on meteorological data collected from Santa Rosa in 2005

Notes and References:

1. Emissions were developed using EMFAC2011 for fleet mix in 2014 assuming 10,000 AADT and includes impacts from diesel and gasoline vehicle exhaust, brake and tire wear, and resuspended dust.
2. Roadways were modeled using CALINE4 air dispersion model assuming a source length of one kilometer. Meteorological data used to estimate the screening values are noted at the bottom of the "Results" box.
3. Cancer risks were estimated for 70 year lifetime exposure starting in 2014 that includes sensitivity values for early life exposures and OEHHA toxicity values adopted in 2013.

Adjusted cancer risk calculation: 17.45 x 1.3744 = 23.98 (per million)

The cancer risk calculated estimated using the BAAQMD Roadway Screening Analysis Calculator was adjusted by a correction factor of 1.3744 to incorporate the latest OEHHA guidance. Source of 1.3744 correction factor: BAAQMD recommendation confirmed through personal communication with BAAQMD Environmental Planner, Areana Flores, on January 8, 2020.

Stonebridge Project Solar Calculation

MINIMUM REQUIREMENTS FOR SINGLE-FAMILY HOMES AS PER TITLE 24, PART 6

		Unit	*Source*
Climate zone	4		*a.*
Low Square Footage	1583	Sq. Ft	
High Square Footage	1298	Sq. Ft	
Average Square Footage	1441	Sq. Ft	
CFA*	2,273	Sq. Ft	
A	0.586		*a.*
NDwell	105	No.	
B	1.21		*a.*
Annual Photvoltaic Electric Output	128.38	kW	
kW size per Dwell	**1.22**	kW	
Energy production factor**	1800	kWh/kW-year	*b.*
Estimated kWh per year per system	2200.83	kWh/year	
Total kWh generated per year	**231,087.56**	kWh/year	

$kW_{PV} = (CFA \times A)/1000 + (NDwell \times B)$

WHERE:

kW_{PV} = kWdc size of the PV system

CFA = Conditioned floor area

NDwell = Number of dwelling units

A = Adjustment factor from Table 150.1-C

B = Dwelling adjustment factor from Table 150.1-C

W = watt; kW = kilo watt; kWh = kilo-watt hour; Sq. Ft = square feet

* Conditioned floor area (CFA) is the total floor area (in square feet) of enclosed conditioned space on all floors of a building, as measured at the floor level of the exterior surfaces of exterior walls enclosing the conditioned space

CFA value listed above is based on high square footage estimate of floor plan range, consistent with construction assumptions.

** Energy production factor based on U.S. Department of Energy, Energy Efficiency and Renewable Energy: A Consumer's Guide Get Your Power from the Sun: https://www.nrel.gov/docs/fy04osti/35297.pdf; pdf page 12

Sources

a. California Energy Commission (CEC). 2018. 2019 Standards Part 6 Chapter 8 (Section 150.1) Revised Express Terms. April 23. Website: https://efiling.energy.ca.gov/GetDocument.aspx?tn=223257-3. Accessed January 9, 2020.

b. U.S Dept of Energy, Energy Efficiency and Renewable Energy. 2003. A Consumer's Guide Get Your Power From The Sun, pdf pg 12. December. Website: https://www.nrel.gov/docs/fy04osti/35297.pdf. Accessed January 9, 2020.

c. California Energy Commission (CEC). 2015. 2016 Building Energy Efficiency Standards Reference Ace Tool, Chapter 1.8 Conditioned Floor Area. June. Website: https://energycodeace.com/site/custom/public/reference-ace-2016/index.html#!Documents/18conditionedfloorarea.htm. Accessed January 9, 2020.

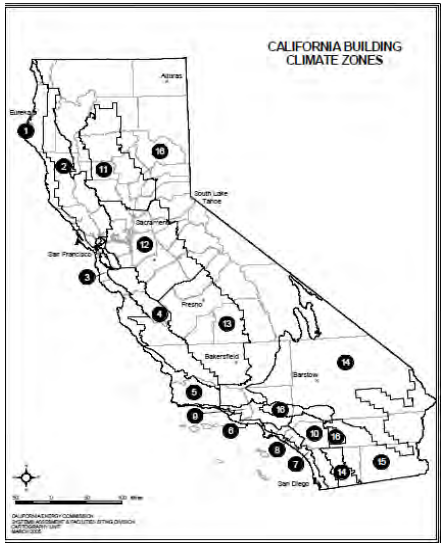
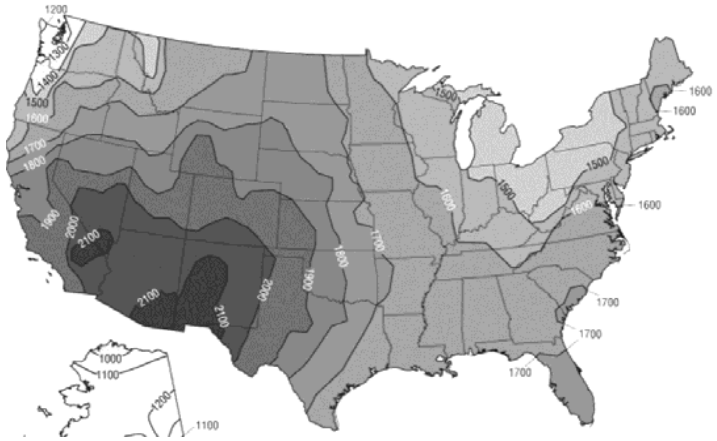


Table 150.1-C – CFA and Dwelling adjustment Factors

Climate Zone	A - CFA	B - Dwelling Units
1	0.793	1.27
2	0.621	1.22
3	0.628	1.12
4	0.586	1.21
5	0.585	1.06
6	0.594	1.23
7	0.572	1.15
8	0.586	1.37
9	0.613	1.36
10	0.627	1.41
11	0.836	1.44
12	0.613	1.40
13	0.894	1.51
14	0.741	1.26
15	1.56	1.47
16	0.59	1.22



1.8 Conditioned Floor Area

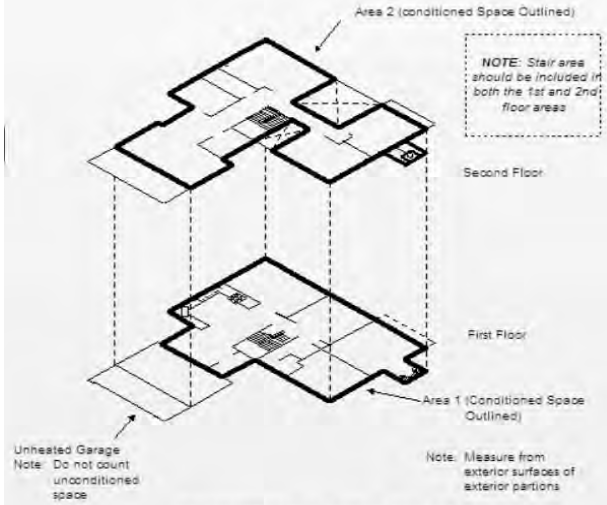
Conditioned floor area (CFA) is the total floor area (in square feet) of enclosed conditioned space on all floors of a building, as measured at the floor level of the exterior surfaces of exterior walls enclosing the conditioned space. [§100.1] This term is also referred to in the Energy Standards simply as the floor area.

This is an important value for compliance since annual energy use is divided by this value to obtain the energy budget. In the prescriptive package, the maximum fenestration and west facing fenestration area requirements are expressed as a percentage of this value.

CFA is calculated from the plan dimensions of the building, including the floor area of all conditioned and indirectly conditioned space on all floors. It includes lofts and mezzanines but does not include covered walkways, open roofed-over areas, porches, pipe trenches, exterior terraces or steps, chimneys, roof overhangs, or parking garages. Unheated basements or closets for central gas forced air furnaces are also not included, unless shown to be indirectly conditioned.

The floor area of an interior stairway is determined as the CFA beneath the stairs and the tread area of the stairs themselves. See figure 1-2 below for an example of how CFA is calculated.

Figure 1-2: Total Conditioned Floor Area



Stonebridge Project Trip Generation

As per Traffic Impact Study*		Unit
Number of Dwellings:	120	dwelling units
Proposed Trips:	1,133	trips
Trip Generation Rate:	9.44	trips per dwelling unit

For Air Quality Analysis		
Number of Dwellings:	105	dwelling units
Trips:	1,133	trips
Trip Generation Rate:	10.79	trips per dwelling unit

*Source: W-Trans. 2019. Traffic Impact Study for the 2220 Fulton Road Project. October 22.
Note: The project would develop 105 single-family residential units. The Traffic Impact Study prepared for the project considered 120 single-family residential units for analysis of traffic-related impacts. To be consistent with the project-specific Traffic Impact Study, the total trips generated by 120 units was used to estimate emissions presented in the air quality analysis. Consistent with the Project Description, all other assumptions and analysis for air quality considers 105 single-family residential units. The use of total trips estimated for 120 single-family residential units represents a conservative approach to estimating emissions from operations of the project.

Appendix B:
Biological Resources Supporting Information

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B.1 - Biological Resources Analysis

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BIOLOGICAL RESOURCES ANALYSIS
2220 FULTON ROAD
CITY OF SANTA ROSA, CALIFORNIA

February 25, 2020

Prepared for

D.M. Jacobson & Sons, Inc.
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Attention: Mr. David Jacobson

Prepared by

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TABLE OF CONTENTS

1. INTRODUCTION 1
2. PROPERTY LOCATION AND SETTING 1
2.1 Land Use History 1
3. PROPOSED PROJECT 2
4. ANALYSIS METHODS 2
5. EXISTING CONDITIONS 3
5.1 Topography and Drainage 3
5.2 Soils 4
5.3 Plant Communities and Associated Wildlife Habitats 4
5.3.1 SEASONAL WETLANDS 5
5.3.2 UPLAND ANNUAL GRASSLAND 6
5.3.3 WOODY VEGETATION/LANDSCAPE TREES 6
5.4 Wildlife Corridors 7
6. SPECIAL-STATUS SPECIES DEFINITION 7
6.1 Definitions 7
7. SPECIAL-STATUS PLANTS AND ANIMALS 10
7.1 Potential Special-Status Plants on the Proposed Project Site 10
7.1.1 BURKE'S GOLDFIELDS 11
7.1.2 BURKE'S GOLDFIELDS SEED REQUIREMENTS FOR STONEBRIDGE PRESERVE ENHANCEMENT/PRESERVATION PROJECT (ALSO SEE SECTION 8 BELOW) 12
7.2 Potential Special-Status Animals on the Proposed Project Site 12
7.2.1 CALIFORNIA TIGER SALAMANDER 13
8. SUMMARY ANALYSIS OF THE EFFECTS OF BURKE'S GOLDFIELDS SEED COLLECTION 21
9. REGULATORY FRAMEWORK FOR NATIVE WILDLIFE, FISH, AND PLANTS 23
9.1 Federal Endangered Species Act 23
9.1.1 RESPONSIBLE AGENCY 25
9.1.2 APPLICABILITY TO THE PROPOSED PROJECT 26
9.2 Federal Migratory Bird Treaty Act 27
9.2.1 APPLICABILITY TO THE PROPOSED PROJECT 27
9.3 California Endangered Species Act 28
9.3.1 SECTION 2081 OF THE CALIFORNIA ENDANGERED SPECIES ACT 28
9.3.2 APPLICABILITY TO THE PROPOSED PROJECT 29
9.4 California Fish and Game Code § 3503, 3503.5, 3511, and 3513 29
9.4.1 APPLICABILITY TO THE PROPOSED PROJECT 30
9.5 City of Santa Rosa General Plan 30
9.5.1 APPLICABILITY TO THE PROPOSED PROJECT 31
9.6 City of Santa Rosa Tree Ordinance 31
9.6.2 APPLICABILITY TO THE PROPOSED PROJECT 34
10. REGULATORY REQUIREMENTS PERTAINING TO WATERS OF THE UNITED STATES AND STATE 35
10.1 U.S. Army Corps of Engineers Jurisdiction and Permitting 35
10.1.1 SECTION 404 OF THE CLEAN WATER ACT 35
10.1.2 APPLICABILITY TO THE PROPOSED PROJECT 37

10.2 California Regional Water Quality Control Board (RWQCB) 38
10.2.1 Section 401 of the Clean Water Act 38
10.2.2 Applicability to the Proposed Project 39
10.2.3 Porter-Cologne Water Quality Control Act 40
10.2.4 Applicability to The Proposed Project 40
11. STATE WATER RESOURCES CONTROL BOARD (SWRCB)/RWQCB – STORM WATER MANAGEMENT 41
11.1 Construction General Permit 41
11.1.1 Applicability to The Proposed Project 43
11.2 RWQCB Municipal Storm Water Permitting Programs 43
11.2.1 NPDES C.3 Requirements 44
11.2.2 Applicability to the Proposed Project 45
11.3 California Department of Fish and Wildlife Protections 45
11.3.1 Section 1602 of California Fish and Game Code 45
11.3.2 Applicability to The Proposed Project 46
12. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) REGULATIONS 46
12.1.1 Applicability to the Proposed Project 47
13. IMPACTS ANALYSIS 47
13.1 Significance Criteria 47
13.1.1 Thresholds of Significance 47
14. IMPACT ASSESSMENT AND PROPOSED MITIGATION 49
14.1 Impacts and Mitigation Measures 50
14.1.1 Impact BIO-1. Development of the Proposed Project Would Have a Significant Adverse Impact on Suitable Vernal Pool (Rare Plant) Habitat (Significant). 50
14.1.2 Mitigation Measure BIO-1. For Impacts to Suitable Vernal Pool (Rare Plant) Habitat 51
14.1.1 Impact Bio-2. Burke's Goldfields Seed Collection 52
14.1.2 Mitigation Measure Bio-2. Burke's goldfields seed collection 52
14.1.3 Impact BIO-3. Development of The Project Would Have a Potentially Significant Adverse Impact on Potential California Tiger Salamander migration/dispersal Habitat (Potentially Significant) 53
14.1.4 Mitigation Measure BIO-3. For Impacts to Potential California Tiger Salamander Migration/Dispersal Habitat 53
14.1.5 Impact BIO-4. Development of the Proposed Project Would Have a Potentially Significant Adverse Impact on Potential California Tiger Salamander Breeding and Over-Summering Habitat (Potentially Significant) 54
14.1.6 Mitigation Measure BIO-4. For Impacts to Occupied California Tiger Salamander Breeding and Over-Summering Habitat 55
14.1.7 Impact BIO-5. Development of The Project Would Have a Potentially Significant Adverse Impact on Nesting Birds (Potentially Significant) 55
14.1.8 Mitigation Measure BIO-5. Nesting Birds 56
14.1.9 Impact BIO-6. Development of the Proposed Project Would Have a Significant Impact on Waters of the United States and/or State (Significant) 56
14.1.10 Mitigation Measure BIO-6. Impacts to Waters of the United States /State 57
14.1.11 Impact BIO-7. Cumulative Impacts to Vegetation and Wildlife Resources (Less Than Significant) 57
15. LITERATURE CITED 59

FIGURES
(At Back of Report)

Figure 1. Stonebridge, 2220 Fulton Road Regional Location Map.

Figure 2. Stonebridge, 2220 Fulton Road Project Location Map.

Figure 3. Aerial Photograph of the Stonebridge, 2220 Fulton Road Project Site.

Figure 4. Soil Types of the Stonebridge, 2220 Fulton Road Project Site.

Figure 5. CNDDB Records of Special-Status Species Known to Occur Within 2 Miles of the Stonebridge, 2220 Fulton Road Project Site.

Figure 6. *Lasthenia burkei* Occurrences on the Stonebridge, 2220 Fulton Road Project Site.

Figure 7. *Blennosperma bakeri* Core and Management Areas (USFWS 2016) in the Vicinity of the Stonebridge, 2220 Fulton Road Project Site.

Figure 8. *Lasthenia burkei* Core and Management Areas (USFWS 2016) in the Vicinity of the Stonebridge, 2220 Fulton Road Project Site.

Figure 9. *Limnanthes vinculans* Core and Management Areas (USFWS 2016) in the Vicinity of the Stonebridge, 2220 Fulton Road Project Site.

Figure 10. USFWS Critical Habitat in the Vicinity of the Stonebridge, 2220 Fulton Road Project Site.

Figure 11. Closest Known Occurrence of California Tiger Salamander to the Stonebridge, 2220 Fulton Road Project Site (Source: CNDDB Records)

Figure 12. Santa Rosa Plain California Tiger Salamander Core and Management Areas (USFWS 2016) in the Vicinity of the 2220 Fulton Road Project Site.

TABLES
(At Back of Report)

Table 1. Plant Species Observed on the Stonebridge, 2220 Fulton Road Project Site.

Table 2. Wildlife Species Observed on the Stonebridge, 2220 Fulton Road Project Site.

Table 3. Special-Status Plant Species Known to Occur Within 2 Miles of Stonebridge, 2220 Fulton Road Project Site.

Table 4. Special-Status Wildlife Species Known to Occur Within 2 Miles of Stonebridge, 2220 Fulton Road Project Site.

EXHIBITS
(At Back of Report)

Exhibit A. Maximum Pools Depths in 2019.

Exhibit B. M&A California tiger salamander Studies and California tiger salamander Discoveries on the Santa Rosa Plain.

Exhibit C. California Tiger Salamander Studies Within One Mile of the Stonebridge Project Site.

Exhibit D. Improvement Section of Fulton Road Completed in 2008.

ATTACHMENTS
(At Back of Report)

Attachment A. Site Plan. Proposed Project. Civil Design Consultants, Inc. July 2019.

Attachment B. Micro-Watersheds Mapped on the Project Site by Dr. L. Stromberg.

Attachment C. Results of Multi-year Survey for Special-status Plant Species. Woodside Holdings Property (A. P. No. 034-043-070) Santa Rosa, California. Laurence Stromberg, PhD. March 30, 2018.

Attachment D. Photo Pages of the Proposed Project Site and the Adjacent Woodbridge Preserve.

Attachment E. Email from U.S. Fish and Wildlife Service to Dr. M. Fawcett Concurring That There Would be No Impacts From Development to a Project located at 2022, 2038, and 2082 Fulton Road, and 2420 San Miguel Avenue, February 6, 2009.

Attachment F. Letter Prepared by Dr. Michael Fawcett Regarding His Absence of Expectation that the California Tiger Salamander Would be Found on the Stonebridge Project Site, June 11, 2019.

Attachment G. Corps Stamped Map. Corps Approved Jurisdictional Determination Letter and Map for the Stonebridge, 2220 Fulton Road Project Site.

Attachment H. Email from U.S. Fish and Wildlife Service to Harvey Rich (tridevser@att.net) and David Jacobson, August 17, 2018.

1. INTRODUCTION

Monk & Associates, Inc. (M&A) has prepared this *Biological Resources Analysis – 2220 Fulton Road, Santa Rosa, California* ("Biological Resources Report") for the proposed Stonebridge development ("Proposed Project") located at 2220 Fulton Road in Santa Rosa, California with Assessor's Parcel Number 034-303-070 ("Proposed Project Site"). The Applicant is Woodside Holdings LLC. The purpose of M&A's analysis is to provide a description of existing biological resources on the Proposed Project Site and to identify potentially significant impacts to sensitive biological resources that could occur from the construction of a proposed residential development.

Biological resources include common plant and animal species, and special-status plants and animals as designated by the U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), National Marine Fisheries Service (NMFS), and other non-agency resource organizations such as the California Native Plant Society. Biological resources also include waters of the United States and State, as regulated by the U.S. Army Corps of Engineers (Corps), California Regional Water Quality Control Board (RWQCB), and CDFW.

This Biological Resources Report also provides mitigation measures for "potentially significant" and "significant" impacts that could occur to biological resources from implementation of the Proposed Project. Whenever possible, implementation of the prescribed mitigation measures would reduce impacts to these resources to levels considered less than significant pursuant to the California Environmental Quality Act (CEQA) (Pub. Resources Code §§ 21000 et seq.; 14 Cal. Code Regs §§ 15000 et seq). Accordingly, this Biological Resources Report is suitable for review and inclusion in any review being conducted by the City of Santa Rosa for the Proposed Project pursuant to the CEQA.

2. PROPERTY LOCATION AND SETTING

The Proposed Project Site (Figures 1-3) is located on the east side of Fulton Road within a geographic area designated as the Santa Rosa Plain. The habitat on the Proposed Project Site includes upland annual grasslands and seasonal wetlands. Trees have been planted along the east property line and around an old residence. One residence and a few associated outbuildings are present on the site; the residence is currently occupied.

2.1 Land Use History

The Proposed Project Site is a rural residential property that has been occupied since the 1940s. Currently, the tenants have established a garden and use several residential outbuildings. The residence is accessed off Fulton Road via a hardscaped (gravel-surfaced) driveway with multiple graveled parking areas onsite. The residential area is well-maintained and all ruderal (weedy) habitats around the residence are regularly mowed. Currently, the eastern three-quarters of the property is mowed annually to reduce risk of fire. Historical fill in the southeast corner of the site suggests that structures may have once been present there. Planted trees (two rows) and scattered fruit trees visible on the 1942 aerial photograph, which is available online through the Sonoma County Vegetation Mapping and Lidar Project, indicate that an orchard may once have been planted in the northeast half of the site but has long been abandoned.

3. PROPOSED PROJECT

The Applicant is proposing to subdivide the 28.60-acre Proposed Project Site into two separate parcels, including:

1. A residential subdivision of approximately 14.60 acres, where construction of 105 lots for single-family homes is being proposed (Attachment A: Site Plan) and
2. A habitat preserve of approximately 14.00 acres where wetlands will be enhanced and created (also shown on Attachment A).
3. New wetlands and enhanced wetlands within the proposed Stonebridge Preserve will be constructed as a restoration component of the Proposed Project.
4. The Stonebridge Preserve wetlands will be enhanced to promote Burke's goldfield colonization. This meets the preservation enhancement objectives set forth in the USFWS' *2016 Recovery Plan for the Santa Rosa Plain* as the Proposed Project Site and Stonebridge Preserve are located within the *Lasthenia burkei* (Burke's goldfields) "Alton Lane Core Area."
5. The proposed wetland enhancement and creation proposal has been reviewed by both USFWS and CDFW and these agencies agree that the enhancement/restoration plan meets their requirements for Burke's goldfields mitigation.
6. The Proposed Project proposes to mitigate impacts to potential California tiger salamander migration/dispersal habitat in accordance with USFWS' mitigation requirements applied to other projects in the Santa Rosa Plain. Mitigation at a 1:1 (impacts to replacement) ratio is warranted for impacts to USFWS-designated California tiger salamander migration/ dispersal habitat since the project site is between 2,200 feet and 1.3 miles of the closest known California tiger salamander breeding site, which is the Alton Lane Mitigation Site, approximately 2,230 feet west of the project site.
7. A California tiger salamander pitfall trapping study is currently underway on the Proposed Project Site and will be followed by a larval dip-netting survey in spring of 2020 (a "protocol study"). If the California tiger salamander is identified on the project site during completion of the protocol study, additional mitigation would be warranted as detailed in the "Impacts and Mitigations Section" of this report.

4. ANALYSIS METHODS

Prior to preparing this Biological Resource Report,

1. M&A researched the most recent version of CDFW's Natural Diversity Database (CNDDB 2019) for historic and recent records of special-status plant and animal species (i.e., threatened, endangered, rare) known to occur in the region of the Proposed Project Site.
2. M&A also searched the 2019 electronic version of the California Native Plant Society's (CNPS) *Inventory of Rare and Endangered Plants of California* (CNPS 2001) for records of special-status plants known in the region of the Proposed Project Site.
3. M&A biologists and project team members met with CDFW personnel and USFWS personnel on several occasions to discuss these agencies' concerns regarding the Proposed Project's effects on sensitive resources. All special-status species records were compiled in tables. M&A examined all known special-status species record locations to

determine if they occurred on the Proposed Project Site or within a zone of influence of the Proposed Project Site.

4. M&A biologists Mr. Geoff Monk, Ms. Hope Kingma, and Ms. Sharon Dulava conducted a general survey of the Proposed Project Site on April 25, 2018 to record biological resources and to assess the likelihood of resource agency regulated areas on the Proposed Project Site. The survey involved searching all habitats on the site and recording all plant and wildlife species observed.
5. M&A cross-referenced the habitats found on the Proposed Project Site against the habitat requirements of local or regionally known special-status species to determine if the Proposed Project could directly or indirectly impact such species.
6. After conducting background research and a field reconnaissance, M&A determined that follow-up surveys for special-status plants and California tiger salamander (*Ambystoma californiense*) larvae would be necessary to address the effects of the project on such species.
7. Finally, CDFW requested that the applicant perform a "protocol" California tiger salamander survey since there are seasonal wetlands on the Proposed Project Site. A formal larval survey was conducted in the spring of 2019, and a pitfall trapping study is underway and will be completed on the Proposed Project Site through March 15, 2020. A second year of larval surveys will be conducted on the project site in the spring of 2020. The results of all surveys will be reported to CDFW and USFWS.

The methods used to conduct these surveys are presented in Sections 7.1 and 7.2 below, respectively. The results of our literature research and all survey findings are provided in the sections below.

5. EXISTING CONDITIONS

5.1 Topography and Drainage

The Proposed Project Site is relatively flat, except for where depressional wetland habitat is present. The elevation over most of the site ranges from approximately 138 feet in depressional wetlands and natural drainages to 142 feet in the eastern two-thirds of the property. The total difference in elevation is approximately four feet. The storm-related drainage patterns on the site are complex and have been modified over the years by adjacent housing developments immediately north and south of the Proposed Project Site.

Mainly, there are two primary watersheds on the Proposed Project Site, one that flows westward toward Fulton Road, and one that flows southward toward the Montage II housing development on the south side of the site. Between these watersheds there is a break in flow directions that was used to help select the two development areas of the Proposed Project Site: the Stonebridge Residential Development area and the Stonebridge Preserve area. *This watershed break was confirmed in the field by the Corps when they confirmed the extent of their jurisdiction on the Proposed Project Site.* The western watershed is proposed to be developed into the residential subdivision ("Stonebridge Residential Site"), while the eastern watershed is proposed to be restored to inure to the benefit of wetlands and rare vernal pool plant species ("Stonebridge Preserve").

The Proposed Project Site supports eight small "micro" watersheds (Stromberg 2018, Attachment B), all but one of which are drained by a swale or swale networks, and nearly all of which reflect the natural topography. The one exception is the watershed in the southwest corner of the site where construction of a driveway, parking areas, a residence, gardens, and several outbuildings long ago removed drainage patterns on this portion of the Proposed Project Site (see micro-watershed 8 on Attachment B).

The natural flow of stormwater from the western half of the Proposed Project Site northward was blocked in circa 2005 when the high-density residential Woodbridge Development was constructed on the northwest border of the Proposed Project Site. Before the Woodbridge residential subdivision was constructed, stormwater flowed from a micro-watershed on the western half of the Proposed Project Site to the headwaters of Abramson Creek. This hydrology connection on the Proposed Project Site is now blocked by the high-density residential Woodbridge Development.

Another micro-watershed occurs on the eastern half of the Proposed Project Site, which historically drained off the project site to the south eventually connecting with the Peterson Creek watershed. Within the eastern area of the Proposed Project Site the largest swale/micro-watershed flows to a Sonoma County storm drain inlet at the edge of the Montage II housing development located immediately south of the Proposed Project Site.

Another swale on the eastern portion of the site flows south and terminates against a retaining wall that supports the raised building pad elevation of a portion of the Montage II subdivision. This swale blockage now results in seasonal pooling (up to 24 inches deep) on the southeastern edge of the site.

5.2 Soils

The soils on the Proposed Project Site, mapped by the Natural Resource Conservation Service (NRCS), are the Huichica loam series and Clear Lake clay series (Figure 4). They are as follows:

1. In the northern central and northeastern corner of the site the soils are Clear Lake clay.

2. In the southern half of the site the soils are Huichica loam, 0-2 percent slopes, and

3. In the northwestern corner and southeastern corner they are Huichica loam, ponded, 0 to 5 percent slopes. The Huichica soils possess a clay horizon at a depth of about two feet and a cemented hardpan below the clay. Together, they form a barrier to deep percolation and result in perched stormwater at or near the surface.

5.3 Plant Communities and Associated Wildlife Habitats

A complete list of plant species observed on the Proposed Project Site is presented in Table 1. Nomenclature used for plant names follows *The Jepson Manual* Second Edition (Baldwin 2012) and changes made to this manual as published on the Jepson Interchange Project website (http://ucjeps.berkeley.edu/interchange/index.html). Table 2 is a list of wildlife species observed

on the Proposed Project Site. Nomenclature for wildlife follows CDFW's *Complete list of amphibian, reptile, bird, and mammal species in California* (2016) and any changes made to species nomenclature as published in scientific journals since the publication of CDFW's list.

The following descriptions of the Proposed Project Site's plant communities and landscape areas were taken from Dr. Stromberg's report: *Results of Multi-year Survey for Special-status Plant Species, Woodside Holdings Property (APN 034-043-070) Santa Rosa, California* (March 30, 2018) (Attachment C). Additional plant species observed by M&A during our 2018 and 2019 surveys are also included below and in Table 1. Wildlife habitat descriptions provided below are based on M&A's site surveys and years of experience working on properties in the Santa Rosa Plain.

5.3.1 SEASONAL WETLANDS

The wetlands on the Proposed Project Site are palustrine emergent wetlands, as classified by the Corps using the Cowardin "method" (Cowardin et al 1979). According to the California Rapid Assessment Method (CRAM) (California Wetlands Monitoring Workgroup 2013: *In* Stromberg 2018b; Attachment C), the wetlands on the Proposed Project Site would be considered a vernal pool system. A CRAM assessment has not been conducted. The area of seasonal wetland on the entire Proposed Project Site is approximately 6.31 acres. The wetlands are a mosaic of vernal pools connected by swales. The maximum depth of standing water in the vernal pools ranges from six inches to more than 24 inches. In the bottoms of vernal pools and the deeply inundated swales (characterized by local high points that cause water to collect upgradient), the dominant and common species include California semaphore grass (*Pleuropogon californicus*), meadow barley (*Hordeum brachyantherum*), curly dock (*Rumex crispus*), smooth goldfields (*Lasthenia glaberrima*), pennyroyal (*Mentha pulegium*), and coyote thistle (*Eryngium aristulatum*).

The vegetation at the wetland margins is typically indicative of the transition into upland habitat. Dominant and common plant species at the margins include perennial ryegrass (*Festuca perennis*), Mediterranean barley (*Hordeum marinum gussoneanum*), bristly ox tongue (*Helminthotheca echioides*), prickly lettuce (*Lactuca serriola*), and sheep sorrel (*Rumex acetosella*). Upland plant species that occur at the wetland margins include Harding grass (*Phalaris aquatica*), pea (*Lathyrus cicera*), medusahead (*Elymus caput-medusae*), common vetch (*Vicia sativa*), rough cat's ear (*Hypochaeris radicata*), hedge bindweed (*Convolvulus arvensis*), soft chess (*Bromus hordeaceus*), and cutleaf geranium (*Geranium dissectum*).

Seasonal wetlands provide wildlife with a seasonal water source that allows animals to drink and forage in the water during the winter and spring months and, so long as the water lasts, into the early summer. Common amphibians lay their eggs in seasonal wetland habitats and complete much of their life cycle in the wetlands. Invertebrates such as mayflies (Ephemeroptera), damselflies (Odonata), and predaceous diving beetles (Dytiscidae) are commonly associated with inundated seasonal wetland habitats and complete their life cycle in the wetlands.

Wildlife observed using these wetlands during the 2018 terrestrial surveys and 2019 larval amphibian surveys included black phoebe (*Sayornis nigricans*), Sierran tree frog (*Pseudacris sierra*), and common invertebrates such as, scuds (Amphipods), water boatman (Corixidae), and predaceous diving beetles (Dytiscidae). No special-status animals or invertebrates were

identified in the Proposed Project Site's existing wetlands. More in-depth discussions of wildlife and the wetlands are provided in the "Special-Status Animals," California tiger salamander discussion below.

5.3.2 Upland Annual Grassland

The upland annual grassland is dominated by non-native annuals, and introduced perennials, and naturalized species. The dominant and more common species include slender oats (*Avena barbata*), hare barley (*Hordeum murinum* ssp. *leporinum*), subterranean clover (*Trifolium subterraneum*), vernal grass (*Anthoxanthum aristatum*), perennial ryegrass *(Festuca perennis*), six-weeks fescue (*Festuca bromoides*), soft chess (*Bromus hordeaceus*), shamrock clover (*Trifolium dubium*), several species of vetch (*Vicia sativa*, *V. cracca*, *V. villosa varia*), sheep sorrel, and cut-leaf geranium. Less common species include rip-gut brome (*Bromus diandrus*), hedge bindweed *(Convolvulus arvensis)*, bristly ox-tongue (*Helminthotheca echioides*), prickly lettuce (*Lactuca serriola*), several species of filaree (*Erodium cicutarium*, *E. botrys, E. moschatum*), rough and smooth cat's ear (*Hypochaeris radicata* and *H. glabra*), California poppy (*Eschscholzia californica*), sun cups (*Taraxia ovata*), toad rush (*Juncus bufonius*), capitate rush (*Juncus capitatus*), bird's foot trefoil (*Lotus corniculatus*), wooly trefoil (*Acmispon brachycarpus*), medusahead grass, willow herb (*Epilobium brachycarpum*), mouse-ear chickweed (*Cerastium glomeratum*), and miniature lupine (*Lupinus bicolor*).

The Proposed Project Site's upland supports annual grasses and forbs (broad-leaved plants) that provide a food source for graniverous (seed-eating) birds including mourning dove (*Zenaida macroura*), song sparrow (*Melospiza melodia*), house finch (*Haemorhous mexicanus*), and lesser goldfinch (*Carduelis psaltria*). Insectivorous birds such as Say's phoebe (*Sayornis saya*), American pipit (*Anthus rubescens*), violet green swallow (*Tachycineta thalassina*), and western meadow lark (*Sturnella neglecta*) find insects to eat in the grassland. Other animals observed in the grassland included Botta's pocket gopher (*Thomomys bottae*) and California meadow vole (*Microtus californicus*).

5.3.3 Woody Vegetation/Landscape Trees

Walnut trees (*Juglans* spp.), fruit trees (*Prunus* spp.), a single, multi-trunked coast live oak (*Quercus agrifolia*) or coast live oak-interior live oak hybrid, a pine (*Pinu*s sp.), a Monterey cypress (*Hesperocyparis macrocarpa*), and ornamental shrubs have been planted around the residence and associated outbuildings in the western part of the Proposed Project Site. A string of eucalyptus trees (*Eucalyptus globulus*) has also been planted just inside the eastern property line. A small amount of coyote brush (*Baccharis pilularis* ssp. *consanguine*a) shrubs and eight small, ornamental fruit trees (*Prunus* spp.) are also scattered across the eastern third of the site, apparent holdovers of an orchard, the remnants of which (two rows) are visible on the 1942 aerial photograph that is available through the online Sonoma County Vegetation Mapping and Lidar Project. Apparently, all but eight trees had been removed prior to 1942.

Scattered trees in a rural residential setting such as the Proposed Project Site provide nesting habitat for passerine birds (that is, perching birds, also known as song birds) such as mourning dove, California scrub jay (*Aphelocoma californica*), Anna's hummingbird (*Calypte anna*), and northern mockingbird (*Mimus polyglottos*), as well as other urban-adapted bird species, and

roosting habitat for a variety of smaller raptors (birds of prey) such as the sharp-shinned hawk (*Accipiter striatus*) which may hunt in the area though is unlikely to nest onsite due to an absence of suitable nesting habitat (the sharp-shinned hawk nests in riparian woodlands). The fruit trees provide food for common, urban-adapted mammals such as the Virginia opossum (*Didelphis virginiana*), striped skunk (*Mephitis mephitis*), and raccoon (*Procyon lotor*). Coyote brush that occurs on the Proposed Project Site also provides nesting opportunities for passerine birds and cover for small mammals and reptiles.

5.4 Wildlife Corridors

Wildlife corridors are linear and/or regional habitats that provide connectivity to other natural vegetation communities within a landscape fractured by urbanization and other development. Wildlife corridors have several functions: 1) they provide avenues along which wide-ranging animals can travel, migrate, and breed, allowing genetic interchange to occur; 2) populations can move in response to environmental changes and natural disasters; and 3) individuals can recolonize habitats from which populations have been locally extirpated (Beier and Loe 1992). All three of these functions can be met if both regional and local wildlife corridors are accessible to wildlife. Regional wildlife corridors provide foraging, breeding, and retreat areas for migrating, dispersing, immigrating, and emigrating wildlife populations. Also, local wildlife corridors within restricted habitats provide access routes to food, cover, and water resources.

Properties located within suburban settings such as the Proposed Project Site typically provide the greatest wildlife corridor function if there is a creek or other heavily vegetated corridor running through the property that connects with other open spaces. No such drainage or vegetated corridor exists on the Proposed Project Site.

The Proposed Project Site is an open grassland with a seasonal wetland habitat that is surrounded by developed properties on three sides (to the north, south, and east). Though there are some small parcels to the northeast and east that are either designated open space (the CDFW-owned Woodbridge Preserve) or currently undeveloped (the Kerry Ranch parcels), these properties abut densely developed lands and do not provide a large swath of contiguous, open land that functions as a wildlife movement corridor. To the immediate west of the Proposed Project Site is Fulton Road, a heavily traveled and highly trafficked road. With over 19,000 vehicle trips a day (data from between Piner and Piner High School, April 28, 2015 - Pacific Traffic & Transit Data Services), Fulton Road is a significant geographical impediment to wildlife movements and removes any wildlife corridor function/value to wildlife originating west of the Proposed Project Site.

6. SPECIAL-STATUS SPECIES DEFINITION

6.1 Definitions

For purposes of this analysis, special-status species are plants and animals that are legally protected under the California and Federal Endangered Species Acts (CESA and FESA, respectively) or other regulations, and species that are considered rare by the scientific community (for example, CNPS). Special-status species are defined as:

- plants and animals that are listed or proposed for listing as threatened or endangered under the CESA (Fish and Game Code §2050 *et seq.*; 14 CCR §670.1 *et seq.*) or the FESA (50 CFR 17.12 for plants; 50 CFR 17.11 for animals; various notices in the Federal Register [FR] for proposed species);

- plants and animals that are candidates for possible future listing as threatened or endangered under the FESA (50 CFR 17; FR Vol. 64, No. 205, pages 57533-57547, October 25, 1999); and under the CESA (California Fish and Game Code §2068);

- plants and animals that meet the definition of endangered, rare, or threatened under the California Environmental Quality Act (CEQA) (14 CCR §15380) that may include species not found on either State or Federal Endangered Species lists;

- Plants occurring on Ranks 1A, 1B, 2A, 2B, 3, and 4 of CNPS' electronic *Inventory* (CNPS 2001). The CDFW recognizes that Ranks 1A, 1B, 2A and 2B of the CNPS inventory contain plants that, in the majority of cases, would qualify for State listing, and CDFW requests their inclusion in Environmental Impact Reports (EIRs). Plants occurring on CNPS Ranks 3 and 4 are "plants about which more information is necessary," and "plants of limited distribution," respectively (CNPS 2001). Such plants may be included as special-status species on a case by case basis due to local significance or recent biological information (more on CNPS Rank species below);

- migratory nongame birds of management concern listed by U.S. Fish and Wildlife Service (Migratory Nongame Birds of Management Concern in the United States: The list 1995; Office of Migratory Bird Management; Washington D.C.; Sept. 1995);

- animals that are designated as "species of special concern" by CDFW (2019);

- Animal species that are "fully protected" in California (Fish and Game Codes 3511, 4700, 5050, and 5515).

- Bat Species that are designated on the Western Bat Working Group's (WBWG) Regional Bat Species Priority Matrix as: "RED OR HIGH." This priority is justified by the WBWG as follows: "Based on available information on distribution, status, ecology, and known threats, this designation should result in these bat species being considered the highest priority for funding, planning, and conservation actions. Information about status and threats to most species could result in effective conservation actions being implemented should a commitment to management exist. These species are imperiled or are at high risk of imperilment."

In the paragraphs below M&A provides further definitions of legal status as they pertain to the special-status species discussed in this report or in the attached tables.

Federal Endangered or Threatened Species. A species listed as Endangered or Threatened under the FESA is protected from unauthorized "take" (that is, harass, harm, pursue, hunt, shoot,

trap) of that species. If it is necessary to take a Federal listed Endangered or Threatened species as part of an otherwise lawful activity, it would be necessary to receive permission from the USFWS prior to initiating the take.

State Threatened Species. A species listed as Threatened under the state Endangered Species Act (§2050 of California Fish and Game Code) is protected from unauthorized "take" (that is, harass, pursue, hunt, shoot, trap) of that species. If it is necessary to "take" a state listed Threatened species as part of an otherwise lawful activity, it would be necessary to receive permission from CDFW prior to initiating the "take."

California Species of Special Concern. These are species in which their California breeding populations are seriously declining and extirpation from all or a portion of their range is possible. This designation affords no legally mandated protection; however, pursuant to the CEQA Guidelines (14 CCR §15380), some species of special concern could be considered "rare." Pursuant to its rarity status, any unmitigated impacts to rare species could be considered a "significant effect on the environment" (§15382). Thus, species of special concern must be considered in any project that will, or is currently, undergoing CEQA review, and/or that must obtain an environmental permit(s) from a public agency.

CNPS Rank Species. The CNPS maintains an "Inventory" of special status plant species. This inventory has four lists of plants with varying rarity. These lists are: Rank 1, Rank 2, Rank 3, and Rank 4. Although plants on these lists have no formal legal protection (unless they are also state or federal listed species), CDFW requests the inclusion of Rank 1 species in environmental documents. In addition, other state and local agencies may request the inclusion of species on other lists as well. The Rank 1 and 2 species are defined below:

- Rank 1A: Presumed extinct in California;
- Rank 1B: Rare, threatened, or endangered in California and elsewhere;
- Rank 2A: Plants presumed extirpated in California, but more common elsewhere;
- Rank 2B: Rare, threatened, or endangered in California, but more common elsewhere.

All of the plants constituting Rank 1B meet the definitions of Section 1901, Chapter 10 (Native Plant Protection Act) or Sections 2062 and 2067 (California Endangered Species Act) of the Fish and Game Code and are eligible for state listing (CNPS 2001). Rank 2 species are rare in California, but more common elsewhere. Ranks 3 and 4 contain species about which there is some concern and are reviewed by CDFW and maintained on "watch lists."

Additionally, in 2006 CNPS updated their lists to include "threat code extensions" for each list. For example, Rank 1B species would now be categorized as Rank 1B.1, Rank 1B.2, or Rank 1B.3. These threat codes are defined as follows:

- .1 is considered "seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat)";
- .2 is "fairly endangered in California (20-80% of occurrences threatened)";
- .3 is "not very endangered in California (less than 20% of occurrences threatened or no current threats known)."

Under the CEQA review process only CNPS Rank 1 and 2 species are considered since these are the only CNPS species that meet CEQA's definition of "rare" or "endangered." Impacts to Rank 3 and 4 species are not regarded as significant pursuant to CEQA.

Fully Protected Birds. Fully protected birds, such as the white-tailed kite and golden eagle, are protected under California Fish and Game Code (§3511). Fully protected birds may not be "taken" or possessed (i.e., kept in captivity) at any time.

7. SPECIAL-STATUS PLANTS AND ANIMALS

A complete list of plant species observed on the Proposed Project Site by both M&A biologists during 2018-2019 special-status plant surveys and by Dr. Larry Stromberg during multiple years of special-status plant surveys is attached as Table 1. A list of wildlife observed by M&A on the Proposed Project Site during April 2018, and April and May 2019, site surveys is provided as Table 2.

7.1 Potential Special-Status Plants on the Proposed Project Site

Figure 5 provides a graphical illustration of the closest known records for special-status species within two miles of the Proposed Project Site and helps readers visually understand the number of sensitive species that occur in the vicinity of the Proposed Project Site. The Proposed Project Site has undergone multiple years of special-status plant surveys exceeding Corps, CDFW, and USFWS policies that require two years of special-status plant surveys prior to the time a project is permitted to impact seasonal wetlands. Special-status plant surveys were conducted by Laurence P. Stromberg, Ph.D. in 2015, 2016, and 2017 (Attachment C, *Results of Multi-Year Survey for Special-Status Plant Species* prepared by Laurence P. Stromberg, Ph.D., dated March 30, 2018), with an additional survey conducted on April 29, 2019 to re-verify the location of Burke's goldfields (*Lasthenia burkei*) that was previously identified onsite. M&A biologists have also conducted special-status plant surveys on the Proposed Project Site. These surveys were conducted on April 25, 2018, and May 7 and 21, 2019. The May 2019 surveys follow Dr. Stromberg's April 2019 survey for a total of three consecutive surveys in 2019, to target the three federally and state listed vernal pool plants known from the Santa Rosa Plain. Both the Stromberg and M&A surveys were conducted when the three target plant species on the Santa Rosa Plain were either in flower or were otherwise readily identifiable, as evidenced at the nearby Alton Lane Mitigation Site ("reference site visit") on the same dates.

Dr. Stromberg's surveys methods were consistent with the guidelines established by the CDFW in 2000 and 2009 (CDFG 2000, 2009), and with USFWS' survey guidelines (USFWS 2000, 2005), and CNPS' (2001) guidelines for assessing the effects of proposed developments on rare and endangered plants and plant communities. M&A's survey methods were also consistent with these survey guidelines, as well as the most recent survey protocol implemented by CDFW in 2018 (CDFW 2018).

Only two special-status plants were identified on the Proposed Project Site during all years of special-status plant surveys: Burke's goldfields and Lobb's buttercup (*Ranunculus lobbii*). Burke's goldfields is discussed below. Lobb's buttercup is only a CNPS Rank 4 plant without a State or Federal status and as such is not protected pursuant to CEQA and is not discussed

further. Since no other special-status plants were identified on the Proposed Project Site during the multiple years of survey, no other species are addressed here but are rather dismissed from consideration in Table 3 (see Table 3).

7.1.1 BURKE'S GOLDFIELDS

Burke's goldfields was identified in seasonal wetlands on the eastern side of the Proposed Project Site, the proposed Stonebridge Preserve location. *No Burke's goldfields have ever been identified on the western side of the Proposed Project Site (where the Stonebridge Residential Site is proposed)*. Please see attached Figure 6 for the locations of Burke's goldfields on the Proposed Project Site; this figure includes current (2019) population numbers. The eastern portion of the Proposed Project Site (i.e., the proposed Stonebridge Preserve) is currently experiencing deep pool hydrology owing to the construction of the Montage II development to the south which has blocked historical flows through the proposed Preserve area preventing water from slowly draining or dissipating offsite. As a result, the depth of these pools is not favorable to colonization by Burke's goldfields and this plant currently only occurs sparsely in limited areas (Figure 6). By enhancing the wetlands within the Stonebridge Preserve, the pool hydrology will mimic historical, natural pool hydrology and pool depths that foster colonization by Burke's goldfields.

Immediately north of the proposed Stonebridge Preserve is the CDFW-owned Woodbridge Preserve. The Woodbridge Preserve property at one time supported similar unsuitable wetland hydrology/pools for Burke's goldfields. These pools were enhanced/modified to mimic historical, natural pool hydrology and pool depths, and these pools now support dense colonies of Burke's goldfields. Attachment D has 2019 photographs of both the existing Stonebridge Preserve wetlands with sporadic occurrences of Burke's goldfields and also the enhanced Woodbridge Preserve wetlands with dense, floriferous Burke's goldfield colonies. These photographs exhibit the glaring differences in Burke's goldfield colonization of enhanced (Woodbridge) pools and existing (Stonebridge) Burke's goldfields pools.

As stated in Section 5.1, above, the hydrology of the vernal pool complexes on the entire Proposed Project Site breaks both east and west. The site development plan was carefully planned to occur in the portion of the Proposed Project Site that has a westward breaking watershed where wetlands have never been known to support Burke's goldfields. Rather a few scattered occurrences of Burke's goldfields occur in the eastern breaking watershed on the Proposed Project Site in three pools mostly immediately adjacent to the Woodbridge Preserve (Figure 6). While these three pools are regarded as "occupied," and thus, would be avoided by all project activities, the pools in the western watershed are *not* regarded as occupied since after years of rare plant surveys Burke's goldfields have never been found in the western watershed.

Figure 6 provides the locations and numbers of the small population of Burke's goldfield plants identified in 2019 on the Stonebridge Preserve portion of the Proposed Project Site. Note that numbers are small, and the number of colonies in 2019 is one fewer than observed in 2018. The occupied pools will be fenced off when pool enhancement grading activities occur within the Stonebridge Preserve to prevent harm/take of these goldfield plants.

7.1.2 BURKE'S GOLDFIELDS SEED REQUIREMENTS FOR STONEBRIDGE PRESERVE ENHANCEMENT/PRESERVATION PROJECT (ALSO SEE SECTION 8 BELOW)

Virtually all reestablished and new colonies of Burke's goldfield on the Santa Rosa Plain are from use of donor site seed sources. Such harvesting is a critical component of reestablishing and recovering the Burke's goldfield population on the Santa Rosa Plain.

Immediately north of the Stonebridge Preserve, in what is now the CDFW-owned Woodbridge Preserve, similar unsuitable wetlands for Burke's goldfields were enhanced/modified in 2005 to mimic historical, natural pool hydrology and pool depths. Burke's goldfield seeds were harvested from the Alton Lane Mitigation Site in 2005 to seed these pools. These pools now support dense colonies of Burke's goldfields.

Attachment D shows 2019 photographs of the existing Stonebridge Preserve wetlands with sporadic occurrences of Burke's goldfields. Attachment D also includes photographs taken of the CDFW-owned Woodbridge Preserve immediately over the northern fence line of the proposed Stonebridge Preserve where previously modified/enhanced wetlands currently support robust Burke's goldfield colonies. Attachment D photographs exhibit the glaring differences in Burke's goldfield colonization of enhanced/created pools at the Woodbridge Preserve vs. the existing seasonal wetlands within the proposed Stonebridge Preserve. The primary objective for enhancement of the existing wetlands in the proposed Stonebridge Preserve is to equally promote colonization of seasonal wetlands by Burke's goldfields, a critically endangered plant on the Santa Rosa Plain.

7.2 Potential Special-Status Animals on the Proposed Project Site

Figure 5 provides a graphical illustration of the closest known records for special-status species within two miles of the Proposed Project Site which provides an understanding of the number of sensitive species that occur in the vicinity. No special-status animal have ever been mapped on or adjacent to the Proposed Project Site; however, according to CDFW's CNDDB records, a total of three special-status animal species are known to occur in the region of the Proposed Project Site (Table 4 and Figure 5). Two of these species would not occur on the Proposed Project Site due to an absence of stream channels, drainages, or other permanent aquatic habitat: the western pond turtle and the Coho salmon. These two species are not discussed below.

The third species is the California tiger salamander. M&A conducted late-winter/spring California tiger salamander larval surveys in the wetlands on the project site. After examining the hydrology of the seasonal wetlands on the Proposed Project Site, and in consideration of other factors, M&A concluded the wetlands on the Proposed Project Site provide habitat that would be unlikely to support breeding California tiger salamanders. This finding is corroborated by a negative protocol level larval survey on the Proposed Project Site, and by a significant body of evidence (discussed below) that would suggest that California tiger salamanders are not present north of Santa Rosa Creek on the east of Fulton Road where the Proposed Project Site occurs. For a full analysis please see the discussion on the California tiger salamander below.

7.2.1 CALIFORNIA TIGER SALAMANDER

7.2.1.1 Legal status

The California tiger salamander Sonoma County "Distinct Population Segment" (DPS) is a federally listed endangered species. The Proposed Project Site is located within its known range. The USFWS determined that the Sonoma County DPS is significantly and immediately imperiled by a variety of threats including habitat destruction, degradation, and fragmentation due to urban development, road construction, pesticide drift, collection, and inadequate regulatory mechanisms. In addition, it was determined that this population could face extinction as a result of naturally occurring events (e.g., fires, droughts) due to the small and isolated nature of the remaining breeding sites combined with the small number of individuals in the population. On August 31, 2011, the Final Rule on the Revised Designation of Critical Habitat for the Sonoma County Distinct Population of the California tiger salamander was published (76 FR 54346 54372) (USFWS 2011). Approximately 47,383 acres were designated as Critical Habitat. *The Proposed Project Site is located within designated critical habitat in the Santa Rosa Plain (Figure 10).*

On March 4, 2010, the California tiger salamander was also State-listed as a threatened species under the California Endangered Species Act (CESA). Proposed projects may not impact California tiger salamanders without incidental take authority from both USFWS and CDFW. Prior to implementing a project that would result in "take" (i.e., to harm, harass, or kill) California tiger salamanders, applicants must obtain "Incidental Take" authorization from the USFWS pursuant to either Section 7 or Section 10 of the FESA. Similarly, projects that would impact California tiger salamanders also require an Incidental Take Permit (ITP) from CDFW pursuant to the CESA.

7.2.1.2 Life History

California tiger salamanders occur in grasslands and open oak woodlands that provide suitable aestivation and/or breeding habitats. M&A has worked with populations that are almost at sea level (Catellus Site in the City of Fremont) to almost 2,900 feet above sea level (Kammerer Ranch, East Santa Clara County). California tiger salamanders spend the majority of their lives underground. They typically only emerge from their subterranean refugia for a few nights each year during rainfall events typically in late October through December to migrate to breeding ponds where they lay eggs. After spending a up to a few weeks and sometimes longer in breeding ponds the adult salamanders then return to their subterranean over-summering refugia not to resurface until the following breeding season. Young hatch typically in February and March and metamorphose leaving natal ponds in search of subterranean refugia typically in late April and May.

Deep, seasonal and sometimes perennial wetlands typically provide most of the breeding habitat used by California tiger salamanders. California tiger salamanders attach their eggs to rooted, emergent vegetation, and other stable filamentous objects in the water column. Eggs are gelatinous and are laid singly or occasionally in small clusters. Eggs range in size from about three-quarters (¾) the diameter of a dime to the full diameter of a dime. Typically, seasonal breeding pools must hold water into the month of May to allow enough time for larvae to fully

metamorphose. Pools that are 16 inches or deeper in the peak winter months usually will remain inundated long enough to provide good breeding conditions for California tiger salamanders. Optimal pools are typically deeper than 16 inches consistently in most winters.

In dry years, seasonal wetlands, especially shallower pools, may dry too early to allow enough time for California tiger salamander larvae to successfully metamorphose. As pools dry down to very small areas of inundation, California tiger salamander larvae become concentrated and are particularly susceptible to predation. In Cotati, Mr. Monk observed drying pool predation of larvae by red-sided garter snakes (*Thamnophis sirtalis infernalis*). Similarly, ducks (various spp.) are often observed predating breeding pools. In duck-ravaged pools, larvae may be concentrated in deeper water or are found in areas along the pool margins were pools remain relatively deep and there is dense emergent vegetation. When pools dry too soon, desiccated California tiger salamander larvae can be found, but owing to scavengers usually disappear within a day or two.

Shallow pools are not optimal California tiger salamander breeding sites. Pools that are as shallow 10 to 12 inches may still attract breeding salamanders, but young do not often successfully metamorphose from such pools except in years exhibiting wet springs. With frequent rainfall events in March and April, or with infrequent but large late spring rainfall events, shallower pools can remain hydrated long enough to allow California tiger salamander larvae ample time to successfully metamorphose from shallower pools. Pools that dry and rehydrate multiple times over the winter do not provide the continuous hydration period required for successful metamorphosis of young.

7.2.1.3 Migration

Adult California tiger salamanders have been observed up to 2,092 meters (1.3 miles) from breeding ponds (USFWS 2004). As such, unobstructed migration corridors are an important component of California tiger salamander habitat. In Sonoma County, Mr. G. Monk has been conducting California tiger salamander surveys since 1989 (Exhibit B). It is M&A's direct experience that California tiger salamanders move to their breeding pools at night during the first heavy, typically warmer, rainfall events of the year, usually in late-October into early December. In most instances, early movements from over-summering refugia to breeding sites do not occur until it has been raining continuously for several days, but occasionally errant salamanders may move to breeding pools during light rainfall events too. Typically, movements of California tiger salamander occur when temperatures are above 48° F.

A primary factor encouraging larger movements of California tiger salamanders is continuous or nearly continuous rainfall over many days. Resultant widespread ground saturation that otherwise floods over-summering refugia can result in relatively large numbers of California tiger salamanders leaving their refugia in search of breeding sites over a one- or two-night period (as observed by G. Monk and S. Lynch during numerous studies). In addition to pitfall trapping results that demonstrate such movements, often these focused movement periods are evident in breeding pools where up to several size classes of larvae can be identified later in the spring, each size class likely being representative of a focused movement period for adult breeding salamanders.

7.2.1.4 Closest Known California Tiger Salamander Breeding Population

The closest known CNDDB record (CNDDB Occurrence No. 360) for the California tiger salamander to the Proposed Project Site is located approximately 2,230 feet (~0.42-mile) to the west at the Alton Lane Mitigation Site (Figure 11). This record resulted from the translocation of California tiger salamander larvae from the Wright Conservation Site to the man-made pools at the Alton Lane Mitigation Site circa 1990-91. Alton Lane Mitigation Site is a former vineyard that was restored into a vernal pool complex in 1989-1992. California tiger salamander adults were also translocated to the Alton Lane Mitigation Site by CDFW (then CDFG) from an M&A salvage project in Cotati immediately west of Highway 101 and north of Highway 116.

7.2.1.5 California Tiger Salamander Studies on and Near the Project Site

M&A biologists hold a federal 10(a)(1)(A) Recovery Permit and a State Memorandum of Understanding (MOU) to conduct California tiger salamander surveys. M&A has extensive experience in the Santa Rosa Plain conducting California tiger salamander surveys and assessments since 1989 (Exhibit B). Most recently, USFWS and CDFW granted approval for M&A biologists to conduct protocol-level surveys for California tiger salamander larvae and adults on the Proposed Project Site. M&A completed one visual California tiger salamander egg survey (March 7, 2019) and three larval dip-netting surveys (March 28, April 15, and May 21, 2019) on the project site. *No California tiger salamander eggs or larvae were observed/identified on the Proposed Project Site.* In early October 2019, M&A established approximately 5,475 linear feet of drift fencing complete with 193 pitfall traps on the project site. This pitfall trapping array will be operated this winter (2019-2020) per USFWS/CDFW's joint survey protocol (2003) to determine if adult California tiger salamanders reside on the project site.

In addition to project site surveys, M&A has completed a large number of multi-season formal California tiger salamander surveys throughout the Santa Rosa Plain, many of which were conducted in the immediate Proposed Project Site vicinity (Exhibits B and C). *M&A have never found California tiger salamanders east of Fulton Road or north of the Wright Conservation Site in Santa Rosa*.

From 2005-2007, M&A completed two winters (adult surveys) and one spring (larval surveys) of field surveys for California tiger salamanders on the Kerry Ranch I, II, and III project sites, which are immediately east of the project site. *No California tiger salamanders were captured on the Kerry Ranch project sites at any time during the 2005/2006 and 2006/2007 survey seasons*. Most recently, in 2018, M&A received USFWS approval to conduct protocol-level larval surveys on the now much-reduced, 4.15-acre, Kerry Ranch I project site (2181 Francisco Avenue). *After completion of the protocol level larval survey, no California tiger salamander larvae were captured*.

Other biologists have also completed formally-approved two-year California tiger salamander surveys in the immediate area of the Proposed Project Site - *all with negative survey results* (Exhibit C). In 2004, a California tiger salamander site assessment was completed by Dr. Michael Fawcett at 1835 Fulton Road. This assessment included larval dip-netting surveys. Survey results were negative. In addition, in 2005-2007 a two-year California tiger salamander

survey was conducted by Dr. Fawcett at 2323 and 2285 San Miguel Avenue in northwest Santa Rosa, just east of Fulton Road and north of Piner Road. *Again, survey results were negative*.

Also, in 2006 and 2007, Dr. Fawcett completed two-year formal surveys at 2022 Fulton Road, 2038 Fulton Road, 2082 Fulton Road, and 2420 San Miguel Road, all of which are in closer proximity to the Alton Lane Conservation Complex than the proposed Stonebridge Preserve. After submitting a two-year survey report to USFWS for the formally completed surveys, USFWS sent an email to Dr. Fawcett and the Applicant stating: *The Service concurs with the conclusions of the July 23, 2008 Report on California Tiger Salamander surveys conducted at four West Santa Rosa Properties, Sonoma County, California. As a result, the Proposed Project will not result in 'take' and no mitigation for the Sonoma County Distinct Population Segment of California tiger salamander (Ambystoma californiense) is necessary* (Email attached as Attachment E). In 2019, Dr. Fawcett prepared a letter regarding his belief that that the California tiger salamander would not be found on the project site, or north of Santa Rosa Creek and east of Fulton Road (Attachment F).

Other properties near the Proposed Project Site in the area bounded by Fulton Road, Francisco Avenue, and San Miguel Road were surveyed for California tiger salamanders between 2002 and 2004 by Dr. Mark Jennings and Ms. Gretchen Padgett-Flohr of Live Oak Associates; *all surveys were negative*.

Between 2002 and 2019, in the vicinity of the Project, over 40 studies for California tiger salamander were conducted by credentialed biologists. Their studies included site assessments, larval surveys, and 2-year studies, all of which were negative for California tiger salamander occurrence. From this large body of data, M&A concludes that it is most unlikely that California tiger salamander are present on the Project site.

7.2.1.6 Project Site Seasonal Wetland Breeding Pool Suitability Analysis and Discussion

The pools on the Proposed Project Site are not optimal California tiger salamander breeding pools and would be unlikely to support a successful reproductive cycle; this statement is considered with the fact that there *are no records for California tiger salamanders east of Fulton Road and north of Santa Rosa Creek* [Source: CNDDB records Figure 5, M&A studies, and Dr. Michael Fawcett -Studies as supported by Attachment F]. The absence of California tiger salamander records east of Fulton Road and north of Santa Rosa Creek may indicate that seasonal wetlands east of Fulton Road are not suitable for California tiger salamander reproduction.

Based on Mr. Monk's 30 years of work with California tiger salamander on the Santa Rosa Plain and elsewhere, the following characteristics are believed to collectively determine whether seasonal wetlands on the Santa Rosa Plain are suitable for California tiger salamander breeding and metamorphosis:

- **Pool Depth:** Generally, on the Santa Rosa Plain, pools that are 16 inches or deeper are necessary to provide a sufficient hydroperiod that allows California tiger salamander eggs to hatch and for young to successfully metamorphose. While pool depth is an important

characteristic of a successful breeding pool, it is not the only determinant. The pools must also maintain deep water *continuously* over a long enough hydroperiod to allow California tiger salamander to reproduce, for eggs to hatch, and for larvae to successfully metamorphose.

One reason deeper pools are generally better for larval development is because the water remains cooler. Shallow pools are warmed faster by the sun, evaporate more quickly becoming smaller and more prone to successful predation, and most importantly, warmer water carries less free oxygen which is necessary for California tiger salamander larvae to mature and metamorphose.

Warmer pools also tend to promote algae blooms and the subsequent excessive decomposition of algae further lowers available oxygen. Free oxygen in pools is a critical factor for California tiger salamander larvae since as they progress through metamorphosis they absorb their gills. With ample free oxygen in the water, California tiger salamander larvae are able to reach full metamorphosis even with partially to fully absorbed gills.

Thick and continuous algal blooms occur most frequently in warmer pools, especially pools that are subjected to higher nutrient levels such as pools that are grazed by livestock. Continuous algae mats usurp the water column of free oxygen through bacterial degradation. This low oxygen environment is detrimental to California tiger salamander larvae. As important, algal blooms physically block advanced larvae from rising to the surface to gulp air, which becomes critical for larvae that have partially to fully absorbed their gills prior to full metamorphosis.

- **Rainfall Patterns:** Rainfall patterns can influence breeding pool suitability. Winters that extend well into spring, bringing more rainfall events, can render even shallower pools (e.g., 12-inch deep pools), or pools with higher soil infiltration rates, potentially useable by California tiger salamander for breeding/larval development. Late rains may continuously replenish pool water depths countering pool drawdown to mud that kills larvae that have not metamorphosed.

- **Escape Habitat:** Seasonal wetlands which have tea-colored to turbid water provide visual screening making predation of California tiger salamander larvae less likely. Similarly, wetlands which support a moderate density of in-column aquatic plants provide California tiger salamander larvae with predator escape cover, and thus, are better California tiger salamander breeding pools. California tiger salamander larvae that occur in clear water pools are readily predated by waterfowl. Turbidity can also be a result of ducks feeding in pools that support silty soils, and the indirect effect is that the stirred up bottom sediments provide cover for California tiger salamander larvae. Pools with solid bottom sediments that are not as subject to stirred up suspension of sediments in the water column, that otherwise provide clear water conditions, allow predators such as ducks clear visibility of targeted California tiger salamander larvae.

- **Impermeable Soils:** Soil types that are more impermeable (i.e., that support lower infiltration rates) are more likely to support adequate pool depths over sufficient duration for

California tiger salamander larvae to successfully metamorphose (typically pools must remain hydrated through May).

- **Population Expansion and Impediments to Migration:** California tiger salamander breeding pools that have adjacent unimpeded migration habitat to previously unoccupied pools (such as created mitigation pools) are more likely to be used by an expanding California tiger salamander breeding population. In contrast, non-breeding pools that are isolated from known California tiger salamander breeding pools by heavily trafficked roads, high-density housing developments, vertical or near vertical concrete lined canals/creeks, and other geographic impediments (i.e., "barriers"), are unlikely to support an expanding California tiger salamander breeding population.

7.2.1.7 Analysis of the Pools on the Stonebridge Project Site

M&A concludes that the seasonal wetlands present on the Proposed Project Site do not exhibit the characteristics necessary to provide successful California tiger salamander breeding habitat. This is corroborated by M&A's negative California tiger salamander larval surveys onsite in 2019, M&A's past California tiger salamander studies in the vicinity of the Proposed Project Site which were also negative, and finally, the work of many other California tiger salamander biologists in the area of the project site that corroborates M&A's negative findings. This is likely attributable to several factors that include pool characteristics as discussed above, and the isolation of the Proposed Project Site from extant California tiger salamander breeding populations.

The observed hydrology of the seasonal wetlands on the Proposed Project Site in 2018/19 indicate that pools did not retain water at adequate depths over continuous duration, long enough to facilitate full California tiger salamander larval metamorphosis despite a wet and long winter. The 2018/2019 rainfall season was an exceptionally high rainfall year, and significant rainfall events persisted well into spring. The National Oceanic and Atmospheric Administration (NOAA) reports that rainfall in Santa Rosa from October 1, 2018, to June 23, 2019, was 134% of normal (https://www.cnrfc.noaa.gov/awipsProducts/RNOWRKCLI.php).

Presumably owing to an exceptional winter of rainfall and late-spring rainfall events, even shallower pools than 16 inches could be used successfully by California tiger salamander for breeding. Exhibit A shows the Proposed Project Site wetland depths. On March 28, 2019, pools measured from 4" to 24" deep, the deepest these pools were measured in the winter/spring of 2018/19. By April 15, 2019, pool depths had dropped by approximately 6 to 12 inches, and one-third (1/3) of all pools on the Proposed Project Site only supported saturated soils (had no standing water). Thus, in a two and one-half week period, the pools had lost half of their water or more.

Pool depths were not investigated on May 15, 2019, the optimal hydroperiod allowing most California tiger salamander larvae to complete metamorphosis in the Santa Rosa Plain. Nevertheless, due to the rapid draw-down observed from March 28th to April 15th, M&A does not believe that pools retained deep enough water into May to support California tiger salamander larvae.

The rapid draw-down of the Stonebridge pools is likely facilitated by relatively permeable soils. By April 15, 2019, the pools that remained, with few exceptions, were already too shallow, too warm, too clear, and too small to support California tiger salamander larval development. The smaller, shallower pools would facilitate focused predation, allowing waterfowl to feed on California tiger salamander and other amphibian larvae. On April 15th there was a measured dramatic decline in the Sierran treefrog (*Pseudacris sierra*) larval population in remaining pools supporting the notion that most larvae had metamorphosed and/or there had been heavy predation of these larvae.

As discussed elsewhere in this report, there is ample scientific evidence that adult California tiger salamander do not occur within or proximate to the seasonal wetlands on the Stonebridge Proposed Project Site. As described above, pools within the Proposed Project Site do not provide characteristics that are expected to support a breeding California tiger salamander population. The nearest documented extant California tiger salamander breeding habitat is more than 2,200 feet to the west of the Proposed Project Site, across Fulton Road, in the Alton Lane Mitigation Site. Fulton Road is a significant geographic barrier that would prevent California tiger salamander from being able to migrate to the Proposed Project Site.

7.2.1.8 Potential Migration to the Project Site From Known Breeding Locations

The closest known California tiger salamander breeding pool to the Proposed Project Site is located approximately 2,230 feet (~0.42-mile) to the west at the Alton Lane Mitigation Site (Figure 11). Aside from the Alton Lane Mitigation Site area, all known California tiger salamander breeding locations are separated from the Proposed Project Site by several to many miles of high-density urban development, which without doubt is an effective geographic barrier preventing migration to the project site. Regarding the closest known breeding record, it is most unlikely that California tiger salamanders that occur at the Alton Lane Mitigation Site would be able to successfully migrate east, across heavily trafficked Fulton Road, to the Proposed Project Site.

Amphibians and reptiles are highly susceptible to injury or death while crossing roads (van Gelder 1973, Fahrig et al. 1995, Carr and Fahrig 2001). Hels and Buchwald (2001) studied the relationship between traffic volume and amphibian mortality for several species of frogs and salamanders. They concluded that *where amphibians have fixed routes to and from spawning sites they may be undeterred by low to medium traffic intensity (i.e., below 12,000 vehicles per 24 hours).* Also, that: *Mortality of this type therefore may be higher than predicted from traffic intensity alone.* Finally, the authors concluded: *with increased traffic intensity, mortality may eventually reduce the population to a level where its reproductive output is too small to reach the carrying capacities of the breeding ponds*.

Fulton Road represents a significant geographic barrier to California tiger salamander migration from the Alton Lane Mitigation Site west of Fulton Road to the project site east of Fulton Road. The reach of Fulton Road between the project site and the Alton Lane Mitigation Site was "improved" in 2008 (Exhibit D). It is now a four-lane road supporting bicycle lanes, curbs on both sides, a sidewalk on the east side, and a left turn lane down the center (so essentially 5

lanes). The curbs have 7-inch vertical side walls that constitute effective barriers to California tiger salamander migration. That said, with 19,124 vehicle trips a day (data from between Piner and Piner High School, April 28, 2015 - Pacific Traffic & Transit Data Services), Fulton Road is a significant and lethal geographical impediment to California tiger salamander migration from the Alton Lane Mitigation Site on the west side of Fulton Road to the east side of Fulton Road where the project site is located.

Even considering nocturnal vehicle trips per day on Fulton Road, the timeframe when California tiger salamanders migrate, Fulton Road represents a significant impediment to successful migration across this road. Of the recorded 19,124 vehicle trips per day (796.83 trips per hour) recorded in 2015, 3,987 of these trips occurred between 8 p.m. and 8 a.m. (332.25 trips per hour). Appendix F provides a summary of the traffic counts from Pacific Traffic & Transit Data Services in 2015. Thus, even at night, traffic counts would be lethal to any amphibian trying to cross Fulton Road, especially in consideration that curbs on both sides of the street would keep any salamander that ended up in the road, imperiled over an extended period while it tried to escape the high curbs. If a salamander were to end up in the road, the only likely way it would survive is if it was able to find a storm drain inlet, which regardless would divert the salamander ultimately to the Laguna de Santa Rosa within the storm drain system. Fulton Road is a significant geographic barrier that would prevent successful migration of the California tiger salamander to the project site from the Alton Lane Mitigation Site.

7.2.1.9 California Tiger Salamander Impact Conclusions

Based upon the multitude of California tiger salamander studies conducted over many years on properties immediately adjacent to or near the Proposed Project Site, all that had negative findings, and as there are no CNDDB records for California tiger salamanders east of Fulton Road or north of Santa Rosa Creek (CNDDB records 2019), M&A concludes that implementation of the Proposed Project is unlikely to result in any impacts to the California tiger salamander, either to occupied habitat or to individual California tiger salamanders as further discussed in Section 14, below. Although the Proposed Project would not result in "take" of the California tiger salamander, CDFW requested that a full "Protocol" California tiger salamander study be completed pursuant to the *Interim guidance on site assessment and field surveys for determining presence or a negative finding of the California tiger salamander* (USFWS 2003). A Protocol California tiger salamander study includes an upland survey (aka "winter pitfall trapping study") and two spring larval breeding pool surveys that must be completed to prove absence of the California tiger salamander on a project site.

One spring larval survey was completed on the Proposed Project Site per the California tiger salamander Protocol in the spring of 2019 and was negative for California tiger salamander larvae. The winter pitfall trapping study is currently underway on the Proposed Project Site and will not be completed until March 15, 2020. The second larval survey will be completed by May 15th, 2020. The completion of the Protocol California tiger salamander survey will provide data that will either support or refute a conclusion that California tiger salamander are unlikely to occur on the Proposed Project Site. ***Until the Protocol study is complete, and the California tiger salamander has been determined to be absent, impacts to the California tiger salamander are regarded as potentially significant pursuant to the CEQA.***

If the Protocol survey is completed and demonstrates absence of the California tiger salamander on the Proposed Project Site, CDFW will not require an Incidental Take Permit pursuant to the California Endangered Species Act and would not require any mitigation measures for California tiger salamander (G. Monk pers. comm. w/ M. Day, CDFW, September 2019).

Regardless, the Proposed Project proposes to mitigate impacts to potential California tiger salamander migration/dispersal habitat as indicated in Sections 3 and 14 of this analysis (See Impacts and Mitigation Section below). In accordance with USFWS' mitigation requirements applied to other projects in the Santa Rosa Plans, mitigation at a 1:1 (impacts to replacement) ratio is warranted for impacts to USFWS designated California tiger salamander migration/ dispersal habitat since the project site is between 2,200 feet and 1.3 miles of the closest known California tiger salamander breeding site, which is the Alton Lane Mitigation Site, approximately 2,230 feet west of the project site (Figure 11). This mitigation requirement was originally established in the USFWS' Conservation Strategy (USFWS 2005) and was later again incorporated into the USFWS' *Programmatic Biological Opinion* (USFWS 2007) for impacts that could occur to potential migration/dispersal habitat within 1.3 miles of a known California tiger salamander breeding pool.

As originally prescribed in the USFWS' Conservation Strategy (USFWS 2005), it states on page 40, *the mitigation requirement for projects on parcels with existing hardscape (see Glossary) can be reduced by the amount of hardscape present*. The Glossary (Section 11) of the Conservation Strategy provides the following definition: **"Hardscape** – Roads, parking lots, compacted gravel surfaces, buildings, or other structures." Neither CDFW nor USFWS requires California tiger salamander mitigation compensation for impacts to "hard-pack" areas. Approximately 0.60-acre of the 14.60-acre development site is currently developed with buildings or hard-packed, gravel-impregnated roadways and parking areas around existing buildings (as shown in Figure 11). These developed surfaces do not constitute California tiger salamander habitat that warrants mitigation. Thus, the 1:1 mitigation requirement would apply to a total of 14.00 acres (that is, 14.60 acres minus 0.60-acre). The Preserve acreage of 14.00 acres would remain available for use by all wildlife including the California tiger salamander if at some time in the future it expands its range. That said, if the California tiger salamander is identified on the Proposed Project Site during completion of the Protocol study, additional mitigation would be warranted as detailed in the Impacts and Mitigations Section of this report.

8. SUMMARY ANALYSIS OF THE EFFECTS OF BURKE'S GOLDFIELDS SEED COLLECTION

The Proposed Project includes a proposal to create the Stonebridge Preserve where wetlands would be enhanced and created to inure to the benefit of Burke's goldfields, a state and federally listed endangered vernal pool plant that occurs on the Santa Rosa Plain. New wetlands and enhanced wetlands within the proposed Stonebridge Preserve will be constructed as a restoration component of the Proposed Project. The targeted pool hydrology will mimic historical, natural pool hydrology and pool depths that foster colonization of pools by Burke's goldfields. The plan to create and enhance Burke's goldfields habitat will require the collection of seeds from healthy colonies of Burke's goldfields for use in recolonizing enhanced and created seasonal wetlands

within the Stonebridge Preserve. Per a Seed Collection Plan prepared by L. Stromberg (L. Stromberg 2018c), Burke's goldfield seeds will be collected from a number of possible source populations including the Alton Lane Mitigation Site and/or the Woodbridge Preserve, and other sites. CDFW owns the Woodbridge Preserve and is proposed to own the Alton Lane Mitigation Site in the future. Since seeds are proposed to be collected in the spring of 2020, for use in the Stonebridge Preserve, CDFW would have to allow the collection of Burke's goldfield seeds from one of these sites or other sites CDFW may designate.

In consideration that CDFW now owns or will own soon most of the property that supports extant Burke's goldfield populations in the Santa Rosa Plain, the Applicant is proposing that Burke's goldfield seeds would be harvested from a CDFW-owned conservation site. In meetings with the CDFW conducted by the Applicant and Applicant's team to discuss this possibility, CDFW was amenable to the notion that Burke's goldfield seeds could be collected from their lands for this important ecological restoration project.

CDFW Region 3 met with the Applicant's team on March 18, 2019 and April 25, 2019 to discuss the Burke's goldfield reestablishment goals for the Stonebridge Preserve and the collection of Burke's goldfield seeds from CDFW-owned lands. In consideration that studies of Burke's goldfield harvested colonies had been underway since 2016 to determine if there is a deleterious effect when extant colonies of Burke's goldfields are used as donor sites, CDFW requested quantification of the effects of this seed harvesting.

L. Stromberg and S. Gordon conducted Burke's goldfield seeding harvesting studies at a number of conservation sites in the period of 2016 through 2018 (Stromberg and Gordon 2019a). In 2016, the Alton North Conservation Bank was selected as the donor site where 19 donor plots were established. Populations of Burke's goldfields were quantified in 2016. In 2017, seeds were harvested for dispersal to the Alton South Mitigation Site (ASMS) (recipient site). Burke's goldfield numbers at the donor site were again quantified in 2018, the year after collection. Comparing numbers of Burke's goldfields at the donor site in 2016 with numbers in the same plots in 2018, the year after seeds were harvested, resulted in demonstrated increases in Burke's goldfields plants in 13 plots, decreases in five plots, and no change in a single plot. Collectively, all plots of Burke's goldfield increased from 60,778 to 196,223 plants, a 323 percent increase. Also, in 2018, four reference pools (pools that were not used as donor pools) at the Alton North Conservation Site showed declines in the number of Burke's goldfields. Regardless, considering the entire conservation site, the number of Burke's goldfields actually increased approximately 40 percent (op. cit.), largely at the donor plots.

Similarly, L. Stromberg and S. Gordon are conducting a Burke's goldfields and Sonoma sunshine (*Blennosperma bakeri*) seed harvesting study at the Woodbridge Preserve (donor site) (Stromberg and Gordon 2019b). The percent cover and numbers of Burke's goldfields and Sonoma sunshine seeds were initially quantified in donor pools in 2016 and were then harvested in 2017 for dispersal to (inoculation of) created pools at the Fulton Road Mitigation Site. As quantified in 2018, the average cover of Burke's goldfields decreased from 2016 to 2018 at donor plots, but the number of plants increased *indicating plants were smaller so provided less cover but were more numerous*.

While the two L. Stromberg and S. Gordon studies (Stromberg and S. Gordon 2019a, 2019b) are only three years into a proposed six-year study period, the data support the preliminary determination that Burke's goldfield seed harvesting does not harm donor populations. As stated in Stromberg and Gordon (2019b), *the objective of the collection effort was to establish new populations of Burke's goldfields and Sonoma sunshine at the Alton South Conservation Bank while simultaneously not adversely affecting donor pools at the existing Alton North Conservation Bank. At the Alton South Conservation Bank new Burke's goldfields colonies were documented in 15 newly created pools while Sonoma sunshine was documented in 16 newly created pools*.

Virtually all reestablished and new colonies of Burke's goldfield on the Santa Rosa Plain are from use of donor site seed sources. Such harvesting is a critical component of reestablishing and recovering the Burke's goldfields populations on the Santa Rosa Plain.

During meetings with USFWS on July 12, 2018, and with CDFW on March 18, 2019, and April 25, 2019, the Applicant team demonstrated that all meaningful recolonizations of Burke's goldfield in the Santa Rosa Plain have been successful owing to the use of Burke's goldfield seeds collected from extant donor colonies. It was shown that the Burke's goldfield seeds used to create the now-regionally-significant Alton Lane Mitigation Site originally came from donor pools that were being impacted on the G. Kovatch, TMD-Brown, and Schellinger Brother's development project sites in 1989-1992. All three of these development project impact areas were located north of Piner Road and immediately east of the Proposed Project Site.

The successful colonization of the Alton Lane Mitigation Site by Burke's goldfields was used as a donor site for the creation of the Woodbridge Preserve in 2005, the Slippery Rock Conservation Site in 2006, and in created and enhanced pools at the Wright Conservation Site in 2007. In turn, donor colonies at the Woodbridge Preserve were used in 2010 at the Alton North Mitigation Bank, and at the Fulton Road Mitigation Bank in 2017. Also, successfully created Burke's goldfields colonies at the Alton North Mitigation Bank were used as donor sites for the Alton South Mitigation Bank in 2017. All these Burke's reintroductions have been highly successful, and clearly would not have occurred without Burke's goldfields donor pool seed sources. Thus, it is easy to conclude that in order to promote the recovery of Burke's goldfields on the Santa Rosa Plain, that Burke's goldfield seed collection is a vitally important component of any reintroduction efforts for establishing Burke's goldfields in newly created seasonal wetlands.

9. REGULATORY FRAMEWORK FOR NATIVE WILDLIFE, FISH, AND PLANTS

This section provides a discussion of laws and regulations that are in place to protect native wildlife, fish, and plants. Under each law its relevance to the Proposed Project is discussed.

9.1 Federal Endangered Species Act

The Federal Endangered Species Act (FESA) forms the basis for the federal protection of threatened or endangered plants, insects, fish and wildlife. FESA contains four main elements, as follows:

Section 4 (16 USCA §1533): Species listing, Critical Habitat Designation, and Recovery Planning: outlines the procedure for listing endangered plants and wildlife.

Section 7 (§1536): Federal Consultation Requirement: imposes limits on the actions of federal agencies that might impact listed species.

Section 9 (§1538): Prohibition on Take: prohibits the "taking" of a listed species by anyone, including private individuals, and State and local agencies.

Section 10: Exceptions to the Take Prohibition: non-federal agencies can obtain an incidental take permit through approval of a Habitat Conservation Plan.

In the case of salt water fish and other marine organisms, the requirements of FESA are enforced by the National Marine Fisheries Service (NMFS). The USFWS enforces all other cases. Below, Sections 9, 7, and 10 of FESA are discussed since they are the sections most relevant to the Proposed Project.

Section 9 of FESA as amended, prohibits the "take" of any fish or wildlife species listed under FESA as endangered. Under Federal regulation, "take" of fish or wildlife species listed as threatened is also prohibited unless otherwise specifically authorized by regulation. "Take," as defined by FESA, means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." "Harm" includes not only the direct taking of a species itself, but the destruction or modification of the species' habitat resulting in the potential injury of the species. As such, "harm" is further defined to mean "an act which actually kills or injures wildlife; such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering" (50 CFR 17.3). A December 2001 decision by the 9th Circuit Court of Appeals (Arizona Cattle Growers' Association, Jeff Menges, vs. the U.S. Fish and Wildlife Service and Bureau of Land Management, and the Southwest Center for Biological Diversity) ruled that the USFWS must show that a threatened or endangered species is present on a project site and that it would be taken by the proposed activities. According to this ruling, the USFWS can no longer require mitigation based on the probability that the species could use the site. Rather they must show that it is "reasonably certain to occur."

Section 9 applies to any person, corporation, federal agency, or any local or State agency. If "take" of a listed species (other than a plant species) is necessary to complete an otherwise lawful activity, this triggers the need to obtain an "incidental take permit" either through a Section 7 Consultation as discussed further below (for federal actions or private actions that are permitted or funded by a federal agency such as the Corps), or through Section 10 of FESA which requires preparation of a Habitat Conservation Plan (HCP) (for state and local agencies, or individuals, and projects without a federal "nexus"; for example, projects that do not need a Corps permit).

Section 7(a)(2) of the Act requires that each federal agency consult with the USFWS to ensure that any action authorized, funded or carried out by such agency is not likely to jeopardize the continued existence of an endangered or threatened species or result in the destruction or adverse modification of Critical Habitat for listed species. Critical Habitat designations mean: (1)

specific areas within a geographic region currently occupied by a listed species, on which are found those physical or biological features that are essential to the conservation of a listed species and that may require special management considerations or protection; and (2) specific areas outside the geographical area occupied by a listed species that are determined essential for the conservation of the species.

The Section 7 consultation process only applies to actions taken by federal agencies that are considering authorizing proposed actions. Section 7 is by and between the NMFS and/or the USFWS and the federal agency contemplating a discretionary approval (that is, the federal "action agency," for example, the Corps or the Federal Highway Administration). Private parties, cities, counties, etc. (i.e., applicants) may participate in the Section 7 consultation *at the discretion of the federal agencies conducting the Section 7 consultation*. The Section 7 consultation process is triggered by a determination of the "action agency" – that is, the federal agency that is carrying out, funding, or approving a project - that the Proposed Project "may affect" a listed species or Critical Habitat. If an action is likely to adversely affect a listed species or designated Critical Habitat, formal consultation between the nexus agency and the USFWS/NMFS is required. As part of the formal consultation, the USFWS/NMFS may resolve any issues informally with the nexus agency or may prepare a formal Biological Opinion assessing whether the proposed action would be likely to result in "jeopardy" to a listed species or if it could adversely modify designated Critical Habitat. If the USFWS/NMFS prepares a Biological Opinion it will contain either a "jeopardy" or "non-jeopardy" decision. If the USFWS /NMFS concludes that a proposed project would result in adverse modification of Critical Habitat or would jeopardize the continued existence of a federal listed species (that is, it will issue a jeopardy decision), the nexus federal agency would be unlikely to authorize its discretionary permit. If the USFWS/NMFS prepares a "non-jeopardy" Biological Opinion, the nexus federal agency may authorize the discretionary permit with the conditions of the Biological Opinion conditions of its discretionary permit. A non-jeopardy Biological Opinion constitutes an "incidental take" authorization that allows applicants to "take" federally listed species while otherwise carrying out legally sanctioned projects.

For non-federal entities, for example private parties, cities, and counties that are proposing a project that might result in incidental take, Section 10 provides the mechanism for obtaining that take authorization. Under Section 10 of FESA, for the applicant to obtain an "incidental take permit," the applicant is required to submit a "conservation plan" to the USFWS or NMFS that specifies the impacts that are likely to result to federally listed species, and the measures the applicant will undertake to minimize and mitigate such impacts, and the funding that will be available to implement those steps. Conservation plans under FESA have come to be known as "habitat conservation plans" or "HCPs" for short. The terms Incidental Take permit, Section 10 permit, and Section 10(a)(1)(B) permit are used interchangeably by the USFWS. Section 10(a)(2)(B) of FESA provides statutory criteria that must be satisfied before an incidental take permit can be issued.

9.1.1 Responsible Agency

FESA gives regulatory authority to the USFWS for federally listed terrestrial species and non-anadromous fish. The NMFS has regulatory authority over federally listed marine mammals and anadromous fish.

9.1.2 APPLICABILITY TO THE PROPOSED PROJECT

The Proposed Project Site supports one federally listed species: Burke's goldfields. Since the Proposed Project will require a Clean Water Act permit (Section 404 permit) from the Corps, the USFWS will produce a Biological Opinion that provides FESA Incidental Take authority. While FESA has no requirements for Incidental Take of plants, the Biological Opinion can be expected to have conservation measures that will apply to Burke's goldfield.

The Proposed Project includes creation of a wetland/rare plant habitat preserve and, as such, will include preservation and enhancement of seasonal wetlands that will result in the recruitment of Burke's goldfields colonies to the Santa Rosa Plain.

The Proposed Project is not expected to result in the direct take of the California tiger salamander as it has not been identified on the Proposed Project Site to date; however, it may result in the potential destruction or adverse modification of federally designated Critical Habitat (Figure 10). The approximately 47,383 acres of designated Critical Habitat for California tiger salamander includes developed areas and roadways that may include unoccupied and occupied California tiger salamander habitats. Indeed, the USFWS designated Critical Habitat over much of the City of Santa Rosa. Accordingly, USFWS designated Critical Habitat is not an indication that the California tiger salamander would be impacted by activities occurring within the mapped Critical Habitat.

USFWS does not require mitigation for impacts to Critical Habitat; nonetheless, USFWS must consider whether the destruction or adverse modification of Critical Habitat could preclude recovery of the species prior to the time it can authorize Incidental Take for proposed projects (G. Monk pers. comm. with J. Hanni, USFWS, October 2019). If the proposed action would preclude recovery, USFWS will not authorize Incidental Take for a proposed project. The Proposed Project is not expected to preclude recovery of the California tiger salamander because there is substantial evidence that the California tiger salamander doesn't use or occur on the Proposed Project Site. However, since the Proposed Project Site is within 1.3 miles of a known California tiger salamander breeding site (Figure 11), the recognized dispersal distance of the California tiger salamander, the Proposed Project includes mitigation for impacts to potential California tiger salamander migration/dispersal habitat that includes land preservation consistent with USFWS policy. The mitigation land will provide similar habitat attributes to the land that will be developed.

If the California tiger salamander is identified on the Proposed Project Site during the Protocol survey that is currently underway, mitigation will also be required for the project's impact on the species and a consideration would be made by USFWS during Section 7 Consultation of whether the effects on designated Critical Habitat constitute adverse impacts that would preclude recovery of the species. It is M&A's conclusion that even if the site is occupied and developed, it would not preclude recovery of the species because ample mitigation that includes land preservation is being provided by the Applicant. See the Impacts and Mitigation section (Section 14) for complete details on Burke's goldfields mitigation and California tiger salamander mitigation.

9.2 Federal Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. §§ 703-712, July 3, 1918, as amended 1936, 1960, 1968, 1969, 1974, 1978, 1986 and 1989) makes it unlawful to "take" (kill, harm, harass, shoot, etc.) any migratory bird listed in Title 50 of the Code of Federal Regulations, Section 10.13, including their nests, eggs, or young. Migratory birds include geese, ducks, shorebirds, raptors, songbirds, wading birds, seabirds, and passerine birds (such as warblers, flycatchers, swallows, etc.).

Executive Order 13186 for conservation of migratory birds (January 11, 2001) requires that any project with federal involvement address impacts of federal actions on migratory birds. The order is designed to assist federal agencies in their efforts to comply with the MBTA and does not constitute any legal authorization to take migratory birds. The order also requires federal agencies to work with the USFWS to develop a memorandum of understanding (MOU). Protocols developed under the MOU must promote the conservation of migratory bird populations through the following means:

- avoid and minimize, to the extent practicable, adverse impacts on migratory bird resources when conducting agency actions;
- restore and enhance habitat of migratory birds, as practicable; and prevent or abate the pollution or detrimental alteration of the environment for the benefit of migratory birds, as practicable.

9.2.1 Applicability to The Proposed Project

White-tailed kite (*Elanus caeruleus*), red-tailed hawk (*Buteo jamaicensis*), and red-shouldered hawk (*Buteo lineatus*) are all examples of raptors that could nest on or within a zone of influence of the Proposed Project Site. These raptors (birds of prey) would be protected by the Migratory Bird Treaty Act. Also, common songbirds and wading birds that could occur on the site would be protected pursuant to this Act. As long as there is no direct mortality of species protected pursuant to this Act caused by development of the site, there should be no constraints to development. While adult birds can typically fly out of harm's way, nesting birds, their eggs, and young are much more prone to being impacted by construction projects. To comply with the Migratory Bird Treaty Act, all active nest sites would have to be avoided while birds were nesting. Upon completion of the nesting cycle, the Proposed Project could commence as otherwise planned.

In 2017, the Solicitor for the USFWS opined that the MBTA only prohibits intentional take of MBTA-listed species and does not prohibit unintentional take incidental to otherwise lawful activities. Accordingly, it is unlikely that development of the Proposed Project would implicate the take prohibitions under the MBTA. As of March 2019, however, the California Legislature was considering a bill (AB 454) that would make illegal, in California, the incidental take of MBTA-listed birds. The Proposed Project would be unlikely to impact MBTA- listed birds; however, the Proposed Project could impact eggs or nestlings of a MBTA-listed birds without avoidance measures. ***Accordingly, impacts to MBTA-listed birds is regarded as a potentially significant impact. These impacts can be mitigated to a level regarded as less than significant pursuant to the CEQA.*** Please review specific requirements for avoidance of nest sites for potentially occurring species in the Impacts and Mitigations section below.

9.3 **California Endangered Species Act**

9.3.1 SECTION 2081 OF THE CALIFORNIA ENDANGERED SPECIES ACT

In 1984, the state legislated the California Endangered Species Act (CESA) (Fish and Game Code §2050). The basic policy of CESA is to conserve and enhance endangered species and their habitats. State agencies will not approve private or public projects under their jurisdiction that would impact threatened or endangered species if reasonable and prudent alternatives are available. Because CESA does not have a provision for "harm" (see discussion of FESA, above), CDFW considerations pursuant to CESA are limited to those actions that would result in the direct take (or mortality) of a listed species.

If a proposed project would result in mortality to a State listed species, an "incidental take" permit pursuant to §2081 of the Fish and Game Code would be necessary (versus a Federal incidental take permit for federally listed species). CDFW will issue an incidental take permit only if:

1) The authorized take is incidental to an otherwise lawful activity;
2) the impacts of the authorized take are minimized and fully mitigated;
3) measures required to minimize and fully mitigate the impacts of the authorized take:
    a) are roughly proportional in extent to the impact of the taking on the species;
    b) maintain the proposed project applicant's objectives to the greatest extent possible; and,
    c) capable of successful implementation; and,
4) adequate funding is provided to implement the required minimization and mitigation measures and to monitor compliance with, and the effectiveness of, the measures.

No §2081 permit may authorize the take of a species for which the Legislature has imposed strict prohibitions on all forms of "take." These species are listed in several statutes that identify "fully protected" species and "specified birds." *See* Fish and Game Code §§ 3505, 3511, 4700, 5050, 5515, and 5517. If a project is planned in an area where a "fully protected" species or a "specified bird" occurs, an applicant must design the proposed project to avoid all take.

Fish and Game Code §2080.1 allows an applicant who has obtained a "non-jeopardy" federal Biological Opinion pursuant to Section 7 of the FESA, or who has received a federal 10(a) permit (federal incidental take permit) pursuant to the FESA, to submit the federal opinion or permit to CDFW for a determination as to whether the federal document is "consistent" with CESA. If after 30 days CDFW determines that the federal incidental take permit is consistent with state law, and that all state listed species under consideration have been considered in the federal Biological Opinion, then no further permit or consultation is required under CESA for the proposed project. However, if CDFW determines that the federal opinion or permit is not consistent with CESA, or that there are State-listed species that were not considered in the federal Biological Opinion, then the applicant must apply for a state CESA permit under Section 2081(b). Section 2080.1 is of no use if an affected species is state-listed, but not federally listed.

State and federal incidental take permits are issued on a discretionary basis and are typically only authorized if applicants are able to demonstrate that impacts to the listed species in question are

unavoidable and can be mitigated to an extent that the reviewing agency can conclude that the proposed impacts would not jeopardize the continued existence of the listed species under review. Typically, if there would be impacts to a listed species, mitigation that includes habitat avoidance, preservation, and creation of endangered species habitat is necessary to demonstrate that projects would not threaten the continued existence of a species. In addition, management endowment fees are usually collected as part of the agreement for the incidental take permit(s). The endowment is used to manage any lands set-aside to protect listed species, and for biological mitigation monitoring of these lands over (typically) a five-year period.

9.3.2 APPLICABILITY TO THE PROPOSED PROJECT

While California tiger salamander is not expected to be found on the Proposed Project Site, should California tiger salamander be found during the Protocol survey, which will not be completed until May 2020, then the Proposed Project Site would be considered to be occupied by the California tiger salamander. If the Proposed Project Site is determined to be occupied by the California tiger salamander then the Applicant would be required to obtain a CESA 2081(b) Incidental Take Permit from the CDFW in advance of grading the Proposed Project Site.

The Proposed Project Site is known to support small numbers of the State-listed Burke's goldfields on the Preserve portion (eastern portion). Protocol-level surveys for all potentially occurring (based on habitat conditions) State-listed plants and animals have been conducted on the Proposed Project Site and no other State-listed species have been identified (the outcome of the California tiger salamander surveys is pending). No impacts are expected to occur to Burke's goldfields when wetlands are enhanced/created on the Stonebridge Preserve as all populations of Burke's goldfields will be avoided during the creation/enhancement work. Since the pools supporting Burke's goldfields will not be directly impacted by the proposed wetland enhancement/creation on the Stonebridge Preserve, ***there will be no direct impacts to "occupied" Burke's goldfield pools by the Proposed Project. Rather wetlands that will be impacted are regarded as impacting "suitable" vernal pool (rare plant) habitat as discussed in Section 10 below.***

As the Applicant will be collecting the seeds of Burke's goldfields from an offsite donor site, CESA incidental take authority would be required for this action under CESA Section 2081. ***Collection of Burke's goldfield seeds for distribution on the Stonebridge Preserve will significantly increase numbers of endangered Burke's goldfields plants/populations.***

9.4 California Fish and Game Code § 3503, 3503.5, 3511, and 3513

California Fish and Game Code §3503 makes it unlawful to take, possess or "needlessly" destroy the nest or eggs of any bird, although it does not protect the fledged birds themselves. Section 3503.5 (birds of prey), 3511 (fully protected birds), and 3513 (MBTA-listed birds) prohibit the take, possession, and/or destruction of different categories of birds, their nests or eggs. Disturbance that causes nest abandonment and/or loss of reproductive effort (killing or abandonment of eggs or young) is considered "take."

All raptors (that is, hawks, eagles, owls) their nests, eggs, and young are protected under California Fish and Game Code (§3503.5). Additionally, "fully protected" birds, such as the white-tailed kite

and golden eagle (*Aquila chrysaetos*), are protected under California Fish and Game Code (§3511). "Fully protected" birds may not be taken or possessed (that is, kept in captivity) at any time.

9.4.1 APPLICABILITY TO THE PROPOSED PROJECT

Several raptor species and many common passerine bird species could nest on the Proposed Project Site. Preconstruction nesting surveys would have to be conducted for nesting birds to ensure that there is no direct take of these birds, or their eggs or nests, as applicable, during the construction of the Proposed Project.

Any active bird nests that are found during preconstruction surveys would have to be avoided by the Proposed Project. Certain exceptions apply for example for European starling (*Sturnus vulgaris*) nests. Other bird species are also exceptions, but this should be assessed by a qualified biologist at the time an active bird nest is identified within a zone of influence of the Proposed Project Site. Suitable non-disturbance buffers should be established around any active nest site until the nesting cycle has been completed. ***Impacts to nesting birds are regarded as a potentially significant impact. Such impacts could be mitigated to levels regarded as less than significant pursuant to the CEQA.*** More specifics on nesting bird surveys and protection buffers are provided below in the Impacts and Mitigations section.

9.5 City of Santa Rosa General Plan

The *Santa Rosa General Plan 2035* (November 3, 2009) was developed to ensure responsible development within the City of Santa Rosa. This General Plan has various measures designed to protect natural resources within the City of Santa Rosa. In the category, Biological Resources and Waterways, the following goals and policies apply to the Proposed Project Site:

> OSC-D Conserve wetlands, vernal pools, wildlife ecosystems, rare plant habitats, and waterways.
>
> OSC-D-1: Utilize existing regulations and procedures, including Subdivision Guidelines, Zoning, Design Review, and environmental law, to conserve wetlands and rare plants. Comply with the federal policy of no net loss of wetlands using mitigation measures such as:
>
> - Avoidance of sensitive habitat;
> - Clustered development;
> - Transfer of development rights; and/or
> - Compensatory mitigation, such as restoration or creation.
>
> OSC-D-2: Protect high quality wetlands and vernal pools from development or other activities as determined by the Vernal Pool Ecosystem Preservation Plan.
>
> OSC-D-5: Consult with North Coast Regional Water Quality Control Board staff as part of the CEQA process for proposed developments to help them identify wetland and vernal pool habitat that has candidacy for restoration/protection based on actual and potential beneficial uses, and determine appropriate locations for mitigation banking.

OSC-H-4: Require incorporation of native plants into landscape plans for new development, where appropriate and feasible, especially in areas adjacent to open space areas or along waterways.

OSC-B-4: Require that graded areas within new developments be revegetated.

9.5.1 APPLICABILITY TO THE PROPOSED PROJECT

Consistent with General Plan Measures OSC-D-1 and OSC-D-5, the Applicant will follow existing regulations and procedures to permit impacts to wetlands (that is, waters of the United States/State) on the Proposed Project Site and mitigate those impacts (no net loss policy) as stated in the permits issued for the Proposed Project. The Applicant intends to mitigate impacts to waters of the United States/State (wetlands) through various means including onsite preservation and enhancement of seasonal wetlands and purchase of mitigation credits from an authorized mitigation bank. Consistent with General Plan Measure OSC-D-2, the Applicant will preserve and protect approximately half of the wetlands and rare plant habitat onsite by placing the eastern half of the Proposed Project Site in a habitat preserve which will allow for the restoration and enhancement of endangered plant habitat.

Finally, as per OSC-B-4 and OSC-H-4, the proposed development will include native plants in the landscape plans where appropriate and feasible and all graded areas within the development will be revegetated.

9.6 City of Santa Rosa Tree Ordinance

The Santa Rosa City Code, Chapter 17.24, has three articles that pertain to the protection of trees within the City of Santa Rosa to discourage the alteration, removal or relocation of trees, including any heritage, protected, or street tree, without a permit. These articles are discussed below.

Article III – Prohibitions – Tree alteration, removal, relocation-Permit required.

Article III has provisions that protect trees which are defined as any woody plant with a single trunk diameter of four (4) inches or more or a combination of multiple trunks having a total diameter of eight (8) inches or more. This article also protects the following types of trees:

(a) Heritage tree which includes any of the following trees, whether located on public or private property, at a diameter equal to or greater than those listed below:

Species	**Diameter**
Valley oak (*Quercus lobata*)	6
Coast live oak (*Quercus agrifolia*)	18
Black oak (*Quercus kelloggii*)	18
Oregon oak (*Quercus garryana*)	18
Canyon oak (*Quercus chrysolepis*)	18
Blue oak (*Quercus douglasii*)	6
Interior live oak (*Quercus wislizenii*)	18

Coast redwood (*Sequoia sempervirens*)	24
Bay (*Umbellularia californica*)	24
Madrone (*Arbutus menziesii*)	12
Douglas's fir (*Pseudotsuga menziesii*)	24
Red alder (*Alnus rubra*)	18
White alder (*Alnus rhombifolia*)	18
Big leaf maple (*Acer macrophyllum*)	24

(b) Protected tree which means any tree, including a heritage tree, designated to be preserved on an approved development plan or as a condition of approval of a tentative map, a tentative parcel map, or other development.

(c) Street tree which means any tree having a single trunk circumference greater than 6 and one-quarter inches or a diameter greater than 2 inches, a height of more than 6 feet, and one half or more of its trunk is within a public right of way or within 5 feet of the paved portion of a City street or a public side walk.

The following tree species are exempt from the above provisions (except for those that may exist as street trees): acacia, silver maple, poplar, ailanthus, hawthorn, fruitless mulberry, privet, pyracantha, Monterey pine, Monterey cypress, and fruit and nut trees (except walnut trees). A permit is not required for these tree species alteration, removal or relocation.

9.6.1.1 Article IV – Permit Category II – Tree alteration, removal or relocation on property proposed for development-Requirements.

Article IV requires the following:

(a) All development proposals and subdivision applications shall clearly designate all trees and heritage trees on the property by trunk location and accurate outline of the dripline and shall indicate those trees proposed to be altered, removed or relocated. The reasons for the removal of any tree shall be stated in writing. The development plan or tentative subdivision map shall indicate the genus and species, shape, drip-line and trunk circumference of each tree and heritage tree. The owner of the property and person in control of the proposed development shall protect and preserve each tree and heritage tree situated within the site of the proposed development during the period the application for the proposed development is being considered by the City. The proposed development shall be designed so that:

(1) The proposed lots and/or improvements preserve any heritage trees to the greatest possible extent.

(2) The road and lot grades protect heritage trees to the greatest extent possible and the existing grad shall be maintained within each such tree's root zone.

(b) If the Proposed Project is approved, the recordation of the final map or issuance of a grading permit or building permit for the Proposed Project shall constitute a permit to

alter, remove or relocate any trees designated for alteration, removal or relocation upon the project's approved plans. Any change in the trees to altered, removed or relocated as designated on the approved development plan or tentative map shall only be permitted upon the written approval of the Director or, when the Director determines that the proposed change may be substantial, by the Planning Commission.

(c) A tree replacement program that will require the applicant to replace trees and heritage trees approved for removal as part of the approval of the Proposed Project in accordance with subdivision 1; each protected tree removed or damaged shall be replaced in accordance with subdivision 2. For each 6 inches or fraction thereof of the diameter of a tree which was approved for removal, two trees of the same genus and species as the removed tree (or another approved species), each of a minimum 15-gallon container size, shall be planted on the Proposed Project Site. For each 6 inches or fraction thereof of the diameter of a tree which was not approved for removal, four trees of the same genus and species as the removed tree (or another approved species), each of a minimum 15-gallon container size, shall be planted on the Proposed Project Site.

(d) If the development site is inadequate in size to accommodate the replacement trees, the trees shall be planted on public property with the approval of the Director of the City's Recreation and Parks Department. Upon the request of the developer and the approval of the Director, the City may accept an in-lieu payment of $100.00 per 15-gallon replacement tree on the condition that all such payments shall be used for tree-related educational projects and/or planting programs of the City.

(e) The following requirements will apply to any applicant of property upon which a protected tree is located:

(1) Before the start of any clearing, excavation, construction or other work on the site, every protected tree shall be securely fenced off at the "protected perimeter" which shall either be the root zone or other limit as may be established by the City.

(2) If the proposed development, including any site work for the development, will encroach upon the protected perimeter of a protected tree, special measures shall be utilized, to allow the roots to obtain oxygen, water and nutrients as needed. Any excavation, cutting, filling, or compaction of the existing ground surface within the protected perimeter, if authorized at all by the Director, shall be minimized and subject to such conditions as may be imposed by the Director. No significant change in existing ground level shall be made within the dripline of a protected tree.

(3) No oil, gas, chemicals or other substances that may be harmful to trees shall be stored or dumped within the protected perimeter. All brush, earth and other debris shall be removed in a manner which prevents injury to the protected tree.

(4) Underground trenching for utilities shall avoid major support and absorbing tree roots of protected trees. If avoidance is impractical, tunnels shall be made below the roots. Trenches shall be consolidated to USFWS as many units as possible. Trenching

within the drip line of protected trees shall be avoided to the greatest extent possible and shall only be done under the at-site directions of a certified arborist.

(5) No concrete or asphalt paving shall be placed over the root zones of protected trees. No artificial irrigation shall occur within the root zone of oaks.

(6) No compaction of the soil within the root zone of protected trees shall occur.

(7) If the trees proposed to be removed can be economically relocated, the developer shall move the trees to a suitable location on the site shown on the approved plans.

9.6.1.2 Article V – Permit category II – Street trees and plantings on and adjacent to public streets and sidewalks.

Article V pertains to the alteration, removal, and relocation of street trees and entails the following:

(a) As per Section 17-24.075, no tree growing within a planting strip or within any public right-of-way shall be removed or altered by or at the instigation of the abutting property owner or anyone other than a duly authorized officer, agent or employee of the City, except upon issuance of a permit therefore by the Director of Recreation and Parks who may require, as a condition of permitting the removal or alteration of a tree, the posting of security for such work and the planting, at the expense of the permittee, of a tree to replace the one removed from a list approved under Section 17-24.070 of the city code.

(b) As per Section 17-24.080, a permit approved by the Director of Recreation and Parks under the provisions of this article shall be valid for a period of 60 days from its issuance unless a longer term is set forth in the permit. If the work to be done under the permit does not commence prior to the permit's expiration and thereafter expeditiously pursued, the permit shall become null and void.

9.6.2 APPLICABILITY TO THE PROPOSED PROJECT

None of the trees onsite meet the City's definition of a "heritage tree." The coast live oak, which is the only tree onsite which could qualify as a heritage tree (since it is the only native), is less than 18 inches diameter at breast height and thus, would not be regarded as a heritage tree. Similarly, according to the Tree Ordinance, the "following tree species are exempt from the above provisions (except for those that may exist as street trees): acacia, silver maple, poplar, ailanthus, hawthorn, fruitless mulberry, privet, pyracantha, Monterey pine, Monterey cypress, and fruit and nut trees (except walnut trees). A permit is not required for these tree species alteration, removal or relocation." Accordingly, impacts to the existing landscape trees will not require a permit. The eucalyptus trees onsite are a non-native, invasive species and though not mentioned specifically in the City's Tree Ordinance, they would not be protected. There are no designated protected trees or street trees on the Proposed Project Site either. ***No significant impacts would occur to heritage trees or other protected trees from implementation of the Proposed Project.***

10. REGULATORY REQUIREMENTS PERTAINING TO WATERS OF THE UNITED STATES AND STATE

This section presents an overview of the criteria used by the Corps, the RWQCB, the State Water Resources Control Board (SWRCB), and the CDFW to determine those areas within a project area that would be subject to their regulation.

10.1 U.S. Army Corps of Engineers Jurisdiction and Permitting

10.1.1 SECTION 404 OF THE CLEAN WATER ACT

Congress enacted the Clean Water Act "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters" (33 U.S.C. §1251(a)). Pursuant to Section 404 of the Clean Water Act (CWA) (33 U.S.C. 1344), the Corps regulates the disposal of dredged or fill material into "waters of the United States" (33 CFR Parts 328 through 330). This requires project applicants to obtain authorization from the Corps prior to discharging dredged or fill materials into any water of the United States.

In the Federal Register "waters of the United States" are defined as, "...all interstate waters including interstate wetlands...intrastate lakes, rivers, streams (including intermittent streams), wetlands, [and] natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce..." (33 CFR Section 328.3).

Limits of Corps' jurisdiction:

(a) Territorial Seas. The limit of jurisdiction in the territorial seas is measured from the baseline in a seaward direction a distance of three nautical miles. (See 33 CFR 329.12)

(b) Tidal Waters of the United States. The landward limits of jurisdiction in tidal waters:

(1) Extends to the high tide line, or
(2) When adjacent non-tidal waters of the United States are present, the jurisdiction extends to the limits identified in paragraph (c) of this section.

(c) Non-Tidal Waters of the United States. The limits of jurisdiction in non-tidal waters:

(1) In the absence of adjacent wetlands, the jurisdiction extends to the ordinary high water mark, or
(2) When adjacent wetlands are present, the jurisdiction extends beyond the ordinary high water mark to the limit of the adjacent wetlands.
(3) When the water of the United States consists only of wetlands the jurisdiction extends to the limit of the wetland.

Section 404 jurisdiction in "other waters" such as lakes, ponds, and streams, extends to the upward limit of the "ordinary high water mark" (OHWM) or the upward extent of any adjacent wetland. The OHWM on a non-tidal water is:

- the "line on shore established by the fluctuations of water and indicated by physical characteristics such as a clear natural line impressed on the bank; shelving; changes in the character of soil; destruction of terrestrial vegetation; the presence of litter or debris; or other appropriate means that consider the characteristics of the surrounding areas" (33 CFR Section 328.3[e]).

Wetlands are defined as: "...those areas that are inundated or saturated by surface or ground water at a frequency and duration to support a prevalence of vegetation adapted for life in saturated soil conditions" (33 CFR Section 328.8 [b]). Wetlands usually must possess hydrophytic vegetation (i.e., plants adapted to inundated or saturated conditions), wetland hydrology (e.g., topographic low areas, exposed water tables, stream channels), and hydric soils (i.e., soils that are periodically or permanently saturated, inundated or flooded) to be regulated by the Corps pursuant to Section 404 of the Clean Water Act.

10.1.1.1 Clean Water Rule 2015

In 2015, the Environmental Protection Agency (EPA) and the Corps published the Clean Water Rule: Definition of ''Waters of the United States''; Final Rule which defines the scope of waters protected under the CWA. This Final Rule was published in light of the statute, science, Supreme Court decisions in *U.S.* v. *Riverside Bayview Homes, Solid Waste Agency of Northern Cook County* v. *U.S. Army Corps of Engineers (SWANCC),* and *Rapanos* v. *United States (Rapanos)*, and the agencies' experience and technical expertise. The Clean Water Rule reflects consideration of the extensive public comments received on the proposed rule. The Clean Water Rule was stayed in federal court shortly after it was adopted in 2015. In August 2018, the stay was lifted and the Clean Water Rule (Rule) became effective once again and remains in effect today. The Rule ensures protection for the nation's public health and aquatic resources and increases CWA program predictability and consistency by clarifying the scope of "waters of the United States" protected under the Act.

The Rule only protects waters that have been historically covered by the CWA. A tributary, or upstream water, must show physical features of flowing water – a bed, bank, and ordinary high-water mark – to warrant protection. The Rule provides protection for headwaters that have these features and have a significant connection to downstream waters. Adjacent waters are defined by three qualifying circumstances established by the Rule. These can include wetlands, ponds, impoundments, and lakes which can impact the chemical, biological or physical integrity of neighboring waters. All existing exclusions from longstanding agency practices are officially established for the first time. Waters used in normal agricultural, ranching, or silvicultural activities, as well as certain defined ditches, prior converted cropland, and waste treatment systems continue to be excluded from CWA protection.

10.1.1.2 Permitting Corps Jurisdictional Areas

To remain in compliance with Section 404 of the CWA, project proponents and property owners (applicants) are required to be permitted by the Corps prior to discharging or otherwise impacting waters of the United States. In many cases, the Corps must visit a Proposed Project area (to conduct a "jurisdictional determination") to confirm the extent of area falling under their jurisdiction prior to authorizing any permit for that project area. Typically, at the time the

jurisdictional determination is conducted, applicants (or their representative) will discuss the appropriate permit application that would be filed with the Corps for permitting the proposed impact(s) to "waters of the United States."

Pursuant to Section 404, the Corps normally provides two alternatives for permitting impacts to the type of waters of the United States found in the proposed project area. The first alternative would be to use Nationwide Permit(s) (NWP). The second alternative is to apply to the Corps for an Individual Permit (33 CFR Section 235.5(2)(b)). The application process for Individual Permits is extensive and includes public interest review procedures (i.e., public notice and receipt of public comments) and must contain an "alternatives analysis" that is prepared pursuant to Section 404(b) of the Clean Water Act (33 U.S.C. 1344(b)). The alternatives analysis is also typically reviewed by the federal EPA and thus brings another resource agency into the permitting framework. Both the Corps and EPA take the initial viewpoint that there are practical alternatives to the proposed project if there would be impacts to waters of the U.S., and the proposed permitted action is not a water dependent project (e.g., a pier or a dredging project). Alternative analyses therefore must provide convincing reasons that the proposed permitted impacts are unavoidable. Individual Permits may be available for use in the event that discharges into regulated waters fail to meet conditions of NWP(s).

NWPs are a type of general permit administered by the Corps and issued on a nationwide basis that authorize minor activities that affect Corps regulated waters. Under NWP, if certain conditions are met, the specified activities can take place without the need for an individual or regional permit from the Corps (33 CFR, Section 235.5[c][2]). Because impacts to waters of the U.S. will exceed 0.5-acre, the proposed project will not meet conditions for use of NWPs.

Prior to finalizing design plans, the applicant needs to be aware that the Corps maintains a policy of "no net loss" of wetlands (waters of the United States) from project area development. Therefore, it is incumbent upon applicants that propose to impact Corps regulated areas to submit a mitigation plan that demonstrates that impacted regulated areas would be recreated (*i.e.,* impacts would be mitigated). Typically, the Corps requires mitigation to be "in-kind" (i.e., seasonal wetlands would be filled, mitigation would include seasonal wetland mitigation), and at a minimum of a 1:1 replacement ratio (i.e., one acre or fraction there of recreated for each acre or fraction thereof lost). Often a 2:1 replacement ratio is required if the Permittee is responsible for the mitigation. In some cases, the Corps allows "out-of-kind" mitigation if the compensation site has greater value than the impacted site. Finally, there are many Corps approved wetland mitigation banks where wetland mitigation credits can be purchased by applicants to meet mitigation compensation requirements. Mitigation banks have defined service areas and the Corps may only allow their use when a project would have minimal impacts to wetlands.

10.1.2 Applicability to the Proposed Project

Laurence P. Stromberg, Ph.D. prepared a *Pre-Jurisdictional Determination* of the Proposed Project Site that was field verified by the Corps on January 25, 2016. The Corps' approved Administrative Jurisdictional Determination letter is dated March 9, 2016 and the map is stamped March 7, 2016 (Attachment G). The Corps verified 6.31 acres of seasonal wetlands on the Proposed Project Site. An Individual Permit application was submitted to the San Francisco District of the Corps during the validity period of the Corps' jurisdictional determination, and

hence, by Corps' policy, this map will remain valid while the permit application is processed by the Corps.

The Proposed Project will result in the fill of 2.52 acres of seasonal wetlands. In addition, 0.13-acre of seasonal wetlands would be permanently filled within the Stonebridge Preserve as necessary to enhance the functions and services of wetlands in the Stonebridge Preserve (total = 2.65 acres of permanent fill). Specifically, wetland hydrology that currently pools against the adjacent development's retaining walls will be recontoured into a naturalistic vernal pool configuration and this will require filling 0.13-acre of the 3.79 acres of wetlands that currently occur in the proposed Stonebridge Preserve. Finally, 0.484-acre of existing seasonal wetland in the Stonebridge Preserve that currently supports Burke's goldfields will be avoided/protected during the implementation of the wetland creation/enhancement project.

To meet the Corps' policy of "no net loss" approximately 1.766 acres of new wetlands are proposed to be created in existing upland habitats in the Stonebridge Preserve. In addition, the Applicant will purchase 0.89-acre of wetland credits from a Corps (and RWQCB) approved Wetland Mitigation Bank. The total creation plus purchase of credit, totals 2.65 acres and meets the Corps no net loss policy or 1:1 impact to mitigation ratio.

In addition, approximately 3.267 acres of existing wetland will be recontoured (enhanced) to improve hydrology and functions such that the enhanced wetlands will promote/support colonization by the state and federally listed vernal pool plant Burke's goldfields. In total, after the enhancement, the Stonebridge Preserve that currently supports 3.79 acres of wetlands will support 5.52 acres of enhanced wetlands. Enhancing 3.267 acres of wetlands exceeds a 1:1 impacts to mitigation ratio. Thus, in consideration that the project will not result in "no net loss" (1:1 ratio) and will enhance 3.267 acres (exceeds 1:1 impacts to enhancement ratio), taken together the Proposed Project will exceed a 2:1 overall replacement/enhancement to impacts ratio.

The Proposed Project would include the permanent loss of 2.65 acres of seasonal wetlands. ***These impacts are regarded as significant pursuant to the CEQA. Mitigation would be implemented that would reduce impacts to waters of the U.S. to levels regarded as less than significant.*** For further details regarding impacts and mitigation for impacts to wetlands please review the Impacts and Mitigation Section below.

10.2 California Regional Water Quality Control Board (RWQCB)

10.2.1 Section 401 of the Clean Water Act

The SWRCB and RWQCB regulate activities in "waters of the State" (which includes wetlands) through Section 401 of the Clean Water Act. While the Corps administers a permitting program that authorizes impacts to waters of the United States, including wetlands and other waters, any Corps permit authorized for a Proposed Project would be inoperative unless it is an NWP that has been certified for use in California by the SWRCB, or if the RWQCB has issued a project specific certification of water quality. Certification of NWPs requires a finding by the SWRCB that the activities permitted by the NWP will not violate water quality standards individually or cumulatively over the term of the permit (the term is typically for five years). Certification must be

consistent with the requirements of the federal Clean Water Act, the California Environmental Quality Act, the California Endangered Species Act, and the SWRCB's mandate to protect beneficial uses of waters of the State. Any denied (i.e., not certified) NWPs, and all Individual Corps permits, would require a project specific RWQCB certification of water quality. Where a project will result in dredge or fill of non-federal waters of the State, the RWQCB will authorize those fills through waste discharge requirements issued under the Porter Cologne Water Quality Control Act.

On April 2, 2019, the State Water Resources Control Board adopted a state-level definition of "wetlands," which is broader than the federal definition in that unvegetated areas may be considered a wetland water of the State. As a part of the same policy, the Water Board adopted permit procedures and standards governing the discharge of dredged or fill material into wetlands and other waters of the State. The policy includes, among other things, requirements for analyses to identify the least environmentally damaging practicable alternative (LEDPA) and compensatory mitigation standards including a minimum 1:1 ratio for wetlands and streams, and full functional replacement of all waters on top of this minimum where applicable. The policy, which will govern both Section 401 certifications and WDRs, is scheduled to become effective nine months following the completion of review by the California Office of Administrative Law.

10.2.2 APPLICABILITY TO THE PROPOSED PROJECT

The Corps has taken jurisdiction over 6.31 acres of waters of the United States on the Proposed Project Site which are all seasonal wetlands. Since the RWQCB does not have a formal method for technically defining what constitutes waters of the State, the RWQCB is expected to remain consistent with the Corps' determination. Any Clean Water Act Section 404 permit authorized by the Corps for the Proposed Project would be inoperative without also obtaining authorization from the RWQCB pursuant to Section 401 of the Clean Water Act (i.e., without obtaining a certification of water quality).

The Proposed Project would include the permanent loss of 2.65 acres of seasonal wetlands. ***These impacts are regarded as significant pursuant to the CEQA. Mitigation would be implemented that would reduce impacts to waters of the State to levels regarded as less than significant.***

Any impacts to waters of the State would be required to be mitigated to the satisfaction of the RWQCB prior to the time this resource agency would issue a permit for impacts to such features. The RWQCB requirements for issuance of a "401 Permit" typically parallel the Corps requirements for permitting impacts to Corps regulated areas pursuant to Section 404 of the Clean Water Act. Please refer to the Corps' "Applicability" section above for likely mitigation requirements for impacts to RWQCB regulated wetlands. Also, please refer to the applicability section of the Porter-Cologne Water Quality Control Act below for other applicable actions that may be imposed on the Proposed Project by the RWQCB prior to the time any certification of water quality is authorized for the Proposed Project. Finally, please review the Impacts and Mitigation Section below for complete information about impacts and mitigation measures that would be implemented by the Proposed Project.

10.2.3 PORTER-COLOGNE WATER QUALITY CONTROL ACT

The uncontrolled discharge of pollutants into impaired water bodies is considered particularly detrimental. According to the U.S. Environmental Protection Agency (USEPA), *sediment is one of the most widespread pollutants contaminating U.S. rivers and streams.* Sediment runoff from construction sites is 10 to 20 times greater than from agricultural lands and 1,000 to 2,000 times greater than from forest lands (EPA 2005). Consequently, the discharge of stormwater from large construction sites is regulated by the RWQCB under the federal CWA and California's Porter-Cologne Water Quality Control Act.

The Porter-Cologne Water Quality Control Act, Water Code § 13260, requires that "any person discharging waste, or proposing to discharge waste, that could affect the waters of the State to file a report of discharge" with the RWQCB through an application for waste discharge (Water Code Section 13260(a)(1). The term "waters of the State" is defined as any surface water or groundwater, including saline waters, within the boundaries of the State (Water Code § 13050(e)). It should be noted that pursuant to the Porter-Cologne Water Quality Control Act, the RWQCB also regulates "isolated wetlands," or those wetlands considered to be outside of the Corps' jurisdiction pursuant to the SWANCC decision (see Corps Section above).

The RWQCB generally considers filling in waters of the State to constitute "pollution." Pollution is defined as an alteration of the quality of the waters of the state by waste that unreasonably affects its beneficial uses (Water Code §13050(1)). The RWQCB litmus test for determining if a project should be regulated pursuant to the Porter-Cologne Water Quality Control Act is whether the action could result in any "threat" to water quality.

The RWQCB requires complete pre- and post-development Best Management Practices Plan (BMPs) of any portion of the Proposed Project Site that is developed. This means that a water quality treatment plan for the pre- and post-developed project site must be prepared and implemented. Preconstruction requirements must be consistent with the requirements of the National Pollutant Discharge Elimination System (NPDES). That is, a *Stormwater Pollution Prevention Plan* (SWPPP) must be developed prior to the time that a site is graded (see NPDES section below). In addition, a post construction BMPs plan, or a Stormwater Management Plan (SWMP) must be developed and incorporated into any site development plan.

10.2.4 APPLICABILITY TO THE PROPOSED PROJECT

The Corps has taken jurisdiction over 6.31 acres of waters on the Proposed Project Site. There are no isolated wetlands or other waters on the Project Site that are outside of the RWQCB's Clean Water Act jurisdiction (see Attachment G).

Prior to issuance of any permit from the RWQCB, this agency will require submittal of a Notice of Determination from the City of Santa Rosa indicating that the Proposed Project has completed environmental review pursuant to CEQA. The pertinent sections of the CEQA document (typically the biology section) are often submitted to the RWQCB for review prior to the time this agency will issue a permit for a proposed project.

Since any "threat" to water quality could conceivably be regulated by the RWQCB or the SWRCB pursuant to the Porter-Cologne Water Quality Control Act, care will be required when

constructing the Proposed Project to be sure that adequate pre and post construction Best Management Practices Plan (BMPs) are incorporated into the Proposed Project implementation plans. Such BMPs, if correctly installed and maintained, are likely to keep the Proposed Project in compliance with the Porter-Cologne Water Quality Control Act.

All stormwater runoff currently flows into the city's existing storm drain system. It is expected that project development will utilize the existing storm drain system; however, pre-treatment of stormwater in accordance with Provision C.3 (discussed in the section below) prior to release into the County stormdrain system will be necessary. Additionally, during project construction it is important for the Proposed Project proponent to have the components of a stormwater pollution prevention plan (SWPPP) and a stormwater low impact development (SW LID) in place; these documents are typically prepared by the Proposed Project civil engineer. Refer to the sections below for further discussion on site disturbance (grading) and storm water management.

11. STATE WATER RESOURCES CONTROL BOARD (SWRCB)/RWQCB – STORM WATER MANAGEMENT

11.1 Construction General Permit

While federal CWA NPDES regulations allow two permitting options for construction related stormwater discharges (individual permits and general permits), the SWRCB has elected to adopt only one statewide Construction General Permit at this time that will apply to all stormwater discharges associated with construction activity, except from those on Tribal Lands, in the Lake Tahoe Hydrologic Unit, and those performed by the California Department of Transportation (CalTrans).

The Construction General Permit requires all dischargers where construction activity disturbs greater than one acre of land or those sites less than one acre that are part of a common plan of development or sale that disturbs more than one acre of land surface to:

1. Develop and implement a SWPPP that specifies Best Management Practices (BMPs) that will prevent all construction pollutants from contacting stormwater with the intent of keeping all products of erosion from moving off site into receiving waters.

2. Eliminate or reduce non-stormwater discharges to storm sewer systems and other waters of the nation. Achieve quantitatively-defined (i.e., numeric) pollutant-specific discharge standards, and conduct much more rigorous monitoring based on the Proposed Project's projected risk level.

3. Perform inspections of all BMPs.

This Construction General Permit is implemented and enforced by the nine RWQCBs. It is also enforceable through citizens' suits and represents a dramatic shift in the State Water Board's approach to regulating new and redevelopment sites, and imposing new affirmative duties and fixed standards on builders and developers.

Types of Construction Activity Covered by the Construction General Permit

- Clearing,
- Grading, and/or
- Disturbances to the ground such as stockpiling or excavation that results in soil disturbances of at least one acre or more of total land area.

Construction activity that results in soil disturbances to a smaller area would still be subject to this General Permit if the construction activity is part of a larger common plan of development that encompasses greater than one acre of soil disturbance, or if there is significant water quality impairment resulting from the activity.

Construction activity does not include:

- Routine maintenance to maintain original line and grade,
- Hydraulic capacity, or original purpose of the facility,
- Nor does it include emergency construction activities required to protect public health and safety.

The Construction General Permit includes several "post-construction" requirements to ensure that site designs provide no net increase in overall site runoff and match pre-project hydrology by maintaining runoff volume and drainage concentrations. To achieve the required results where impervious surfaces such as roofs and paved surfaces are being increased, developers must implement non-structural off-setting BMPs, such as landform grading, site design BMPs, and distributed structural BMPs (e.g., bioretention cells, rain gardens, and rain cisterns). This "runoff reduction" approach is essentially a State Water Board-imposed regulatory requirement to implement Low Impact Development ("LID") design features. Volume that cannot be addressed using non-structural BMPs must be captured in structural BMPs that are approved by the RWQCB.

Improving the quality of site runoff is necessary to improve water quality in impaired and threatened streams, rivers, and lakes (that is, water bodies on the EPA's 303(d) list). The RWQCB prioritizes the water bodies on the 303(d) list according to potential impacts to beneficial uses. Beneficial uses can include a wide range of uses, such as nautical navigation; wildlife habitat; fish spawning and migration; commercial fishing, including shellfish harvesting; recreation, including swimming, surfing, fishing, boating, beachcombing, and more; water supply for domestic consumption or industrial processes; and groundwater recharge, among others. The State is required to develop action plans and establish Total Maximum Daily Loads (TMDLs) to improve water quality within these impaired water bodies. The TMDL is the quantity of a pollutant that can be safely assimilated by a water body without violating the applicable water quality standards.

Pursuant to the CWA, the RWQCB regulates construction discharges under the National Pollutant Discharge Elimination System (NPDES). The project sponsor of construction or other

activities that disturb more than 1 acre of land must obtain coverage under NPDES Construction General Permit Order 2009-0009-DWQ, administered by the RWQCB[1].

11.1.1 APPLICABILITY TO THE PROPOSED PROJECT

The Proposed Project will impact greater than one acre and thus, must obtain NPDES coverage via acquisition of coverage under the General Construction Permit. To obtain coverage under the SWRCB administered Construction General Permit, the applicant (typically through its civil engineer) must electronically file a number of permit-related compliance documents (Permit Registration Documents (PRDs), including a Notice of Intent (NOI), a risk assessment, site map, signed certification, SWPPP, Notice of Termination (NOT), NAL exceedance reports, and other site-specific PRDs that may be required. The PRDs must be prepared by a Qualified SWPPP Practitioner (QSP) or Qualified SWPPP Developer (QSD) and filed by a Legally Responsible Person (LRP) on the RWQCB's Stormwater Multi-Application Report Tracking System (SMARTS). (QSDs are typically civil engineers, professional hydrologists, engineering geologists, or landscape architects.) Once filed, these documents become immediately available to the public for review and comment. At a minimum, the SWPPP shall identify Best Management Practices (BMPs) for implementation during project construction that are in accordance with the applicable guidance and procedures contained in the California Stormwater Quality Association's *California Stormwater Best Management Practices Handbook* (2015).

11.2 RWQCB Municipal Storm Water Permitting Programs

The federal Clean Water Act (CWA) was amended in 1987 to address urban stormwater runoff pollution of the nation's waters. In 1990, the U.S. Environmental Protection Agency (USEPA) promulgated rules establishing Phase 1 of the National Pollutant Discharge Elimination System (NPDES) stormwater program. The Phase 1 program for Municipal Separate Storm Sewer System (MS4s) requires operators that serve populations of 100,000 or greater to implement a stormwater management program to control polluted discharges from these MS4s. While Phase 1 of the municipal stormwater program has focused on large urban areas, Phase 2 of the municipal stormwater program was promulgated by the USEPA for smaller urban areas including non-traditional Small MS4s, which are governmental facilities such as military bases, public campuses, and prison and hospital complexes.

MS4 permits require the discharger (or dischargers that are permitted by the MS4 permittees) to develop and implement a Storm Water Management Plan/Program (SWMP) with the goal of reducing the discharge of pollutants to the maximum extent practicable (MEP). MEP is the performance standard specified in Section 402(p) of the CWA. The management programs specify what BMPs will be used to address certain program areas. The program areas include public education and outreach; illicit discharge detection and elimination; construction and post-construction; and good housekeeping for municipal operations. In general, medium and large municipalities are required to conduct chemical monitoring, though small municipalities are not.

[1] CGP Order 2009-0009-DWQ remains in effect, but has been amended by CGP Order 2009-0014-DWQ, effective February 14, 2011, and CGP Order 2009-0016-DWQ, effective July 17, 2012. The first amendment merely provided additional clarification to Order 2009-0009-DWQ, while Order 2009-0016-DWQ eliminated numeric effluent limits on pH and turbidity (except in the case of active treatment systems), in response to a legal challenge to the original order.

11.2.1 NPDES C.3 REQUIREMENTS

The NPDES C.3 requirements went into effect for any project (public or private) that is "deemed complete" by the city or county (Lead Agency) on or after February 15, 2005, and which will result in the creation or replacement (other than normal maintenance) of at least 10,000 square feet of impervious surface area (e.g., roofs, streets, patios, parking lots, etc.). Provision C.3 requires the onsite treatment of stormwater prior to its discharge into downstream receiving waters. Note that these requirements are in addition to existing NPDES requirements for erosion and sedimentation controls during project construction that are typically addressed through acquisition of coverage under the SWRCB administered Construction General Permit. The C.3 requirements are typically required to be implemented by MS4 permittees (and their constituencies).

Projects subject to Provision C3 must include the capture and onsite treatment of all stormwater from the site prior to its discharge, including rainwater falling on building rooftops. Project applicants are required to implement appropriate source control and site design measures and to design and implement stormwater treatment measures in order to reduce the discharge of stormwater pollutants to the *maximum extent practicable.* While the CWA does not define "maximum extent practicable," the Stormwater Quality Management Plans required as a condition of the municipal NPDES permits identify control measures (known as BMPs) and, where applicable, performance standards, to establish the level of effort required to satisfy the maximum extent practicable criterion. It is ultimately up to the professional judgment of the reviewing municipal staff in the individual jurisdictions to determine whether a project's proposed stormwater controls will satisfy the maximum extent practicable criterion; however, there are numeric criteria used to ensure that treatment BMPs have been adequately sized to accommodate and treat a site's stormwater. The C3 requirements are quite extensive, and their complete explanation is not provided here. However, the following are minimums that should be understood and adhered to:

- The applicant must provide a detailed and realistic site design *and impervious surface area calculations*. This site design *and calculations* will be used by the Lead Agency (county or city) to determine/*verify* the amount of impervious surface area that is being created or replaced. It should include all proposed buildings, roads, walkways, parking lots, landscape areas, etc., that are being created or redeveloped. If large lots (greater than 10,000 square feet) are being created an effort will need to be made to determine the total impervious surface area that could be created on that parcel. For example if only a portion of the lot is shown as a "building envelope" then the Lead Agency will need to consider that a driveway will have to be constructed to access the envelope and that the envelope will then be developed as shown. If the C.3 thresholds are met (creation/redevelopment of 10,000 square feet of impervious surface area), a Stormwater Control Plan (SWCP) (if required by the Lead Agency, or whatever steps for compliance with Provision C3 are required locally) must accompany the application.

- If a SWCP is required by the Lead Agency for the Proposed Project it must be stamped by a Licensed Civil Engineer, Architect, or Landscape Architect.

11.2.2 APPLICABILITY TO THE PROPOSED PROJECT

The Water Board issued county-wide municipal stormwater permits in the early 1990s to operators of MS4s. On November 19, 2015, the Water Board re-issued these county-wide municipal stormwater permits as one Municipal Regional Stormwater NPDES Permit to regulate stormwater discharges from municipalities and local agencies. Permittees in the San Francisco Bay area are included in a Municipal Regional Permit (MRP), issued to 76 cities, counties and flood control districts in 2009 and revised in 2015. Each of the Permittee's must file an Annual Report that is comprised of three parts: regional, countywide, and individual.

The City of Santa Rosa is an MS-4 permittee. It is the applicant's responsibility to ensure that the Proposed Project's civil engineer prepares all required Storm Water Planning documents for submittal to the City of Santa Rosa to comply with its MS4 permit requirements. In 2017, the City of Santa Rosa released "The Storm Water Low Impact Development Technical Design Manual" (SW LID Manual). The SW LID Manual provides technical guidance for project designs that require the implementation of permanent storm water BMPs. The intent of this manual is to provide design guidance to mitigate negative water quality impacts due to development and otherwise to ensure projects meet the City's MS-4 reporting requirements. The SW LID Manual supersedes both the 2005 SUSMP Guidelines and the 2011 version of this SW LID Manual, both of which similarly provided earlier guidance to the development community, ensuring project compliance with the NPDES and the city's MS-4 requirements.

In addition, as the Proposed Project includes a requirement to obtain a CWA Section 401 permit from the RWQCB, a Storm Water Management Plan prepared in compliance with the SW LID must be submitted to the RWQCB with the application package submitted for acquisition of a Section 401 permit (aka "water quality certification").

11.3 California Department of Fish and Wildlife Protections

11.3.1 SECTION 1602 OF CALIFORNIA FISH AND GAME CODE

Pursuant to Section 1602 of the California Fish and Game Code: "An entity may not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake, unless "CDFW receives written notification regarding the activity in the manner prescribed by CDFW." The notification shall include, but is not limited to, all of the following:

(A) A detailed description of the Proposed Project's location and a map.
(B) The name, if any, of the river, stream, or lake affected.
(C) A detailed project description, including, but not limited to, construction plans and drawings, if applicable.
(D) A copy of any document prepared pursuant to Division 13 (commencing with Section 21000) of the Public Resources Code.
(E) A copy of any other applicable local, state, or federal permit or agreement already issued.
(F) Any other information required by CDFW (Fish & Game Code 2016).

Refer to Section 1602 of the current California Fish and Game Code for further details.

Also note that, while not stated in the regulations above, CDFW typically considers its jurisdiction to include riparian vegetation (that is, the trees and bushes growing along the stream). Thus, any proposed activity in a natural stream channel that would substantially adversely affect an existing fish and/or wildlife resource, including its riparian vegetation, would require entering into a Streambed Alteration Agreement (SBAA) with CDFW prior to commencing with work in the stream. However, prior to authorizing such permits, CDFW typically reviews an analysis of the expected biological impacts, and any proposed mitigation plans that would be implemented to offset biological impacts and engineering and erosion control plans.

11.3.2 Applicability to The Proposed Project

There are no streams or drainages on or adjacent to the Proposed Project Site that would be subject to regulation by CDFW pursuant to Section 1602 of the Fish and Game Code. Hence, an SBAA with CDFW is not required for the Proposed Project.

12. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) REGULATIONS

A CEQA Lead Agency must determine if a proposed activity constitutes a project requiring further review pursuant to CEQA. Pursuant to CEQA, a Lead Agency would have to determine if there could be significant adverse impacts to the environment from a proposed project. Typically, if within the city limits, the city would be the CEQA Lead Agency. If a discretionary permit (i.e., conditional use permit) would be required for a project (e.g., an occupancy permit must be issued), the Lead Agency typically must determine if there could be significant environmental impacts. This is usually accomplished by an "Initial Study." If there could be significant environmental impacts, the Lead Agency must determine an appropriate level of environmental review prior to approving and/or otherwise permitting the impacts. In some cases, there are "Categorical Exemptions" that apply to the proposed activity; thus, the activity is exempt from CEQA. The Categorical Exemptions are provided in CEQA. There are also Statutory Exemptions in CEQA that must be investigated for any proposed project.

If the proposed project is not exempt from CEQA, the lowest level of review typically reserved for projects with no significant effects on the environment would be for the Lead Agency to prepare a "Negative Declaration." If a proposed project would have only minimal impacts that can be mitigated to a level of no significance pursuant to CEQA, then a "Mitigated Negative Declaration" is typically prepared by the Lead Agency. Finally, those projects that may have significant effects on the environment, or that have impacts that can't be mitigated to a level considered less than significant pursuant to CEQA, typically must be reviewed via an Environmental Impact Report (EIR). All CEQA review documents are subject to public circulation and comment periods.

Section 15380 of CEQA defines "endangered" species as those whose survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors. "Rare" species are defined by CEQA as those who are in such low numbers that they could become endangered if

their environment worsens; or the species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered "threatened" as that term is used in FESA. The CEQA Guidelines also state that a project will normally have a significant effect on the environment if it will "substantially affect a rare or endangered species of animal or plant or the habitat of the species." The significance of impacts to a species under CEQA, therefore, must be based on analyzing actual rarity and threat of extinction to that species despite its legal status or lack thereof.

12.1.1 APPLICABILITY TO THE PROPOSED PROJECT

This report has been prepared as a Biology section that is suitable for incorporation by the CEQA Lead Agency (in this case, the City of Santa Rosa) into a CEQA review document such as a Mitigated Negative Declaration or an Environmental Impact Report. This document addresses potential impacts to species that would be defined as endangered or rare pursuant to Section 15380 of the CEQA.

13. IMPACTS ANALYSIS

Below the criteria used in assessing impacts to Biological Resources is presented.

13.1 Significance Criteria

A significant impact is determined using CEQA and CEQA Guidelines. Pursuant to CEQA §21068, a significant effect on the environment means a substantial, or potentially substantial, adverse change in the environment. Pursuant to CEQA Guideline §15382, a significant effect on the environment is further defined as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the proposed project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance. Other Federal, State, and local agencies' considerations and regulations are also used in the evaluation of significance of proposed actions.

Direct and indirect adverse impacts to biological resources are classified as "significant," "potentially significant," or "less than significant." Biological resources are broken down into four categories: vegetation, wildlife, threatened and endangered species, and regulated "waters of the United States" and/or stream channels.

13.1.1 THRESHOLDS OF SIGNIFICANCE

13.1.1.1 Plants, Wildlife, Waters

In accordance with Appendix G (Environmental Checklist Form) of the CEQA Guidelines, implementing the Proposed Project would have a significant biological impact if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS.

- Have a substantial adverse effect on federally protected "wetlands" as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

13.1.1.2 Waters of the United States and State.

Pursuant to Section 404 of the CWA (33 U.S.C. 1344), the Corps regulates the discharge of dredged or fill material into waters of the United States, which includes wetlands, as discussed in the bulleted item above, and also includes "other waters" (stream channels, rivers) (33 CFR Parts 328 through 330). Substantial impacts to Corps regulated areas on a project site would be considered a significant adverse impact. Similarly, pursuant to Section 401 of the Clean Water Act, and to the Porter-Cologne Water Quality Control Act, the RWQCB regulates impacts to waters of the State. Thus, substantial impacts to RWQCB regulated areas on a project site would also be considered a significant adverse impact.

13.1.1.3 Stream Channels

Pursuant to Section 1602 of the California Fish and Game Code, CDFW regulates activities that divert, obstruct, or alter stream flow, or substantially modify the bed, channel, or bank of a stream which CDFW typically considers to include riparian vegetation. Any proposed activity that would result in substantial modifications to a natural stream channel would be considered a significant adverse impact.

14. IMPACT ASSESSMENT AND PROPOSED MITIGATION

In this section potential impacts to sensitive biological resources are discussed, including special-status plants and waters of the United States/State in accordance with Appendix G of the CEQA Guidelines. We follow each impact with a mitigation prescription that when implemented would reduce impacts to the greatest extent possible. This impact analysis is based on a Site Plan prepared by Civil Design Consultants, Inc. in February 2019 (Attachment A: Proposed Project Site Plan).

Appendix G – Checklist Items are listed below. Where there would be significant impacts to checklist categories, these impacts and required mitigation measures are fully discussed below.

Would the Proposed Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?

Yes, impacts and mitigations are detailed below.

Would the Proposed Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS?

No. There is no riparian habitat or sensitive natural community on the project site that has been identified in local or regional plans, policies, regulations, or by the CDFW or USFWS. Therefore, the Proposed Project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community.

Would the Proposed Project have a substantial adverse effect on state or federally protected "wetlands" (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Yes, impacts and mitigations are detailed below.

Would the Proposed Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

No. The Proposed Project would not adversely impact or interfere with wildlife movement corridors. The project site is an open grassland/seasonal wetland mosaic habitat that is surrounded by developed properties on three sides (to the north, south, and east). Though there are some small parcels to the northeast and east that are either designated open space (the Woodbridge Preserve) or currently undeveloped (the Kerry Ranch parcels), these properties abut already developed lands and do not provide a large swath of contiguous, open land that serves as a wildlife movement corridor. To the immediate west of the Proposed Project Site is Fulton Road, a heavily traveled and highly trafficked road which is an impediment to wildlife

movements and removes any wildlife corridor function/value to wildlife originating west of the Proposed Project Site.

Would the Proposed Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No, there are no heritage trees, protected trees, or street trees onsite. There are no other local policies or ordinances with which this project would conflict.

Would the Proposed Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No, there are no Habitat Conservation Plans or Natural Community Conservation Plans in force in the City of Santa Rosa.

14.1 Impacts and Mitigation Measures

14.1.1 Impact BIO-1. Development of the Proposed Project Would Have A Significant Adverse Impact on Suitable Vernal Pool (Rare Plant) Habitat (Significant).

As detailed in this report, several years of special-status plant surveys have been conducted on the project site pursuant to all required CDFW, USFWS, and CNPS Guidelines. Only one CEQA-protected, special-status plant was identified during surveys. A small number of Burke's goldfields were found in isolated pools within the proposed Stonebridge Preserve. Burke's goldfields is a federally-listed and State-listed endangered species that is protected pursuant to both the FESA and the CESA (respectively).

Wetlands where the Burke's goldfields occur within the proposed Stonebridge Preserve are hydrologically isolated from the seasonal wetlands on the western portion of the Proposed Project Site by a naturally occurring watershed break. The residential subdivision component of the Proposed Project has been proposed to occur in a separate micro-watershed than the proposed Stonebridge Preserve to avoid impacting endangered plants. The proposed residential area has a westward breaking watershed, while the proposed Stonebridge Preserve has a watershed that breaks eastward. As the Burke's goldfield colonies only occur within the proposed Stonebridge Preserve, and as these pools will not be directly impacted by proposed wetland enhancement/ creation in the Stonebridge Preserve, ***there will be no direct impacts to occupied Burke's goldfield pools by the Proposed Project. Rather wetlands that will be impacted (by both the development and the wetland enhancement) are regarded as impacting "suitable" vernal pool (rare plant) habitat.***

Approximately 2.65 acres of "suitable" vernal pool (rare plant) habitat will be impacted by the Proposed Project. As detailed in the USFWS' *Programmatic Biological Opinion for U.S. Army Corps of Engineers Permitted Projects that Affect the California Tiger Salamander and Three Endangered Plant Species on the Santa Rosa Plain, California* (USFWS 2007) projects are required to mitigate impacts to suitable vernal pool habitat via preservation of vernal pool habitats. While this project will not rely on use of this Programmatic Biological Opinion, it

nonetheless presents USFWS' regulatory requirements for projects that impact suitable vernal pool habits on the Santa Rosa Plain.

Impacts to "suitable" vernal pool (rare plant) habitat in the Santa Rosa Plain is a significant and adverse impact. This impact would be mitigated to a less than significant level pursuant to CEQA based on the wetlands preservation/restoration and enhancement proposed at the Stonebridge Preserve.

14.1.2 MITIGATION MEASURE BIO-1. FOR IMPACTS TO SUITABLE VERNAL POOL (RARE PLANT) HABITAT

The Proposed Project will mitigate impacts to 2.65 acres of suitable vernal pool (rare plant) habitat via: (1) the creation of 1.766 acres of new vernal pool habitat on the proposed Stonebridge Preserve; (2) the enhancement of an additional 3.267 acres of wetlands in the proposed Stonebridge Preserve; and (3) avoidance/preservation of 0.484-acre of wetlands in the proposed Stonebridge Preserve that support a small number of Burke's goldfield plants (0.484-acre of "occupied" habitat). These actions together will create a total of 5.52 acres of vernal pools that will provide optimal conditions for supporting colonization by Burke's goldfields. The proposed enhancements will emulate similar enhancements at the immediately adjacent Woodbridge Preserve that now supports abundant Burke's goldfield colonies (see photographic proof at Attachment D). This is approximately a 2.1:1 mitigation to impacts ratio which exceeds requirements for plant establishment mitigation for impacts to "suitable" vernal pool (rare plant) habitats as presented in the USFWS' *Santa Rosa Plain Programmatic Biological Opinion* (USFWS 2007).

Pursuant to the USFWS' requirements, compensation mitigation that is required for impacts to "suitable" vernal pool (rare plant) habitat is replacement via 1:1 "occupied or established habitat" (any combination) with success criteria met prior to groundbreaking at a project site and 0.5:1 "established habitat" credit with success criteria met prior to ground breaking. Or, instead, applicants may also mitigate impacts through acquisition and permanent protection of occupied and suitable special-status plant habitats ("conserved land") as permitted by the USFWS (and CDFW). The conserved land must also have a USFWS and CDFW-approved management plan and a non-wasting endowment fund must be established to provide for the in-perpetuity management of the conserved land.

In pre-application meetings with the USFWS and CDFW, these agencies agreed that the proposed mitigation plan for the Proposed Project meets their criteria for Burke's goldfields mitigation on the Santa Rosa Plain.

A mitigation compliance report shall be submitted to the City planning staff or staff biologist at least 30 days prior to breaking ground on the residential subdivision portion of the Proposed Project. The compliance report shall detail the progress that has been made towards implementation of the vernal pool creation/enhancement mitigation measures implemented by the Proposed Project. Provided mitigation is well underway, the City may approve commencement of the development portion of the Proposed Project thereafter.

The above mitigation measure would reduce impacts to Burke's goldfields (special-status plants) to a level considered less than significant pursuant to CEQA.

14.1.1 IMPACT BIO-2. BURKE'S GOLDFIELDS SEED COLLECTION

The Proposed Project includes a proposal to create the Stonebridge Preserve where wetlands would be enhanced and created to inure to the benefit of Burke's goldfields, a state and federally-listed endangered vernal pool plant that occurs on the Santa Rosa Plain. The plan to create and enhance Burke's goldfields habitat will require the collection of this plant's seeds from a property or properties that support healthy donor colonies of Burke's goldfields for use in recolonizing enhanced and created seasonal wetlands within the Stonebridge Preserve.

Pursuant to the CEQA, harvesting Burke's goldfields seeds from a healthy donor site for use in the Stonebridge Preserve, if carefully executed, will not result in significant impacts to donor populations. The wetland enhancement and creation project in the Stonebridge Preserve is expected to increase seasonal wetland functions and values and will significantly increase numbers of endangered Burke's goldfields plants/colonies. The establishment of a new Burke's goldfield preserve will increase the Santa Rosa Plain population of Burke's goldfields which is in keeping with the USFWS' 2016 Recovery Plan for the Santa Rosa Plain (USFWS 2016), and with CDFW's objectives for promotion of endangered vernal pool plants on the Santa Rosa Plain.

None of the sparse occurrences of Burke's goldfields in the proposed Stonebridge Preserve will be impacted during enhancement of wetlands within the Stonebridge Preserve. That is, there will be no direct "take" of Burke's goldfields during the enhancement/recontouring of existing wetlands because the portions of the wetlands where these plants occur will be avoided by the enhancement project. Within the Stonebridge Preserve, wetlands that are not occupied by Burke's will be enhanced to provide conditions that promote the establishment of Burke's goldfield colonies. The proposed enhancement/recontouring of swales in the proposed Preserve will emulate the highly successful wetland recontouring that occurred in the CDFW-owned Woodbridge Preserve which has resulted in a flourishing Burke's goldfield population (refer to Attachment D for photographs of the Woodbridge Preserve Burke's goldfield population).

14.1.2 MITIGATION MEASURE BIO-2. BURKE'S GOLDFIELDS SEED COLLECTION

Per a Seed Collection Plan prepared by L. Stromberg (L. Stromberg 2018c) for the proposed Stonebridge Preserve, Burke's goldfield seeds will be collected from a number of possible source populations including the Alton Lane Mitigation Site and/or the Woodbridge Preserve, and other sites. This seed collection plan shall be implemented as part of the Proposed Project. CDFW owns the Woodbridge Preserve and will own the Alton Lane Mitigation Site in the near future. Since seeds are proposed to be collected in the spring of 2020, for use in the Stonebridge Preserve in 2020, the CDFW would have to permit the collection of Burke's goldfield seeds from one of these sites or other sites that CDFW may designate. The Applicant shall apply to CDFW for an Incidental Take Permit pursuant to Section 2081 of the California Fish and Game Code that allows the collection of Burke's goldfield seeds. This seed collection will allow for the

Stonebridge Preserve Burke's goldfields restoration project to be implemented and is a key component of this restoration project.

When implemented, the above mitigation measure would ensure that the Stonebridge Preserve enhancement project can be completed as proposed by the Applicant. This is a mitigation measure for a less than significant beneficial impact.

14.1.3 IMPACT BIO-3. DEVELOPMENT OF THE PROJECT WOULD HAVE A POTENTIALLY SIGNIFICANT ADVERSE IMPACT ON POTENTIAL CALIFORNIA TIGER SALAMANDER MIGRATION/DISPERSAL HABITAT (POTENTIALLY SIGNIFICANT)

The project site falls within the Sonoma County Distinct Population Segment (DPS) of the California tiger salamander. This DPS is federally listed as endangered and State-listed as threatened; as such, California tiger salamander is protected pursuant to FESA and CESA, respectively. The Proposed Project Site lies within USFWS designated Critical Habitat for this species. While USFWS does not require mitigation for impacts to Critical Habitat, nonetheless, USFWS must consider whether impacts to Critical Habitat would preclude recovery of the species prior to the time it can authorize Incidental Take for proposed projects (G. Monk pers. comm. with J. Hanni of the USFWS, October 2019).

The closest known record of breeding California tiger salamanders to the Proposed Project Site is at the Alton Lane Mitigation Site approximately 2,230 feet to the west of the Proposed Project Site (on the other side of Fulton Road from the Proposed Project). Based upon the USFWS' 2007 *Programmatic Biological Opinion* for the Santa Rosa Plain, that while not being used for the Proposed Project nonetheless sets precedent for USFWS' California tiger salamander mitigation requirements on the Santa Rosa Plain, requires a 1:1 mitigation ratio for a project that is greater than 2,200 feet but within 1.3 miles of a known California tiger salamander breeding site. ***Thus, in accordance with the USFWS' mitigation requirements for impacts to California tiger salamander dispersal/migration habitat, the Proposed Project would result in a potentially significant impact to California tiger salamander dispersal/migration habitat. This impact would be mitigated to a less than significant level pursuant to CEQA.***

14.1.4 MITIGATION MEASURE BIO-3. FOR IMPACTS TO POTENTIAL CALIFORNIA TIGER SALAMANDER MIGRATION/DISPERSAL HABITAT

The project would obtain Incidental Take authorization from the USFWS for impacts to potential California tiger salamander migration/dispersal habitat. The Proposed Project would require a Section 404 permit from the Corps for the discharge of fill or dredged material to waters of the U.S. The Corps would consult with USFWS under Section 7 of FESA. Under Section 7, USFWS will prepare a Biological Opinion (BO) that would provide FESA Incidental Take authorization for the Proposed Project. The BO will impose mitigation requirements for potential impacts to California tiger salamander migration/dispersal habitat and suitable rare plant habitat. These requirements will become conditions of the Corps' permit. The Applicant will implement applicable Corps' permit conditions including the conditions in the USFWS' BO.

The Project includes California tiger salamander mitigation based on the USFWS' *Programmatic Biological Opinion for the Santa Rosa Plain* (USFWS 2007). The mitigation for the Proposed Project's impact on California tiger salamander dispersal/ migration habitat would

be at a 1:1 ratio (i.e., 1 acre of preservation for each acre of development – or a prorata share thereof). The distance based 1:1 mitigation ratio set forth in the USFWS' Programmatic Biological Opinion was discussed in a July 12, 2018, pre-application meeting with the USFWS (Mr. Ryan Olah), M&A biologists, the Applicant (Mr. David Jacobson), and a mitigation banker (Mr. Harvey Rich). In this meeting it was confirmed that the proposed 14.00-acre Preserve would meet the 1:1 mitigation requirement for the project's impacts to California tiger salamander dispersal habitat on 14.00 acres of natural habitats on the Proposed Project Site (approximately 0.60-acre of the 14.60-acre development area is currently developed with buildings or hard-packed, gravel-impregnated roadways and parking areas around buildings (as shown in Figure 11). These developed surfaces do not constitute California tiger salamander habitat that warrants mitigation). The mitigation proposal meets with the objectives of the USFWS' *Recovery Plan for the Santa Rosa Plain* (USFWS 2016).

Thus, if the Protocol survey confirms that California tiger salamander are not found (discussed in Impact BIO-4, below), then mitigation for impacts to California tiger salamander would follow the USFWS' 1:1 mitigation requirement in accordance with the 2007 *Programmatic Biological Opinion* for the Santa Rosa Plain as described above. ***Implementation of this mitigation measure would fully mitigate impacts to California tiger salamander migration/dispersal habitat to a level regarded as less than significant pursuant to the CEQA.***

14.1.5 Impact BIO-4. Development of the Proposed Project Would Have a Potentially Significant Adverse Impact on Potential California Tiger Salamander Breeding and Over-Summering Habitat (Potentially Significant)

Based upon the multitude of California tiger salamander studies conducted over many years on properties immediately adjacent to or near the Proposed Project Site, all that had negative findings, and the absence of CNDDB records for California tiger salamanders east of Fulton Road and north of Santa Rosa Creek (CNDDB records 2019), M&A concludes that implementation of the project is unlikely to result in any impacts to the California tiger salamander, either to occupied habitat or to individual California tiger salamanders. That is, there is no expectation that the Proposed Project would result in "take" of the California tiger salamander. However, CDFW has requested that a full "Protocol" California tiger salamander study be completed pursuant to the "*Interim guidance on site assessment and field surveys for determining presence or a negative finding of the California tiger salamander*" (USFWS 2003). A Protocol California tiger salamander study includes an upland survey (aka "winter pitfall trapping study") and two spring larval breeding pool surveys to prove absence of the California tiger salamander on a project site.

One spring larval survey was completed in the spring of 2019 on the Proposed Project Site per the Protocol and was negative for California tiger salamander larvae. The winter pitfall trapping study is currently underway on the Proposed Project site and will not be completed until March 15, 2020. The second larval survey will be completed by May 15th, 2020. The completion of the Protocol California tiger salamander study will provide data that will either support or refute a conclusion that California tiger salamander are unlikely to occur on the project site. Until the Protocol California tiger salamander study is complete, and the California tiger salamander has been determined conclusively to be absent, ***impacts to the California tiger salamander are***

regarded as potentially significant pursuant to the CEQA. These impacts can be mitigated to a less than significant level pursuant to CEQA.

14.1.6 MITIGATION MEASURE BIO-4. FOR IMPACTS TO OCCUPIED CALIFORNIA TIGER SALAMANDER BREEDING AND OVER-SUMMERING HABITAT

While California tiger salamander are not expected to be found on the Proposed Project Site, should California tiger salamander be found during completion of the Protocol survey, which will not be completed until May 2020, then the Proposed Project Site *shall be regarded as occupied by the California tiger salamander*. If the Proposed Project Site is determined to be occupied by California tiger salamander then the Applicant would obtain a CESA 2081(b) Incidental Take Permit from the CDFW and the Biological Opinion prepared by the USFWS would also include conditions for the Proposed Project to ensure the recovery of the species. Any conditions in these permits/authorizations shall be implemented by the Applicant prior to grading the project site.

In addition, if the Proposed Project Site is determined to be occupied by California tiger salamander, consistent with the mitigation requirements imposed by CDFW and USFWS for impacts to occupied habitat, mitigation shall be implemented at a 3:1 replacement to impacts ratio. That is, three (3) acres of occupied California tiger salamander habitat shall be preserved in perpetuity for each acre of impact from the Proposed Project. The establishment of the Stonebridge Preserve shall be allowed to constitute a pro-rata acreage share of this California tiger salamander mitigation requirement. The remainder of the mitigation could be met by purchasing mitigation credits at an agency-approved mitigation bank.

In lieu of any land preservation, mitigation credits may be purchased by the Applicant to meet "occupied habitat" mitigation requirements, but any mitigation credits purchased to compensate for impacts to occupied California tiger salamander habitat must be approved by both USFWS and CDFW. After approved credits are purchased, proof of purchase shall be provided to the City of Santa Rosa, CDFW, and USFWS prior to the time that grading may commence on the Proposed Project Site. ***Implementation of this mitigation measure would fully mitigate impacts to occupied California tiger salamander habitat to a level regarded as less than significant pursuant to CEQA.***

14.1.7 IMPACT BIO-5. DEVELOPMENT OF THE PROJECT WOULD HAVE A POTENTIALLY SIGNIFICANT ADVERSE IMPACT ON NESTING BIRDS (POTENTIALLY SIGNIFICANT)

White-tailed kite, red-tailed hawk, and red-shouldered hawks are all known from the area and could nest on the Proposed Project Site or within a zone of influence of the Proposed Project Site. Common song birds (passerine birds) could also nest on or immediately adjacent to the Proposed Project Site. These bird species and many others known to nest in the Santa Rosa Plain are protected under the Migratory Bird Treaty Act (50 CFR 10.13). Also, their eggs and young are protected under California Fish and Game Code Sections 3503, 3503.5. Any project-related impacts to these species would be considered a significant adverse impact. Potential impacts to these species from the Proposed Project include disturbance to nesting birds and possibly death of adults and/or young. ***In the absence of survey results, impacts to nesting raptors and song***

birds from the Proposed Project would be potentially significant pursuant to CEQA. This impact could be mitigated to a level considered less than significant.

14.1.8 MITIGATION MEASURE BIO-5. NESTING BIRDS

To avoid impacts to nesting birds, a nesting bird survey shall be conducted within 15 days of commencing with construction work or tree removal if this work would commence between February 1st and August 31st. The nesting survey should include an examination of all buildings and all trees onsite and within 200 feet of the Proposed Project Site (i.e., within a zone of influence of the project site). The zone of influence includes those areas outside the Proposed Project Site where birds could be disturbed by earth- moving vibrations and/or other construction-related noise.

If birds are identified nesting on or within the zone of influence of the Proposed Project, prior to the commencement of construction that could impact the active nest(s), a qualified biologist shall establish a temporary protective nest buffer around the nest(s). The nest buffer should be staked with orange construction fencing. The buffer must be of sufficient size to protect the nesting site from construction-related disturbance and shall be established by a qualified ornithologist or biologist with extensive experience working with nesting birds near and on construction sites. Typically, adequate nesting buffers are 50 feet from the nest site or nest tree dripline for small birds and up to 300 feet for sensitive nesting birds and several raptor species known to nest in the region of the Proposed Project Site.

No construction or earth-moving activity shall occur within any established nest protection buffer prior to September 1 unless it is determined by a qualified ornithologist/biologist that the young have fledged (that is, left the nest) and have attained sufficient flight skills to avoid project construction zones, or that the nesting cycle is otherwise completed. In the region of the Proposed Project Site, most species complete nesting by mid-July. This date can be significantly earlier or later and would have to be determined by the qualified biologist. At the end of the nesting cycle, as determined by a qualified biologist, temporary nesting buffers may be removed and construction may commence in the established nesting buffers without further regard for the buffered nest site(s). ***Implementation of this mitigation measure would reduce impacts to nesting birds to a level regarded as less than significant pursuant to CEQA.***

14.1.9 IMPACT BIO-6. DEVELOPMENT OF THE PROPOSED PROJECT WOULD HAVE A SIGNIFICANT IMPACT ON WATERS OF THE UNITED STATES AND/OR STATE (SIGNIFICANT)

The Corps' approved Administrative Jurisdictional Determination letter (Attachment G) verified 6.31 acres of waters of the U.S. (specifically seasonal wetlands) on the Proposed Project Site. The proposed development project will permanently impact 2.52 acres of seasonal wetlands. In addition, 0.13-acre of seasonal wetlands would be permanently impacted within the Stonebridge Preserve as necessary to enhance the functions and services of wetlands in the Stonebridge Preserve (total = 2.65 acres of permanent fill). Specifically, wetland hydrology that currently pools against the adjacent development's retaining walls will be recontoured into a naturalistic vernal pool configuration and this will require filling 0.13-acre of the 3.79 acres of wetlands that currently occur in the proposed Stonebridge Preserve. Finally, 0.484-acre of existing seasonal

wetland in the Stonebridge Preserve that currently supports Burke's goldfields will be avoided/protected during the implementation of the wetland creation/enhancement project.

The Proposed Project would include the permanent loss of 2.65 acres of seasonal wetlands. ***These impacts are regarded as significant pursuant to the CEQA. The Project includes wetlands mitigation that would reduce impacts to waters of the U.S. to levels regarded as less than significant.***

14.1.10 MITIGATION MEASURE BIO-6. IMPACTS TO WATERS OF THE UNITED STATES /STATE

Given that there are no opportunities for meaningful avoidance or preservation within the development area of the Proposed Project Site, the Proposed Project will compensate for the loss of 2.65 acres of wetlands at a 2:1 mitigation ratio, or as otherwise required by the Corps and RWQCB to achieve "no net loss" of wetlands. Mitigation proposed is as follows:

To compensate for the loss of 2.65 acres of waters of the U.S. and State resulting from construction of the Proposed Project (2.52 acres) and the Stonebridge Preserve (0.13-acre), the Applicant proposes to construct, enhance, and avoid/preserve a total of 5.52 acres of wetlands in the Stonebridge Preserve. This will be accomplished by:

1. creating a total of 1.766 acres of new wetlands from uplands within the Preserve;
2. enhancing 3.267 acres of wetlands within the Preserve; and,
3. avoiding/preserving 0.484-acre of wetlands in the Preserve.

This enhancement, preservation, and creation is shown on Attachment A. Finally, to meet the Corps' "no net loss" policy, the Applicant will also purchase 0.89-acre of wetland mitigation credit from the Hazel Mitigation Bank or another Corps and RWQCB-approved wetland mitigation bank.

In total, after the enhancement and creation, the Stonebridge Preserve that currently supports 3.79 acres of wetlands will support 5.52 acres of enhanced wetlands. Enhancing 3.267 acres of wetlands exceeds a 1:1 impact to mitigation ratio. Thus, in consideration that the Proposed Project will not result in a net loss of waters of the United States/State (per paragraph above) and will enhance an additional 3.267 acres of existing wetlands (which exceeds 1:1 impacts to enhancement ratio), and create 1.766 acres, taken together the Proposed Project *will exceed* a 2:1 overall replacement/enhancement to impacts ratio.

When implemented, the above mitigation measure would reduce impacts to waters of the United States and State to a level considered less than significant.

14.1.11 IMPACT BIO-7. CUMULATIVE IMPACTS TO VEGETATION AND WILDLIFE RESOURCES (LESS THAN SIGNIFICANT)

Implementation of the Proposed Project would contribute to a cumulative loss of seasonal wetlands and non-native annual grassland. Implementation of the development project would also result in cumulative impacts to common plant and animal species. There are other Proposed Projects in Santa Rosa and Sonoma County that would/are impacting similar resources to those

that would be impacted by the Proposed Project. Project-related impacts would be considered cumulative with other projects in the region. ***The mitigation measures prescribed in the section above would offset cumulative impacts to special-status species, seasonal wetlands, and plant communities/wildlife habitats to a level regarded as less than significant.*** The mitigation proposed would also result in a net increase of Burke's goldfields colonies since wetland restoration and enhancement measures on the property would improve hydrologic function in seasonal wetlands specifically to promote colonization of these wetlands by Burke's goldfields.

15. LITERATURE CITED

Baldwin D.H, Goldman D.H., Keil D.J., Patterson R, Rosatti T.J., Wilken D.H. (ed.). 2012. The Jepson Manual Vascular Plants of California: Second Edition. University of California Press, Berkeley. 1568 pps.

Beier, P. and S. Loe. 1992. "In my experience.." a checklist for evaluating impacts to wildlife movement corridors. Wildlife Society Bulletin Vol. 20(4): 6.

Carr, L. W., and L. Fahrig. 2001. Effect of road traffic on two amphibian species of differing vagility. Conservation Biology 15:1071-1078.

CDFW (California Department of Fish and Wildlife). 2016. Complete list of amphibian, reptile, bird and mammal species in California. Published September 2008; updated May 2016.

CDFW (California Department of Fish and Wildlife). 2018. Protocols for surveying and evaluating impacts to special-status native plant populations and sensitive natural communities. State of California. California Natural Resources Agency. Department of Fish and Wildlife. March 20, 2018. 12 pps.

CNDDB (California Natural Diversity Data Base). 2019. RareFind 5. Computer printout for special-status species within a 3-mile radius of the Proposed Project Site. California Natural Heritage Division, California Department of Fish and Wildlife, Sacramento, CA.

CNPS (California Native Plant Society). 2001. Inventory of rare and endangered plants of California (sixth edition). Rare plant scientific advisory committee, David P. Tibor, convening editor. California Native Plant Society. Sacramento, CA. x+338 pps.

Cowardin, L. M., V. Carter, F. C. Golet, and E. T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Department of the Interior, Fish and Wildlife Service, Office of Biological Services, Washington, D.C. 79 pp.

Environmental Laboratory. 1987. U.S. Army Corps of Engineers Wetlands Delineation Manual. Department of the Army, Waterways Experiment Station, Vicksburg, MS.

Fahrig, L., J. H. Pedlar, S. E. Pope, P. D. Taylor, and J. F. Wegner. 1995. Effect of road traffic on amphibian density. Biological Conservation 74:177-182.

Fawcett, Michael and Marco Waaland. 2005. Preliminary California tiger salamander assessment, 1835 Fulton Road. June 26, 2005. 7 pp.

Fawcett, Michael. 2007. Report on two years of California tiger salamander surveys at 2323 and 2285 San Miguel Avenue (APN 034-041-007, 034-041-008), Santa Rosa, California. August 10, 2007. 30 pp.

Gordon, S.P. 2016. Memorandum: Recommendations regarding Burke's goldfields seed sources for Fulton Road Mitigation Site, Santa Rosa, CA. Prepared for: Mr. Harvey Rich, Managing Member, Fulton Road Preserve, LLC. 336 Bon Air Center, Box 232, Greenbrae, CA 94904 and Mr. Jon Stout, Airport Manager, Charles M. Schulz-Sonoma County Airport, 2290 Airport Blvd., Santa Rosa, CA 95403. Prepared by: Sarah P. Gordon, MS, Botanic Consultant, P.O. Box 144, Kenwood, CA 95452, and Michelle Halbur, MS, Preserve Ecologist, Pepperwood Preserve, 2130 Pepperwood Preserve Road, Santa Rosa, CA 95404. 27 pp.

Hels T. and Buchwald E. 2001. The effect of road kills on amphibian populations. *In*: Proceedings of the 2001 International Conference on Ecology and Transportation, Eds. Irwin CL, Garrett P, McDermott KP. Center for the Carolina State University, Raleigh, NC: pp. 25-42.

Holland, V.L. & D.J. Keil. 1995. California vegetation. Kendall/Hunt Publishing Company.

Monk & Associates. 2003a. California tiger salamander (*Ambystoma californiense*) survey, 2003-2004, Montage I project site, Santa Rosa, California. April 20, 2003. 9p + figures and tables.

Monk & Associates. 2003b. California tiger salamander (*Ambystoma californiense*) survey, Montage II project site, Santa Rosa, California. April 19, 2003. 9p + figures, photographs, and tables.

Monk & Associates. 2003c. California tiger salamander (*Ambystoma californiense*) survey, Stone Briar project site, Santa Rosa, California. April 17, 2003. 2p.

Monk & Associates. 2004a. California tiger salamander (*Ambystoma californiense*) survey, Petzel project site, Santa Rosa, California. March 26, 2004. 9p.

Monk & Associates. 2004b. California tiger salamander *(Ambystoma californiense*) survey, 2003-2004, Woodbridge project site, Santa Rosa, California. April 20, 2004. 9p.

Monk & Associates. 2006a. California tiger salamander (*Ambystoma californiense*) survey, 2005-2006, Francisco-South & Kerry Ranch project sites, Santa Rosa, California. August 8, 2006. 9p.

Monk & Associates. 2006b. California tiger salamander (*Ambystoma californiense*) survey, 2005-2006, Francisco-South & Kerry Ranch project sites, Santa Rosa, California. August 20, 2006. 10p.

Monk & Associates. 2007a. California tiger salamander (*Ambystoma californiense*) survey, 2005/2006-2006/2007, Kerry Ranch project sites, Santa Rosa, California. May 31, 2007. 8p.

Monk & Associates. 2007b. California tiger salamander (*Ambystoma californiense*) survey, 2005/2006-2006/2007, Francisco-East project site, Santa Rosa, California. July 31, 2007. 7p.

Monk & Associates. 2007c. California tiger salamander (*Ambystoma californiense*) survey, 2005/2006-2006/2007, Francisco-West project site, Santa Rosa, California. July 31, 2007. 7p.

Monk & Associates. 2007d. California tiger salamander (*Ambystoma californiense*) survey, 2006-2007, Francisco-South project site, Santa Rosa, California. July 31, 2007. 7p.

Monk & Associates. 2008. California tiger salamander (*Ambystoma californiense*) survey, 2007/2008, Francisco Road project site, Santa Rosa, California. September 2, 2008. 7p + figures and tables.

Monk & Associates. 2009a. California tiger salamander (*Ambystoma californiense*) survey, 2007/2008-2008/2009, 1615 Fulton Road project site, Santa Rosa, California. June 25, 2009. 8p + figures and tables.

Monk & Associates. 2009b. California tiger salamander (*Ambystoma californiense*) survey, 2007/2008-2008/2009, Francisco Road project site, Santa Rosa, California. June 25, 2009. 8p.

Pacific Traffic and Transit Services. 2015. Traffic counts. Fulton between Piner and Piner High School. April 28, 2015.

Stromberg, L.P. 2018a. Figure 3. Existing drainage network and watershed boundaries on the Woodside Holdings Property.

Stromberg, L.P. 2018b. Results of multi-year survey for special-status plant species. Woodside Holdings Property (A. P. No. 034-043-070) Santa Rosa, California. March 30, 2018.

Stromberg, L.P. 2018c. Seed collection plan Stonebridge Preserve. Report submitted to Mr. Gregg Erickson, Regional Manager, Bay-Delta Region, California Department of Fish and Wildlife, 7329 Silverado Trail, Yountville, CA 994558. Prepared for Woodside Holdings, LP, 47 Bellevue Avenue, San Rafael, CA 94901. 34 pp. December 4.

Stromberg, L.P. and S. Gordon. 2019a. First annual monitoring report. 2018. California Endangered Species Act scientific, educational, or management permit no. 2081(a)-15-007-RP amendment 1. Charles M. Schulz - Sonoma County airport runway safety enhancement project. Recovery of donor plots at Woodbridge Preserve. Prepared for Fulton Road Preserve, LLC, Mr. Harvey Rich, managing member. 33 pps. January 30, 2019.

Stromberg, L.P. and S. P. Gordon. 2019b. First annual monitoring report. 2018. California Endangered Species Act Scientific, Educational, or Management Permit No. 2081(a)-15-

007-RP Amendment 1, Charles M. Schulz - Sonoma County Airport Runway Safety Enhancement Project. Recovery of plots at Alton North Conservation Bank. Prepared for Fulton Road Preserve, LLC, Mr. Harvey Rich, Managing Member. 41 pp. January 30, 2019.

USFWS (U.S. Fish & Wildlife Service). 2000. Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed Proposed and Candidate Plants. January 2000.

USFWS (U.S. Fish & Wildlife Service). 2003. Interim guidance on site assessment and field surveys for determining presence or a negative finding of the California tiger salamander. October 2003. Joint survey protocol released by the California Department of Fish and Game and the U.S. Fish and Wildlife Service. October 2003. 12 pp.

USFWS (U.S. Fish & Wildlife Service). 2004. Endangered and threatened wildlife and plants; determination of threatened status for the California tiger salamander; and special rule exemption for existing routine ranching activities; Final Rule. Federal Register Vol 69, No 149 pps. 47212-47248. August 4, 2004.

USFWS (U.S. Fish & Wildlife Service) et. al. 2005. Santa Rosa Plain Conservation Strategy. Appendix D-Guidelines for conducting and reporting botanical inventories for federally listed plants on the Santa Rosa Plain (modified from the September 23, 1996 USFWS guidelines for conducting and reporting botanical inventories for federally listed, proposed and candidate plants).

USFWS (U.S. Fish & Wildlife Service). 2007. Programmatic Biological Opinion (Programmatic) for U.S. Army Corps of Engineers (Corps) Permitted Projects that Affect the California Tiger Salamander and Three Endangered Plant Species on the Santa Rosa Plain, California (Corps File No. 223420N). November 9, 2007. 41 pp. w/ Enclosures.

USFWS (U.S. Fish & Wildlife Service). 2011. Endangered and Threatened Wildlife and Plants: Revised Designation of Critical Habitat for the Sonoma County Distinct Population Segment of California Tiger Salamander; Final Rule. Federal Register 50 CFR Part 17 August 31, 2011 (Volume 76, Number 169) Page 54346.

USFWS (U.S. Fish and Wildlife Service). 2016. Recovery Plan for the Santa Rosa Plain: *Blennosperma bakeri* (Sonoma sunshine)*; Lasthenia burkei* (Burke's goldfields)*; Limnanthes vinculans* (Sebastopol meadowfoam); California Tiger Salamander Sonoma County Distinct Population Segment (*Ambystoma californiense*). U.S. Fish and Wildlife Service, Pacific Southwest Region, Sacramento, California. vi + 128 pp. June 20, 2016. Federal Register. Pages: 39945-39946.

van Gelder, J. J. 1973. A quantitative approach to the mortality resulting from traffic in a population of Bufo bufo L. Oecologia 13:93-95.

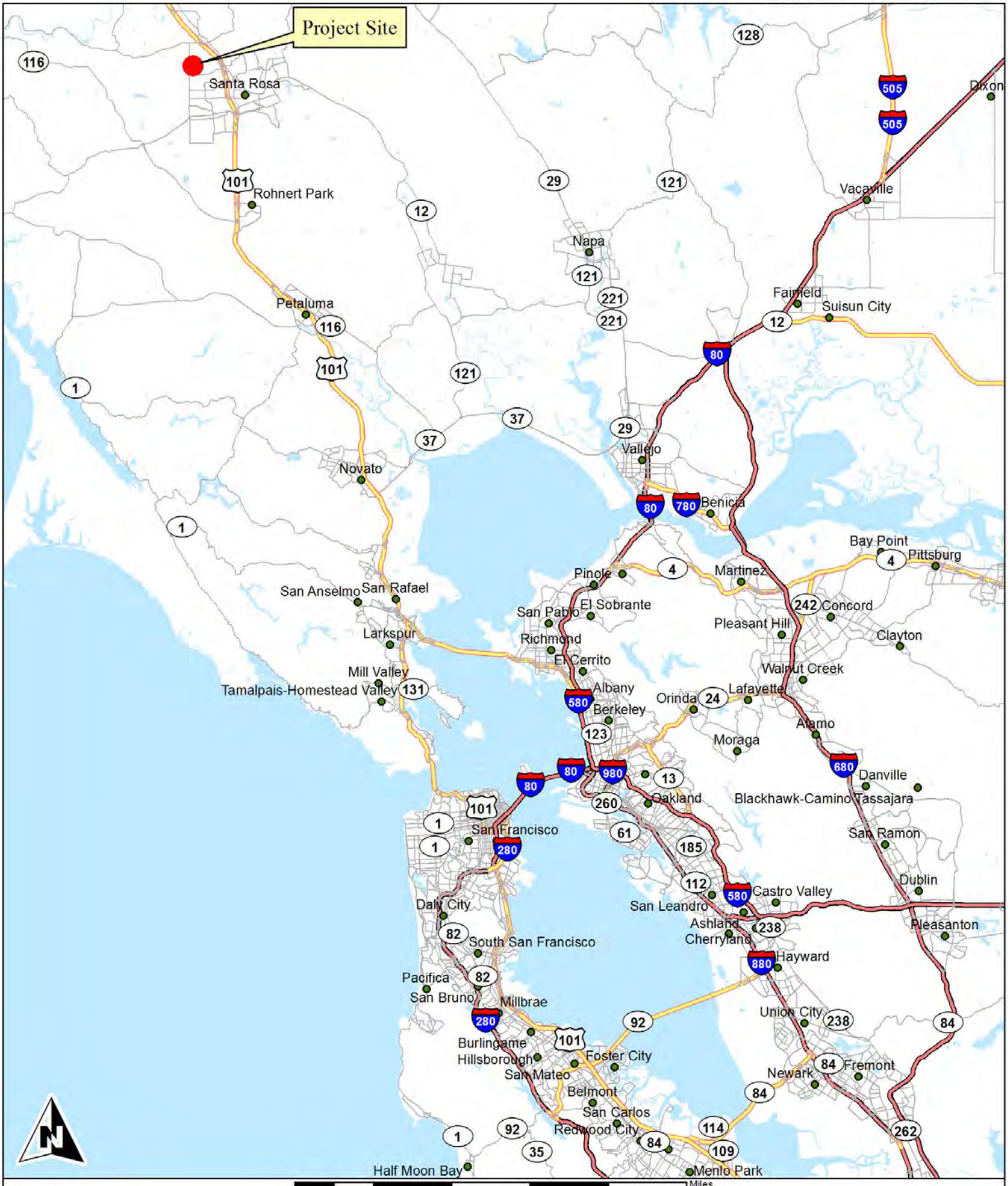

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Figure 1. Stonebridge, 2220 Fulton Road Project Site
Regional Map
Santa Rosa, California

County: Sonoma
Map Preparation Date: June 18, 2019

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Figure 2. Stonebridge, 2220 Fulton Road Project Site
Location Map
Santa Rosa, California

38.485319 -122.766168
Section: 5; T7N R8W
7.5-Minute Sebastopol quadrangle
Aerial Photograph Source: ESRI
Map Preparation Date: June 18, 2019

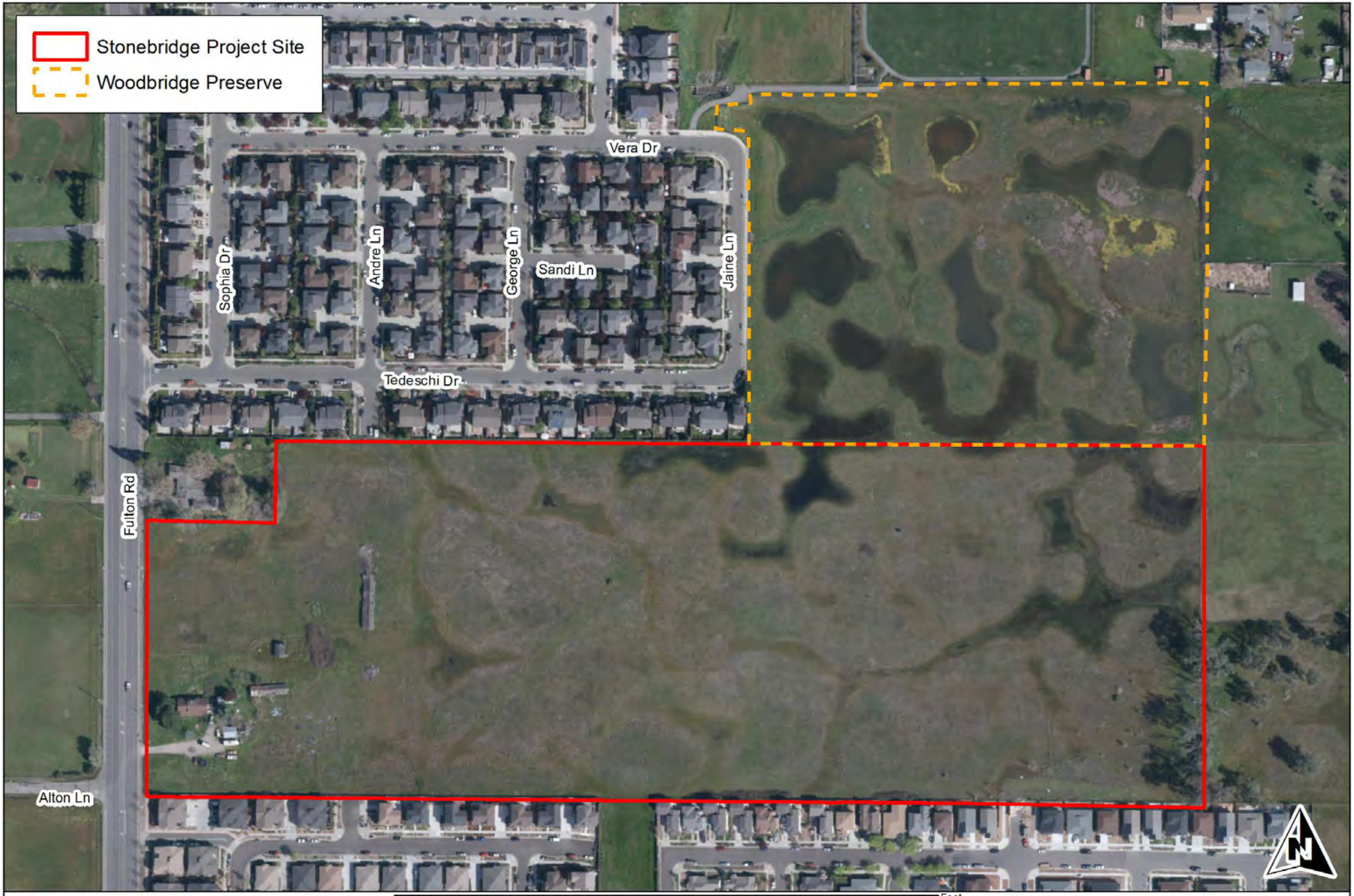

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Figure 3. Aerial Photograph of the
Stonebridge, 2220 Fulton Road Project Site
Santa Rosa, California

Aerial Photograph Source: ESRI
Map Preparation Date: June 18, 2019

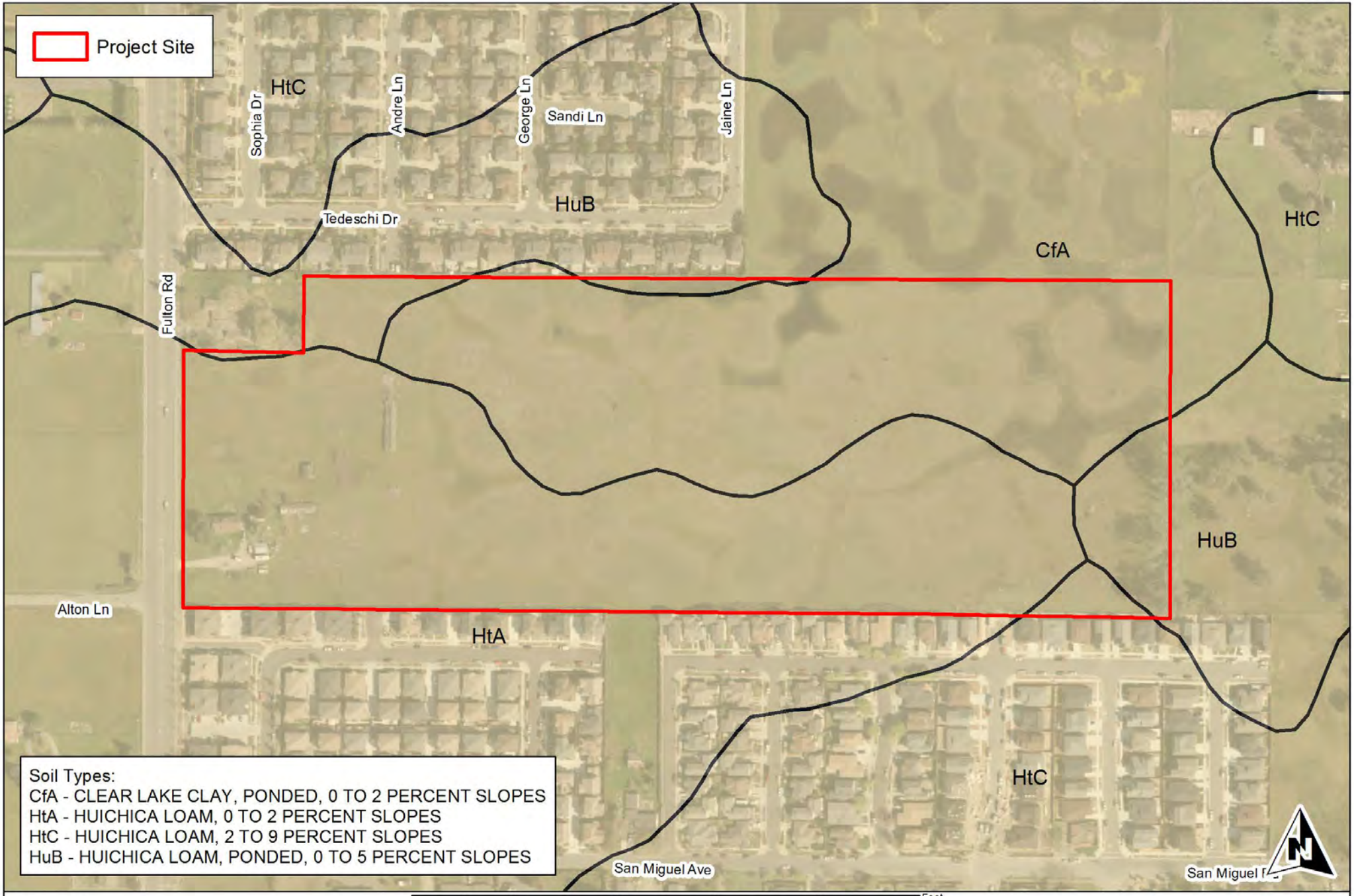

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Figure 4. Soil types of the
Stonebridge, 2220 Fulton Road Project Site
Santa Rosa, California

Aerial Photograph Source: ESRI
Map Preparation Date: June 18, 2019
Soils Data Source:
USDA NRCS Soil Survey Maps

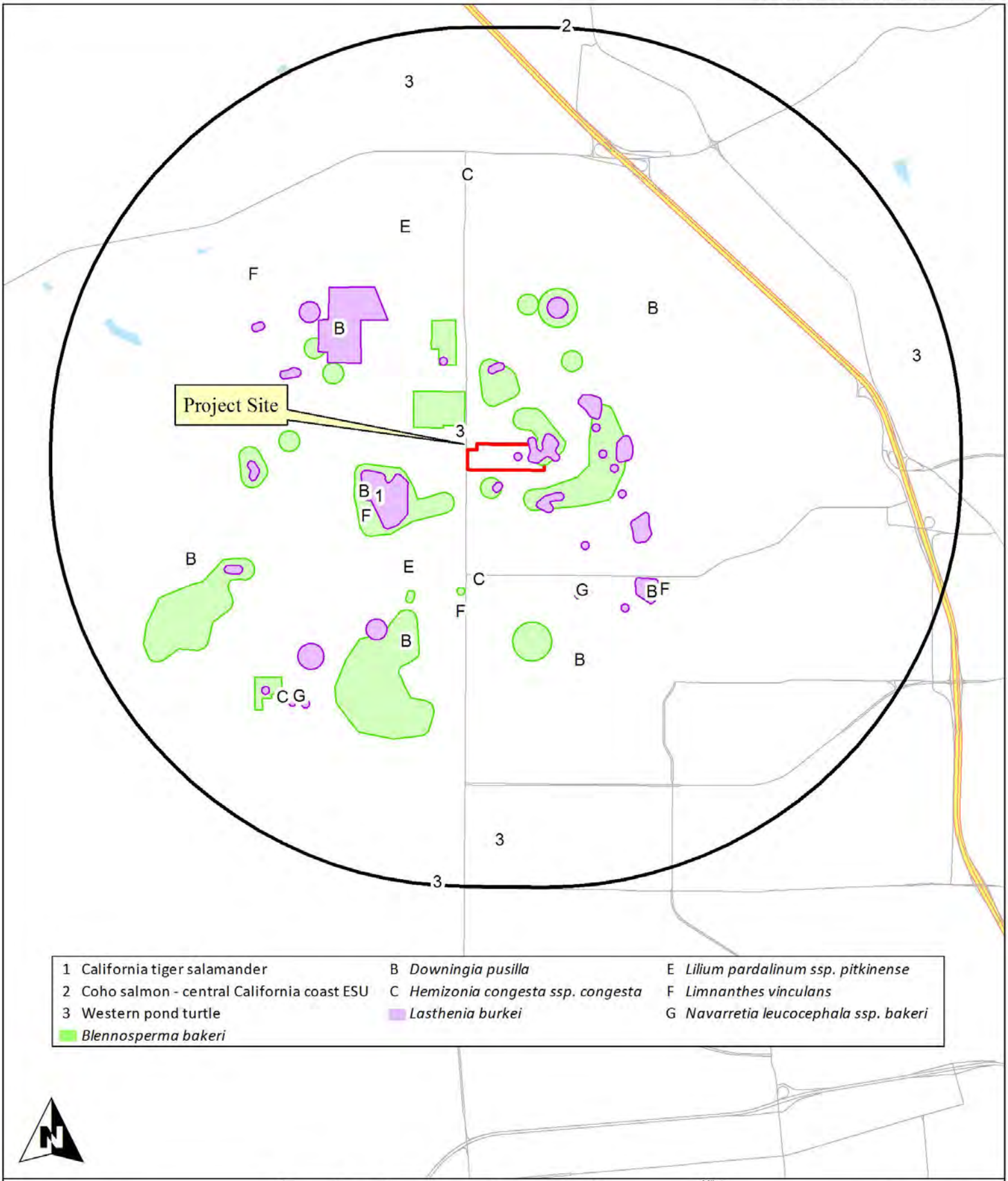

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Figure 5. Special-Status Species
Within 2 Miles of the
Stonebridge, 2220 Fulton Road Project Site

Map Preparation Date:
June 18, 2019
2-Mile Radius
Source: CDFW, California
Natural Diversity Data Base, 2019

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Figure 6. Occupied and Suitable Burke's goldfields (*Lasthenia burkei*) Habitats
Stonebridge, 2220 Fulton Road Project Site
Santa Rosa, California

Aerial Photograph Source: ESRI
Map Preparation Date: June 18, 2019

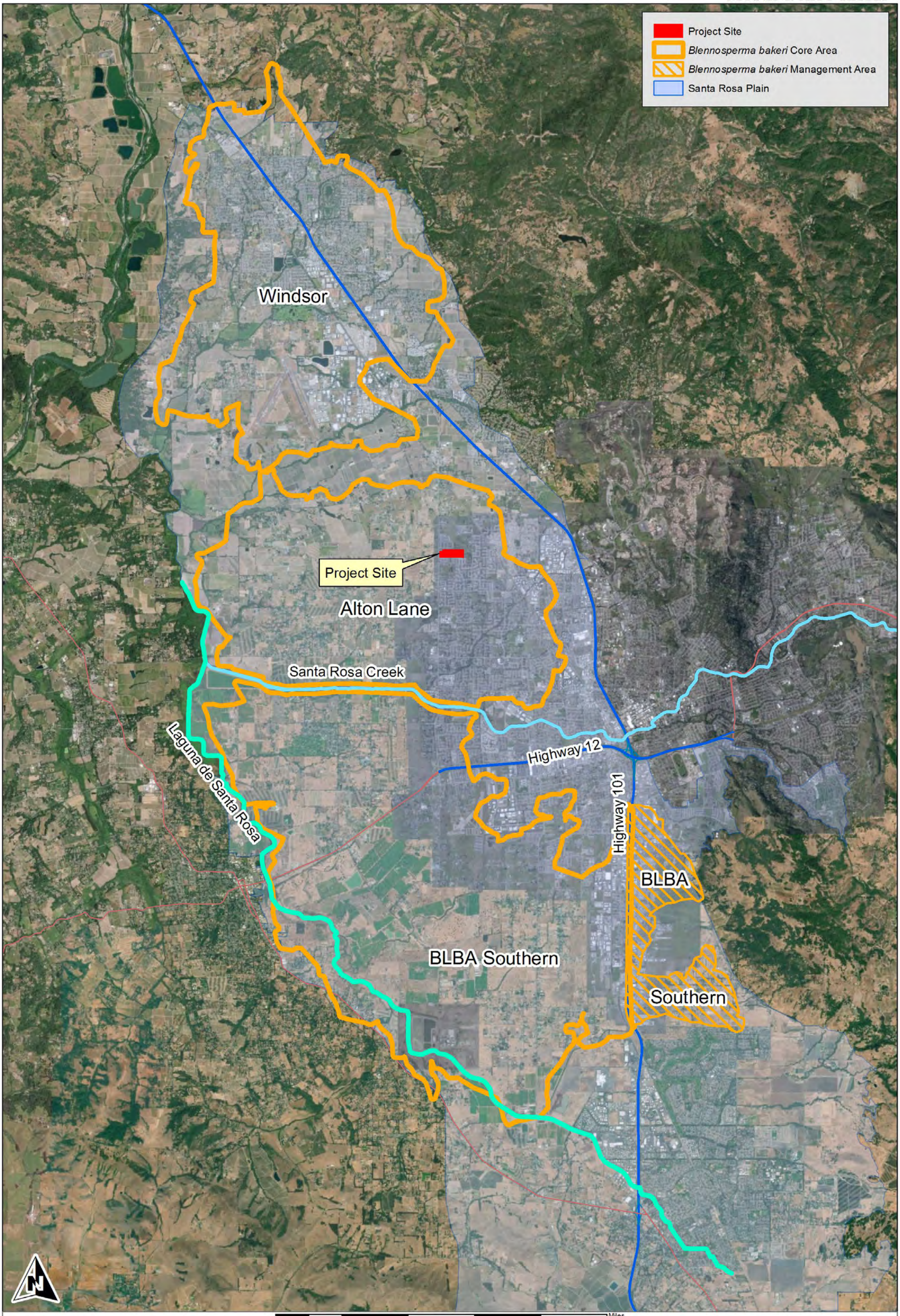

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Figure 7. *Blennosperma bakeri* Core and Management Areas (from USFWS 2016) in the Vicinity of the Stonebridge, 2220 Fulton Road Project Site

County: Sonoma
Aerial Photograph Source: ESRI
Map Preparation Date: June 18, 2019

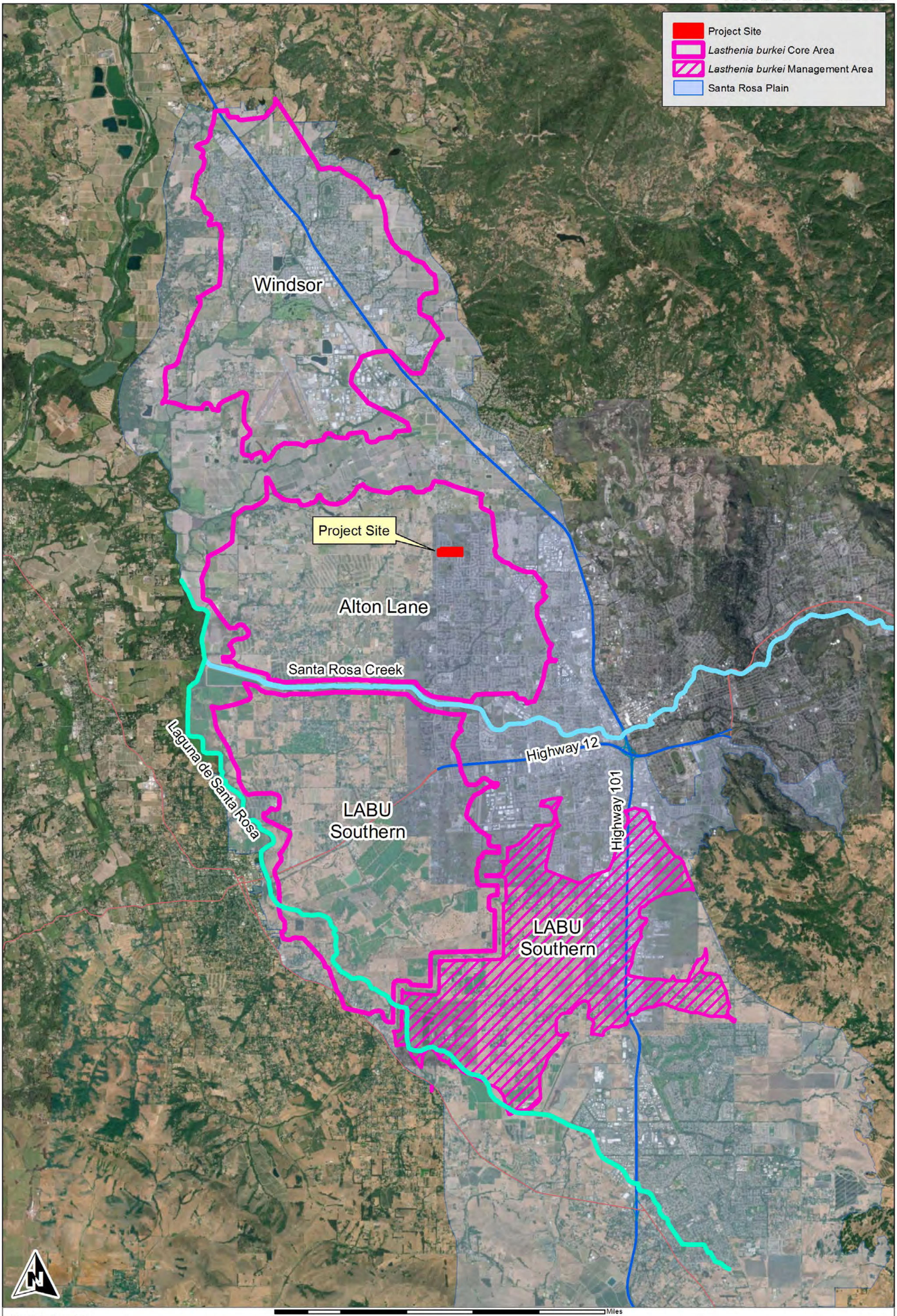

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Figure 8. *Lasthenia burkei* Core and Management Areas (from USFWS 2016) in the Vicinity of the Stonebridge, 2220 Fulton Road Project Site

County: Sonoma
Aerial Photograph Source: ESRI
Map Preparation Date: June 18, 2019

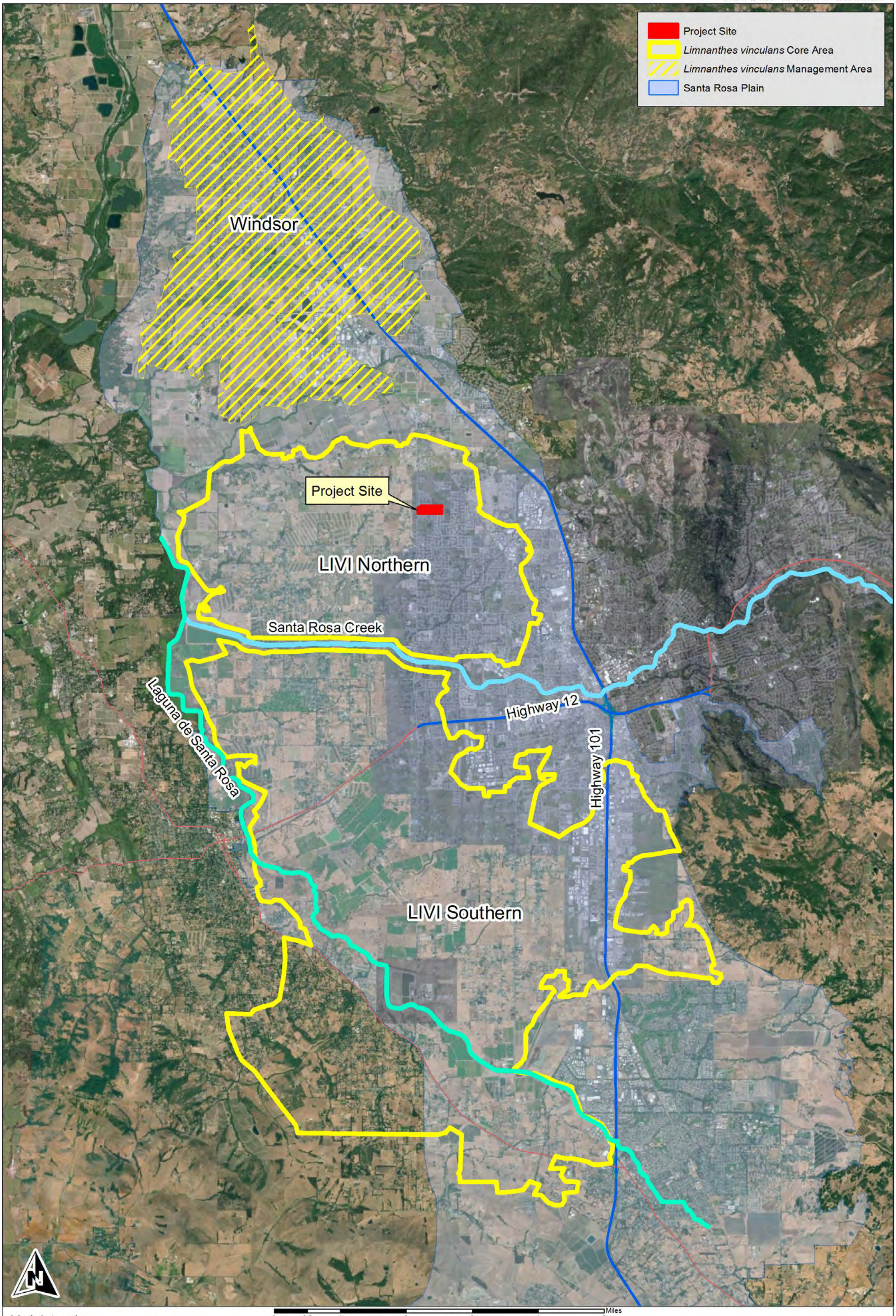

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Figure 9. *Limnanthes vinculans* Core and Management Areas (from USFWS 2016) in the Vicinity of the Stonebridge, 2220 Fulton Road Project Site

County: Sonoma
Aerial Photograph Source: ESRI
Map Preparation Date: June 18, 2019

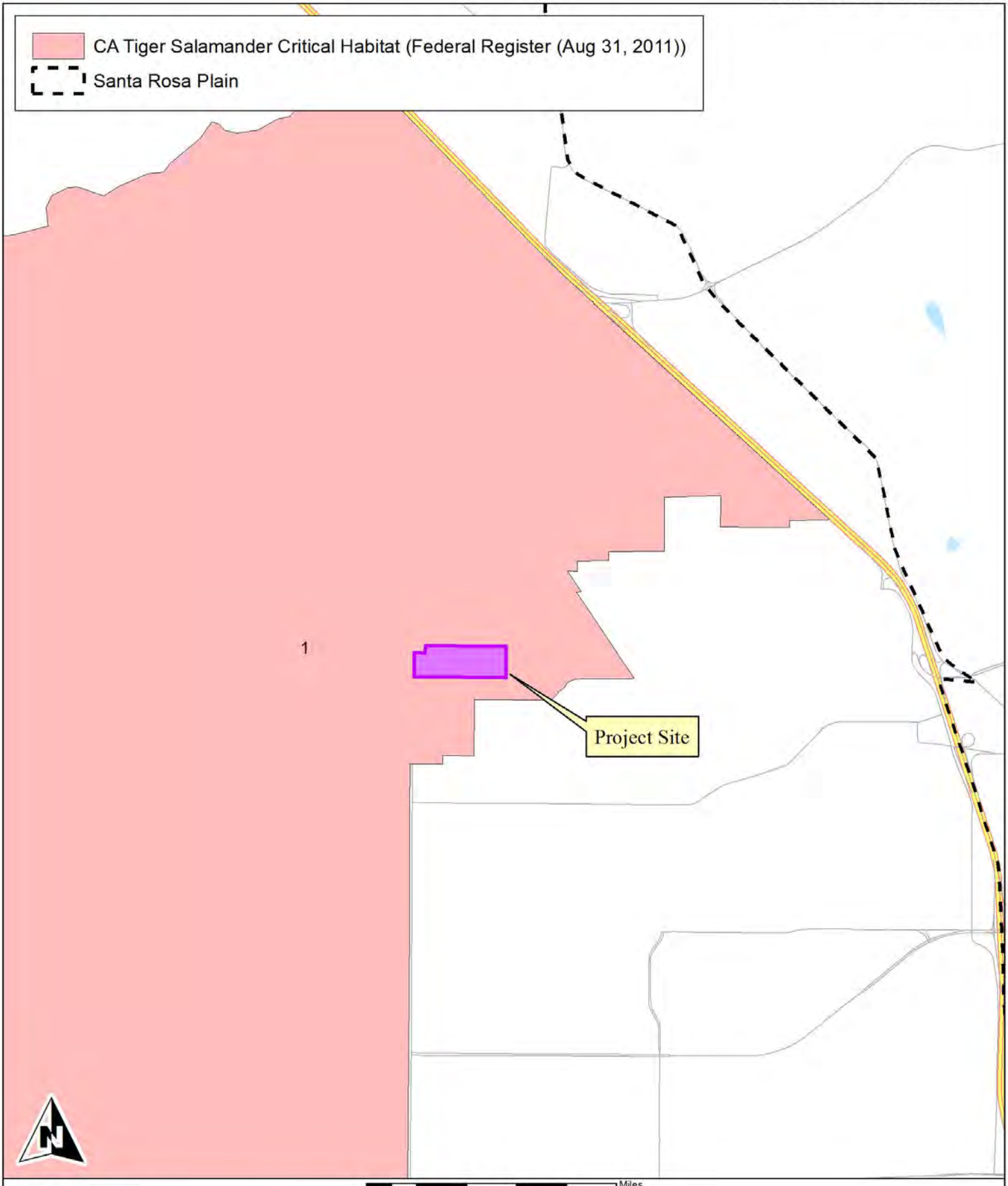

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Figure 10. USFWS Critical Habitat in the Vicinity of the Stonebridge, 2220 Fulton Road Project Site
Santa Rosa, California

Source: USFWS
Map Preparation Date: June 18, 2019

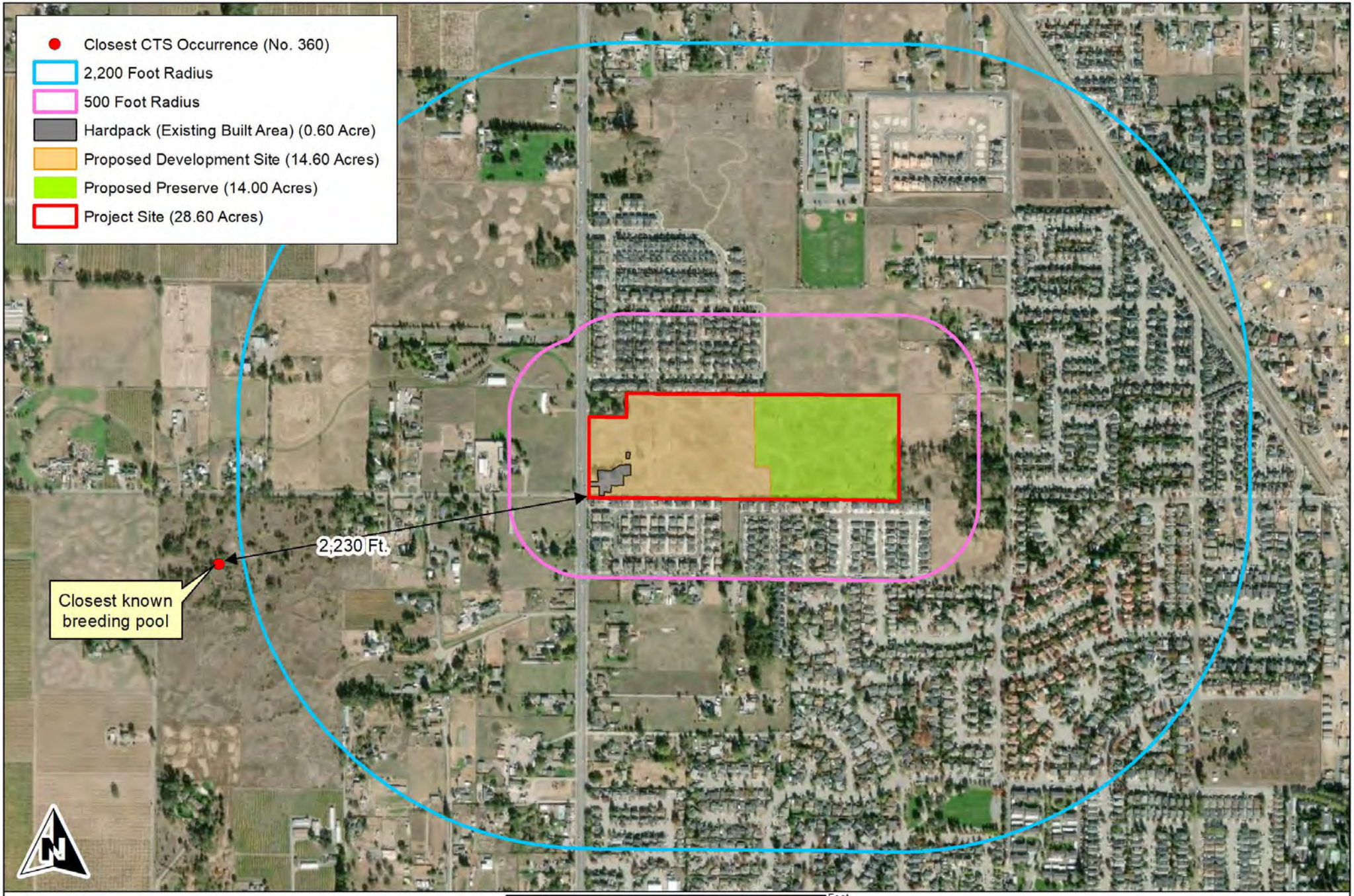

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Figure 11. Closest Known Occurrence of
CTS to the Stonebridge, 2220 Fulton Road Project Site
(Source: CDFW CNDDB Records)

Aerial Photograph Source: ESRI
Map Preparation Date: February 20, 2020

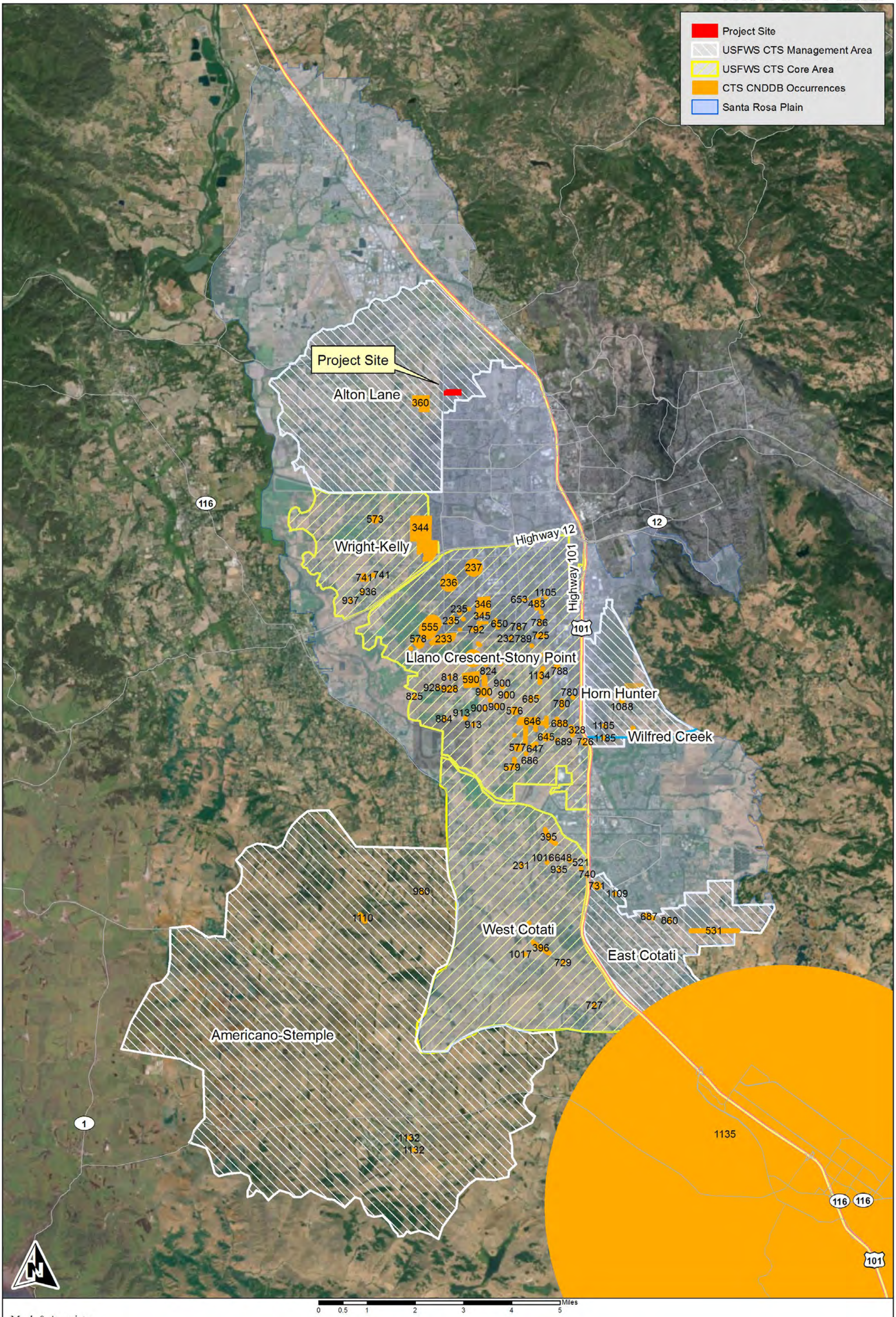

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Figure 12. Santa Rosa Plain California Tiger Salamander Core and Management Areas (USFWS 2016) in the Vicinity of the Stonebridge, 2220 Fulton Road Project Site

County: Sonoma
Aerial Photograph Source: ESRI
Map Preparation Date: June 18, 2019

Table 1

Plants Observed at the Stonebridge, 2220 Fulton Road Project Site

Gymnosperms

Cupressaceae

Hesperocyparis macrocarpa	Monterey cypress

Pinaceae

Pinus radiata	Monterey pine

Angiosperms - Dicots

Apiaceae

Daucus pusillus	Rattlesnake weed
Eryngium aristulatum var. aristulatum	California coyote-thistle
**Foeniculum vulgare*	Sweet fennel
Sanicula bipinnatifida	Purple sanicle
**Torilis nodosa*	Knotted hedge-parsley

Araliaceae

**Hedera helix*	English ivy

Asteraceae

Achyrachaena mollis	Blow-wives
Agoseris heterophylla var. heterophylla	False dandelion
Anaphalis margaritacea	Pearly everlasting
**Anthemis cotula*	Mayweed
Baccharis pilularis subsp. consanguinea	Coyote brush
**Carduus pycnocephalus subsp. pycnocephalus*	Italian thistle
**Cichorium intybus*	Chicory
**Cirsium vulgare*	Bull thistle
**Cotula coronopifolia*	Brass-buttons
Erigeron canadensis	Horseweed
**Helminthotheca echioides*	Bristly ox-tongue
**Hypochaeris glabra*	Smooth cat's-ear
**Hypochaeris radicata*	Rough cat's-ear
**Lactuca saligna*	Willow lettuce
**Lactuca serriola*	Prickly lettuce
Lasthenia burkei	Burke's goldfields
Lasthenia glaberrima	Smooth goldfields
**Leontodon saxatilis*	Long-beaked hawkbit
**Matricaria chamomilla*	German chamomile
**Pseudognaphalium luteoalbum*	Everlasting cudweed
**Senecio vulgaris*	Common groundsel
**Soliva sessilis*	Field burrweed
**Sonchus asper subsp. asper*	Prickly sow-thistle
**Sonchus oleraceus*	Common sow-thistle
**Taraxacum officinale*	Common dandelion
**Tragopogon porrifolius*	Common salsify
Xanthium strumarium	Cocklebur

* Indicates a non-native species

Table 1

Plants Observed at the Stonebridge, 2220 Fulton Road Project Site

Boraginaceae	
Plagiobothrys bracteatus	Bracted popcornflower
Plagiobothrys stipitatus var. stipitatus	Showy Great Valley popcornflower
Plagiobothrys undulatus	Wavy-stemmed popcornflower
Brassicaceae	
**Brassica nigra*	Black mustard
**Capsella bursa-pastoris*	Shepherd's purse
Cardamine oligosperma	Few-seed bittercress
**Hirschfeldia incana*	Short-podded mustard
Lepidium nitidum	Shining peppergrass
**Raphanus sativus*	Wild radish
Campanulaceae	
Downingia concolor var. concolor	Downingia
Downingia cuspidata	Toothed downingia
Caryophyllaceae	
**Cerastium glomeratum*	Mouse-ear chickweed
**Stellaria media*	Common chickweed
Convolvulaceae	
**Convolvulus arvensis*	Bindweed
Crassulaceae	
Crassula aquatica	Water pygmy-weed
Cucurbitaceae	
Marah fabacea	Wild cucumber
Euphorbiaceae	
Croton setiger	Turkey mullein
Fabaceae	
Acmispon brachycarpus	Short podded lotus
**Lotus corniculatus*	Birdfoot trefoil
Lupinus bicolor	Bicolored lupine
Lupinus nanus	Sky lupine
**Medicago polymorpha*	California burclover
Trifolium depauperatum	Dwarf sack clover
**Trifolium dubium*	Little hop clover
**Trifolium repens*	White clover
**Trifolium subterraneum*	Subterranean clover
Trifolium variegatum	White-tip clover
Trifolium willdenovii	Tomcat clover
**Vicia benghalensis*	Purple vetch
**Vicia cracca*	Bird vetch
**Vicia sativa*	Common vetch
Fagaceae	
Quercus agrifolia var. agrifolia	Coast live oak

* Indicates a non-native species

Table 1

Plants Observed at the Stonebridge, 2220 Fulton Road Project Site

Geraniaceae	
**Erodium botrys*	Broad-leaf filaree
**Erodium cicutarium*	Red-stem filaree
**Erodium moschatum*	White-stem filaree
**Geranium dissectum*	Cut-leaf geranium
Juglandaceae	
**Juglans regia*	English walnut
Lamiaceae	
**Mentha pulegium*	Pennyroyal
Limnanthaceae	
Limnanthes douglasii subsp. nivea	Douglas' meadowfoam
Lythraceae	
**Lythrum hyssopifolia*	Hyssop loosestrife
Malvaceae	
**Malva nicaeensis*	Bull mallow
Sidalcea calycosa subsp. calycosa	Annual checker mallow
Myrsinaceae	
**Lysimachia arvensis*	Scarlet pimpernel
Myrtaceae	
**Eucalyptus globulus*	Blue gum
Onagraceae	
Epilobium brachycarpum	Summer cottonweed
Taraxia ovata	Sun cup
Orobanchaceae	
**Parentucellia viscosa*	Yellow glandweed
Triphysaria versicolor subsp. faucibarbata	Yellow owl's-clover
Papaveraceae	
Eschscholzia californica	California poppy
Plantaginaceae	
Callitriche heterophylla var. heterophylla	Larger water-starwort
Callitriche marginata	Winged water-starwort
Gratiola ebracteata	Bractless hedge-hyssop
Plantago erecta	Plantain
**Plantago lanceolata*	English plantain
Veronica peregrina subsp. xalapensis	Purslane speedwell
Polygonaceae	
**Polygonum aviculare*	Common knotweed
**Rumex acetosella*	Sheep sorrel
**Rumex crispus*	Curly dock
**Rumex pulcher*	Fiddle dock

* Indicates a non-native species

Table 1

Plants Observed at the Stonebridge, 2220 Fulton Road Project Site

Ranunculaceae

Ranunculus californicus	California buttercup
Ranunculus lobbii	Lobb's aquatic buttercup
**Ranunculus muricatus*	Spiny-fruit buttercup
Ranunculus pusillus	Low buttercup

Rosaceae

**Prunus cerasifera*	Cherry plum
Prunus sp.	Prunus
**Rubus armeniacus*	Himalayan blackberry

Angiosperms -Monocots

Agavaceae

Chlorogalum pomeridianum var. pomeridianum	Soap plant

Cyperaceae

Cyperus eragrostis	Tall flatsedge
Eleocharis macrostachya	Creeping spikerush

Juncaceae

Juncus bufonius	Toad rush
**Juncus capitatus*	Dwarf rush
Juncus tenuis	Slender rush

Juncaginaceae

Triglochin scilloides	Flowering quillwort

Poaceae

**Aira caryophyllea*	Silver European hairgrass
**Anthoxanthum aristatum subsp. aristatum*	Annual vernal grass
**Avena barbata*	Slender wild oat
**Briza maxima*	Rattlesnake grass
**Briza minor*	Small quaking grass
Bromus carinatus var. carinatus	California brome
**Bromus diandrus*	Ripgut grass
**Bromus hordeaceus*	Soft chess
**Bromus madritensis subsp. madritensis*	Foxtail chess
**Cynodon dactylon*	Bermudagrass
**Cynosurus echinatus*	Dogtail Grass
Danthonia californica	California oatgrass
Deschampsia danthonioides	Annual hairgrass
**Elymus caput-medusae*	Medusahead
**Festuca bromoides*	Brome fescue
**Festuca myuros*	Rattail sixweeks grass
**Festuca perennis*	perennial ryegrass
Hordeum brachyantherum	Meadow barley
**Hordeum marinum subsp. gussoneanum*	Mediterranean barley
**Hordeum murinum subsp. leporinum*	Hare barley
**Phalaris aquatica*	Harding grass
Pleuropogon californicus var. californicus	Annual semaphore grass

* Indicates a non-native species

Table 1

Plants Observed at the Stonebridge, 2220 Fulton Road Project Site

**Poa annua*	Annual bluegrass
**Polypogon monspeliensis*	Annual beard grass
Themidaceae	
Brodiaea elegans subsp. elegans	Harvest brodiaea
Triteleia hyacinthina	White brodiaea

* Indicates a non-native species

Table 2
Wildlife Observed at the Stonebridge, 2220 Fulton Road Project Site

Amphibians	
Sierran treefrog	*Pseudacris sierra*
Reptiles	
California red-sided garter snake	*Thamnophis sirtalis infernalis*
Birds	
lesser yellow legs	*Tringa flavipes*
Snowy egret	*Egretta thula*
Mallard	*Anas platyrhynchos*
Mourning dove	*Zenaida macroura*
Anna's hummingbird	*Calypte anna*
Black phoebe	*Sayornis nigricans*
California scrub jay	*Aphelocoma californica*
American crow	*Corvus brachyrhynchos*
Northern mockingbird	*Mimus polyglottos*
European starling	*Sturnus vulgaris*
Cedar waxwing	*Bombycilla cedrorum*
California towhee	*Pipilo crissalis*
Mammals	
Botta's pocket gopher	*Thomomys bottae*
Raccoon	*Procyon lotor*

Table 3

Special-Status Plants Known to Occur Within Two Miles of the Stonebridge Project Site

Family Taxon Common Name	Status*	Flowering Period	Habitat	Area Locations	Probability on Project Site
Asteraceae					
Blennosperma bakeri Sonoma sunshine	Fed: FE State: CE CNPS: Rank 1B.1	February-April	Valley and foothill grassland (mesic); vernal pools.	Closest record for this species is a historic record on the project site (Occurrence No. 10, mapped by CNDDB as a polygon covering several properties).	None. Not observed onsite in 2015, 2016, 2017, or 2019 appropriately timed surveys. No impact to plant expected from development; the Preserve will provide habitat. See text.
Hemizonia congesta congesta White seaside tarplant	Fed: - State: - CNPS: Rank 1B.2	April-November	Valley and foothill grassland. 20 to 560 meters. Clay soils	Closest record for this species located approximately 0.6-mile south of the project site (Occurrence No. 23).	None. Was not observed during years of appropriately timed surveys. No impact expected.
Lasthenia burkei Burke's goldfields	Fed: FE State: CE CNPS: Rank 1B.1	April-June	Meadows and seeps (mesic); vernal pools.	Observed on the project site and also 0.6-mile south of the project site (Occurrence No. 19 and 23).	High. Was observed during appropriately timed surveys. Will be protected in a habitat Preserve. See text.
Campanulaceae					
Downingia pusilla Dwarf downingia	Fed: - State: - CNPS: Rank 2.2	March-May	Valley and foothill grassland (mesic); vernal pools.	Closest record for this species located approximately 0.4-mile west of the project site (Occurrence No. 80).	None. Was not observed during years of appropriately timed surveys. No impact expected.
Liliaceae					
Lilium pardalinum pitkinense Pitkin Marsh lily	Fed: FE State: CE CNPS: Rank 1B.1	June-July	Cismontane woodland (mesic); meadows and seeps; marshes and swamps (freshwater).	Closest record for this species located in the vicinity of the project site (Occurrence No. 1).	None. No suitable habitat onsite. It was not observed during years of appropriately timed surveys. No impact expected.

Table 3

Special-Status Plants Known to Occur Within Two Miles of the Stonebridge Project Site

Family Taxon Common Name	Status*	Flowering Period	Habitat	Area Locations	Probability on Project Site
Limnanthaceae					
Limnanthes vinculans Sebastopol meadowfoam	Fed: FE State: CE CNPS: Rank 1B.1	April-May	Meadows (mesic); vernal pools.	Closest record for this species located apprioximately 0.4 mile west of the project site (Occurrence No. 21).	None. Not observed onsite during years of appropriately timed surveys. No impact to plant expected from development. Regardless, the Preserve will provide habitat. See text.
Polemoniaceae					
Navarretia leucocephala bakeri Baker's navarretia	Fed: - State: - CNPS: Rank 1B.1	May-July	Cismontane woodland; lower montane coniferous forest; meadows (mesic); valley and foothill grassland; vernal pools.	Closest record for this species located approximately 0.6-mile south of the project site (Occurrence No. 20).	None. Was not observed during years of appropriately timed surveys. No impact expected.
Ranunculaceae					
Ranunculus lobbii Lobb's aquatic buttercup	Fed: - State: - CNPS: Rank 4	March-May	Cismontane woodland; north coast coniferous forest; valley and foothill grassland; vernal pools; [mesic].	Observed in the wetlands onsite.	High. Observed during surveys onsite. Will be protected in the onsite habitat Preserve.

Table 3

Special-Status Plants Known to Occur Within Two Miles of the Stonebridge Project Site

Family Taxon Common Name	Status*	Flowering Period	Habitat	Area Locations	Probability on Project Site

***Status**

Federal:
FE - Federal Endangered
FT - Federal Threatened
FPE - Federal Proposed Endangered
FPT - Federal Proposed Threatened
FC - Federal Candidate

State:
CE - California Endangered
CT - California Threatened
CR - California Rare
CC - California Candidate
CSC - California Species of Special Concern

CNPS:
Rank 1A - Presumed extinct in California
Rank 1B - Plants rare, threatened, or endangered in California and elsewhere
Rank 1B.1 - Seriously endangered in California (over 80% occurrences threatened/ high degree and immediacy of threat)
Rank 1B.2 - Fairly endangered in California (20-80% occurrences threatened)
Rank 1B.3 - Not very endangered in California (<20% of occurrences threatened or no current threats known)

CNPS Continued:
Rank 2 - Plants rare, threatened, or endangered in California, but more common elsewhere
Rank 2A - Extirpated in California, common elsewhere
Rank 2B.1 - Seriously endangered in California, but more common elsewhere
Rank 2B.2 - Fairly endangered in California, but more common elsewhere
Rank 2B.3 - Not very endangered in California, but more common elsewhere
Rank 3 - Plants about which we need more information (Review List)
Rank 3.1 - Plants about which we need more information (Review List) Seriously endangered in California
Rank 3.2 - Plants about which we need more information (Review List) Fairly endangered in California
Rank 4 - Plants of limited distribution - a watch list

Table 4

Special-Status Wildlife Known to Occur Within Two Miles of the Stonebridge, 2220 Fulton Road Project Site

Species	*Status	Habitat	Closest Locations	Probability on Project Site
Fish				
Coho salmon - Central California ESU *Oncorhynchus kisutch*	Fed: FE State: CE Other:	Federal listing = pops between Punta Gorda & San Lorenzo River. State listing = pops south of San Francisco Bay only. Requires beds of loose, silt-free, coarse gravel for spawning. Also needs cover, cool water and sufficient dissolved oxygen.	Closest record for this species located 3.0 miles north of the project site (Occurrence No. 25)	None. No stream, creeks, or other drainages onsite. No impacts expected.
Amphibians				
California tiger salamander (So Co DPS) *Ambystoma californiense*	Fed: FE State: CT Other:	Found in grassland habitats of the valleys and foothills. Requires burrows for aestivation and standing water until late spring (May) for larvae to metamorphose.	Closest record for this species located 0.42- mile west of the project site (Occurrence No. 360)	Low to None. No records for CTS east of Fulton Road. Extensive studies completed in area with negative findings. Protocol study onsite underway. See text.
Reptiles				
Western pond turtle ** *Emys marmorata*	Fed: - State: CSC Other:	Inhabits ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Needs suitable basking sites and upland habitat for egg laying. Occurs in the Central Valley and Contra Costa County.	Closest record for this species located 0.1 -mile northwest of the project site (Occurrence No. 525)	None. No streams, drainages or other semi-permanent water sources onsite. Seasonal wetlands onsite dry too quickly to provide habitat. No impact expected.

Table 4

Special-Status Wildlife Known to Occur Within Two Miles of the Stonebridge, 2220 Fulton Road Project Site

Species	*Status	Habitat	Closest Locations	Probability on Project Site

***Status**

Federal:	State:
FE - Federal Endangered	CE - California Endangered
FT - Federal Threatened	CT - California Threatened
FPE - Federal Proposed Endangered	CR - California Rare
FPT - Federal Proposed Threatened	CC - California Candidate
FC - Federal Candidate	CSC - California Species of Special Concern
FPD - Federally Proposed for delisting	FP - Fully Protected
	WL - Watch List. Not protected pursuant to CEQA

**The USFWS hopes to finish a 12-month finding for western pond turtle in 2021 but until formally listed, it is not afforded the protections of FESA.

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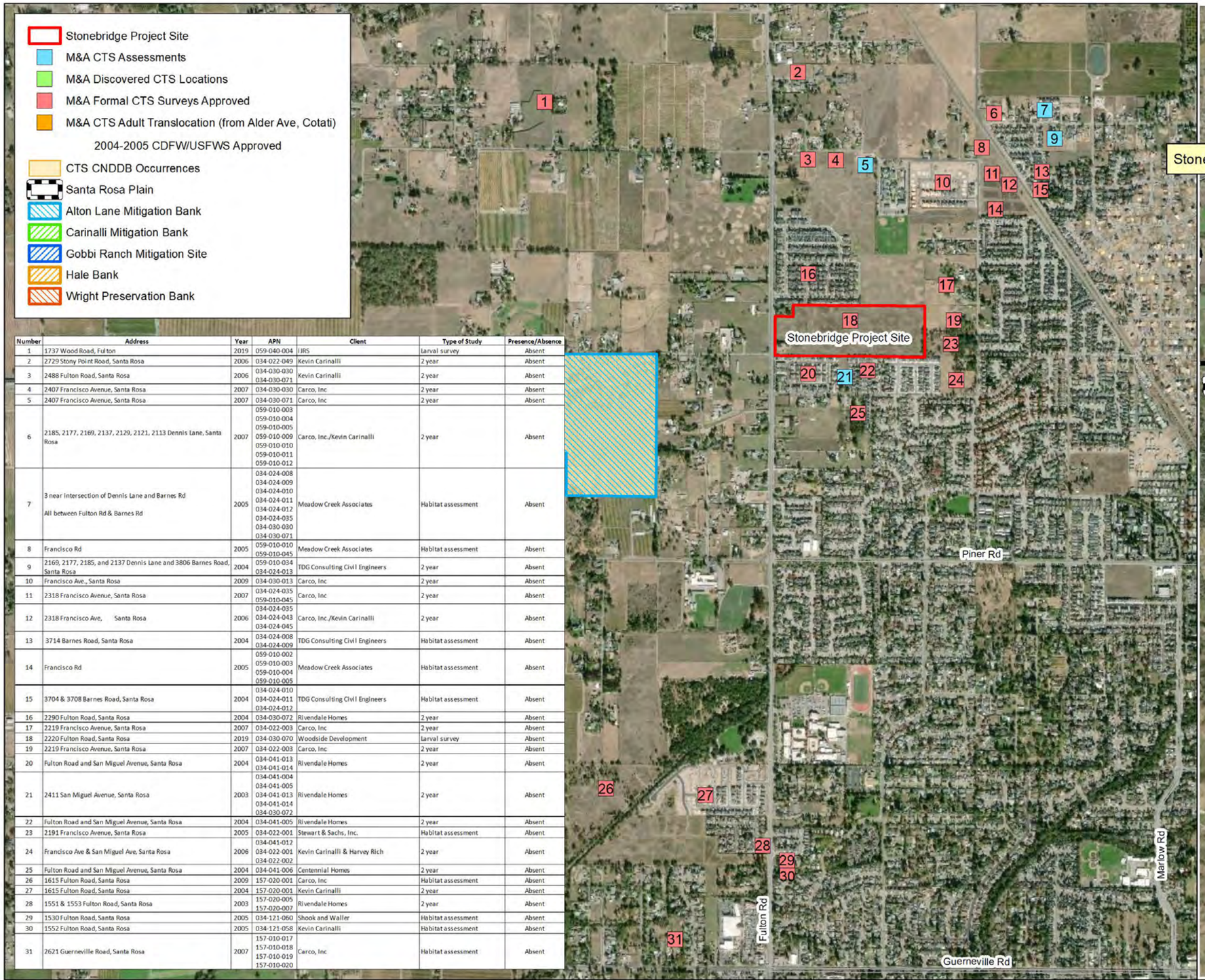
Exhibit A. Maximum Pool Depths
Stonebridge, 2220 Fulton Road Project Site
Santa Rosa, California

Aerial Photograph Source: ESRI
Map Preparation Date: June 24, 2019



Number	Address	Year	APN	Client	Type of Study	Presence/Absence
1	1737 Wood Road, Fulton	2019	059-040-004	JRS	Larval survey	Absent
2	2729 Stony Point Road, Santa Rosa	2006	034-022-049	Kevin Carinalli	2 year	Absent
3	2488 Fulton Road, Santa Rosa	2006	034-030-030 034-030-071	Kevin Carinalli	2 year	Absent
4	2407 Francisco Avenue, Santa Rosa	2007	034-030-030	Carco, Inc	2 year	Absent
5	2407 Francisco Avenue, Santa Rosa	2007	034-030-071	Carco, Inc	2 year	Absent
6	2185, 2177, 2169, 2137, 2129, 2121, 2113 Dennis Lane, Santa Rosa	2007	059-010-003 059-010-004 059-010-005 059-010-009 059-010-010 059-010-011 059-010-012	Carco, Inc./Kevin Carinalli	2 year	Absent
7	3 near Intersection of Dennis Lane and Barnes Rd All between Fulton Rd & Barnes Rd	2005	034-024-008 034-024-009 034-024-010 034-024-011 034-024-012 034-024-035 034-030-030 034-030-071	Meadow Creek Associates	Habitat assessment	Absent
8	Francisco Rd	2005	059-010-010 059-010-045	Meadow Creek Associates	Habitat assessment	Absent
9	2169, 2177, 2185, and 2137 Dennis Lane and 3806 Barnes Road, Santa Rosa	2004	059-010-034 034-024-013	TDG Consulting Civil Engineers	2 year	Absent
10	Francisco Ave., Santa Rosa	2009	034-030-013	Carco, Inc	2 year	Absent
11	2318 Francisco Avenue, Santa Rosa	2007	034-024-035 059-010-045	Carco, Inc	2 year	Absent
12	2318 Francisco Ave, Santa Rosa	2006	034-024-035 034-024-043 034-024-045	Carco, Inc./Kevin Carinalli	2 year	Absent
13	3714 Barnes Road, Santa Rosa	2004	034-024-008 034-024-009	TDG Consulting Civil Engineers	Habitat assessment	Absent
14	Francisco Rd	2005	059-010-002 059-010-003 059-010-004 059-010-005	Meadow Creek Associates	Habitat assessment	Absent
15	3704 & 3708 Barnes Road, Santa Rosa	2004	034-024-010 034-024-011 034-024-012	TDG Consulting Civil Engineers	Habitat assessment	Absent
16	2290 Fulton Road, Santa Rosa	2004	034-030-072	Rivendale Homes	2 year	Absent
17	2219 Francisco Avenue, Santa Rosa	2007	034-022-003	Carco, Inc	2 year	Absent
18	2220 Fulton Road, Santa Rosa	2019	034-030-070	Woodside Development	Larval survey	Absent
19	2219 Francisco Avenue, Santa Rosa	2007	034-022-003	Carco, Inc	2 year	Absent
20	Fulton Road and San Miguel Avenue, Santa Rosa	2004	034-041-013 034-041-014	Rivendale Homes	2 year	Absent
21	2411 San Miguel Avenue, Santa Rosa	2003	034-041-004 034-041-005 034-041-013 034-041-014 034-030-072	Rivendale Homes	2 year	Absent
22	Fulton Road and San Miguel Avenue, Santa Rosa	2004	034-041-005	Rivendale Homes	2 year	Absent
23	2191 Francisco Avenue, Santa Rosa	2005	034-022-001	Stewart & Sachs, Inc.	Habitat assessment	Absent
24	Francisco Ave & San Miguel Ave, Santa Rosa	2006	034-041-012 034-022-001 034-022-002	Kevin Carinalli & Harvey Rich	2 year	Absent
25	Fulton Road and San Miguel Avenue, Santa Rosa	2004	034-041-006	Centennial Homes	2 year	Absent
26	1615 Fulton Road, Santa Rosa	2009	157-020-001	Carco, Inc	Habitat assessment	Absent
27	1615 Fulton Road, Santa Rosa	2004	157-020-001	Kevin Carinalli	2 year	Absent
28	1551 & 1553 Fulton Road, Santa Rosa	2003	157-020-005 157-020-007	Rivendale Homes	2 year	Absent
29	1530 Fulton Road, Santa Rosa	2005	034-121-060	Shook and Waller	Habitat assessment	Absent
30	1552 Fulton Road, Santa Rosa	2005	034-121-058	Kevin Carinalli	Habitat assessment	Absent
31	2621 Guerneville Road, Santa Rosa	2007	157-010-017 157-010-018 157-010-019 157-010-020	Carco, Inc	Habitat assessment	Absent

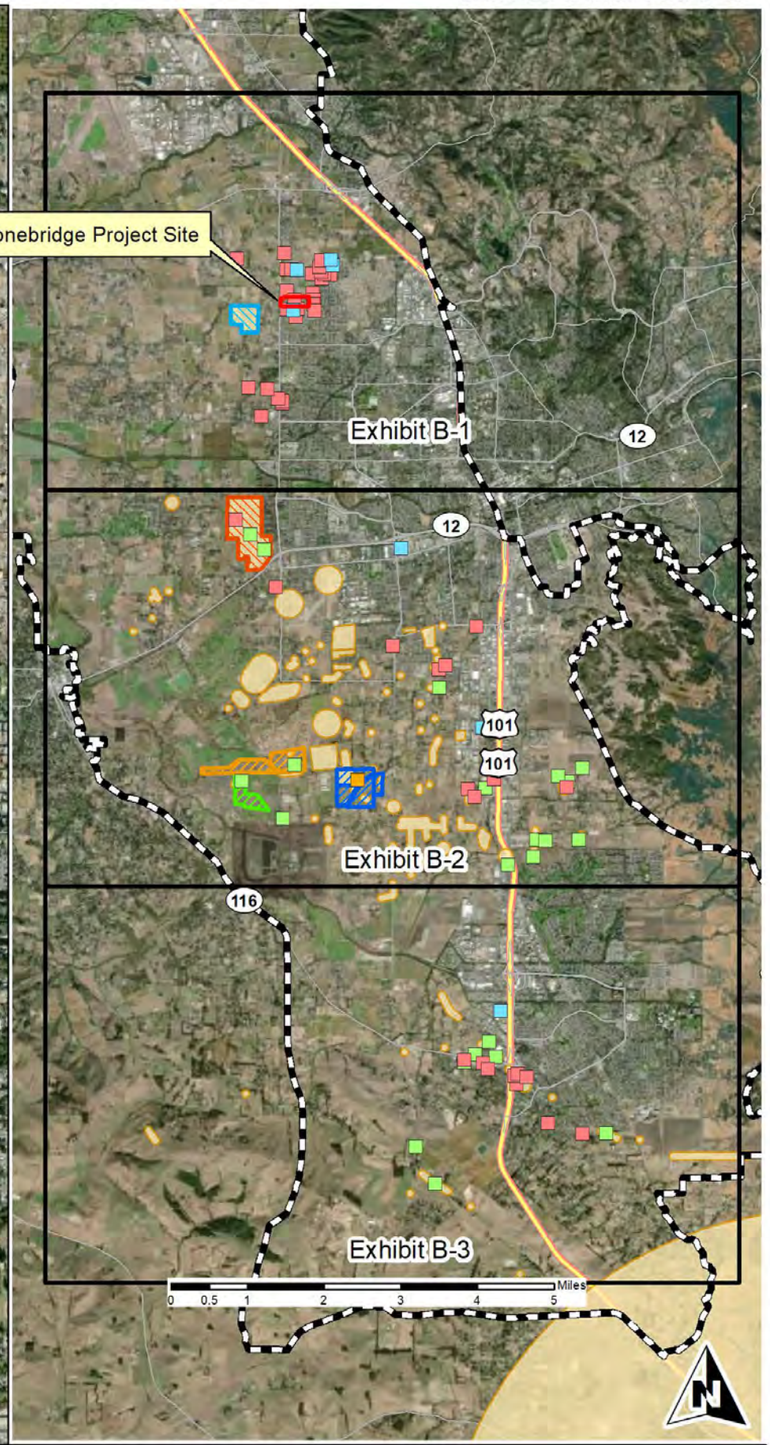


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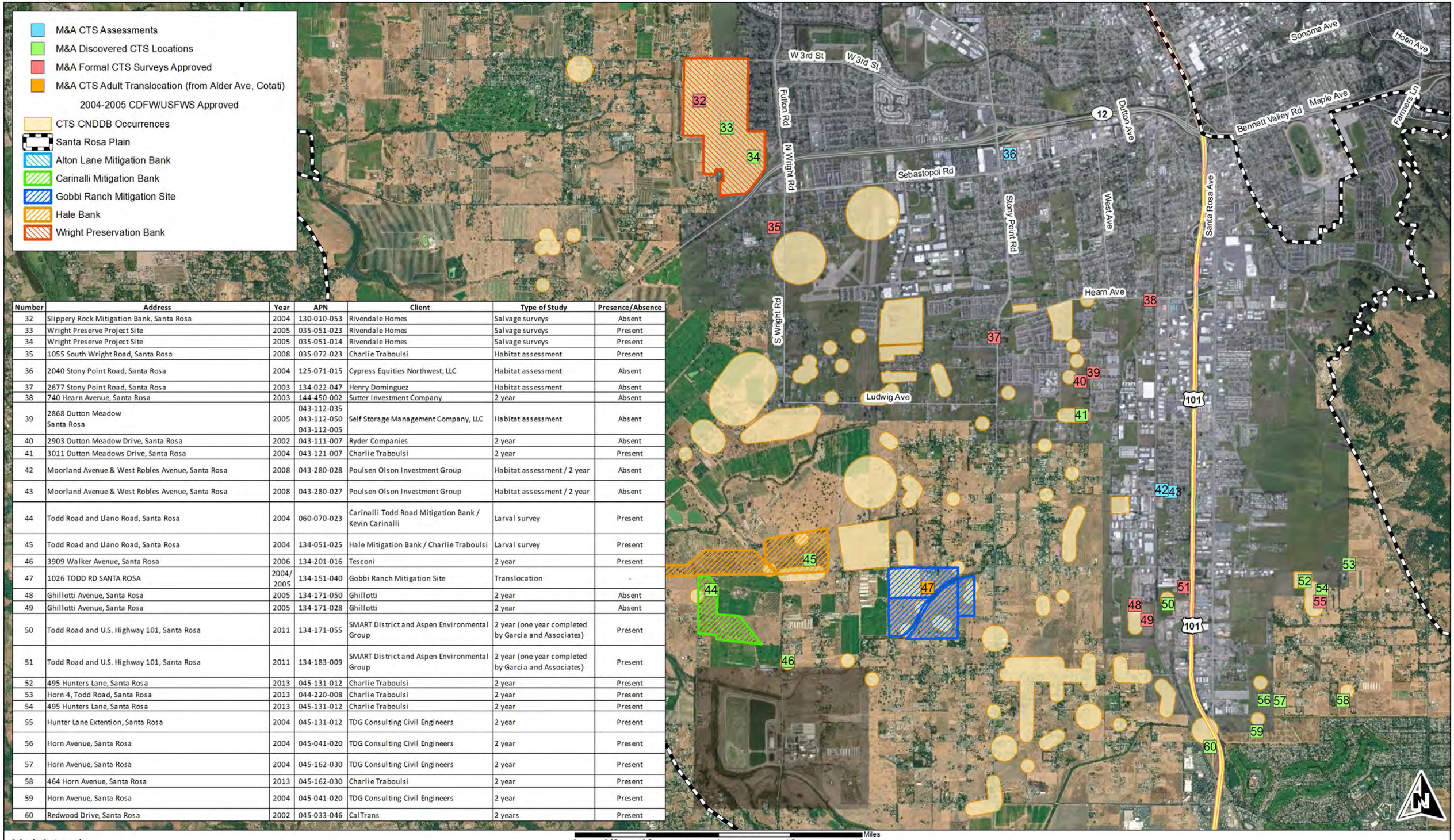
Exhibit B-1. Monk & Associates CTS Studies and CTS Discoveries on the Santa Rosa Plain From CDFW CNDDB & M&A Studies

County: Sonoma
Aerial Photograph Source: ESRI
Map Preparation Date: November 19, 2019



Number	Address	Year	APN	Client	Type of Study	Presence/Absence
32	Slippery Rock Mitigation Bank, Santa Rosa	2004	130-010-053	Rivendale Homes	Salvage surveys	Absent
33	Wright Preserve Project Site	2005	035-051-023	Rivendale Homes	Salvage surveys	Present
34	Wright Preserve Project Site	2005	035-051-014	Rivendale Homes	Salvage surveys	Present
35	1055 South Wright Road, Santa Rosa	2008	035-072-023	Charlie Traboulsi	Habitat assessment	Present
36	2040 Stony Point Road, Santa Rosa	2004	125-071-015	Cypress Equities Northwest, LLC	Habitat assessment	Absent
37	2677 Stony Point Road, Santa Rosa	2003	134-022-047	Henry Dominguez	Habitat assessment	Absent
38	740 Hearn Avenue, Santa Rosa	2003	144-450-002	Sutter Investment Company	2 year	Absent
39	2868 Dutton Meadow Santa Rosa	2005	043-112-035 043-112-050 043-112-005	Self Storage Management Company, LLC	Habitat assessment	Absent
40	2903 Dutton Meadow Drive, Santa Rosa	2002	043-111-007	Ryder Companies	2 year	Absent
41	3011 Dutton Meadows Drive, Santa Rosa	2004	043-121-007	Charlie Traboulsi	2 year	Present
42	Moorland Avenue & West Robles Avenue, Santa Rosa	2008	043-280-028	Poulsen Olson Investment Group	Habitat assessment / 2 year	Absent
43	Moorland Avenue & West Robles Avenue, Santa Rosa	2008	043-280-027	Poulsen Olson Investment Group	Habitat assessment / 2 year	Absent
44	Todd Road and Llano Road, Santa Rosa	2004	060-070-023	Carinalli Todd Road Mitigation Bank / Kevin Carinalli	Larval survey	Present
45	Todd Road and Llano Road, Santa Rosa	2004	134-051-025	Hale Mitigation Bank / Charlie Traboulsi	Larval survey	Present
46	3909 Walker Avenue, Santa Rosa	2006	134-201-016	Tesconi	2 year	Present
47	1026 TODD RD SANTA ROSA	2004/ 2005	134-151-040	Gobbi Ranch Mitigation Site	Translocation	-
48	Ghillotti Avenue, Santa Rosa	2005	134-171-050	Ghillotti	2 year	Absent
49	Ghillotti Avenue, Santa Rosa	2005	134-171-028	Ghillotti	2 year	Absent
50	Todd Road and U.S. Highway 101, Santa Rosa	2011	134-171-055	SMART District and Aspen Environmental Group	2 year (one year completed by Garcia and Associates)	Present
51	Todd Road and U.S. Highway 101, Santa Rosa	2011	134-183-009	SMART District and Aspen Environmental Group	2 year (one year completed by Garcia and Associates)	Present
52	495 Hunters Lane, Santa Rosa	2013	045-131-012	Charlie Traboulsi	2 year	Present
53	Horn 4, Todd Road, Santa Rosa	2013	044-220-008	Charlie Traboulsi	2 year	Present
54	495 Hunters Lane, Santa Rosa	2013	045-131-012	Charlie Traboulsi	2 year	Present
55	Hunter Lane Extention, Santa Rosa	2004	045-131-012	TDG Consulting Civil Engineers	2 year	Present
56	Horn Avenue, Santa Rosa	2004	045-041-020	TDG Consulting Civil Engineers	2 year	Present
57	Horn Avenue, Santa Rosa	2004	045-162-030	TDG Consulting Civil Engineers	2 year	Present
58	464 Horn Avenue, Santa Rosa	2013	045-162-030	Charlie Traboulsi	2 year	Present
59	Horn Avenue, Santa Rosa	2004	045-041-020	TDG Consulting Civil Engineers	2 year	Present
60	Redwood Drive, Santa Rosa	2002	045-033-046	CalTrans	2 years	Present

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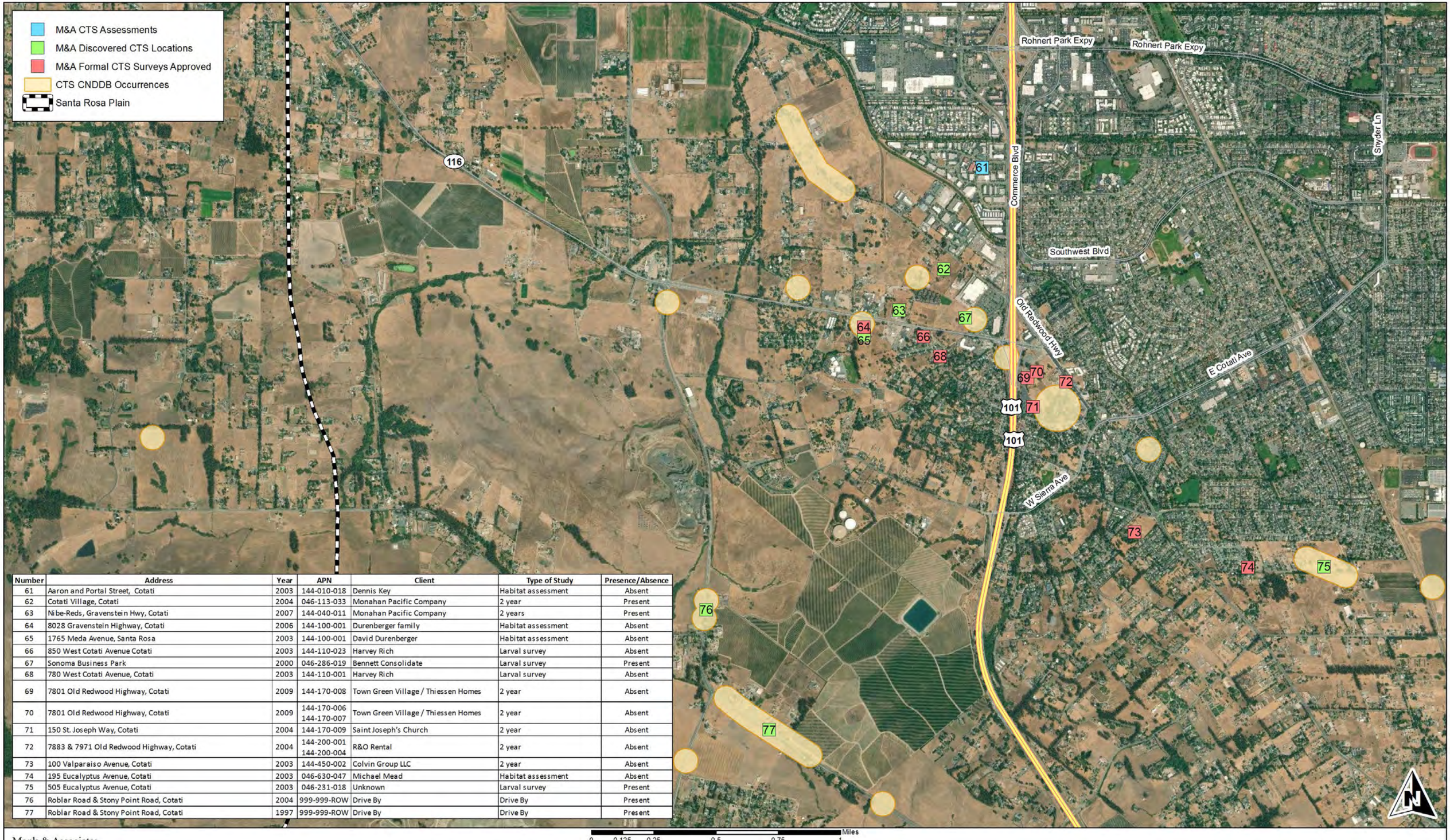
Exhibit B-2. Monk & Associates CTS Studies and CTS Discoveries on the Santa Rosa Plain From CDFW CNDDB & M&A Studies

County: Sonoma
Aerial Photograph Source: ESRI
Map Preparation Date: June 24, 2019



Number	Address	Year	APN	Client	Type of Study	Presence/Absence
61	Aaron and Portal Street, Cotati	2003	144-010-018	Dennis Key	Habitat assessment	Absent
62	Cotati Village, Cotati	2004	046-113-033	Monahan Pacific Company	2 year	Present
63	Nibe-Reds, Gravenstein Hwy, Cotati	2007	144-040-011	Monahan Pacific Company	2 years	Present
64	8028 Gravenstein Highway, Cotati	2006	144-100-001	Durenberger family	Habitat assessment	Absent
65	1765 Meda Avenue, Santa Rosa	2003	144-100-001	David Durenberger	Habitat assessment	Absent
66	850 West Cotati Avenue Cotati	2003	144-110-023	Harvey Rich	Larval survey	Absent
67	Sonoma Business Park	2000	046-286-019	Bennett Consolidate	Larval survey	Present
68	780 West Cotati Avenue, Cotati	2003	144-110-001	Harvey Rich	Larval survey	Absent
69	7801 Old Redwood Highway, Cotati	2009	144-170-008	Town Green Village / Thiessen Homes	2 year	Absent
70	7801 Old Redwood Highway, Cotati	2009	144-170-006 144-170-007	Town Green Village / Thiessen Homes	2 year	Absent
71	150 St. Joseph Way, Cotati	2004	144-170-009	Saint Joseph's Church	2 year	Absent
72	7883 & 7971 Old Redwood Highway, Cotati	2004	144-200-001 144-200-004	R&O Rental	2 year	Absent
73	100 Valparaiso Avenue, Cotati	2003	144-450-002	Colvin Group LLC	2 year	Absent
74	195 Eucalyptus Avenue, Cotati	2003	046-630-047	Michael Mead	Habitat assessment	Absent
75	505 Eucalyptus Avenue, Cotati	2003	046-231-018	Unknown	Larval survey	Present
76	Roblar Road & Stony Point Road, Cotati	2004	999-999-ROW	Drive By	Drive By	Present
77	Roblar Road & Stony Point Road, Cotati	1997	999-999-ROW	Drive By	Drive By	Present

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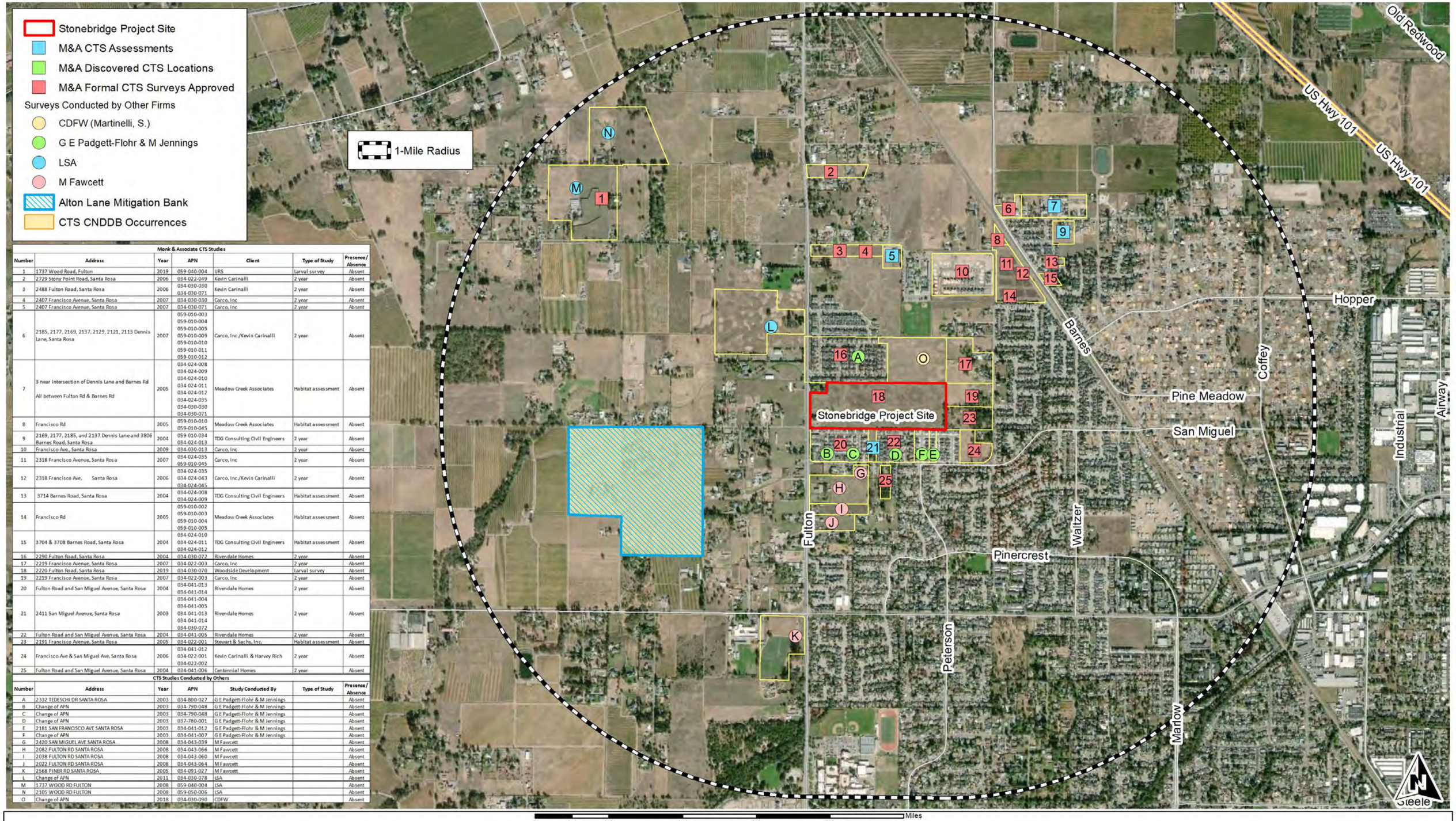
Exhibit B-3. Monk & Associates CTS Studies and CTS Discoveries
on the Santa Rosa Plain
From CDFW CNDDB & M&A Studies

County: Sonoma
Aerial Photograph Source: ESRI
Map Preparation Date: June 24, 2019



Monk & Associate CTS Studies

Number	Address	Year	APN	Client	Type of Study	Presence/ Absence
1	1737 Wood Road, Fulton	2019	059-040-004	IJRS	Larval survey	Absent
2	2729 Stony Point Road, Santa Rosa	2006	034-022-049	Kevin Carinalli	2 year	Absent
3	2488 Fulton Road, Santa Rosa	2006	034-030-030 034-030-071	Kevin Carinalli	2 year	Absent
4	2407 Francisco Avenue, Santa Rosa	2007	034-030-030	Carco, Inc	2 year	Absent
5	2407 Francisco Avenue, Santa Rosa	2007	034-030-071	Carco, Inc	2 year	Absent
6	2185, 2177, 2169, 2137, 2129, 2121, 2113 Dennis Lane, Santa Rosa	2007	059-010-003 059-010-004 059-010-005 059-010-009 059-010-010 059-010-011 059-010-012	Carco, Inc./Kevin Carinalli	2 year	Absent
7	3 near intersection of Dennis Lane and Barnes Rd All between Fulton Rd & Barnes Rd	2005	034-024-008 034-024-009 034-024-010 034-024-011 034-024-012 034-024-035 034-030-030 034-030-071	Meadow Creek Associates	Habitat assessment	Absent
8	Francisco Rd	2005	059-010-010 059-010-045	Meadow Creek Associates	Habitat assessment	Absent
9	2169, 2177, 2185, and 2137 Dennis Lane and 3806 Barnes Road, Santa Rosa	2004	059-010-034 034-024-013	TDG Consulting Civil Engineers	2 year	Absent
10	Francisco Ave., Santa Rosa	2009	034-030-013	Carco, Inc	2 year	Absent
11	2318 Francisco Avenue, Santa Rosa	2007	034-024-035 059-010-045	Carco, Inc	2 year	Absent
12	2318 Francisco Ave, Santa Rosa	2006	034-024-035 034-024-043 034-024-045	Carco, Inc./Kevin Carinalli	2 year	Absent
13	3714 Barnes Road, Santa Rosa	2004	034-024-008 034-024-009	TDG Consulting Civil Engineers	Habitat assessment	Absent
14	Francisco Rd	2005	059-010-002 059-010-003 059-010-004 059-010-005	Meadow Creek Associates	Habitat assessment	Absent
15	3704 & 3708 Barnes Road, Santa Rosa	2004	034-024-010 034-024-011 034-024-012	TDG Consulting Civil Engineers	Habitat assessment	Absent
16	2290 Fulton Road, Santa Rosa	2004	034-030-072	Rivendale Homes	2 year	Absent
17	2219 Francisco Avenue, Santa Rosa	2007	034-022-003	Carco, Inc	2 year	Absent
18	2220 Fulton Road, Santa Rosa	2019	034-030-070	Woodside Development	Larval survey	Absent
19	2219 Francisco Avenue, Santa Rosa	2007	034-022-003	Carco, Inc	2 year	Absent
20	Fulton Road and San Miguel Avenue, Santa Rosa	2004	034-041-013 034-041-014	Rivendale Homes	2 year	Absent
21	2411 San Miguel Avenue, Santa Rosa	2003	034-041-004 034-041-005 034-041-013 034-041-014 034-030-072	Rivendale Homes	2 year	Absent
22	Fulton Road and San Miguel Avenue, Santa Rosa	2004	034-041-005	Rivendale Homes	2 year	Absent
23	2191 Francisco Avenue, Santa Rosa	2005	034-022-001	Stewart & Sachs, Inc.	Habitat assessment	Absent
24	Francisco Ave & San Miguel Ave, Santa Rosa	2006	034-041-012 034-022-001 034-022-002	Kevin Carinalli & Harvey Rich	2 year	Absent
25	Fulton Road and San Miguel Avenue, Santa Rosa	2004	034-041-006	Centennial Homes	2 year	Absent

CTS Studies Conducted by Others

Number	Address	Year	APN	Study Conducted By	Type of Study	Presence/ Absence
A	2332 TEDESCHI DR SANTA ROSA	2003	034-800-027	G E Padgett-Flohr & M Jennings		Absent
B	Change of APN	2003	034-790-048	G E Padgett-Flohr & M Jennings		Absent
C	Change of APN	2003	034-790-048	G E Padgett-Flohr & M Jennings		Absent
D	Change of APN	2003	037-780-001	G E Padgett-Flohr & M Jennings		Absent
E	2181 SAN FRANCISCO AVE SANTA ROSA	2003	034-041-012	G E Padgett-Flohr & M Jennings		Absent
F	Change of APN	2003	034-041-007	G E Padgett-Flohr & M Jennings		Absent
G	2420 SAN MIGUEL AVE SANTA ROSA	2008	034-043-039	M Fawcett		Absent
H	2082 FULTON RD SANTA ROSA	2008	034-043-066	M Fawcett		Absent
I	2038 FULTON RD SANTA ROSA	2008	034-043-060	M Fawcett		Absent
J	2022 FULTON RD SANTA ROSA	2008	034-043-064	M Fawcett		Absent
K	2568 PINER RD SANTA ROSA	2005	034-091-027	M Fawcett		Absent
L	Change of APN	2011	034-030-078	LSA		Absent
M	1737 WOOD RD FULTON	2008	059-040-004	LSA		Absent
N	2105 WOOD RD FULTON	2008	059-050-006	LSA		Absent
O	Change of APN	2018	034-030-090	CDFW		Absent

0 0.1 0.2 0.4 0.6 0.8 1 Miles

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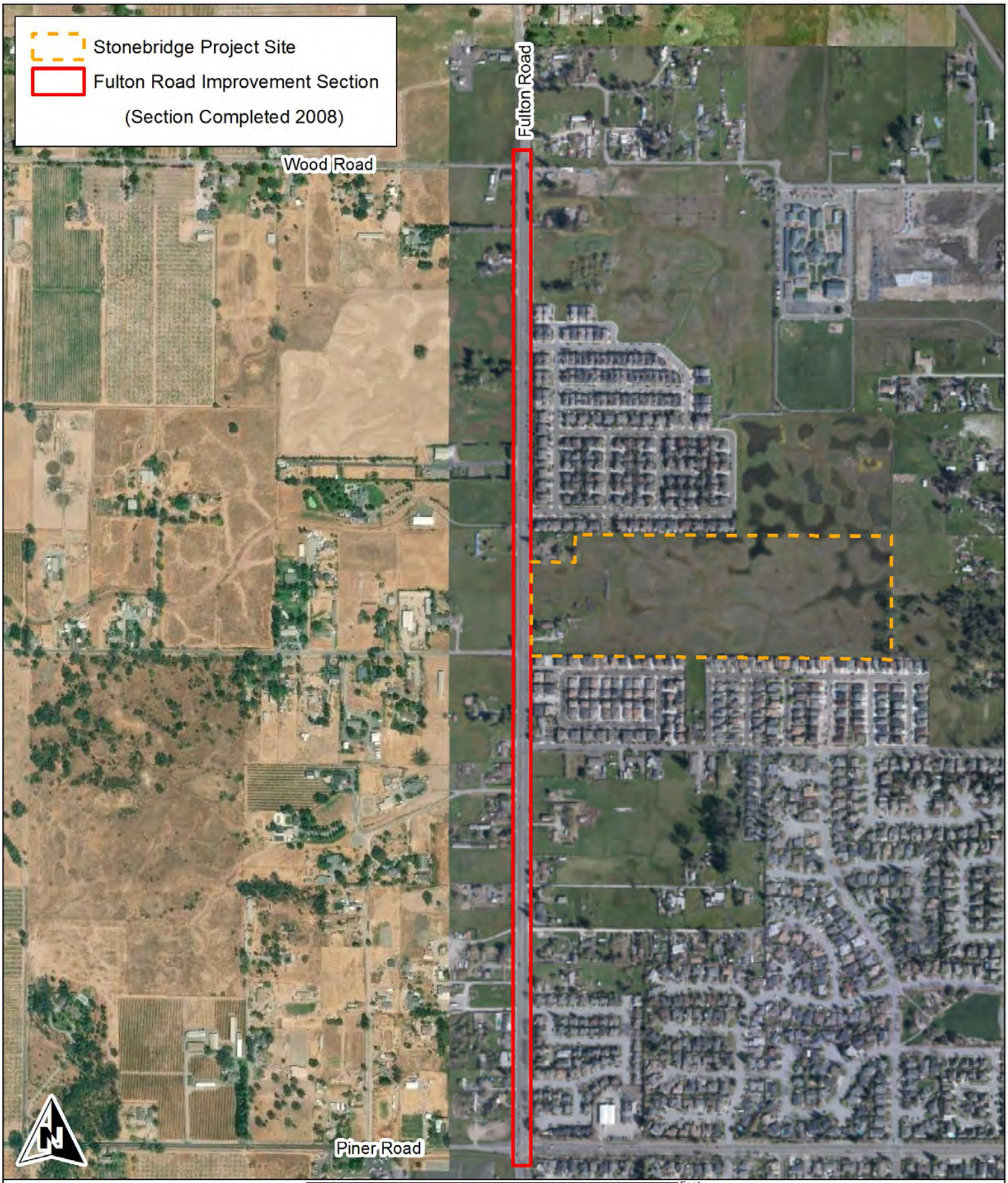
Exhibit C. CTS Studies Within One Mile
of the Stonebridge Project Site
From CDFW CNDDB, Monk & Associates Studies, and Other Firms
- - All Studies Negative - -

One-Mile Radius

County: Sonoma
One Mile Radius Aerial Photograph Source: ESRI
Map Preparation Date: November 19, 2019



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Walnut Creek, California 94595
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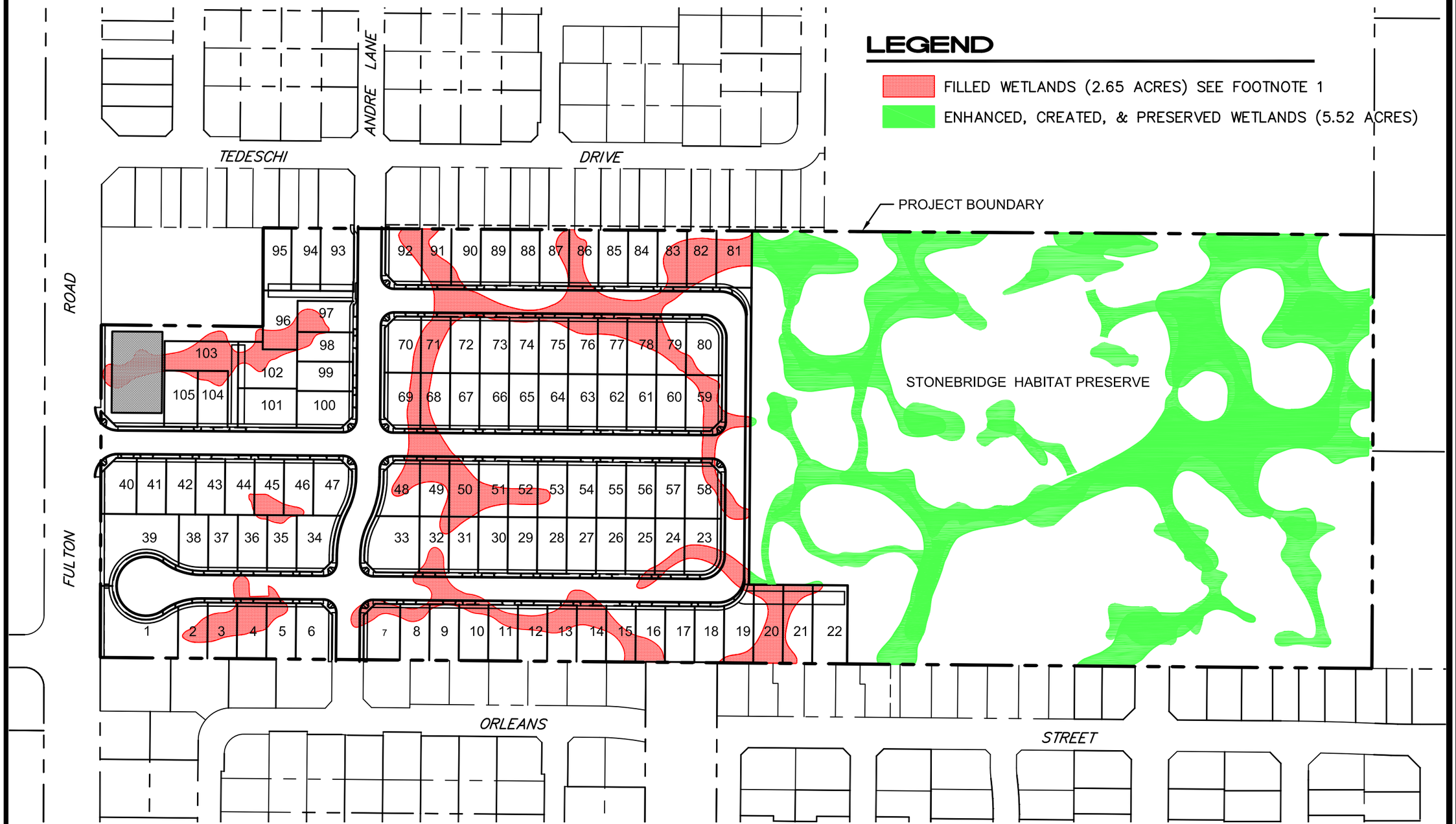
Exhibit D. Fulton Road Improvement Section
Stonebridge Project Site
Santa Rosa, California

Aerial Photograph Source: ESRI
Map Preparation Date: June 24, 2019



PROJECT DATA

NUMBER OF RESIDENTIAL LOTS – 105
DEVELOPMENT AREA – 14.6 ACRES
PRESERVE AREA – 14.0 ACRES
TOTAL SITE AREA 28.6 ACRES

AREA ROAD & SIDEWALK =4.7 ACRE
AREA BIORETENTION =0.4 ACRE
AREA RESIDENTIAL LOTS = 9.5 ACRE
TOTAL = 14.6 ACRE

FOOTNOTE 1: THE 2.65 ACRES OF IMPACTED WETLANDS INCLUDES 2.52 ACRES ON THE PROJECT SITE AND 0.13 ACRES ON THE PRESERVE TO ENHANCE THE FUNCTIONS AND SERVICES OF PRESERVE WETLANDS. NO OCCUPIED BURKE'S POOLS WOULD BE AFFECTED. SEE REPORT.

SCALE: 1"=150'

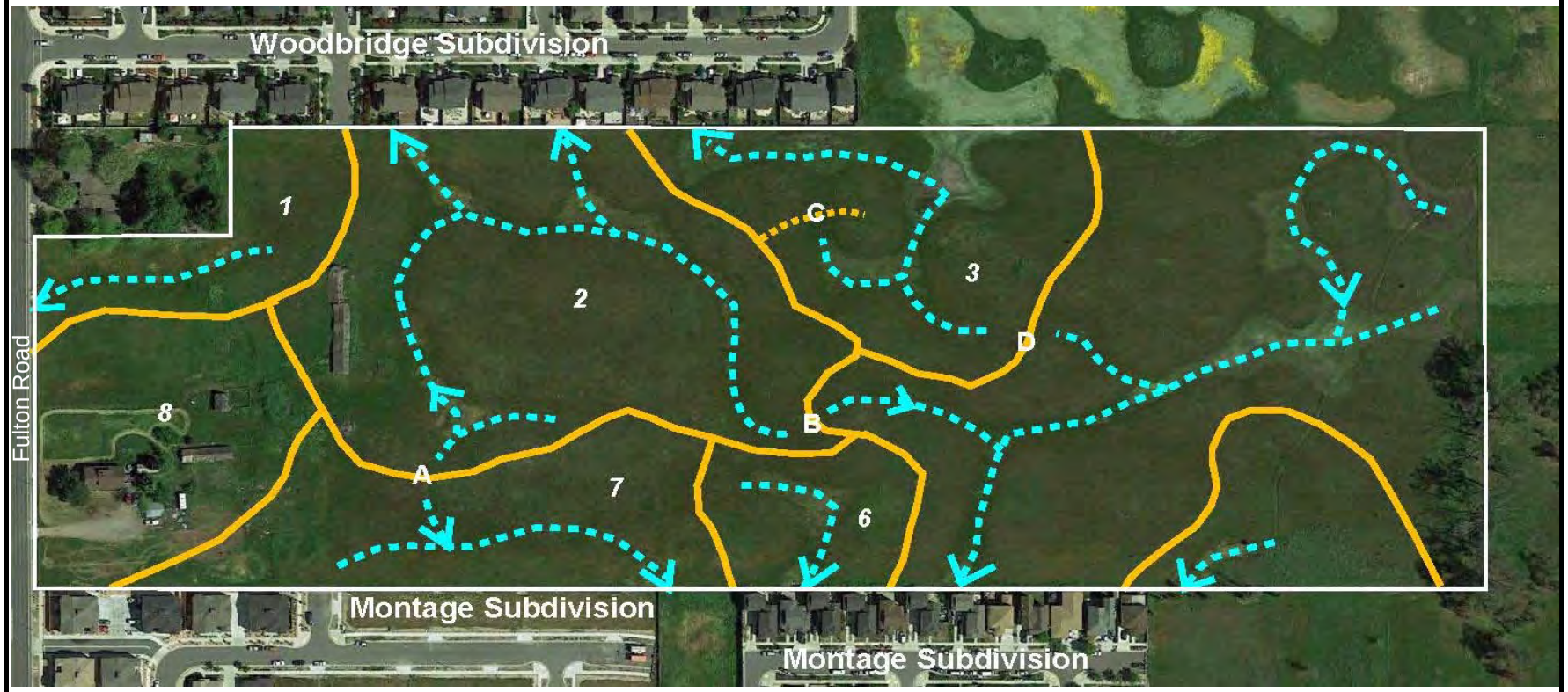
CIVIL DESIGN CONSULTANTS, INC.
2200 Range Avenue, Suite 204
Santa Rosa, CA 95403
(707) 542-4920

ATTACHMENT A – PROPOSED PROJECT
STONEBRIDGE SUBDIVISION
SANTA ROSA, CALIFORNIA

JULY 2019

JOB NO. 17–114

SHEET NO. 1 OF 1 SHEET



LEGEND

Subwatershed Divide

Watershed Boundaries

A, B, C, D Watershed Divides

Drainages

Applicant:
Mr. David Jacobson
Woodside Holdings, LP
47 Bellevue Road
San Rafael, CA 94901

Site:
Woodside Holdings Property (A.P. 034-043-070)
Santa Rosa, California

No Scale

Attachment B.
Existing Drainage Network and Watershed Boundaries
on the Woodside Holdings Property

Laurence P. Stromberg, Ph. D.
Wetlands Consultant
59 Jewell Street, San Rafael, CA 94901
Tel. & Fax: (415) 721-0700

RESULTS OF MULTI-YEAR SURVEY FOR SPECIAL-STATUS PLANT SPECIES, WOODSIDE HOLDINGS PROPERTY (A. P. NO. 034-043-070) SANTA ROSA, CALIFORNIA

Submitted on behalf of:

Mr. David Jacobson
Woodside Holdings LP
47 Bellevue Avenue
San Rafael, CA 94901
(415)-306-1687

Prepared by:

Laurence P. Stromberg, Ph.D.
Wetlands Consultant
59 Jewell Street
San Rafael, CA 94901
(415) 254-5566

March 30, 2018

RESULTS OF MULTI-YEAR SURVEY FOR SPECIAL-STATUS PLANT SPECIES, WOODSIDE HOLDINGS PROPERTY (A. P. NO. 034-043-070) SANTA ROSA, CALIFORNIA

1.0. SUMMARY

This report presents the findings of a multi-year survey conducted for special-status plant species on the approximately 28.6-ac Woodside Holdings property (A.P. No. 034-043-070), located in northwest Santa Rosa (Figure 1) on the west side of Fulton Road between San Miguel Avenue and Tedeschi Drive (Figure 2) (all figures at the end of the report). The site is located within the Santa Rosa Plain and the area covered by the Santa Rosa Plain Conservation Strategy.

Several site visits were made in 2015, 2016, and 2017. Based on visits in each of these years to reference sites for the three plant species listed as endangered on the Santa Rosa Plain, the survey in each year was conducted within the "windows" during which the three target species either were in flower or were otherwise readily identifiable. The survey methods used were consistent with the guidelines established by the California Department of Fish and Wildlife and the U. S. Fish and Wildlife Service for assessing the effects of proposed developments on rare and endangered plants and plant communities.

Historic records indicate that both Sonoma sunshine and Burke's goldfields have been observed on the property in the past. The three years of survey produced observations of Burke's goldfields at several locations but Sonoma sunshine was not observed on the property in any year.

2.0. PROPERTY LOCATION AND CONDITIONS

2.1. PROJECT SITE LOCATION

The Woodside Holdings property is a 28.6-acre parcel (A. P. No. 034-043-070) located northwest of downtown Santa Rosa (Figure 1) (all figures at the end of the report) on the east side of Fulton Road between San Miguel Avenue and Tedeschi Drive (Figure 2). The site is located within the Santa Rosa Plain and the area covered by the Santa Rosa Plain Conservation Strategy.

2.2. HISTORIC AND CURRENT LAND USES

The Woodside Holdings property is a rural residential property occupied currently by tenants who have established a garden, use many of the outbuildings, and park their vehicles on hardscaped (gravel-surfaced) areas and in other areas that are regularly mowed around the residence and other structures. Twenty years ago, the property was used to graze cattle and horses and to produce hay. Currently, the eastern three-quarters of the property is mowed annually for fuel control. Fill in the southeast corner of the Woodside Holdings property suggest that structures may have once been present there. Apparently planted trees (two rows) visible on the 1942 aerial photograph available through on-line the Sonoma County Vegetation Mapping and Lidar Project and a scattered fruit trees indicate that an orchard may once have been planted in the northeast half of the Woodside Holdings property but has long been abandoned; all but eight trees had been removed prior to 1942.

2.3. TOPOGRAPHY AND DRAINAGE

The project site is relatively flat, except for where depressional wetland habitat is present. The elevation over most of the site ranges from approximately 138 ft in the depressional wetlands, including the natural drainages, to 142 ft on the top of mounds where they remain intact in the eastern two-thirds of the property. The total difference in elevation is approximately four feet.

The drainage patterns on the site are complex and have been modified slightly by development of adjacent lands. The property contains eight small watersheds (Figure 3) (Stromberg 2015) all but one of which are drained by a swale or swale network and all of which reflect the natural topography except the watershed in the southwest corner of the site where construction of a driveway, parking areas, a residence, gardens, and several outbuildings long ago changed the drainage pattern.

Most significantly, the flow of water from the site is blocked on both sides of the property. Before the Woodbridge subdivision was constructed, water flowed from a pair of watersheds toward a six-foot-deep ditch excavated at the headwaters of Abramson Creek that carried water to a culvert below Fulton Road. The largest, best defined swale on the site drains a large part of the site toward a drop inlet at the edge of the Montage subdivision, Another swale also carries water toward the Montage subdivision but, absent a drop inlet, water collects against a retaining wall. Small swales drain Watersheds 5 and 7 to the south and water from Watershed 8 flows toward Fulton Road as sheet flow.

2.4. SOILS

The soils on the site are mapped by the Natural Resource Conservation Service (NRCS) (U. S. Soil Conservation Service 1978) as belonging to three phases of the Huichica loam series and to the ponded phase of the Clear Lake clay soil series. Huichica loam soils are mapped as being present over more than 60 percent of the site with Clear Lake clays restricted to the northcentral and northeastern part. The mapping is inaccurate; Clear Lake clays are present in less than an acre of the site and variants of the Huichica loam series occur over all but this small area.

Generally, Huichica loam soils are characterized by a water-restricting horizon in the form of a moderately well cemented hardpan with the capacity to perch water at the surface. In the native, undrained state, the Huichica loam series in depressional sites is a hydric soil.

Both the Huichica and the Clear Lake clay soils are considered a vernal pool soils by the Vernal Pool Task Force (CH2M Hill 1996). Applying the criteria developed by the National Technical Committee for Hydric Soils to the soils in Sonoma County, the NRCS field office in Santa Rosa (Soil Conservation Service 1992) developed a draft list of hydric soils that occur in Sonoma County. The ponded phase of the Huichica series and the Clear Lake clay series are classified as hydric soils. Although the actual presence of hydric soils must be determined in the field during the course of the delineation, experience indicates that the soils in the depressional landforms in terrain, i.e., the soils in the swales and in the lower ground surrounding the mima mounds, are generally considered to be hydric soils.

2.5. EXISTING HABITAT

The habitat on the Woodside Holdings property includes upland annual grasslands and seasonal wetlands. Trees have been planted along the east property line and around the residence and the area around the residential is mowed A complete list of plant species observed on the project site is presented in Appendix B. The general aspect of the vegetation is shown in Figure 3.

2.5.1. Seasonal Wetlands

The wetlands on the Woodside Holdings property (Figure 4) are palustrine emergent wetlands (Cowardin et al 1979). According to the California Rapid Assessment Method (CRAM) (California Wetlands Monitoring Workgroup 2013), the wetlands on the Woodside Holdings property would be considered a vernal pool system. No CRAM assessment has been conducted.

The area of the seasonal wetland on the site is approximately 6.31 acres. The wetlands are a mosaic of vernal pools connected by swales. The maximum depth of standing water in the vernal pools ranges from six inches to more than 18 inches.

In the bottoms of vernal pools and the deeply inundated swales (characterized by local high points that cause water to collect upgradient), dominant and common species include California semaphore grass (*Pleuropogon californicus*), meadow barley (*Hordeum brachyantherum*), and curly dock (*Rumex crispus*), smooth goldfields (*Lasthenia glaberrima*), pennyroyal (*Mentha pulegium*), and coyote thistle (*Eryngium aristulatum*). The vegetation at the margins is typically indicative of the

transition into upland habitat. Dominant and common plant species at the margins include perennial ryegrass (*Festuca perennis*), Mediterranean barley (*Hordeum marinum gussoneanum*), bristly oxtongue (*Heminthotheca echioides*), prickly lettuce (*Lactuca serriola*), and sheep sorrel (*Rumex acetosella*).

Upland plant species that occur at the wetland margins include Harding grass (*Phalaris aquatica*), pea (*Lathyrus cicera*), medusahead (*Taeniatherum caput-medusae*), common vetch (*Vicia sativa*), rough cat's ear (*Hypocheris radicata*), hedge bindweed (*Convolvulus arvensis*), soft chess (*Bromus hordeaceus*), and cutleaf geranium (*Geranium dissectum*).

2.5.2. Upland Annual Grassland

The upland annual grassland is dominated by non-native annual and perennial introduced and naturalized species. The dominant and more common species include slender oats (*Avena barbata*), hare barley (*Hordeum murinum*), subterranean clover (*Trifolium subterraneum*), vernal grass (*Anthoxanthum aristatum*), perennial ryegrass *(Festuca perennis*), six-weeks fescue (*Vulpia bromoides*), soft chess (*Bromus hordeaceus*), lesser trefoil (*Trifolium dubium*), several species of vetch (*Vicia sativa, V. cracca, V. villosa varia*), sheep sorrel (*Rumex acetosella*), and cut-leaf geranium (*Geranium dissectum*). Less common species include ripgut brome (*Bromus diandrus*), hedge bindweed *(Convolvulus arvensis)*, bristly ox-tongue (*Helminthotheca echioides*), prickly lettuce (*Lactuca serriola*), several species of filaree (*Erodium cicutarium, E. botrys, E. moschatum*), rough and smooth cat's ear (*Hypochaeris radicata* and *H. glabra*), California poppy (*Eschscholzia californica*), sun cups (*Camissonia ovata*), toad rush (*Juncus bufonius*), capitate rush (*Juncus capitatus*), bird'sfoot trefoil (*Lotus corniculatus*), wooly trefoil (*Lotus humistratus*), medusahead grass (*Taeniatherum caput-medusae*), willow herb (*Epilobium brachycarpum*), mouse-ear chickweed (*Cerastium glomeratum*), and miniature lupine (*Lupinus bicolor*).

2.5.3. Woody Vegetation

Walnut trees (*Juglans* spp.), fruit trees (*Prunus* spp.), a single coast live oak (*Quercus agrifolia*) or coast live oak-interior live oak hybrid, a pine (*Pinu*s sp.), a Monterrey cypress (*Hesperocyparis macrocarpa*), and ornamental shrubs have been planted around the residence and associated outbuildings in the western part of the site. A string of eucalyptus trees (*Eucalyptus globulus*) has also been planted just inside the eastern property line. A handful of coyote brush (*Baccharis pilularis* var. *consanguine*a) shrubs and eight small ornamental fruit trees (*Prunus* spp.) are also scattered across the eastern third of the site, apparent holdovers of an orchard, the remnants of which (two rows) visible on the 1942 aerial photograph available through on-line the Sonoma County Vegetation Mapping and Lidar Project (all but eight trees had been removed prior to 1942).

3.0. METHODS

Target special-status species were those listed in the draft Santa Rosa Plain Vernal Pool Ecosystem Preservation Plan in preparation for the Santa Rosa Plain Vernal Pool Task Force (CH2M Hill 1996) and identified in California Natural Diversity Data Base records. Target species include those species whose range includes the region and which, by virtue of their known occurrence in the vicinity, were considered to have the potential to occur on the site given their habitat requirements and the types of habitat present. These species are listed in the table in Appendix A.

The dates of the field visits were:

1. April 21 and 29, May 8, and July 21, 2015;

2. April 4, 14, and 27, May 6 and 19, 2016;

3. May 9 and 23, 2017.

Each wetland was surveyed completely each year. Non-wetland habitat was considered to provide suitable habitat for the upland target species were surveyed using a series of wandering transects. The survey was conducted within the "windows" during which all target species (those whose range and habitat affinities include the site, those observed in previous years on the site or on adjacent properties) either were in flower or would be readily identifiable to species. The surveys followed U. S. Fish and Wildlife Service's (Service) (2005)[1] survey guidelines for the Santa Rosa Plain, the guidelines published by the California Department of Fish and Wildlife (CDFW)[2] for assessing the impacts of development on rare and endangered plant communities (2000), and the inventory guidelines published by the California Native Plant Society (2001).[3]

Distributional information for the three species listed as endangered by the federal government -- Sonoma sunshine (*Blennosperma bakeri*), Sebastopol meadowfoam (*Limnanthes vinculans*), and Burke's goldfields (*Lasthenia burkei)* -- was obtained from Appendix B to the Vernal Pool Ecosystem Preservation Plan (CH2M Hill 1996). Information on distributional and habitat requirements of the upland species was obtained from flora (Mason 1975, Munz and Keck 1968, Best et al. 1996, Baldwin et al. 2012), other reports and surveys conducted for special-status species on the Santa Rosa Plain and properties in the vicinity, and the California Native Plant Society's list of rare and endangered plant species in the state (Skinner and Pavlik 1994). Target species are

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[1] U.S. Fish & Wildlife Service. nd. Guidelines for conducting and reporting botanical inventories for federally listed plants on the Santa Rosa Plain (modified from the September 23, 1996 Service *g*uidelines for conducting and reporting botanical inventories for federally listed, proposed and candidate plants.

[2] California Department of Fish and Game. 2000. Guidelines for assessing the effects of proposed developments on rare and endangered plants and plant communities. May 4, 1984; revised May 8, 2000. 2 p.

[3] CNPS (California Native Plant Society). 2001. Inventory of rare and endangered plants of California (sixth edition.

shown in Appendix A.

Nearby reference sites were checked prior to *and on the first survey date* in each of the three years. The reference sites included:

1. For Sebastopol meadowfoam – Carinalli-Todd Road Mitigation Bank, Gobbi Mitigation Site, Slippery Rock Conservation Bank, Hazel Mitigation Bank;

2. For Sonoma sunshine – Alton Lane Mitigation Site, Alton North Conservation Bank, Slippery Rock Conservation Bank, Carinalli-Todd Road Mitigation Bank;

3. For Burke's goldfields – Alton Lane Mitigation Site, Alton North Conservation Bank, the nearby Woodbridge Mitigation Site, Slippery Rock Conservation Bank, Hall Road Unity of the Santa Rosa Ecological Reserve (constructed wetlands in the southwest corner).

4.0. SURVEY RESULTS

4.1. SONOMA SUNSHINE

Figure 5 shows that Sonoma sunshine had been observed in the eastern quarter of the site. The figure shows both extant and current occurrences. Sonoma sunshine was not observed on the project site in the current protocol surveys.

All plant species observed during the conduct of the survey are listed in Appendix B.

4.2. BURKE'S GOLDFIELDS

Burke's goldfields also occurred historically on the Woodside Holdings property. The orange polygon in Figure 5 shows the limits of a broadly defined occurrence of Burke's goldfields that includes the north eastern third of the Woodside Holdings property, the Woodbridge Preserve (WP), the Leras property to the east of the Woodbridge Preserve, and the Kerry Ranch site to the east of the Woodside Holdings property. Several million Burke's goldfields have been observed during monitoring of the WP and the species persists in a small but declining colony on the Kerry Ranch site, but no Burke's goldfields has been observed on the Leras property by Stromberg in 2016.

Burke's goldfields was present in one colony on the SP in 2014 and four colonies in 2017 (Figure 6). Based on full counts, the annual maximum number of plants observed in the four colonies is estimated at 3,305 plants. Colony 1, observed in years prior to the three-year protocol surveys is situated along the eastern property line at the margin between a deep pool and an adjacent mound. The population at this location has fluctuated; over the three-year period the total number of plants has ranged from an estimated 720 plants to more than 1,500 plants.

Since 2015, Burke's goldfields has been observed at the three other locations along the northern SP boundary, the colonies developing from seed carried onto the SP from vernal pools on the WP. The number of plants and the extent of the colonies have continued to climb since the first plants were observed in Colony 2 in 2015, when 55 Burke's goldfields were observed in a 20-foot-long strip on the west side of the vernal pool and just inside the fence. In 2016, Colony 2 spread within the pool and by the spring of 2017, Colonies 3 and 4 had become established.

4.3. LOBB'S AQUATIC BUTTERCUP

Other special-status plant species that occur in the region include those listed in the Santa Rosa Plain Vernal Pool Ecosystem Preservation Plan (CH2M Hill 1996) and which, by virtue of their known nearby occurrence, habitat affinities, and the habitats present, could be considered to have the potential to occur on the Woodside Holdings property. These species include Bogg's Lake dodder (*Cuscuta howelliana*), a parasitic species on many vernal pool species, particularly *Eryngium*, Sebastopol meadowfoam (*Limnanthes vinculans*); small-flowered mesamint (*Pogogyne douglasii* ssp. *parviflora*); Lobb's aquatic buttercup; and many-flowered navarretia (*Navarretia pleiantha*).

Suitable habitat is present on the Woodside Holdings property for all of these special-status species but only Lobb's aquatic buttercup has been observed. The locations at which the species has been observed, including areas west of the Woodside Holdings property, are shown in Figure 6. Because

of the species' floating habitat, no attempt was made to count the number of plants at any of the locations where it has been observed.

5.0. REFERENCES CITED

Baldwin, B. G., D. H. Goldman, D. K. Keil, R. Patterson, T. J. Rosatti, and D. H. Wilkens. (Eds). 2012. The Jepson Manual: vascular plants of California. 2nd. ed. University of California Press, Berkeley, California. 1567pp.

Best, C. J. T. Howell, W. Knight, I. Knight, and M. Wells. 1996. A flora of Sonoma County. First edition. California Native Plant Society. 347pp.

CH2M Hill. 1996. Santa Rosa vernal pool ecosystem preservation plan. Submitted to the Santa Rosa Vernal Pool Task Force.

Mason, H. L. 1975. A flora of the marshes of California. University of California Press. Los Angeles.

Munz, P. A. and D. D. Keck. 1968. A California flora. University of California Press. Berkeley.

Monk & Associates. 2005. Special-status plant first-year survey report, Kerry Ranch – Phase II Project Site, Santa Rosa, Sonoma County, California. 3p. plus appendices and figures.

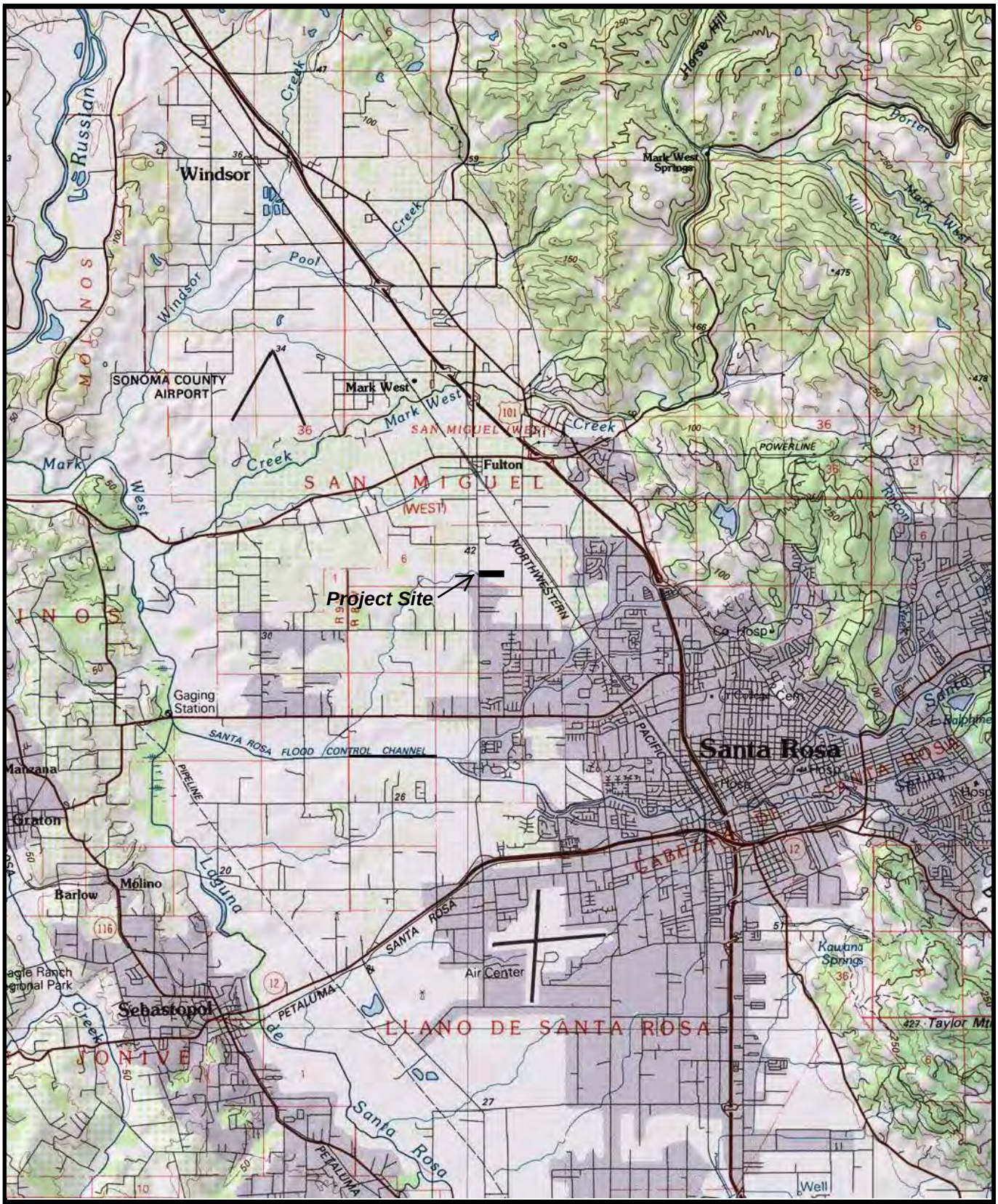
Patterson, C. A. 1992. Re: botanical/wetland survey of the site on Francisco Avenue in northwest Santa Rosa. 3p. + maps and data sheets.

Patterson, C. A. 1995. Re: botanical/wetland survey of the "Stewart and Sachs" site at 2193 Francisco Avenue, northwest Santa Rosa. 2p. + maps and data sheets.

Skinner, M. W. and B. M. Pavlik. 1994. Inventory of rare and endangered vascular plants of California. California Native Plant Society Special Publication No. 1. Fifth edition.

U. S. D. A. Forest Service and Soil Conservation Service and the University of California Agricultural Experiment Station. 1972. Soil survey of Sonoma County. 188p. + maps.

FIGURES

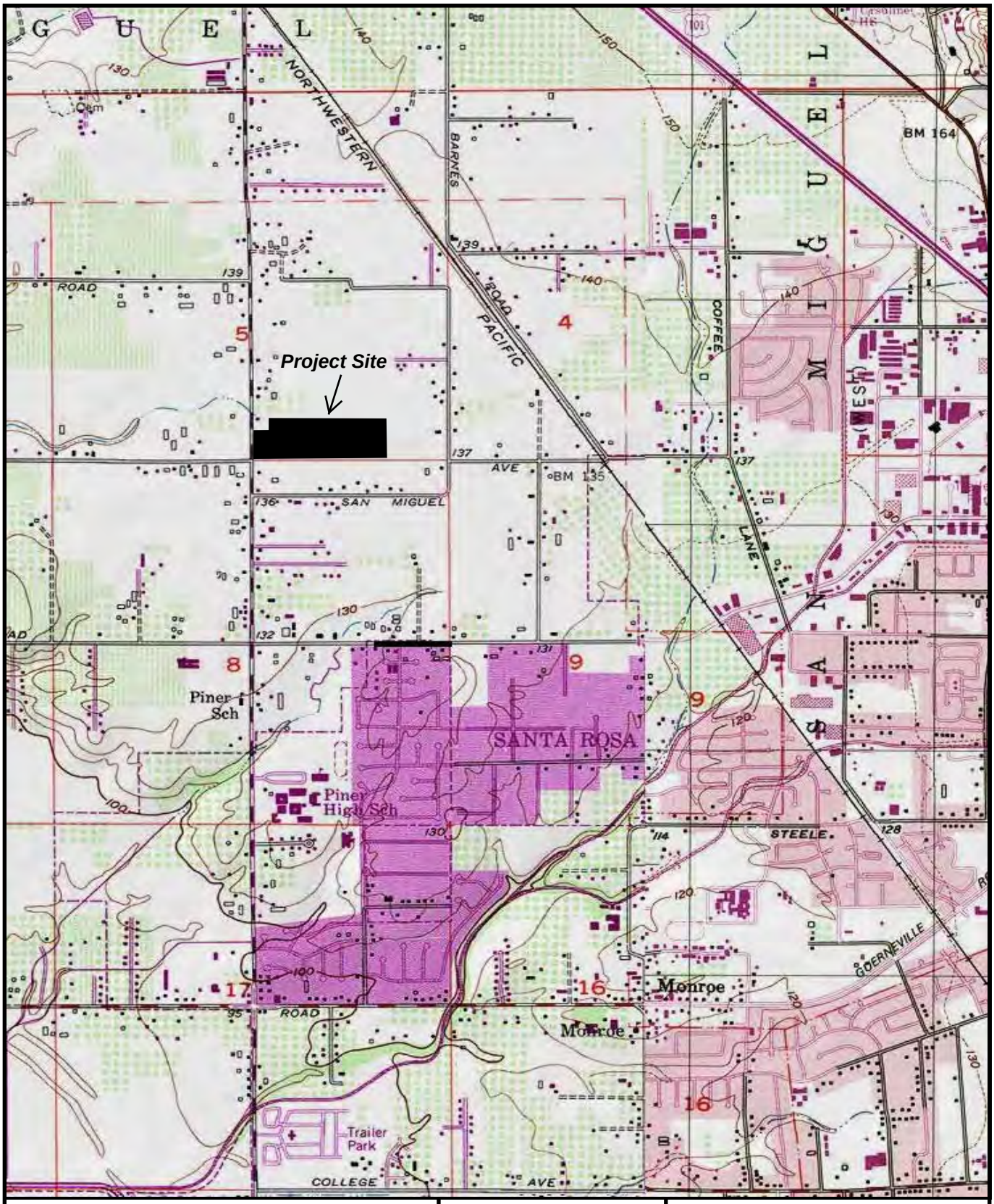


Applicant:
Mr. David Jacobson
Woodside Holdings, LP
47 Bellevue Road
San Rafael, CA 94901

Site:
Woodside Holdings Property (A.P. 034-043-070)
Santa Rosa, California

Nominal Scale:
1:100,000

Figure 1.
Regional Location Map

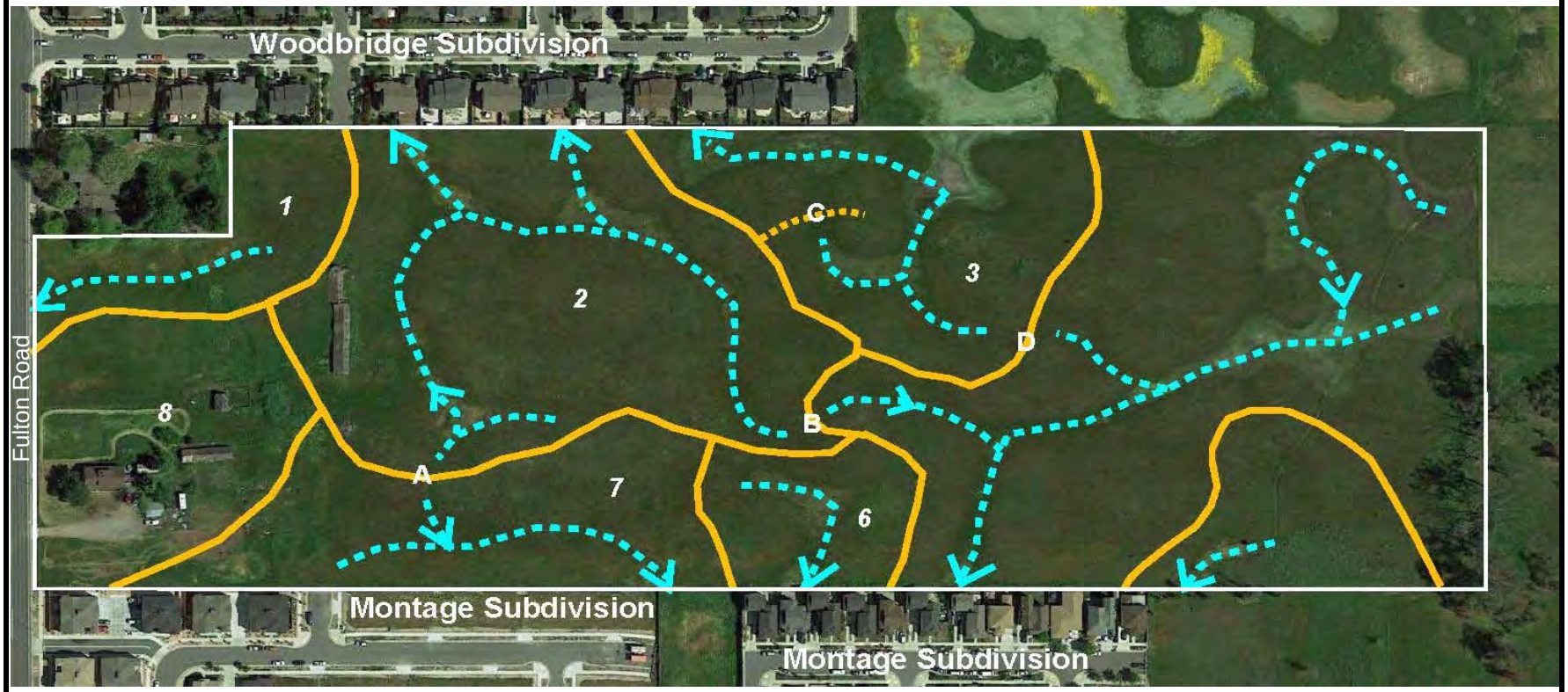


Applicant:
Mr. David Jacobson
Woodside Holdings, LP
47 Bellevue Road
San Rafael, CA 94901

Site:
Woodside Holdings Property (A.P. 034-043-070)
Santa Rosa, California

Nominal Scale:
1:22,500

Figure 2.
Project Site Location



LEGEND

Subwatershed Divide

Watershed Boundaries

A, B, C, D Watershed Divides

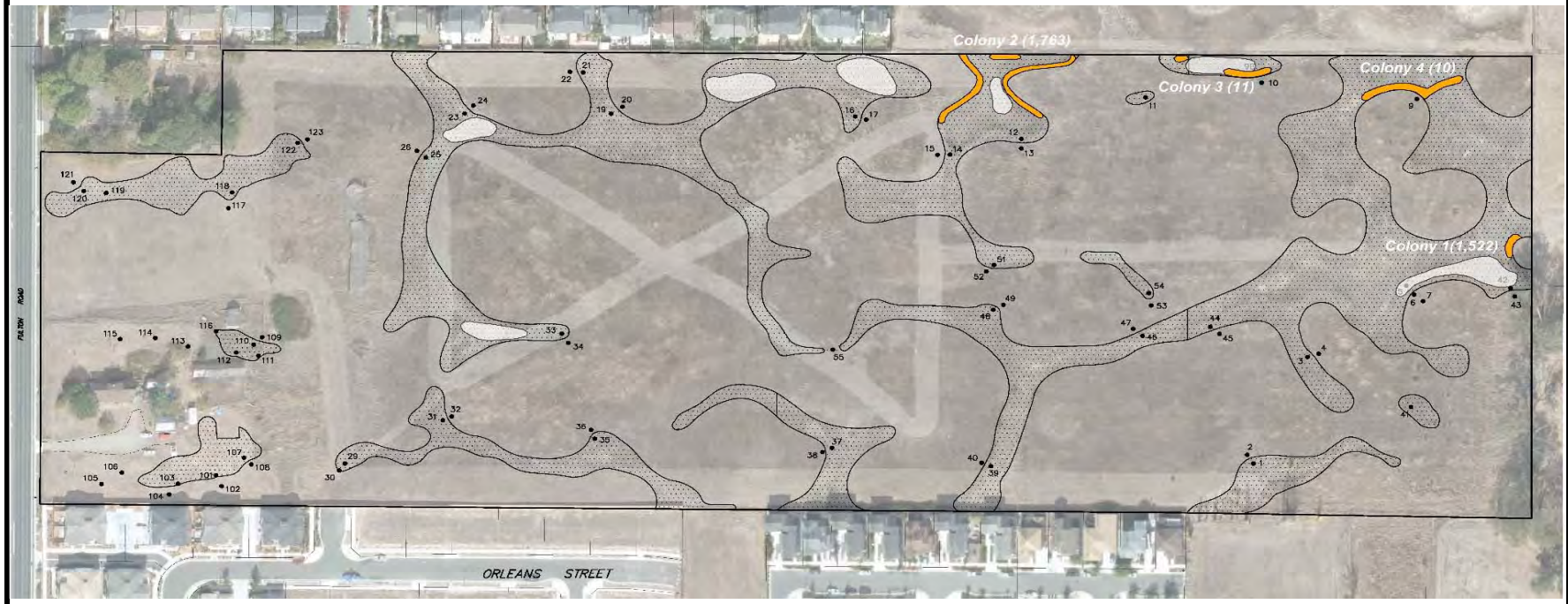
Drainages

Applicant:
Mr. David Jacobson
Woodside Holdings, LP
47 Bellevue Road
San Rafael, CA 94901

Site:
Woodside Holdings Property (A.P. 034-043-070)
Santa Rosa, California

No Scale

Figure 3.
Existing Drainage Network and Watershed Boundaries
on the Woodside Holdings Property



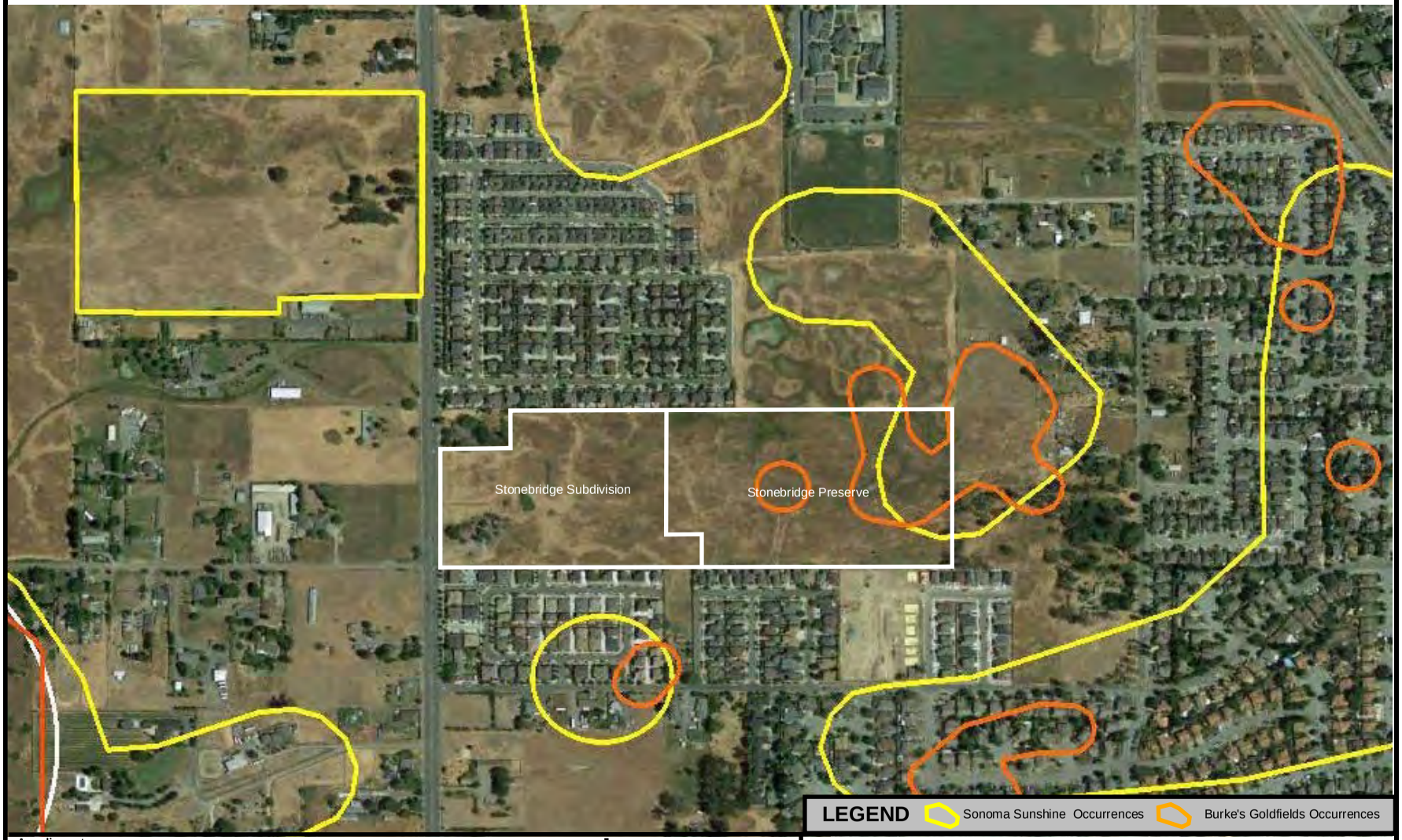
LEGEND Burke's Goldfields *Colony X (xx)* Burke's Goldfields Colony Number (Number of Plants) Lobb's Aquatic Buttercup

Applicant:
Mr. David Jacobson
Woodside Holdings, LP
47 Bellevue Road
San Rafael, CA 94901

Site:
Woodside Holdings Property (A.P. 034-043-070)
Santa Rosa, California

Approximate Scale:
1:2,900

Figure 4.
Current Burke's Goldfields and Lobb's Aquatic Buttercup Occurrences
on the Woodside Holdings Property

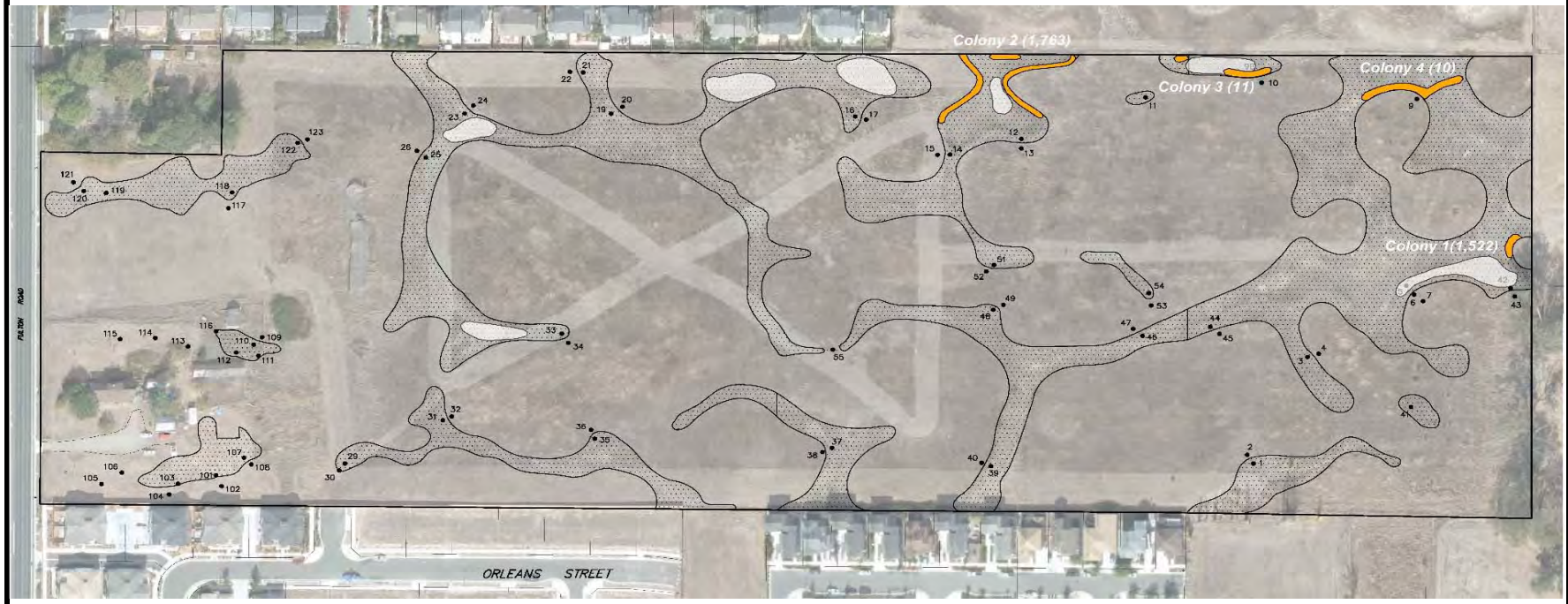


Applicant:
Mr. David Jacobson
Woodside Holdings, LP
47 Bellevue Road
San Rafael, CA 94901

Site:
Woodside Holdings Property (A.P. 034-043-070)
Santa Rosa, California

Approximate Scale:
1:7,500

Figure 5.
CNDDB Map of
Sonoma Sunshine and Burke's Goldfields Occurrences



LEGEND Burke's Goldfields *Colony X (xx)* Burke's Goldfields Colony Number (Number of Plants) Lobb's Aquatic Buttercup

Applicant:
Mr. David Jacobson
Woodside Holdings, LP
47 Bellevue Road
San Rafael, CA 94901

Site:
Woodside Holdings Property (A.P. 034-043-070)
Santa Rosa, California

Approximate Scale:
1:2,900

Figure 6.
Current Burke's Goldfields and Lobb's Aquatic Buttercup Occurrences
on the Woodside Holdings Property

APPENDICES

APPENDIX A.
Species with the Potential to Occur on the Woodside Holdings Property
Santa Rosa, California

Scientific Name **Common Name**	**Status**	**Habitat Affinities**	**Blooming Period**	**Notes**
Alopecurus aequalis var. *sonomensis* Sonoma alopecurus	USFWS: C2 CDFG: - CNPS: 1A	Marshes, swamps, and scrub.	Feb-Apr	No suitable habitat occurs on the Woodside Holdings property. Species was not observed.
Amsinkia lunaris Bent-flowered fiddleneck	USFWS: - CDFG: - CNPS: 4	Annual grassland.	Mar-Jun	The upland habitat might provide marginally suitable habitat but the species was not observed
Blennosperma bakeri Sonoma sunshine	USFWS: E CDFG: E CNPS: 1b	Vernal pools and vernal swales.	Mar-Apr	Suitable habitat is present on the Woodside Holdings property. The species was not observed. CNDDB historic records.
Cuscuta howelliana Bogg's Lake dodder	USFWS: - CDFG: - CNPS: 4	Vernal pools.	Mar-Apr	Suitable habitat is present on the Woodside Holdings property. The species was not observed.
Downingia humilis Dwarf downingia	USFWS: - CDFG: - CNPS: 1B	Vernal pools.	Mar-Apr	Suitable habitat is present on the Woodside Holdings property. The species was not observed.
Lasthenia burkei Burke's goldfields	USFWS: E CDFG: E CNPS: 1b	Vernal pools and vernal swales.	Mar-Apr	Suitable habitat is present on the Woodside Holdings property. Four colonies were observed.
Limnanthes vinculans Sebastopol meadowfoam	USFWS: E CDFG: E CNPS: 1b	Vernal pools and vernal swales.	Mar-Apr	Suitable habitat is present on the Woodside Holdings property but site is near the northern range limit. Species not observed.
Navarretia pleiantha Many-flowered navarretia	USFWS: C1 CDFG: CNPS: 1b	Vernal pools and vernal swales.	Mar-Apr	Suitable habitat is present on the Woodside Holdings property site but the species was not observed.
Perideridia gairdneri ssp. *gairdneri* Gairdner's yampah	USFWS: C2 CDFG: - CNPS: 1B	Vernal pools and saturated season-al wetlands.	Jun-Jul	Suitable clay soils are present in a small area of the site but the species was not observed.
Pogogyne douglasii ssp. *parviflora* Small-flowered mesamint	USFWS: C3c CDFG: - CNPS: 1B	Vernal pools and inundated sea-sonal wetlands	May-Jul	Suitable habitat is present on the Woodside Holdings property. The species was not observed.
Ranunculus lobbii Lobb's aquatic buttercup	USFWS: - CDFG: - CNPS: 4	Vernal pools and ponded swales.	Feb-Apr	Suitable habitat is present on the Woodside Holdings property. The species was not observed.
Trifolium amoenum Showy indian clover	USFWS: C2* CDFG: - CNPS: 1A	Annual grassland.	Apr-Jun	The upland habitat on the site provides marginally suitable habitat but the species was not observed.

Notes: **Agencies** - USFWS = U.S. Fish and Wildlife Service, CDFG = California Department of Fish and Game, CNPS = California Native Plant Society. **Federal Designations** – E = Listed as Endangered by the Federal Government. T = Listed as Threatened by the Federal Government. C1 = Category 1 Candidate. C1* = Sufficient data are on file to support listing but taxon presumed extinct. C2 = Category 2 Candidate. C2* = Sufficient data to support federal listing lacking, taxon presumed extinct. **State Designations** – E = Listed as Endangered. R = Listed as Rare. **CNPS Designations** – List 1A = Species presumed extinct in California. List 1B = Species rare and endangered in California and elsewhere. List 2 = Species rare and endangered in California but more common elsewhere. List 3 = Species about which additional data are needed. List 4 = Species of limited distribution.

APPENDIX B.
Species Observed on the Woodside Holdings Property,
Santa Rosa, California

CLASS **Family** ***Scientific name***	**Common name**
GYMNOSPERMS	
Cupressaceae	
Hseperocyparis macrocarpa	
Pinaceae	
Pinus radiata	Monterey pine
ANGIOSPERMS **DICOTYLEDONAE**	
Apiaceae	
Eryngium aristulatum	coyote thistle
Foeniculum vulgare	fennel
Sanicula bipinnatifida	footsteps of spring
Torilis nodosa	knotted hedge parsley
Araliaceae	
Hedera helix	English ivy
Asteraceae	
Achyrachaena mollis	blow-wives
Agoseris heterophylfa	false dandelion
Anaphalis margaritacea	pearly everlasting
Anthemis cotula	mayweed
Baccharis pilularis var. *consanguinea*	coyote brush
Carduus pycnocephalus	Italian thistle
Chamomilla suaveolens	pineapple weed
Cichorium intybus	chicory
Cirsium vulgare	bull thistle
Conyza canadensis	horseweed
Cotula coronopifolia	brass buttons
Gnaphalium luteo-album	cudweed
Helminthotheca echioides	bristly ox-tongue
Hypochaeris glabra	Smooth cat's-ear
Hypochaeris radicata	rough cat's-ear

Lactuca saligna	Willow lettuce
Lactuca serriola	prickly lettuce
Lasthenia burkei	Burke’s goldfields
Leontodon taraxacoides	hawkbit
Senecio vulgaris	common groundsel
Soliva sessilis	soliva
Sonchus asper asper	prickly sow thistle
Sonchus oleraceus	common sow thistle
Taraxacum officinale	dandelion
Tragopogon porrifolius	salsify
Xanthium strumarium	cocklebur

Boraginaceae

Plagiobothrys stipitatus stipitatus	slender popcorn flower
Plagiobothrys bracteatus	popcorn flower

Brassicaceae

Brassica nigra	black mustard
Capsella bursa-pastoris	shepherd's purse
Cardamine oligosperma	bitter cress
Hirschfeldia incana	short-podded mustard
Lepidium nitidum nitidum	peppeweed
Raphanus sativus	wild radish

Callitrichaceae

Callitriche heterophylla	water starwort

Campanulaceae

Downingia concolor	downingia

Caryophyllaceae

Cerastium glomeratum	mouse-ear chickweed
Spergularia sp.	sand spurrey
Stellaria media	common chickweed

Convolvulaceae

Convolvulus arvensis	hedge bindweed

Crassulaceae

Crassula aquatica	pygmy water-wort

Cucurbitaceae

Marah fabaceus	manroot

Euphorbiaceae	
Eremocarpus setigerus	turkey mullein
Fabaceae	
Acmispon brachycarpum	wooly trefoil
Lotus corniculatus	birdsfoot trefoil
Lupinus bicolor	miniature lupine
Lupinus nanus	sky lupine
Medicago polymorpha	bur clover
Trifolium depauperatum	dwarf sack clover
Trifolium dubium	little hop clover (lesser trefoil)
Trifolium repens	white clover
Trifolium subterraneum	subterranean clover
Trifolium variegatum	white-tip clover
Trifolium willdenovii	tomcat clover
Vicia benghalensis	purple vetch
Vicia cracca	cow vetch
Vicia sativa	common vetch
Fagaceae	
Quercus agrifolia	coast live oak
Geraniaceae	
Erodium botrys	broad-leaf filaree
Erodium cicutarium	red-stem filaree
Erodium moschatum	white-stem filaree
Geranium dissectum	cut-leaf geranium
Juglandaceae	
Juglans regia	English walnut
Lamiaceae	
Mentha pulegium	pennyroyal
Lythraceae	
Lythrum hyssopifolium	hedge hyssop
Malvaceae	
Malva nicaeensis	bull mallow
Sidalcea calycosa	checker mallow
Myrtaceae	
Eucalyptus globulus	blue gum (eucalyptus)

Onagraceae	
Camissonia ovata	sun cups
Epilobium angustifolium	fireweed
Epilobium brachycarpum	tall willowherb
Orobanchaceae	
Parentucellia viscosa	parentucellia
Triphysaria versicolor faucibarbata	yellow owl's clover
Papaveraceae	
Eschscholzia californica	California poppy
Plantaginaceae	
Plantago erecta	plantain
Plantago lanceolata	English plantain
Veronica peregrina xalapensis	speedwell
Polygonaceae	
Polygonum arenastrum	knotweed
Rumex acetosella	sheep sorrel
Rumex crispus	curly dock
Rumex pulcher	fiddle dock
Primulaceae	
Anagallis arvensis	scarlet pimpernel
Ranunculaceae	
Ranunculus californicus	California buttercup
Ranunculus muricatus	spiny-fruited buttercup
Rosaceae	
Prunus cerasifera	cherry plum
Prunus sp.	ornamental fruit tree
Rubus discolor	Himalya berry
Scrophulariaceae	
Parentucellia viscosa	parentucellia
MONOCOTYLEDONAE	
Cyperaceae	
Cyperus eragrostis	tall flatsedge
Eleocharis macrostachya	spike rush

Juncaceae	
Juncus bufonius	toad rush
Juncus capitatus	capitate rush
Juncus tenuis	slender rush
Liliaceae	
Brodiaea elegans	harvest brodiaea
Chlorogalum pomeridianum	soap plant
Triteleia hyacinthina	hyacinth brodiaea
Poaceae	
Aira caryophyllea	silver European hairgrass
Anthoxanthum aristatum	vernal grass
Avena barbata	slender oats
Briza maxima	rattlesnake grass
Briza minor	little rattlesnake grass
Bromus carinatus	California bromegrass
Bromus diandrus	ripgut brome
Bromus hordeaceus	soft chess
Cynodon dactylon	Bermuda grass
Cynosurus echinatus	dogtail grass
Danthonia californica	California oatgrass
Deschampsia danthonioides	annual hairgrass
Festuca bromoides	brome fescue
Festuca myuros	six-weeks descur
Festuca perennis	ryegrass
Hordeum brachyantherum	meadow barley
Hordeum marinum var. *gussoneanum*	Mediterranean barley
Hordeum murinum var. *leporinum*	hare barley
Phalaris aquatica	Harding grass
Pleuropogon californicus	California semaphore grass
Poa annua	annual bluegrass
Polypogon monspeliensis	rabbitsfoot grass
Taeniatherum caput-medusae	medusahead

Attachment D. Photographs of the Stonebridge Project Site
Burke's Goldfields within the Project Site and the Adjacent Woodbridge Preserve

Looking southeast at existing seasonal wetlands on the Stonebridge development site. Marginal habitat for Burke's goldfields and other special-status plants.

Scattered, sparse occurrence of Burke's goldfields in dense vegetation along northern boundary of Project Site Preserve on May 7, 2019. Compare with the Burke's on the Woodbridge Preserve which is immediately to the north of the project site and shown in the photos below.

Woodbridge Preserve on May 7, 2019. *Lasthenia burkei* (yellow) and *Limnanthes douglasii* (white).

Woodbridge Preserve on May 21, 2019. *Lasthenia burkei* and *Limnanthes douglasii*.

Attachment

USFWS 2009 Letter of concurrence on conclusions of July 23, 2000 Report on California tiger salamander surveys conducted at four West Santa Rosa Properties, Sonoma, California.

Subj: **Schellinger Brothers Construction Proposed Medium Density Residential Project on 2022, 2038 and 2082 Fulton Rd and 2420 San Miguel Rd. (Service File No. 81420-2009-TA-0431)**
Date: 2/6/2009 9:36:00 AM Pacific Standard Time
From: Vincent_Griego@fws.gov
To: bill@pacificbioconsulting.com
CC: Mhfawcett@aol.com, TLove@dfg.ca.gov

Bill,

The Service concurs with the conclusions of the July 23, 2008 Report on California Tiger Salamander Surveys Conducted at Four West Santa Rosa Properties, Sonoma County, California. As a result, the proposed project will not result in 'take' and no mitigation for the Sonoma County Distinct Population Segment of California tiger salamander (Ambystoma californiense) is required, however compensation will be required for the endangered Burke's goldfields, Sonoma sunshine, Sebastopol meadowfoam and/or Many-flowered navarretia for the proposed medium density residential project on these parcels. The Service should be contacted to obtain concurrence on the acreage of compensation required prior to any ground disturbance for the proposed project.

No critical habitat has been proposed or designated for these species in the Santa Rosa Plain, therefore none will be affected. Our determinations are confined to this project site, are consistent with the Interim Santa Rosa Plain Conservation Strategy and made under the authority of the Endangered Species Act of 1973.

Vincent Griego
Senior Fish and Wildlife Biologist
Coast Bay Delta Branch
U.S. Fish and Wildlife Service
2800 Cottage Way Room W-2605
Sacramento, CA 95825

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FAWCETT ENVIRONMENTAL CONSULTING
P.O. BOX 385
BODEGA, CA 94922
TELEPHONE: 707/876-3450
EMAIL: p.fawcetti22@gmail.com

JUNE 11, 2019

Mr. Peter Hellmann
Builders Land Group
1615 Bonanza St., Suite 314
Walnut Creek, CA 94595

Subject: California tiger salamander studies near the Stonebridge Development Project, 2220 Fulton Road, Santa Rosa, CA, 94201

Dear Mr. Hellmann:

At your request, I am writing this letter to describe and summarize the findings of surveys and studies of Sonoma DPS California tiger salamander (CTS) I have conducted in the vicinity of the proposed Stonebridge Project at 2200 Fulton Road (project site), and to provide my opinion of the probability of finding CTS on your project site. The surveys and studies are indicated in the attached image and include the following:

- Harvest Christian project site, 2568 Piner Road (Fawcett 2005): A CTS Site Assessment for the parcel was conducted in 2004 (Fawcett 2005). Wetlands on the parcel were considered too shallow for CTS breeding. However, in February and March 2005, dip net surveys for CTS larvae were conducted in wetlands on adjacent City-owned property (2590 Piner Road) in February and March 2005, with negative findings.

- Shook and Waller project site, 2323 and 2285 San Miguel Avenue (Fawcett 2007): Pitfall trapping was conducted at this uplands site in 2005-2006 and 2006-2007, with negative results.

- Schellinger Brothers Fulton Road project site (Fawcett 2008): From spring 2004 through spring 2008 protocol-level pitfall trapping and dip net surveys were conducted at four parcels located between San Miguel Avenue and Onsrud Lane (APNs 034-043-066, 2082 Fulton Road; 034-043-060, 2038 Fulton Road; 034-043-064, 2022 Fulton Road; and 034-043-039), 2420 San Miguel Avenue). Potentially suitable pools for CTS breeding at the 2022 and 2038 Fulton Road properties (Figure 2) were dip-netted once in 2004 and multiple times in 2005, 2006, and 2007, with negative results. Pitfall trapping was conducted in two consecutive years at each of the parcels, with negative results for CTS. A letter of concurrence from the U.S. Fish and Wildlife Service (USFWS) that the project would not result in take of CTS is attached at the end of this letter.

- Alton North Conservation Bank (ANCB): My team conducted CTS egg and larvae surveys every breeding season since pools were created in summer 2010 (Fawcett 2011 through 2019 annual reports). Three adult or juvenile CTS were rescued and relocated during construction, and breeding occurred in spring 2011 in several pools close to known breeding pools at the Alton Lane Mitigation Site (ALMS). The ALMS CTS breeding population was established from an unauthorized introduction of larvae circa 1989-90. Since 2011, breeding has occurred in ANCB pools hydrologically connected to pools at the ALMS, progressively breeding in pools westward across the larger (22.67 acre) portion of ANCB. This westward movement between pools that are in relatively close proximity demonstrates that terrestrial-phase adults or juveniles that grew into adult CTS moved into and bred within the ANCB, representing a small western expansion of the ALMS CTS population. This is the only known evidence of any range expansion of the ALMS population.

- Fulton Road Conservation Site (FRCS; Fawcett 2015, 2016, 2019): This approximately 26-acre preserve located at 2365 Fulton Road consists of two sections, named the Fulton Road Conservation Site and the Fulton Road Mitigation Site (see attached image). Potentially suitable pools and swales for CTS breeding were present at FRCS (mainly in the western half) before construction in 2017 of new pools and swales, many of which are also potentially suitable for breeding. Dip net surveys for CTS larvae were conducted by LSA, Inc. in existing pools in 2006, 2007, and 2008., and egg and larvae surveys were conducted by my team in 2014 – 2015 and in 2016, all with negative results for CTS. Following construction of new pools in 2017, we conducted a larvae survey in 2018, and multiple egg and larvae surveys in 2019, again with negative results.

Discussion

The geographic range of CTS, as defined by USFWS, includes the project site, although to date, no CTS eggs, larvae, or terrestrial juveniles or adults have been found anywhere east of Fulton Road (the location of the project site) or north of Santa Rosa Creek. The only known breeding population north of Santa Rosa Creek occurs on the west side of Fulton Road focused around the ALMS including at the immediately adjacent ANCB. The Alton Lane population was originally established by an unauthorized introduction of CTS larvae circa 1989-90 from likely from what is now known as the Wright Conservation Property. In addition, there was a subsequent authorized introduction in 2004 of juveniles and adults taken from a construction site in Cotati west of Highway 101. Because of legal precedent (Alsea Decision), USFWS treats the Alton Lane CTS population the same as all others in Sonoma County. Pursuant to the USFWS' 2007 Programmatic Biological Opinion by and between the U.S. Army Corps of Engineers and the USFWS, and the USFWS' 2016 Santa Rosa Plain Recovery Plan, USFWS requires mitigation for impacts to CTS individuals

and/or their habitat. CDFW, pursuant to the CESA can only require CTS mitigation when a proposed project would impact ("take") CTS since the CESA doesn't regulate impacts to "habitat."

In answer to the second part of your request regarding the probability of finding CTS at the Stonebridge site, I will point out that the Alton Lane CTS population appears to be expanding its range only to immediately adjacent pools within the ANCB. No expansion has been documented outside the Alton Lane mitigation complex. No CTS were detected in the surveys described above, nor in numerous other surveys of which I am aware in the Fulton Road area closer to the Stonebridge project site (Stacy Martinelli, CDFW, personal communication May 2019). and in areas further east and north (Geoff Monk, personal communication 06/11/19). In my view, it is extremely unlikely that CTS currently occupy uplands or breed in wetlands at the Stonebridge site.

References

Fawcett, M.H. 2005. Preliminary California tiger salamander assessment, 1835 Fulton Road. Prepared for Golden Bear Biostudies. June 2005. 7 p.

Fawcett, M.H. 2007. Report on two years of California tiger salamander surveys at 2323 and 2285 San Miguel Avenue (APN 034-041-007, 034-041-008), Santa Rosa, California. Prepared for Golden Bear Biostudies and Shook and Waller. August 2007. 29 p. + Appendix.

Fawcett, M.H. 2008. Report on California tiger salamander surveys conducted at four west Santa Rosa Properties, Sonoma County, California: 2022, 2038, and 2082 Fulton Road (APNs 034-043-066, 034-043-060, 034-043-064); and 2420 San Miguel Road (APN 034-043-039). Report prepared for Pacific Biological Consulting and Schellinger Brothers Construction. July 2008. 30 p. + Appendix.

Fawcett, M.H. 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019. Annual reports on surveys conducted at Alton North Conservation Bank, prepared for Alton Preserve, LLC.

USFWS 2007. Programmatic Biological Opinion for U.S. Army Corps of Engineers for projects that may affect California tiger salamander and three endangered plant species on the Santa Rosa Plain, California. Corps File Number 233420N. U.S. Fish and Wildlife Service, November 2007.

USFWS 2016. Recovery Plan for the Santa Rosa Plain: *Blennosperma bakeri* (Sonoma sunshine; *Lasthenia burkei* (Burke's goldfields); *Limnanthes vinculans* (Sebastopol meadowfoam); California tiger salamander Sonoma County Distinct Population

Segment (*Ambystoma californiense*). U.S. Fish and Wildlife Service, Pacific Southwest Region, Sacramento, California. vi + 128 pp.

Thank you for the opportunity to be of service.

Sincerely,

Michael H. Fawcett, Ph.D.

Figures

Figure 1. Google Earth image showing Fawcett study sites (blue markers) near Stonebridge project

Attachment

USFWS 2009 Letter of concurrence on conclusions of July 23, 2000 Report on California tiger salamander surveys conducted at four West Santa Rosa Properties, Sonoma, California.

Subj: **Schellinger Brothers Construction Proposed Medium Density Residential Project on 2022, 2038 and 2082 Fulton Rd and 2420 San Miguel Rd. (Service File No. 81420-2009-TA-0431)**
Date: 2/6/2009 9:36:00 AM Pacific Standard Time
From: Vincent_Griego@fws.gov
To: bill@pacificbioconsulting.com
CC: Mhfawcett@aol.com, TLove@dfg.ca.gov

Bill,

The Service concurs with the conclusions of the July 23, 2008 Report on California Tiger Salamander Surveys Conducted at Four West Santa Rosa Properties, Sonoma County, California. As a result, the proposed project will not result in 'take' and no mitigation for the Sonoma County Distinct Population Segment of California tiger salamander (Ambystoma californiense) is required, however compensation will be required for the endangered Burke's goldfields, Sonoma sunshine, Sebastopol meadowfoam and/or Many-flowered navarretia for the proposed medium density residential project on these parcels. The Service should be contacted to obtain concurrence on the acreage of compensation required prior to any ground disturbance for the proposed project.

No critical habitat has been proposed or designated for these species in the Santa Rosa Plain, therefore none will be affected. Our determinations are confined to this project site, are consistent with the Interim Santa Rosa Plain Conservation Strategy and made under the authority of the Endangered Species Act of 1973.

Vincent Griego
Senior Fish and Wildlife Biologist
Coast Bay Delta Branch
U.S. Fish and Wildlife Service
2800 Cottage Way Room W-2605
Sacramento, CA 95825

(916) 414-6493
Website: http://www.fws.gov/sacramento

DEPARTMENT OF THE ARMY
SAN FRANCISCO DISTRICT, U.S. ARMY CORPS OF ENGINEERS
1455 MARKET STREET, 16TH FLOOR
SAN FRANCISCO, CALIFORNIA 94103-1398

MAR - 9 2016

Regulatory Division

Subject: File Number 2015-00443N

Laurence P. Stromberg, Ph.D.
59 Jewell Street
San Rafael, California 94901

Dear Dr. Stromberg:

This correspondence is in reference to your submittal of November 16, 2015, on behalf of David Jacobson, Harvey Rich, and Ted Winfield requesting an approved jurisdictional determination of the extent of wetlands on a 28.6 acre parcel located at 2220 Fulton Road in Santa Rosa, Sonoma County, California. Coordinates for the project are 38°28.322'N, -122°46.478'W and APN 034-043-070. The wetlands drain to Abramson Creek.

All proposed discharges of dredged or fill material occurring below the plane of ordinary high water in non-tidal waters of the United States; or below the high tide line in tidal waters of the United States; and within the lateral extent of wetlands adjacent to these waters, typically require Department of the Army authorization and the issuance of a permit under Section 404 of the Clean Water Act of 1972, as amended (33 U.S.C. § 1344 *et seq.*). Waters of the United States generally include the territorial seas; all traditional navigable waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including waters subject to the ebb and flow of the tide; wetlands adjacent to traditional navigable waters; non-navigable tributaries of traditional navigable waters that are relatively permanent, where the tributaries typically flow year-round or have continuous flow at least seasonally; and wetlands directly abutting such tributaries. Where a case-specific analysis determines the existence of a "significant nexus" effect with a traditional navigable water, waters of the United States may also include non-navigable tributaries that are not relatively permanent; wetlands adjacent to non-navigable tributaries that are not relatively permanent; wetlands adjacent to but not directly abutting a relatively permanent non-navigable tributary; and certain ephemeral streams in the arid West.

All proposed structures and work, including excavation, dredging, and discharges of dredged or fill material, occurring below the plane of mean high water in tidal waters of the United States; in former diked baylands currently below mean high water; outside the limits of mean high water but affecting the navigable capacity of tidal waters; or below the plane of ordinary high water in non-tidal waters designated as navigable waters of the United States, typically require Department of the Army authorization and the issuance of a permit under Section 10 of the Rivers and Harbors Act of 1899, as amended (33 U.S.C. § 403 *et seq.*). Navigable waters of the United States generally include all waters subject to the ebb and flow of

the tide; and/or all waters presently used, or have been used in the past, or may be susceptible for future use to transport interstate or foreign commerce.

The enclosed delineation map entitled, "Woodside Holdings Property" consisting of one sheet, certified March 4, 2016, prepared by Cinquini & Passarino, Inc. dated October 16, 2015 accurately depicts the extent and location of 6.31 acres of wetlands within the boundary area of the site that are subject to U.S. Army Corps of Engineers' regulatory authority under Section 404 of the Clean Water Act. This approved jurisdictional determination is based on the current conditions of the site, as verified during a field investigation of January 25, 2016, and a review of other data included in your submittal. This approved jurisdictional determination will expire in three years from the date of this letter, unless new information or a change in field conditions warrants a revision to the delineation map prior to the expiration date. The basis for this approved jurisdictional determination is explained in the enclosed *Approved Jurisdictional Determination Form*. This approved jurisdictional determination is presumed to be consistent with the official interagency guidance of June 5, 2007, interpreting the Supreme Court decision, *Rapanos v. United States*, 126 S. Ct. 2208 (2006).

You are advised that the approved jurisdictional determination may be appealed through the U.S. Army Corps of Engineers' *Administrative Appeal Process*, as described in 33 C.F.R. Part 331 (65 Fed. Reg. 16,486; Mar. 28, 2000), and outlined in the enclosed flowchart and *Notification of Administrative Appeal Options, Process, and Request for Appeal* (NAO-RFA) Form. If you do not intend to accept the approved jurisdictional determination, you may elect to provide new information to this office for reconsideration of this decision. If you do not provide new information to this office, you may elect to submit a completed NAO-RFA Form to the Division Engineer to initiate the appeal process; the completed NAO-RFA Form must be submitted directly to the Appeal Review Officer at the address specified on the NAO-RFA Form. You will relinquish all rights to a review or an appeal, unless this office or the Division Engineer receives new information or a completed NAO-RFA Form within 60 days of the date on the NAO-RFA Form. If you intend to accept the approved jurisdictional determination, you do not need to take any further action associated with the Administrative Appeal Process.

You are further advised that the U.S. Army Corps of Engineers evaluated the approved jurisdictional determination pursuant to the provisions of Section 404 of the Clean Water Act. Accordingly, the approved jurisdictional determination may not be valid under the wetland conservation provisions of the Food Security Act of 1985, as amended (16 U.S.C. §§ 3801-3862 *et seq.*). If you or your tenant is a current or prospective USDA program participant, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service prior to the commencement of work.

You may refer any questions on this matter to Roberta Morganstern of my Regulatory staff by telephone at 415-503-6782 or by e-mail at Roberta.A.Morganstern@usace.army.mil. All

correspondence should be addressed to the Regulatory Division, North Branch referencing the file number at the head of this letter.

The San Francisco District is committed to improving service to our customers. My Regulatory staff seeks to achieve the goals of the Regulatory Program in an efficient and cooperative manner, while preserving and protecting our nation's aquatic resources. If you would like to provide comments on our Regulatory Program, please complete the Customer Service Survey Form available on our website: http://www.spn.usace.army.mil/Missions/Regulatory.aspx.

Sincerely,

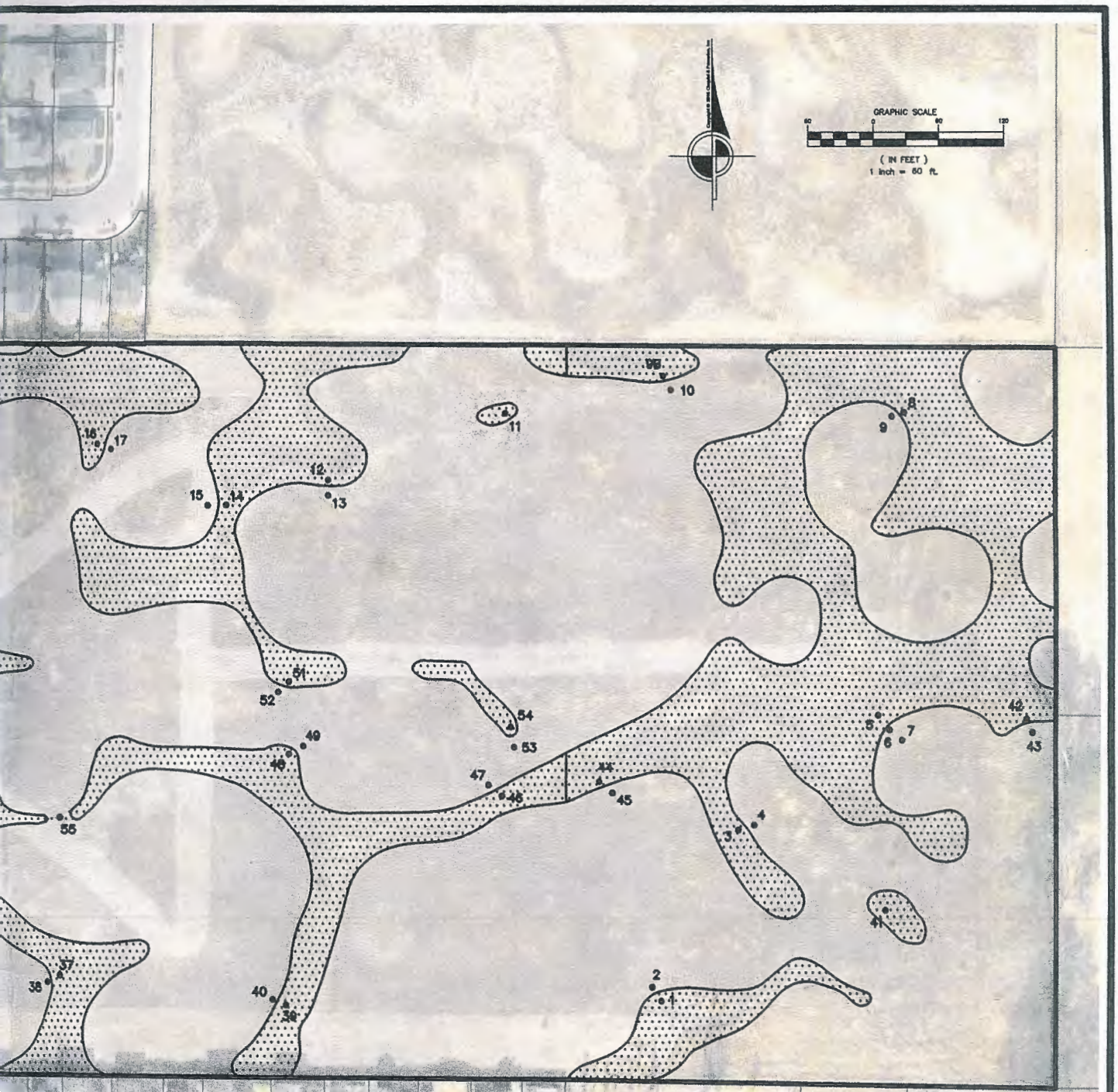
Roberta Morganstern

Roberta Morganstern
Regulatory Division Project Manager

Enclosures

Copy Furnished **electronically**:

Applicants: Harvey Rich 'Harvey Rich' tridevser@att.net
David Jacobson: davidjacobson101@gmail.com; Ted P. Winfield: tpw_jr@comcast.net
North Coast Regional Water Quality Control Board: Bargsten, Stephen@Waterboards <Stephen.Bargsten@waterboards.ca.gov>
U.S. EPA, San Francisco, CA Siu, Jennifer <Siu.Jennifer@epa.gov>



U.S. Army Corps of Engineers
San Francisco District
Regulatory Branch

Approved Jurisdictional Determination
Pursuant to Section 404 of Clean Water Act
and Section 10 of the Rivers and Harbors Act.

Woodside Holdings Property
2220 Fulton Road in Santa Rosa
Sonoma County APN 034-043-070
38°28.322'N, -122°46.478'W
Map reflects verified jurisdiction within project boundary.

File #2015-00443N March 7, 2016

Job Name: WOODSIDE HOLDINGS PROPERTY	DRAWN BY: JM	CHECKED BY: JMD
	SCALE: 1" = 60'	
	SHEET: 1 OF 1	JOB NUMBER: 6831-14
Description: JURISDICTIONAL DETERMINATION, WATERS OF THE STATE AND UNITED STATES	DWG. FILE: G:\LDDT\6831\dwg\6831Topo-20150429-Aerial-230c.dwg	
	DATE: Feb 02, 2016	
	TIME: 11:35am	

CINQUINI & PASSARINO, INC.
LAND SURVEYING
1360 N. Dutton Ave. #150 Phone: (707) 542-6266
Santa Rosa, Ca. 95401 Fax: (707) 542-2106
WWW.CINQUINIPASSARINO.COM

△ BOUNDARY
△ TOPOGRAPHIC
△ CONSTRUCTION
△ SUBDIVISIONS

TEDESCHI DRIVE
ORLEANS STREET
FLOW ROAD
LEGEND
EXISTING VERNAL POOL/SWALE HABITAT
SAMPLE SITE LOCATION

From: Ryan Olah [mailto:ryan_olah@fws.gov]
Sent: Friday, August 17, 2018 7:46 AM
To: tridevser@att.net
Subject: Re: [EXTERNAL] JACOBSON PROPERTY

Hi David and Harvey:

This e-mail is to confirm our discussions of Thursday, July 12 in which we discussed establishing a preserve on the eastern portion of the Jacobson Property to provide Burke's goldfields mitigation and California tiger salamander mitigation for the development of the western portion of the property into a residential subdivision. This compensation approach would be beneficial to Burke's goldfields and CTS since it will create a larger protected preserved area for these species. The Service approves of this approach to developing the site and looks forward to receiving the documentation. Thank you.

Ryan

Ryan Olah

Coast Bay Division Chief

U.S. Fish and Wildlife Service

Sacramento Fish and Wildlife Office

2800 Cottage Way

Sacramento, CA 95825

(916) 414-6623

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B.2 - USACE Jurisdictional Determination Verification Letter

draft

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DEPARTMENT OF THE ARMY
SAN FRANCISCO DISTRICT, U.S. ARMY CORPS OF ENGINEERS
1455 MARKET STREET, 16TH FLOOR
SAN FRANCISCO, CALIFORNIA 94103-1398

MAR - 9 2016

Regulatory Division

Subject: File Number 2015-00443N

Laurence P. Stromberg, Ph.D.
59 Jewell Street
San Rafael, California 94901

Dear Dr. Stromberg:

This correspondence is in reference to your submittal of November 16, 2015, on behalf of David Jacobson, Harvey Rich, and Ted Winfield requesting an approved jurisdictional determination of the extent of wetlands on a 28.6 acre parcel located at 2220 Fulton Road in Santa Rosa, Sonoma County, California. Coordinates for the project are 38°28.322'N, -122°46.478'W and APN 034-043-070. The wetlands drain to Abramson Creek.

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You may refer any questions on this matter to Roberta Morganstern of my Regulatory staff by telephone at 415-503-6782 or by e-mail at Roberta.A.Morganstern@usace.army.mil. All

correspondence should be addressed to the Regulatory Division, North Branch referencing the file number at the head of this letter.

The San Francisco District is committed to improving service to our customers. My Regulatory staff seeks to achieve the goals of the Regulatory Program in an efficient and cooperative manner, while preserving and protecting our nation's aquatic resources. If you would like to provide comments on our Regulatory Program, please complete the Customer Service Survey Form available on our website: http://www.spn.usace.army.mil/Missions/Regulatory.aspx.

Sincerely,

Roberta Morganstern

Roberta Morganstern
Regulatory Division Project Manager

Enclosures

Copy Furnished **electronically**:

Applicants: Harvey Rich 'Harvey Rich' tridevser@att.net
David Jacobson: davidjacobson101@gmail.com; Ted P. Winfield: tpw_jr@comcast.net
North Coast Regional Water Quality Control Board: Bargsten, Stephen@Waterboards <Stephen.Bargsten@waterboards.ca.gov>
U.S. EPA, San Francisco, CA Siu, Jennifer <Siu.Jennifer@epa.gov>

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B.3 - Waters of the State Jurisdictional Delineation Map

draft

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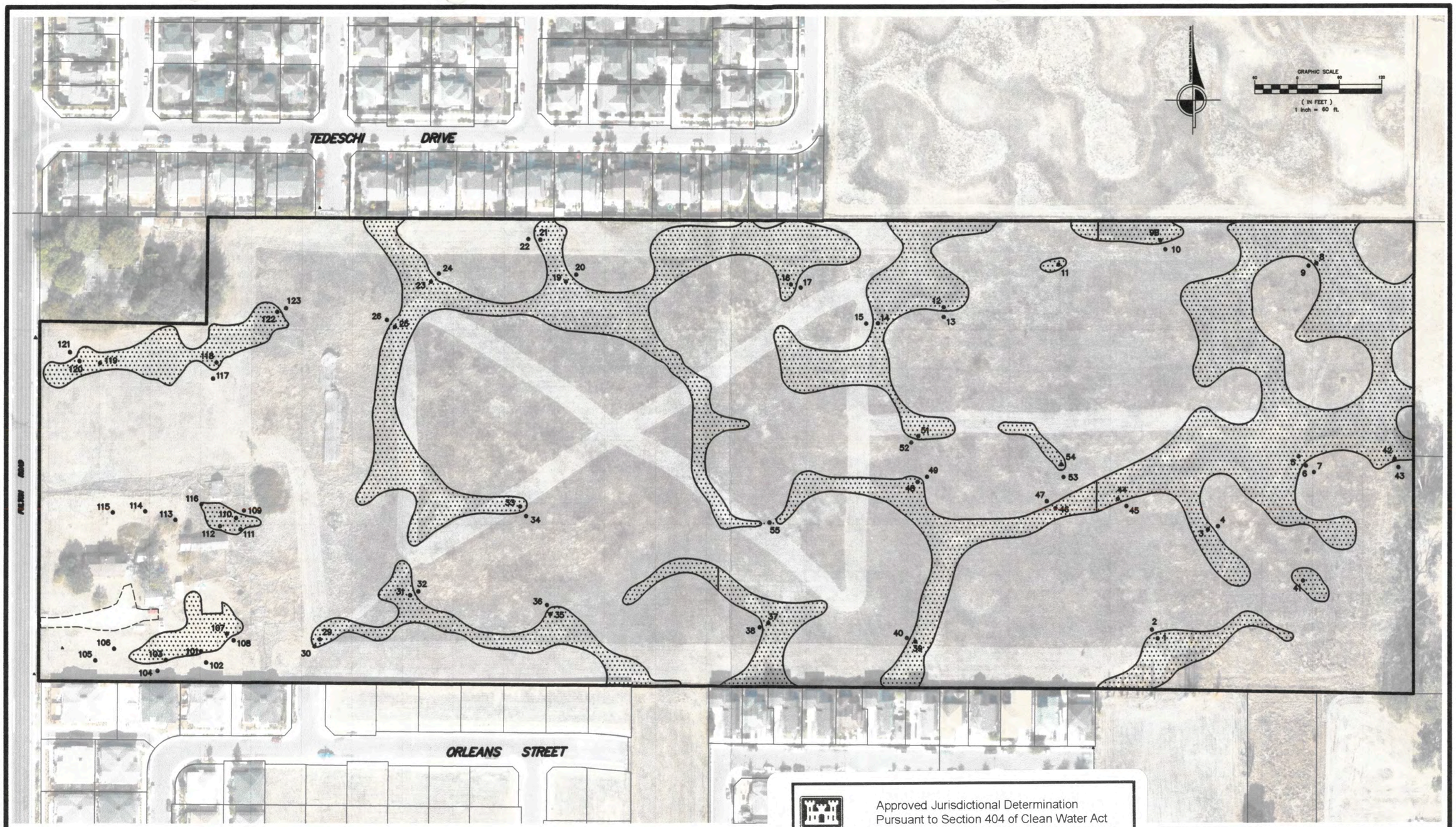

LEGEND

EXISTING VERNAL POOL/SWALE HABITAT

SAMPLE SITE LOCATION

U.S. Army Corps of Engineers
San Francisco District
Regulatory Branch

Approved Jurisdictional Determination
Pursuant to Section 404 of Clean Water Act
and Section 10 of the Rivers and Harbors Act.

Woodside Holdings Property
2220 Fulton Road in Santa Rosa
Sonoma County APN 034-043-070
38°28.322'N, -122°46.478'W
Map reflects verified jurisdiction within project boundary.

File #2015-00443N March 7, 2016

Job Name: WOODSIDE HOLDINGS PROPERTY	DRAWN BY: JM	CHECKED BY: JMD
	SCALE: 1" = 60'	
	SHEET: 1 OF 1	JOB NUMBER: 6831-14
Description: JURISDICTIONAL DETERMINATION, WATERS OF THE STATE AND UNITED STATES	DWG. FILE: G:\JOT\6831\dwg\6831topo-20150429-Aerial330e.dwg	
	DATE: Feb 03, 2016	
	TIME: 11:28am	

CINQUINI & PASSARINO, INC.
LAND SURVEYING
1360 N. Dutton Ave. #150 Santa Rosa, Ca. 95401
Phone: (707) 542-6268 Fax: (707) 542-2106
WWW.CINQUINIPASSARINO.COM

△ BOUNDARY
△ TOPOGRAPHIC
△ CONSTRUCTION
△ SUBDIVISIONS

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B.4 - Tree Preservation and Mitigation Report

draft

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HORTICULTURAL
Associates

Consultants in Horticulture and Arboriculture

TREE PRESERVATION AND MITIGATION REPORT

2220 Fulton Road
Santa Rosa, CA

Prepared For:

Mr. David Jacobson
Woodside Holdings LP
454 Gallinas Avenue, #488
San Rafael, CA 94903

Prepared by:

John C. Meserve
International Society of Arboriculture
ISA Certified Arborist, WE #0478A
ISA Qualified Tree Risk Assessor

May 9, 2019

HORTICULTURAL Associates

Consultants in Horticulture and Arboriculture
P.O Box 1261, Glen Ellen, CA 95442

May 9, 2019

Mr. David Jacobson
Woodside Holdings LP
454 Gallinas Avenue, #488
San Rafael, CA 94903

Re: Completed *Tree Preservation and Mitigation Report*, 2220 Fulton Road, Santa Rosa, California

David,

Attached you will find our completed *Tree Preservation and Mitigation Report* for the above noted project site in Santa Rosa. A total of 32 trees were evaluated and this includes all trees in the vicinity of proposed grading and construction. Some off-site trees were also included where they overhang the project site and could be impacted by the construction project.

Each tree on the project is identified in the field with a numbered aluminum tag placed on the trunk at approximately eye level. Off-site trees were not tagged because they were on private property, and the attached Tree Location Plan identifies their location as reference.

All trees in this report was evaluated and documented for species, size, health, and structural condition. The *Tree Inventory Chart* also includes information about expected impacts of the proposed development plan and recommendations for action based on the plan reviewed. The *Tree Location Plan* shows the location and numbering sequence of all evaluated trees. *Tree Preservation Guidelines* are also included for general reference.

This report is intended to be a basic inventory of trees present at this site, which includes a general review of tree health and structural condition. No in-depth evaluation has occurred on any tree, and assessment has included only external visual examination without probing, drilling, coring, root collar examination, root excavation, or dissecting any tree part. Failures, deficiencies, and problems may occur in these trees in the future, and this inventory in no way guarantees or provides a warranty for their condition. Trees that are located off site should be evaluated by their owners if they have concerns about health or stability.

EXISTING SITE CONDITION SUMMARY

The project property consists of a large grass covered field with a single homesite that will be demolished. A second homesite is present in one corner of the site that is not part of this project. There are existing subdivision developments on the sides of the property.

EXISTING TREE SUMMARY

Trees on-site and overhanging include the following:

- Native species at or adjacent to the site include Valley Oak.
- Native species planted as ornamentals include Coast Redwood.
- Non-native species included Weeping Willow, Flowering Pear Black Walnut, Silver Maple, Plum, Apple, Deodar Cedar, Honey Locust, Red Gum Eucalyptus, and Italian Stone Pine

CONSTRUCTION IMPACT SUMMARY

A total of 10 trees will need to be removed for the project to be constructed. Off-site, overhanging trees appear to be preservable. Off-site Eucalyptus near the southeast corner of the site are in poor condition and should be removed before any construction begins.

Please feel free to contact me if you have questions regarding this report, or if further discussion would be helpful.

Regards,

John C. Meserve
Consulting Arborist and Horticulturist
ISA Certified Arborist, WE #0478A
ISA Qualified Tree Risk Assessor

TREE INVENTORY CHART

TREE INVENTORY
2220 Fulton Road
Santa Rosa, CA

May 9, 2019

Tree #	Species	Common Name	Trunk (dbh ± inches)	Height (± feet)	Radius (± feet)	Health (1 - 5)	Structure (1-4)	Expected Impact	Recommendations
1	*Juglans regia*	English Walnut	16	15	16	2	2	3	2
2	*Pinus pinea*	Italian Stone Pine	23+24	30	24	4	2	3	2
3	*Pinus pinea*	Italian Stone Pine	27.5	20	20	3	2	3	2
4	*Gleditsia triacanthos*	Honey Locust	19	40	18	3	2	3	2
5	*Cedrus deodara*	Deodar Cedar	20	40	16	4	3	3	2
6	*Juglans regia*	English Walnut	18.5	20	16	3	2	3	2
7	*Juglans nigra*	Black Walnut	12	12	14	2	2	3	2
8	*Juglans nigra*	Black Walnut	7+multiple	12	16	2	2	3	2
9	*Malus domestica*	Apple	6+6	10	8	3	3	3	2, 11
10	*Prunus cerasifera*	Plum	6+ multiple	25	16	3	3	3	2, 11
11	*Acer saccarharinum*	Silver Maple	19+15+16+18	50	30	3	2	1	1, 6, 10
12	*Quercus lobata*	Valley Oak	32	50	35	4	3-2	1	1, 6, 10
13	*Juglans nigra*	Black Walnut	14	30	18	3	3	1	1, 6, 10

Tree #	Species	Common Name	Trunk (dbh ± inches)	Height (± feet)	Radius (± feet)	Health (1 - 5)	Structure (1-4)	Expected Impact	Recommendations
14	*Quercus lobata*	Valley Oak	6	18	18	4	3	1	1, 6, 10
15	*Sequoia sempervirens*	Coast Redwwod	20+20	35	18	2	2	1	1, 6, 10
16	*Salix babylonica*	Weeping Willow	9	15	12	1	1	1	1, 6, 10
17	*Pyrus calleryana*	Flowering Pear	8	20	14	4	3	1	1, 6, 10
18	*Pyrus calleryana*	Flowering Pear	6	18	12	3	3	1	1, 6, 10
19	*Pyrus calleryana*	Flowering Pear	6	15	12	4	3	1	1, 6, 10
20	*Pyrus calleryana*	Flowering Pear	7	20	14	4	3	1	1, 6, 10
21	*Eucalyptus camaldulensis*	Red Gum Eucalyptus	26+16+18	40	20	2	2	1	3, 5, 10
22	*Eucalyptus camaldulensis*	Red Gum Eucalyptus	14+22+20+30	100	45	2	2	1	3, 5, 10
23	*Eucalyptus camaldulensis*	Red Gum Eucalyptus	11.5+18.5	100	45	2	2	1	3, 5, 10
24	*Eucalyptus camaldulensis*	Red Gum Eucalyptus	32.5+13+17.5	100	45	2	2	1	3, 5, 10
25	*Eucalyptus camaldulensis*	Red Gum Eucalyptus	34	80	45	2	2	1	3, 5, 10
26	*Eucalyptus camaldulensis*	Red Gum Eucalyptus	9	20	14	3	2	1	3, 5, 10

TREE INVENTORY
2220 Fulton Road
Santa Rosa, CA

May 9, 2019

Tree #	Species	Common Name	Trunk (dbh ± inches)	Height (± feet)	Radius (± feet)	Health (1 - 5)	Structure (1-4)	Expected Impact	Recommendations
27	*Eucalyptus camaldulensis*	Red Gum Eucalyptus	34	80	45	2	2	1	3, 5, 10
28	*Eucalyptus camaldulensis*	Red Gum Eucalyptus	8	20	16	3	2	1	3, 5, 10
29	*Eucalyptus camaldulensis*	Red Gum Eucalyptus	16.5+9	40	20	2	2	1	3, 5, 10
30	*Eucalyptus camaldulensis*	Red Gum Eucalyptus	20	50	30	3	2	1	3, 5, 10
31	*Eucalyptus camaldulensis*	Red Gum Eucalyptus	30	100	45	3	1	1	3, 5, 10
32	*Eucalyptus camaldulensis*	Red Gum Eucalyptus	30	45	24	1	1	1	3, 5, 10

KEY TO TREE INVENTORY CHART

KEY TO TREE INVENTORY CHART

2220 Fulton Road
Santa Rosa, California

Tree Number

Each tree has been identified in the field with an aluminum tag and reference number. Tags are attached to the trunk at approximately eye level and the *Tree Location Plan* illustrates the location of each numbered tree.

Species

Each tree has been identified by genus, species and common name. Many species have more than one common name.

Trunk

Each trunk has been measured, to the nearest one-half inch, to document its diameter at 4 feet above adjacent grade. Trunk diameter is a good indicator of age, and is commonly used to determine mitigation replacement requirements.

Height

Height is estimated in feet, using visual assessment.

Radius

Radius is estimated in feet, using visual assessment. Since many canopies are asymmetrical, it is not uncommon for a radius estimate to be an average of the canopy size.

Health

The following descriptions are used to rate the health of a tree. Trees with a rating of 4 or 5 are very good candidates for preservation and will tolerate more construction impacts than trees in poorer condition. Trees with a rating of 3 may or may not be good candidates for preservation, depending on the species and expected construction impacts. Trees with a rating of 1 or 2 are generally poor candidates for preservation.

(5) Excellent - health and vigor are exceptional, no pest, disease, or distress symptoms.

(4) Good - health and vigor are average, no significant or specific distress symptoms, no significant pest or disease.

(3) Fair - health and vigor are somewhat compromised, distress is visible, pest or disease may be present and affecting health, problems are generally correctable.

(2) Marginal - health and vigor are significantly compromised, distress is highly visible and present to the degree that survivability is in question.

(1) Poor - decline has progressed beyond the point of being able to return to a healthy condition again. Long-term survival is not expected. This designation includes dead trees.

Structure

The following descriptions are used to rate the structural integrity of a tree. Trees with a rating of 3 or 4 are generally stable, sound trees which do not require significant pruning, although cleaning, thinning, or raising the canopy might be desirable. Trees with a rating of 2 are generally poor candidates for preservation unless they are preserved well away from improvements or active use areas. Significant time and effort would be required to reconstruct the canopy and improve structural integrity. Trees with a rating of 1 are hazardous and should be removed.

(4) Good structure - minor structural problems may be present which do not require corrective action.

(3) Moderate structure - normal, typical structural issues which can be corrected with pruning.

(2) Marginal structure - serious structural problems are present which may or may not be correctable with pruning, cabling, bracing, etc.

(1) Poor structure - hazardous structural condition which cannot be effectively corrected with pruning or other measures, may require removal depending on location and the presence of targets.

Expected Impacts

Considering the proximity of construction activities, type of activities, tree species, and tree condition - the following ratings are used to estimate the amount of impact on tree health and stability. Most trees will tolerate a (1) rating, many trees could tolerate a (2) rating with careful consideration and mitigation, but trees with a (3) rating are poor candidates for preservation due to their very close proximity to construction or because they are located within the footprint of construction and cannot be preserved.

(3) A significant impact on long term tree integrity can be expected as a result of proposed development.

(2) A moderate impact on long term tree integrity can be expected as a result of proposed development.

(1) A very minor or no impact on long term tree integrity can be expected as a result of proposed development.

(0) No impact is expected

Recommendations

Recommendations are provided for removal or preservation. For those being preserved, protection measures and mitigation procedures to offset impacts and improve tree health are provided.

(1) Preservation appears to be possible.

(2) Removal is required due to significant development impacts.

(3) Removal is recommended due to poor health or hazardous structure.

(4) Removal is required due to significant development impacts and poor existing condition.

(5) Removal is recommended due to poor species characteristics.

(6) Install temporary protective fencing at the edge of the dripline, or edge of approved construction, prior to beginning grading or construction. Maintain fencing in place for duration of all construction activity in the area.

(7) Maintain existing grade within the fenced portion of the dripline. Route drainage swales and all underground work outside the dripline.

(8) Place a 4" layer of chipped bark mulch over the soil surface within the fenced dripline prior to installing temporary fencing. Maintain this layer of mulch throughout construction.

(9) Prune to clean, raise, or provide necessary clearance. Prune to reduce branches that are over-loaded, over-extended, largely horizontal, arching, or have foliage concentrated near the branch ends, per International Society of Arboriculture Pruning Standards.

Pruning to occur by, or under the supervision of, an Arborist certified by the International Society of Arboriculture. Pruning Standards are attached to this report.

(10) This is a tree that is located off the project site, or very near the property line, with a canopy that overhangs the project site. This tree may be owned by others and ownership should be verified.

(11) This tree is exempt from mitigation replacement, per the Santa Rosa Tree Ordinance.

TREE LOCATION PLAN

Tree Location Map

2220 Fulton Road Project

Parcel Boundary

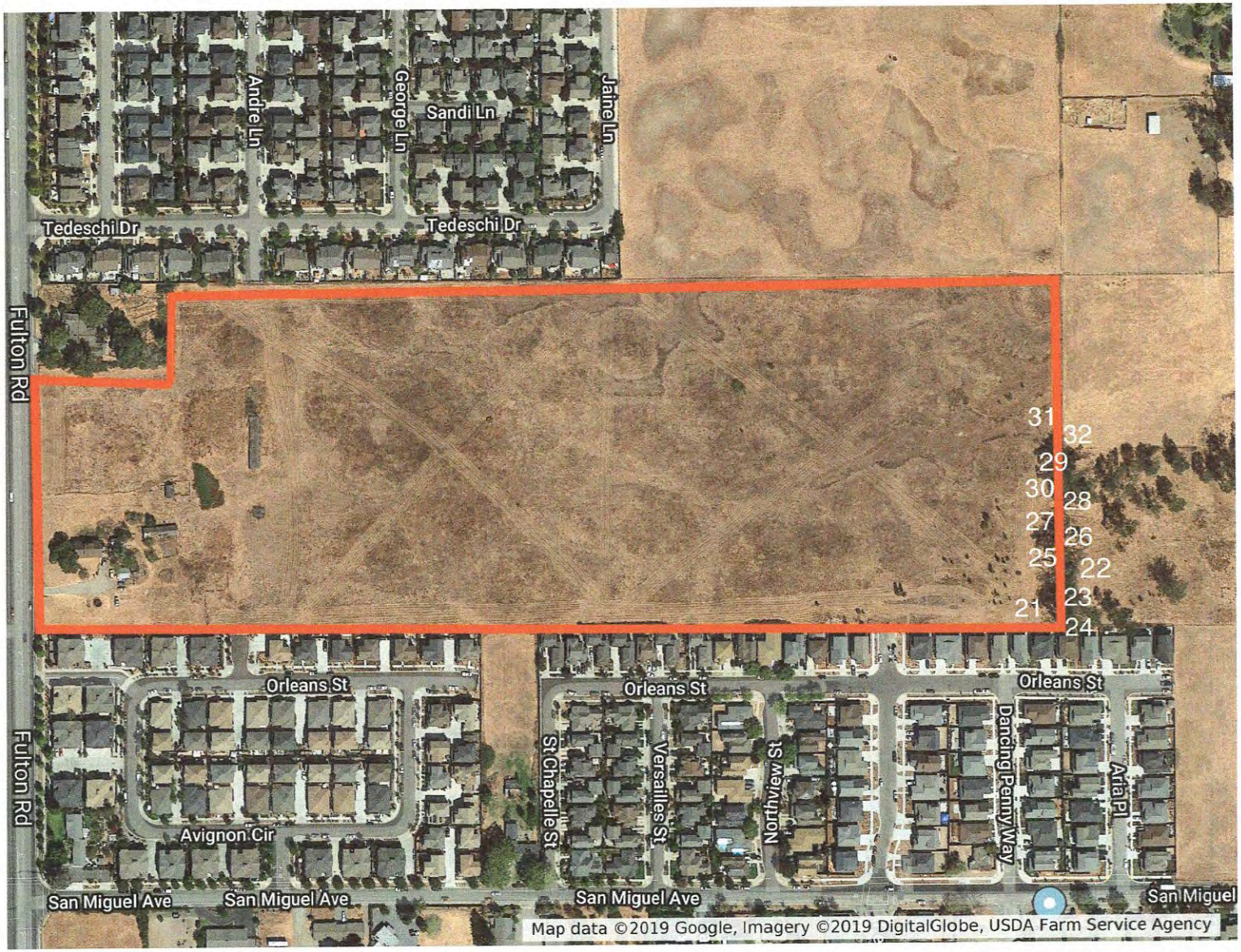
Horticultural Associates

Tree Location Map

2220 Fulton Road Project

Parcel Boundary

Horticultural Associates



TREE PROTECTION GUIDELINES

GENERAL TREE PROTECTION GUIDELINES
FOR CONSTRUCTION AROUND PRESERVED TREES

2220 Fulton Road
Santa Rosa, CA

INTRODUCTION

Great care must be exercised when development is proposed in the vicinity of established trees of any type. The trees present at construction sites require specialized protection techniques during all construction activities to minimize negative impact on their long term health and vigor. The area immediately beneath and around canopy driplines is especially critical, and the requirements and procedures that follow are established to protect short and long term tree integrity. The purpose of this protection guideline is therefore to define the procedures that must be followed during any and all phases of development in the immediate vicinity of designated and protected trees.

Established, mature trees respond in a number of different ways to the disruption of their natural conditions. Change of grade within the root system area or near the root collar, damage to the bark of the trunk, soil compaction above the root system, root system reduction or damage, or alteration of summer soil moisture levels may individually or collectively cause physiological stress leading to tree decline and death. The individual impacts of these activities may cause trees to immediately exhibit symptoms and begin to decline, but more commonly the decline process takes many years, with symptoms appearing slowly and over a period of time. Trees may not begin to show obvious signs of decline from the negative impacts of construction until many years after construction is completed. It is not appropriate to wait for symptoms to appear, as this may be too late to correct the conditions at fault and to halt decline.

It is therefore critical to the long-term health of all protected trees that a defined protection program be established before beginning any construction activity where protected trees are found. Once incorporated at the design level, it is mandatory that developers, contractors, and construction personnel understand the critical importance of these guidelines, and the potential penalties that will be levied if they are not fully incorporated at every stage of development.

The following guidelines are meant to be utilized by project managers and those supervising any construction in the vicinity of protected trees including grading contractors, underground contractors, all equipment operators, construction personnel, and landscape contractors. These protection guidelines are presented in a brief outline form to be applied to each individual activity that occurs during

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development activities. It is left to project managers to implement these protection measures. Questions which arise, or interpretation of guidelines as they apply to specific site activities, must be referred to the designated project arborist as they occur.

TREE PROTECTION ZONE

1. The canopy dripline is illustrated on the Improvement Plans and represents the area around each tree, or group of trees, which must be protected at all times with tree protection fencing. No encroachment into the dripline is allowed at any time without approval from the project arborist, and unauthorized entry may be subject to civil action and penalties.

2. The dripline will be designated by the project arborist at a location determined to be adequate to ensure long term tree viability and health.

TREE PROTECTION FENCING

1. Prior to initiating any construction activity on a construction project, including demolition or grading, temporary protective fencing shall be installed at each site tree. Fencing shall be located at the dripline designated by the project arborist or illustrated on the Improvement Plans.

2. Fencing shall be minimum 4' height at all locations, and shall form a continuous barrier without entry points around all individual trees, or groups of trees. Barrier type fencing such as *Tensar* plastic fencing is recommended, but any fencing system that adequately prevents entry will be considered for approval by the project arborist. The use of post and cable fencing is not acceptable.

3. Fencing shall be installed in a professional manner with steel fence posts (standard quality farm 'T' posts work well) placed no more than 8 feet on center. Fencing shall be attached to each post at 5 locations with plastic electrical ties, metal tie wire, or flip tie. See fencing detail.

4. Fencing shall serve as a barrier to prevent encroachment of any type by construction activities, equipment, materials storage, or personnel.

5. All encroachment into the fenced dripline must be approved in writing and supervised by the project arborist. Approved dripline encroachment may require additional mitigation or protection measures that will be determined by the project arborist at the time of the request.

6. Contractors and subcontractors shall direct all equipment and personnel to remain outside the fenced area at all times until project is complete, and shall instruct personnel and sub-contractors as to the purpose and importance of fencing and preservation.

7. Fencing shall be upright and functional at all times from start to completion of project. Fencing shall remain in place and not be moved or removed until all construction activities at the site are completed.

TREE PRUNING AND TREATMENTS

1. All recommendations for pruning or other treatments must be completed prior to acceptance of the project. It is strongly recommended that pruning be completed prior to the start of grading to facilitate optimum logistics and access.
2.
3. All pruning shall be conducted in conformance with International Society of Arboriculture pruning standards, and all pruning must occur by, or under the direct supervision of, an arborist certified by the International Society of Arboriculture.

GRADING AND TRENCHING

1. Any construction activity that necessitates soil excavation in the vicinity of preserved trees shall be avoided where possible, or be appropriately mitigated under the guidance of the project arborist. All contractors must be aware at all times that specific protection measures are defined, and non conformance may generate stop-work orders.

2. The designated dripline is defined around all site trees to be preserved. Fences protect the designated areas. No grading or trenching is to occur within this defined area unless so designated by the Improvement Plan, and where designated shall occur under the direct supervision of the project arborist.

3. Trenching should be routed around the dripline whenever possible. Where trenching has been designated within the dripline, utilization of underground technology to bore, tunnel or excavate with high-pressure air or water will be specified. Hand digging will be generally discouraged unless site conditions restrict the use of alternate technology.

4. All roots greater than one inch in diameter shall be cleanly hand-cut as they are encountered in any trench or in any grading activity. The tearing of roots

by equipment of any type shall not be allowed. Mitigation treatment of pruned roots shall be specified by the project arborist as determined by the degree of root pruning, location of root pruning, and potential exposure to desiccation. No pruning paints or sealants shall be used on cut roots.

5. Where significant roots are encountered mitigation measures such as supplemental irrigation and/or organic mulches may be specified by the project arborist to offset the reduction of root system capacity.

6. Retaining walls are effective at holding grade changes outside the area of the dripline and are recommended where necessary. Retaining walls shall be constructed in post and beam or drilled pier construction styles where they are necessary near or within a dripline.

7. Placement of fill soils is generally discouraged within the dripline, but in some approved locations may be approved to cover up to 30% of this area. The species and condition of the tree shall be considered, as well as site and soil conditions, and depth of fill. Retaining walls should be utilized to minimize the area of fill within the dripline. Type of fill soil and placement methods shall be specified by the project arborist.

8. Grade changes outside the dripline, or those necessary in conjunction with retaining walls, shall be designed so that drainage water of any type or source is not diverted toward or around the root crown in any manner. Grade shall drain away from root crown at a minimum of 2%. If grading toward the root collar is unavoidable, appropriate surface and/or subsurface drain facilities shall be installed so that water is effectively diverted away from root collar area.

9. Approved fill soils within the dripline may also be mitigated using aerated gravel layers and/or perforated aeration tubing systems, as specified by the project arborist.

10. Tree roots will be expected to grow into areas of soil fill, and quality of imported soil shall be considered. Ideally, fill soil should be site soil that closely matches that present within the root zone area. When import soil is utilized it must be the same or slightly coarser texture than existing site soil, should have a pH range comparable to site soils, and generally should have acceptable chemical properties for appropriate plant growth. A soil analysis is recommended prior to importation to evaluate import soil for these criteria.

11. Grade reduction within the designated dripline shall be generally discouraged, and where approved, shall be conducted only after careful consideration and coordination with the project arborist.

12. Foundations of all types within the dripline shall be constructed using design techniques that eliminate the need for trenching into natural grade. These techniques might include drilled piers, grade beams, bridges, or cantilevered structures. Building footprints should generally be outside the dripline whenever possible.

DRAINAGE

The location and density of native trees on many sites may be directly associated with the presence of naturally occurring water, especially ephemeral waterways. Project design, especially drainage components, should take into consideration that these trees may begin a slow decline if this naturally present association with water is eliminated.

TREE DAMAGE

Any form of tree damage which occurs during the demolition, grading, or construction process shall be evaluated by the project arborist. Specific mitigation measures will be developed to compensate for or correct the damage. Fines and penalties may also be levied.

Measures may include, but are not limited to, the following:

- pruning to remove damaged limbs or wood
- bark scoring to remove damaged bark and promote callous formation
- alleviation of compaction by lightly scarifying the soil surface
- installation of a specific mulching material
- supplemental irrigation during the growing season for up to 5 years
- treatment with specific amendments intended to promote health, vigor, or root growth
- vertical mulching or soil fracturing to promote root growth

- periodic post-construction monitoring at the developer's expense

- tree replacement, or payment of the established appraised value, if the damage is so severe that long term survival is not expected

FERTILIZATION

1. Native trees generally do not require supplemental fertilization unless exhibiting a deficiency symptom. Following completion of construction any tree that exhibits symptoms of a specific nutrient deficiency shall be fertilized to compensate for the deficiency. Soil or tissue analysis may be required to identify the deficiency.

2. Distressed trees, or trees damaged by construction in any way, may be detrimentally affected by supplemental fertilization. The decision to fertilize, and with what fertilizers, shall be made by the project arborist based on conditions and appearance observed at the completion of the project.

PEST CONTROL

A close visual examination for tree pests shall be conducted by the pruning contractor as he completes recommended pruning procedures. If a serious infestation is present, that was not apparent from ground observation, then pest control measures may be considered. However, the simple presence of tree pests does not warrant the use of chemical pesticides. Only a serious infestation, capable of causing tree decline, would warrant pesticide use. The use of organic sprays or pesticidal soaps is the preferred method for treating any serious pest infestation.

WEED CONTROL

No specific measures are recommended for weed control, and the presence of weeds should not be considered problematic in relation to continued tree health. However, use of contact weed killers and pre-emergent weed killers are generally not recommended due to their potential for root system damage if improperly applied.

DISEASE CONTROL

No specific measures are recommended for disease control unless noted in the Tree Protection and Preservation Plan. All disease control measures should be based on observation of actual conditions in the tree canopy.

MULCHING

Trees will generally benefit from the application of a 4 inch layer of chipped bark mulch over the soil surface within the greater root zone area. Ideal mulch material is a chipped bark containing a wide range of particle sizes. Bark mulches composed of shredded redwood, bark screened for uniformity of size, or chipped lumber will not function as beneficially. Rock and gravel mulches are generally discouraged due to their minimal benefit.

PLANTING UNDER EXISTING TREES

1. The installation of lawn beneath established native trees is strongly discouraged because it has the potential to initiate serious disease. If planting is required for aesthetic or functional purposes, the use of drought tolerant, woody species is most appropriate. Species should be selected for their ability to survive with minimal or no water through the summer months after the initial establishment period. Only drip irrigation should be utilized within the canopy dripline to minimize summer water in the root zone.

2. Many non-native trees will tolerate summer irrigation well and suitable landscape planting and irrigation may actually be beneficial.

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B.5 - CNDDB Search Results

draft

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Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Sebastopol (3812247))

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Agelaius tricolor tricolored blackbird	G2G3 S1S2	None Threatened	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_EN-Endangered NABCI_RWL-Red Watch List USFWS_BCC-Birds of Conservation Concern	106 106	955 S:1	0	0	0	0	0	1	1	0	1	0	0
Alopecurus aequalis var. sonomensis Sonoma alopecurus	G5T1 S1	Endangered None	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden	140 150	21 S:2	0	0	0	0	0	2	2	0	2	0	0
Ambystoma californiense California tiger salamander	G2G3 S2S3	Threatened Threatened	CDFW_WL-Watch List IUCN_VU-Vulnerable	80 135	1213 S:28	5	13	5	1	0	4	2	26	28	0	0
Andrena blennospermatis Blennosperma vernal pool andrenid bee	G2 S2	None None		90 130	15 S:2	0	0	0	0	0	2	2	0	2	0	0
Antrozous pallidus pallid bat	G5 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive WBWG_H-High Priority		420 S:1	0	0	0	0	0	1	1	0	1	0	0
Arctostaphylos densiflora Vine Hill manzanita	G1 S1	None Endangered	Rare Plant Rank - 1B.1	200 240	2 S:2	0	0	1	1	0	0	1	1	2	0	0
Arctostaphylos stanfordiana ssp. decumbens Rincon Ridge manzanita	G3T1 S1	None None	Rare Plant Rank - 1B.1		12 S:1	0	0	0	0	0	1	1	0	1	0	0
Blennosperma bakeri Sonoma sunshine	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden	70 140	24 S:9	0	3	1	0	2	3	3	6	7	1	1
Calamagrostis crassiglumis Thurber's reed grass	G3Q S2	None None	Rare Plant Rank - 2B.1	150 150	15 S:1	0	0	0	0	0	1	1	0	1	0	0

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Campanula californica swamp harebell	G3 S3	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	150 150	139 S:2	0	0	0	0	2	0	2	0	0	1	1
Castilleja uliginosa Pitkin Marsh paintbrush	GXQ SX	None Endangered	Rare Plant Rank - 1A	150 200	2 S:2	0	0	0	0	2	0	2	0	0	2	0
Ceanothus confusus Rincon Ridge ceanothus	G1 S1	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive SB_SBBG-Santa Barbara Botanic Garden		33 S:1	0	0	0	0	1	0	1	0	0	0	1
Ceanothus foliosus var. vineatus Vine Hill ceanothus	G3T1 S1	None None	Rare Plant Rank - 1B.1	150 250	6 S:3	0	0	1	0	0	2	1	2	3	0	0
Ceanothus purpureus holly-leaved ceanothus	G2 S2	None None	Rare Plant Rank - 1B.2 SB_SBBG-Santa Barbara Botanic Garden		43 S:1	0	0	0	0	0	1	1	0	1	0	0
Chorizanthe valida Sonoma spineflower	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden	150 150	6 S:1	0	0	0	0	1	0	1	0	0	1	0
Clarkia imbricata Vine Hill clarkia	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden SB_UCBBG-UC Berkeley Botanical Garden	230 232	2 S:2	0	1	1	0	0	0	1	1	2	0	0
Coastal and Valley Freshwater Marsh Coastal and Valley Freshwater Marsh	G3 S2.1	None None		65 65	60 S:1	0	0	0	0	0	1	1	0	1	0	0
Cuscuta obtusiflora var. glandulosa Peruvian dodder	G5T4? SH	None None	Rare Plant Rank - 2B.2		6 S:1	0	0	0	0	0	1	1	0	1	0	0
Delphinium luteum golden larkspur	G1 S1	Endangered Rare	Rare Plant Rank - 1B.1 SB_UCBBG-UC Berkeley Botanical Garden		11 S:1	0	0	0	0	1	0	1	0	0	1	0
Downingia pusilla dwarf downingia	GU S2	None None	Rare Plant Rank - 2B.2	85 142	132 S:9	4	1	0	0	2	2	6	3	7	1	1

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Emys marmorata western pond turtle	G3G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable USFS_S-Sensitive	55 135	1384 S:6	0	2	3	1	0	0	1	5	6	0	0
Fritillaria liliacea fragrant fritillary	G2 S2	None None	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden USFS_S-Sensitive		82 S:1	0	0	0	0	0	1	1	0	1	0	0
Hemizonia congesta ssp. congesta congested-headed hayfield tarplant	G5T2 S2	None None	Rare Plant Rank - 1B.2 SB_UCBBG-UC Berkeley Botanical Garden	90 175	52 S:7	0	0	0	0	2	5	7	0	5	2	0
Horkelia tenuiloba thin-lobed horkelia	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_RSABG-Rancho Santa Ana Botanic Garden	200 250	27 S:3	0	0	0	0	0	3	3	0	3	0	0
Lasiurus cinereus hoary bat	G5 S4	None None	IUCN_LC-Least Concern WBWG_M-Medium Priority		238 S:1	0	0	0	0	0	1	1	0	1	0	0
Lasthenia burkei Burke's goldfields	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden SB_UCBBG-UC Berkeley Botanical Garden	50 142	35 S:18	3	5	5	1	3	1	7	11	15	1	2
Lasthenia californica ssp. bakeri Baker's goldfields	G3T1 S1	None None	Rare Plant Rank - 1B.2	125 125	19 S:1	0	0	0	0	0	1	1	0	1	0	0
Legenere limosa legenere	G2 S2	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive SB_UCBBG-UC Berkeley Botanical Garden	90 90	83 S:1	0	0	1	0	0	0	1	0	1	0	0

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Lilium pardalinum ssp. pitkinense Pitkin Marsh lily	G5T1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_BerrySB-Berry Seed Bank SB_RSABG-Rancho Santa Ana Botanic Garden SB_USDA-US Dept of Agriculture	150 200	4 S:2	0	1	0	0	0	1	2	0	2	0	0
Limnanthes vinculans Sebastopol meadowfoam	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden SB_UCBBG-UC Berkeley Botanical Garden	50 135	46 S:26	2	3	5	0	5	11	10	16	21	5	0
Linderiella occidentalis California linderiella	G2G3 S2S3	None None	IUCN_NT-Near Threatened	100 135	438 S:3	0	0	0	0	0	3	3	0	3	0	0
Microseris paludosa marsh microseris	G2 S2	None None	Rare Plant Rank - 1B.2 SB_SBBG-Santa Barbara Botanic Garden SB_UCSC-UC Santa Cruz	80 80	38 S:1	0	0	0	0	0	1	1	0	1	0	0
Navarretia leucocephala ssp. bakeri Baker's navarretia	G4T2 S2	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive	50 130	58 S:9	0	0	0	0	4	5	9	0	5	2	2
Northern Hardpan Vernal Pool Northern Hardpan Vernal Pool	G3 S3.1	None None		60 135	126 S:5	3	0	1	0	1	0	5	0	4	1	0
Northern Vernal Pool Northern Vernal Pool	G2 S2.1	None None		73 80	20 S:2	0	1	0	0	0	1	2	0	2	0	0
Oncorhynchus kisutch pop. 4 coho salmon - central California coast ESU	G4 S2?	Endangered Endangered	AFS_EN-Endangered	445 445	23 S:1	0	0	0	0	0	1	0	1	1	0	0
Rhynchospora alba white beaked-rush	G5 S2	None None	Rare Plant Rank - 2B.2	200 200	11 S:1	0	1	0	0	0	0	1	0	1	0	0
Rhynchospora californica California beaked-rush	G1 S1	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive	150 150	9 S:2	0	0	0	0	1	1	2	0	1	0	1
Rhynchospora capitellata brownish beaked-rush	G5 S1	None None	Rare Plant Rank - 2B.2	150 150	25 S:2	0	0	1	0	1	0	1	1	1	1	0

Summary Table Report

California Department of Fish and Wildlife

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Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Rhynchospora globularis round-headed beaked-rush	G4 S1	None None	Rare Plant Rank - 2B.1	150 150	2 S:2	0	0	0	0	1	1	2	0	1	1	0
Syncaris pacifica California freshwater shrimp	G2 S2	Endangered Endangered	IUCN_EN-Endangered	162 162	20 S:1	0	1	0	0	0	0	0	1	1	0	0
Taxidea taxus American badger	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	80 90	591 S:2	0	2	0	0	0	0	0	2	2	0	0
Trifolium amoenum two-fork clover	G1 S1	Endangered None	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden SB_UCBBG-UC Berkeley Botanical Garden SB_USDA-US Dept of Agriculture	200 200	26 S:2	0	0	0	0	0	2	2	0	2	0	0
Trifolium hydrophilum saline clover	G2 S2	None None	Rare Plant Rank - 1B.2		49 S:1	0	0	0	0	1	0	1	0	0	0	1
Viburnum ellipticum oval-leaved viburnum	G4G5 S3?	None None	Rare Plant Rank - 2B.3		39 S:1	0	0	0	0	0	1	1	0	1	0	0

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B.6 - CNPS Inventory Results

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CNPS California Native Plant Society

Inventory of Rare and Endangered Plants

*The database used to provide updates to the Online Inventory is under construction. View updates and changes made since May 2019 here.

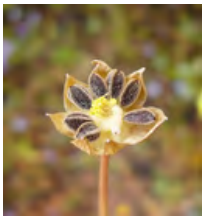
Plant List

40 matches found. *Click on scientific name for details*

Search Criteria

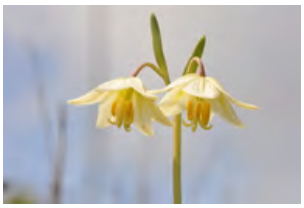
Found in Quad 3812247

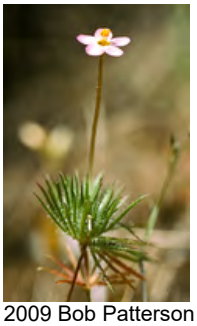
Modify Search Criteria | Export to Excel | Modify Columns | Modify Sort | Remove Photos

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	State Listing Status	Federal Listing Status	Habitats	Lowest Elevation	Highest Elevation	Photo
Alopecurus aequalis var. sonomensis	Sonoma alopecurus	Poaceae	perennial herb	May-Jul	1B.1	S1		FE	• Marshes and swamps (freshwater) • Riparian scrub	5 m	365 m	2010 Robert Steers/NPS
Arctostaphylos densiflora	Vine Hill manzanita	Ericaceae	perennial evergreen shrub	Feb-Apr	1B.1	S1	CE		• Chaparral (acid marine sand)	50 m	120 m	2012 Aaron Arthur
Arctostaphylos stanfordiana ssp. decumbens	Rincon Ridge manzanita	Ericaceae	perennial evergreen shrub	Feb-Apr(May)	1B.1	S1			• Chaparral (rhyolitic) • Cismontane woodland	75 m	370 m	2012 Aaron Arthur
Blennosperma bakeri	Sonoma sunshine	Asteraceae	annual herb	Mar-May	1B.1	S1	CE	FE	• Valley and foothill grassland (mesic) • Vernal pools	10 m	110 m	 2010 Zoya Akulova
Calamagrostis bolanderi	Bolander's reed grass	Poaceae	perennial rhizomatous herb	May-Aug	4.2	S4			• Bogs and fens • Broadleafed upland forest • Closed-cone coniferous forest • Coastal	0 m	455 m	2009 Zoya Akulova

								scrub • Meadows and seeps (mesic) • Marshes and swamps (freshwater) • North Coast coniferous forest			
Calamagrostis crassiglumis	Thurber's reed grass	Poaceae	perennial rhizomatous herb	May-Aug	2B.1	S2		• Coastal scrub (mesic) • Marshes and swamps (freshwater)	10 m	60 m	2013 Vernon Smith
Campanula californica	swamp harebell	Campanulaceae	perennial rhizomatous herb	Jun-Oct	1B.2	S3		• Bogs and fens • Closed-cone coniferous forest • Coastal prairie • Meadows and seeps • Marshes and swamps (freshwater) • North Coast coniferous forest	1 m	405 m	Rick York and CNPS
Castilleja ambigua var. ambigua	johnny-nip	Orobanchaceae	annual herb (hemiparasitic)	Mar-Aug	4.2	S3S4		• Coastal bluff scrub • Coastal prairie • Coastal scrub • Marshes and swamps • Valley and foothill grassland • Vernal pools margins	0 m	435 m	2010 Toni Corelli
Castilleja uliginosa	Pitkin Marsh paintbrush	Orobanchaceae	perennial herb (hemiparasitic)	Jun-Jul	1A	SX	CE	• Marshes and swamps (freshwater)	240 m	240 m	Jo-Ann Ordano2004 California Academy of Sciences
Ceanothus confusus	Rincon Ridge ceanothus	Rhamnaceae	perennial evergreen shrub	Feb-Jun	1B.1	S1		• Closed-cone coniferous forest • Chaparral • Cismontane woodland	75 m	1065 m	2006 Barrett Jeffery

Ceanothus foliosus var. vineatus	Vine Hill ceanothus	Rhamnaceae	perennial evergreen shrub	Mar-May	1B.1	S1			• Chaparral	45 m	305 m	2012 Aaron Arthur
Ceanothus gloriosus var. exaltatus	glory brush	Rhamnaceae	perennial evergreen shrub	Mar-Jun(Aug)	4.3	S4			• Chaparral	30 m	610 m	2010 Neal Kramer
Ceanothus purpureus	holly-leaved ceanothus	Rhamnaceae	perennial evergreen shrub	Feb-Jun	1B.2	S2			• Chaparral • Cismontane woodland	120 m	640 m	2008 Jorg Fleige
Chorizanthe valida	Sonoma spineflower	Polygonaceae	annual herb	Jun-Aug	1B.1	S1	CE	FE	• Coastal prairie (sandy)	10 m	305 m	2008 Aaron Schusteff
Clarkia imbricata	Vine Hill clarkia	Onagraceae	annual herb	Jun-Aug	1B.1	S1	CE	FE	• Chaparral • Valley and foothill grassland	50 m	75 m	Harlan Lewis and CNPS
Cuscuta obtusiflora var. glandulosa	Peruvian dodder	Convolvulaceae	annual vine (parasitic)	Jul-Oct	2B.2	SH			• Marshes and swamps (freshwater)	15 m	280 m	no photo available
Delphinium luteum	golden larkspur	Ranunculaceae	perennial herb	Mar-May	1B.1	S1	CR	FE	• Chaparral • Coastal prairie • Coastal scrub	0 m	100 m	2010 Charles Patterson
Downingia pusilla	dwarf downingia	Campanulaceae	annual herb	Mar-May	2B.2	S2			• Valley and foothill grassland (mesic) • Vernal pools	1 m	445 m	2011 Dylan Neubauer
Eriophorum gracile	slender cottongrass	Cyperaceae	perennial rhizomatous herb (emergent)	May-Sep	4.3	S4			• Bogs and fens • Meadows and seeps • Upper montane	1280 m	2900 m	

									coniferous forest			2006 Steve Matson
Fritillaria liliacea	fragrant fritillary	Liliaceae	perennial bulbiferous herb	Feb-Apr	1B.2	S2			• Cismontane woodland • Coastal prairie • Coastal scrub • Valley and foothill grassland	3 m	410 m	 2009 Shawn DeCew
Hemizonia congesta ssp. congesta	congested-headed hayfield tarplant	Asteraceae	annual herb	Apr-Nov	1B.2	S2			• Valley and foothill grassland	20 m	560 m	2015 John Doyen
Horkelia tenuiloba	thin-lobed horkelia	Rosaceae	perennial herb	May-Jul(Aug)	1B.2	S2			• Broadleafed upland forest • Chaparral • Valley and foothill grassland	50 m	500 m	2012 Aaron Arthur
Hosackia gracilis	harlequin lotus	Fabaceae	perennial rhizomatous herb	Mar-Jul	4.2	S3			• Broadleafed upland forest • Coastal bluff scrub • Closed-cone coniferous forest • Cismontane woodland • Coastal prairie • Coastal scrub • Meadows and seeps • Marshes and swamps • North Coast coniferous forest • Valley and foothill grassland	0 m	700 m	2000 Joseph Dougherty/ecology.org
Lasthenia burkei	Burke's goldfields	Asteraceae	annual herb	Apr-Jun	1B.1	S1	CE	FE	• Meadows and seeps (mesic) • Vernal pools	15 m	600 m	2002 John Game
Lasthenia californica ssp. bakeri	Baker's goldfields	Asteraceae	perennial herb	Apr-Oct	1B.2	S1			• Closed-cone coniferous	60 m	520 m	

									forest (openings) • Coastal scrub • Meadows and seeps • Marshes and swamps		2015 Asa Spade
Legenere limosa	legenere	Campanulaceae	annual herb	Apr-Jun	1B.1	S2			• Vernal pools	1 m	880 m	1993 Dean Wm. Taylor
Leptosiphon jepsonii	Jepson's leptosiphon	Polemoniaceae	annual herb	Mar-May	1B.2	S2S3			• Chaparral • Cismontane woodland • Valley and foothill grassland	100 m	500 m	 2009 Bob Patterson and CNPS
Lilium pardalinum ssp. pitkinense	Pitkin Marsh lily	Liliaceae	perennial bulbiferous herb	Jun-Jul	1B.1	S1	CE	FE	• Cismontane woodland • Meadows and seeps • Marshes and swamps (freshwater)	35 m	65 m	Jo-Ann Ordano 2005 California Academy of Sciences
Limnanthes vinculans	Sebastopol meadowfoam	Limnanthaceae	annual herb	Apr-May	1B.1	S1	CE	FE	• Meadows and seeps • Valley and foothill grassland • Vernal pools	15 m	305 m	Jo-Ann Ordano 2005 California Academy of Sciences
Microseris paludosa	marsh microseris	Asteraceae	perennial herb	Apr-Jun(Jul)	1B.2	S2			• Closed-cone coniferous forest • Cismontane woodland • Coastal scrub • Valley and foothill grassland	5 m	355 m	2013 Vernon Smith
Navarretia leucocephala	Baker's navarretia	Polemoniaceae	annual herb	Apr-Jul	1B.1	S2			• Cismontane woodland	5 m	1740 m	

ssp. bakeri									• Lower montane coniferous forest • Meadows and seeps • Valley and foothill grassland • Vernal pools			 2003 Doreen L. Smith
Navarretia leucocephala ssp. plieantha	many-flowered navarretia	Polemoniaceae	annual herb	May-Jun	1B.2	S1	CE	FE	• Vernal pools (volcanic ash flow)	30 m	950 m	no photo available
Ranunculus lobbii	Lobb's aquatic buttercup	Ranunculaceae	annual herb (aquatic)	Feb-May	4.2	S3			• Cismontane woodland • North Coast coniferous forest • Valley and foothill grassland • Vernal pools	15 m	470 m	 2008 Jorg Fleige
Rhynchospora alba	white beaked-rush	Cyperaceae	perennial rhizomatous herb	Jun-Aug	2B.2	S2			• Bogs and fens • Meadows and seeps • Marshes and swamps (freshwater)	60 m	2040 m	 1996 Dean Wm. Taylor
Rhynchospora californica	California beaked-rush	Cyperaceae	perennial rhizomatous herb	May-Jul	1B.1	S1			• Bogs and fens • Lower montane coniferous forest • Meadows and seeps (seeps) • Marshes and swamps (freshwater)	45 m	1010 m	 2002 Kristiaan Stuart
Rhynchospora capitellata	brownish beaked-rush	Cyperaceae	perennial herb	Jul-Aug	2B.2	S1			• Lower montane coniferous forest • Meadows and seeps • Marshes and swamps • Upper montane coniferous forest	45 m	2000 m	 2010 Aaron Arthur
Rhynchospora globularis	round-headed beaked-rush	Cyperaceae	perennial rhizomatous herb	Jul-Aug	2B.1	S1			• Marshes and swamps (freshwater)	45 m	60 m	 2004 Steve Matson
Trifolium amoenum	two-fork clover	Fabaceae	annual herb	Apr-Jun	1B.1	S1		FE	• Coastal bluff scrub • Valley and foothill grassland (sometimes serpentinite)	5 m	415 m	

2009 Doreen L. Smith

Trifolium hydrophilum	saline clover	Fabaceae	annual herb	Apr-Jun	1B.2	S2	• Marshes and swamps • Valley and foothill grassland (mesic, alkaline) • Vernal pools	0 m	300 m	2005 Aaron Schusteff
Viburnum ellipticum	oval-leaved viburnum	Adoxaceae	perennial deciduous shrub	May-Jun	2B.3	S3?	• Chaparral • Cismontane woodland • Lower montane coniferous forest	215 m	1400 m	2006 Tom Engstrom

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Appendix C:
Cultural Resources Supporting Information

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C.1 - Archeological Resources Report

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Archaeological Resources Study of the Property at 2220 Fulton Road, Santa Rosa, Sonoma County, California

Eileen Barrow, MA/RPA

March 28, 2019

Archaeological Resources Study of the Property at 2220 Fulton Road, Santa Rosa, Sonoma County, California

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March 28, 2019

ABSTRACT

Tom Origer & Associates conducted an archaeological resources study of the property at 2220 Fulton Road, Santa Rosa, California as part of the environmental review for development of a portion the property into a residential subdivision and the remainder of the property into wetland open space. The study, requested by Geoff Monk of Geoff Monk & Associates, complies with Section 106 of the National Historic Preservation Act, as required by the US Army Corps of Engineers and the California Environmental Quality Act. The purpose of this study was to identify resources that could be eligible for inclusion in the National Register of Historic Places, as outlined in 36 CFR 800 and to identify potential historical resources other than Tribal Cultural Resources, as defined in Public Resources Code [PRC] 21074 (a)(1)(A)-(B) and discussed in the Regulatory Context section). Tribal Cultural Resources are defined in Public Resources Code [PRC] 21074 (a)(1)(A)-(B).

The proposed project includes the development of 14.6 acres of the parcel into a residential subdivision with associated infrastructure. The remaining 14 acres would be converted into a wetland preserve.

This study included archival research at the Northwest Information Center, Sonoma State University, examination of the library and files of Tom Origer & Associates, Native American contact, and field inspection of the area of potential effects. The buildings on the property have the potential to be eligible for inclusion on the California Register of Historical Resources and the National Register of Historic Places.

Synopsis

Project:	2220 Fulton Road
Location:	2220 Fulton Road, Santa Rosa, Sonoma County
APN:	034-030-070
Quadrangles:	Sebastopol 7.5' series
Study Type:	Intensive
Scope:	28.49 acres
Field Hours:	6 person hours
NWIC #:	18-1609
TOA #:	2019-017
Finds:	No historic properties found (archaeology)

Key Personnel

Eileen Barrow was the project manager for this project. She participated in the fieldwork and wrote the report for this project. Mrs. Barrow has been with Tom Origer & Associates since 2005. She holds a Master of Arts in cultural resources management from Sonoma State University. Mrs. Barrow's experience includes work that has been completed in compliance with local ordinances, CEQA, NEPA, and Section 106 (NHPA) requirements. Her professional affiliations include the Society for American Archaeology, the Society for California Archaeology, the Cotati Historical Society, the Sonoma County Historical Society, and the Western Obsidian Focus Group.

Julia Karnowski conducted the records search for this project at the Northwest Information Center and participated in the fieldwork the report for this project. Ms. Karnowski holds a Bachelor of Science in Anthropology from California State Polytechnic University, Pomona, with graduate studies at Sonoma State University. She is affiliated with the Society for California Archaeology, the Society for American Archaeology, and the Society for Historical Archaeology.

CONTENTS

ABSTRACT i
Synopsis i
Key Personnel ii
INTRODUCTION 4
REGULATORY CONTEXT 4
Resource Definitions 5
Significance Criteria 5
PROJECT SETTING 6
Area of Potential Effects 6
Cultural Setting 8
STUDY PROCEDURES AND FINDINGS 11
Native American Contact 11
Native American Contact Results 12
Archival Research Procedures 12
Archival Research Findings 13
Field Survey Procedures 14
Field Survey Findings 15
DISCUSSION AND RECOMMENDATIONS 16
Recommendations 16
Accidental Discovery 16
SUMMARY 17
MATERIALS CONSULTED 18

APPENDIX A: Native American Contact

APPENDIX B Resource Documentation

FIGURES

Figure 1.Project vicinity. 4
Figure 2.Location of the APE. 7
Figure 3. Overview of the APE, facing north-northeast. 8
Figure 4. Location of auger borings within the APE. 15

TABLES

Table 1. North Bay/San Francisco Bay Area Chronology 10
Table 2. Studies within a Half-mile of the APE 14
Table 3. Resources within a Half-mile of the APE 14

INTRODUCTION

This report describes an archaeological resources study of the property at 2220 Fulton Road in central Sonoma County, 3.75 miles northwest of the Santa Rosa City Hall (Figure 1). The project encompasses a 28.49-acre parcel (APN 034-030-070) at 2220 Fulton Road and includes development of the western half of the parcel into a residential subdivision with associated infrastructure, and the conversion of the eastern half of the parcel into a wetland preserve. Geoff Monk of Geoff Monk & Associates requested the study. The US Army Corps of Engineers will review this project for compliance with Section 106 of the National Historic Preservation Act (Section 106) and the City of Santa Rosa will review this project for compliance with the California Environmental Quality Act (CEQA). Documentation pertaining to this study is on file at Tom Origer & Associates (File No. 2019-017).

REGULATORY CONTEXT

Under Section 106, when a federal agency is involved in an undertaking, it must take into account the effects of the undertaking on historic properties (36CFR Part 800). Compliance with Section 106 requires that agencies make an effort to identify historic properties that might be affected by a project.

The State of California requires that cultural resources be considered during the environmental review process. This process is outlined in CEQA and accomplished by an inventory of resources within a study area and by assessing the potential that historical resources could be affected by development. The term "Historical Resources" encompasses all forms of cultural resources including prehistoric and historical archaeological sites and built environment resources (e.g., buildings, bridges, canals), that would be eligible for inclusion on the California Register of Historical Resources (California Register). An additional category of resources is defined in CEQA under the term "Tribal Cultural

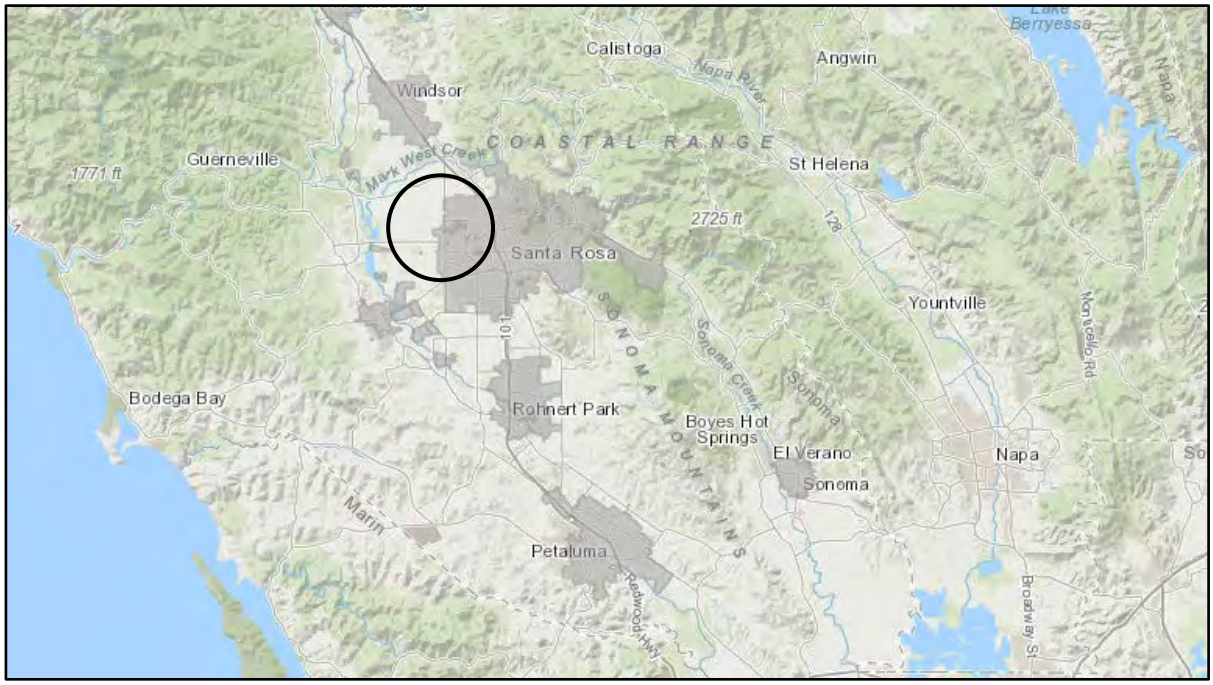


Figure 1. Project vicinity (adapted from Sonoma County Zoning and Land Use Map 2018).

Resources" (Public Resources Code Section 21074). They are not addressed in this report because Tribal Cultural Resources are resources that are of specific concern to California Native American tribes, and knowledge of such resources is limited to tribal people. Pursuant to CEQA, as revised in July 2015, such resources are to be identified by tribal people in direct, confidential consultation with the lead agency (PRC §21080.3.1).

The term, cultural resources, will be used in this report to describe historical resources under CEQA and cultural resources under Section 106.

Pursuant to Section 106 and the CEQA Guidelines, the goals of this study were to: 1) identify cultural resources within the project's area of potential effects (APE); 2) provide an evaluation of the significance of identified resources; 3) determine resource vulnerability to adverse impacts that could arise from project activities; and 4) offer recommendations designed to protect cultural resource values, as warranted.

Resource Definitions

The National Register defines a historic property as a district, site, building, structure, or object significant in American history, architecture, engineering, archaeology, and culture, and that may be of value to the nation as a whole or important only to the community in which it is located. The National Park Service (NPS) describes these resources as follows (NPS 1995:4-5).

> **Site.** A site is the location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archaeological value regardless of the value of any existing structure.
>
> **Building.** A building, such as a house, barn, church, hotel, or similar construction, is created principally to shelter any form of human activity. "Building" may also be used to refer to a historically and functionally related unit, such as a courthouse and jail, or a house and barn.
>
> **Structure.** The term "structure" is used to distinguish from buildings those functional constructions made usually for purposes other than creating human shelter.
>
> **Object.** The term "object" is used to distinguish from buildings and structures those constructions that are primarily artistic in nature or are relatively small in scale and simply constructed. Although it may be, by nature or design, movable, an object is associated with a specific setting or environment.
>
> **District.** A district possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development.

Significance Criteria

When a project might affect a cultural resource, the project proponent is required to conduct an assessment to determine whether the effect may be one that is significant. Consequently, it is necessary to determine the importance of resources that could be affected. For purposes of the

National Register, the importance of a resource is evaluated in terms of criteria put forth in 36CFR60 (see below). Eligibility criteria for the California Register of Historical Resources (CRHR) (Title 14 CCR, §4852) are very similar and will not be presented here.

> The quality of significance is present in properties that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:
>
> A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
>
> B. That are associated with the lives of persons significant in our past; or
>
> C. That embody the distinct characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
>
> D. That have yielded or may be likely to yield, information important in prehistory or history.

In addition to meeting one or more of the above criteria, eligibility for both the CRHR and the National Register requires that a resource retains sufficient integrity to convey a sense of its significance or importance. Seven elements are considered key in considering a property's integrity: location, design, setting, materials, workmanship, feeling, and association.

The OHP advocates that all resources over 45 years old be recorded for inclusion in the OHP filing system (OHP 1995:2), although the use of professional judgment is urged in determining whether a resource warrants documentation.

PROJECT SETTING

The project lies on the Santa Rosa Plain, a northwest trending valley of the southern Coast Ranges. Twenty-two miles long and nine miles wide at its widest point, the Santa Rosa Plain was once a mosaic of oak savannah and vernal pools, cross-cut by seasonal streams that drained toward the area now known as the Laguna de Santa Rosa. Santa Rosa Creek and Mark West Creek, year-round tributaries to the laguna, are the main westerly flowing streams on the plain. In addition to vast grasslands and vernal pools, plant communities include oak woodlands, with mixed hardwood and coniferous forest on the hills to the east (Honton and Sears 2006).

Area of Potential Effects

The area of potential effects (APE) is the 28.49-acre parcel at 2220 Fulton Road, as shown on the Sebastopol 7.5' USGS topographic map (Figure 2). This part of Sonoma County has remained relatively rural; though over the last 20 years several subdivisions have been developed to the north and south of the APE. A house and six outbuildings are found at the western end of the APE, but the majority of the parcel consists of open grassland (Figure 3). County records indicate that the house was constructed in 1930.

The APE is situated on nearly level land with little slope, if any. A subdivision constructed in 2006 covered or rerouted the closest portion of Abramson Creek from the APE, which once was 30 meters northwest of the northwest corner of the APE.

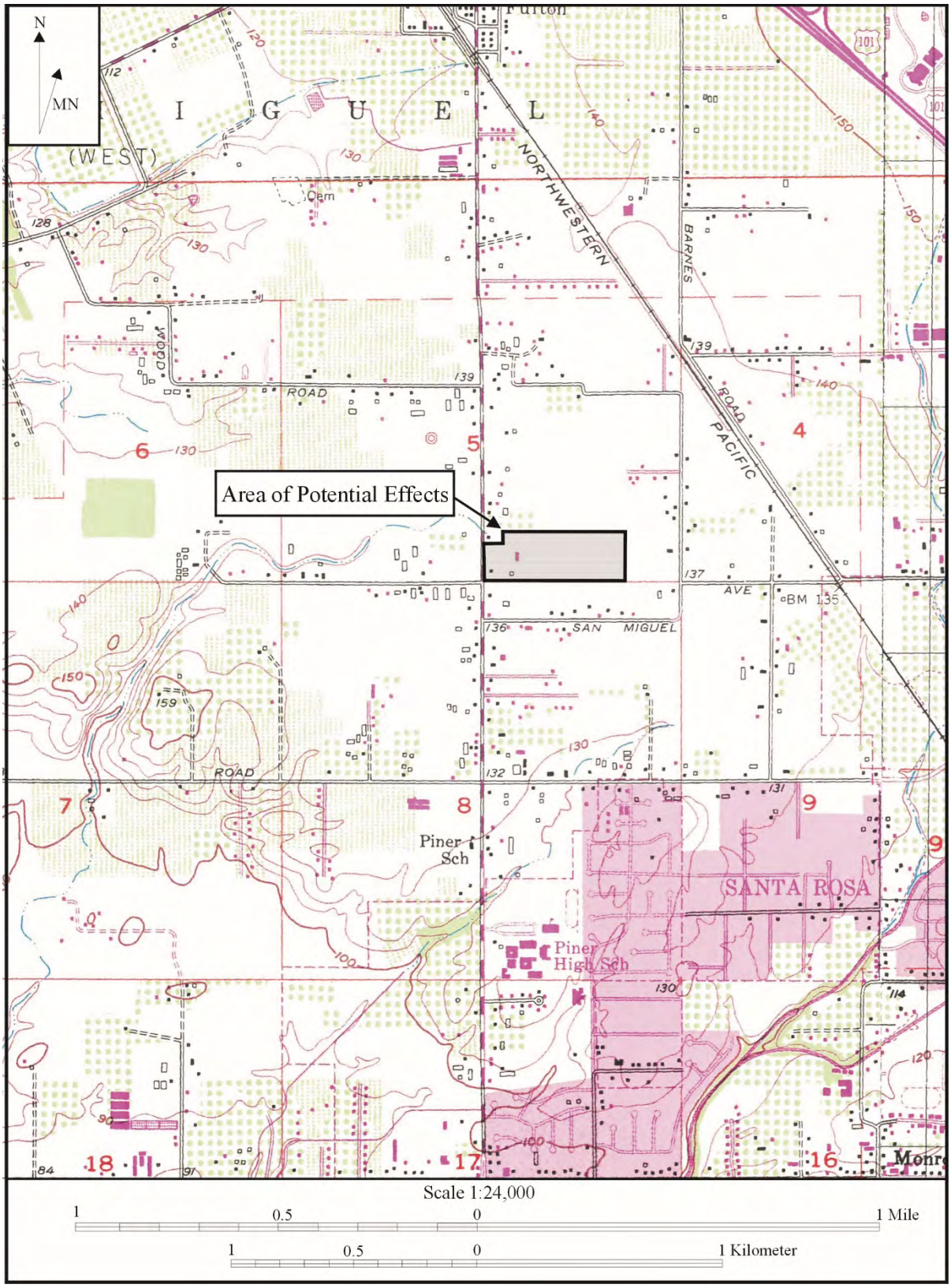


Figure 2. Location of the APE (adapted from the 1980 Sebastopol 7.5' USGS topographic map).

Figure 3. Overview of the APE, facing west.

The geology of the APE consists of Pleistocene (11,700 years ago to 2.588 million years ago) alluvial fan, stream terrace, and basin deposits (Qoa) (Delattre and Gutierrez 2008). These deposits are poorly sorted sand, silt, and gravel composed of Franciscan basement material with conspicuous red and green chert and lesser volcanic clasts. Soils mapped for the APE are Clear Lake clay and Huichica loams (Miller 1972: Sheet 74). Clear Lake soils are poorly draining clay soils found on plains and flat basin areas. In an uncultivated state, they support the growth of cannula or perennial grasses and forbs. Historically, these soils have been used for growing oat vetch hay and oat hay (Miller 1972:22). Huichica soils are moderately well-drained to somewhat poorly draining loams that have a clay subsoil. These soils are typically found on hummocky plains and terraces. In an uncultivated state, these soils support the growth of annual and perennial grasses and forbs, and scattered oaks. Historically, theses soils were used for dryland and irrigated pasture and for hay crops (Miller 1972:48).

Cultural Setting

Prehistory

The concept of prehistory refers to the period of time before events were recorded in writing and varies worldwide. Because there is no written record, our understanding of California prehistory relies

on archaeological materials and oral histories passed down through generations. Early archaeological research in this area began with the work of Max Uhle and Nels Nelson. Uhle is credited with the first scientific excavation in California with his work at the Emeryville Shellmound in 1902, and Nelson spent several years (1906 to 1908) surveying the San Francisco Bay margins and California coast for archaeological sites. In the 1930s, archaeologists from Sacramento Junior College and the University of California began piecing together a sequence of cultures primarily based on burial patterns and ornamental artifact from sites in the lower Sacramento Valley (Lillard *et al*. 1939; Heizer and Fenenga 1939). Their cultural sequence became known as the Central California Taxonomic System (CCTS), which identified three culture periods termed the Early, Middle, and Late Horizons, but without offering date ranges. Refinement of the CCTS became a chief concern of archaeologists as the century progressed with publications by Richard Beardsley (1948, 1954) and Clement Meighan (1955) based on materials excavated by the University of California archaeological survey.

In 1973, David Fredrickson synthesized prior work, and in combination with his own research, he developed a regional chronology that is used to this day, albeit modified for locality-specific circumstances. Fredrickson's scheme shows that native peoples have occupied the region for over 11,000 years (which is supported by Erlandson *et al*. 2007), and during that time, shifts took place in their social, political, and ideological regimes (Fredrickson 1973). While Fredrickson's chronology was adopted by many archaeologists, Beardsley's cultural sequence was adopted by others creating a roughly North Bay-South Bay division in usage.

In an effort to bridge the differences between chronologies, Milliken *et al*. (2007: Figure 8.4) presented a concordance for comparing time periods, cultural patterns, and local variations for the San Francisco Bay Area. Milliken included Dating Scheme D, as presented by Groza in 2002, which is a refinement of previous radiocarbon-based temporal sequences for the San Francisco Bay Area. More recently, Byrd, Whitaker, Mikkelsen, and Rosenthal (2017) called upon archaeologist to abandon previous temporal sequences in favor of Scheme D, further refined in Groza *et al*. 2011. Table 1 assimilates Scheme D, Fredrickson's (1973) chronology, and the obsidian hydration dating scheme from Origer (1987). Note that the Early, Middle, Late Horizon scheme is still evident though refinements have been made within those categories.

Early occupants appear to have had an economy based largely on hunting, with limited exchange, and social structures based on the extended family unit. Later, milling technology and an inferred acorn economy were introduced. This diversification of economy appears to be coeval with the development of sedentism and population growth and expansion. Sociopolitical complexity and status distinctions based on wealth are also observable in the archaeological record, as evidenced by an increased range and distribution of trade goods (e.g., shell beads, obsidian tool stone), which are possible indicators of both status and increasingly complex exchange systems.

These horizons or periods are marked by a transition from large projectile points and millingslabs, indicating a focus on hunting and gathering during the Early Period, to a marine focus during the Middle Period evidenced by the number of shellmounds in the Bay Area. The Middle Period also saw more reliance on acorns and the use of bowl-shaped mortars and pestles. Acorn exploitation increased during the Late Period and the bow and arrow were introduced.

Prehistoric archaeological site indicators expected to be found in the region include but are not limited to: obsidian and chert flakes and chipped stone tools; grinding and mashing implements such as slabs and hand-stones, and mortars and pestles; and locally darkened midden soils containing some of the previously listed items plus fragments of bone, shellfish, and fire affected stones.

Table 1. North Bay/San Francisco Bay Area Chronology

Temporal Period[1]	Approximate Time Range[1]	~ Hydration Interval (μ)[2]	Scheme D Periods[3]	Approximate Time Range[4]	~ Hydration Interval (μ)[5]
Historical	< A.D. 1800	<1.20	Historic Mission	A.D. 1835 to A.D. 1770	1.10 - 1.27
Upper Emergent	A.D. 1800 to A.D. 1500	1.21 - 1.84	Late 2	A.D. 1770 to A.D. 1520	1.28 - 1.80
Lower Emergent	A.D. 1500 to A.D. 1000	1.85 - 2.58	Late 1b	A.D. 1520 to A.D. 1390	1.81 - 2.02
			Late 1a	A.D. 1390 to A.D. 1265	2.03 - 2.22
			Middle/Late Transition	A.D. 1265 to A.D. 1020	2.23 - 2.55
Upper Archaic	A.D. 1000 to 500 B.C.	2.59 - 4.05	Middle 4	A.D. 1020 to A.D. 750	2.56 - 2.88
			Middle 3	A.D. 750 to A.D. 585	2.89 - 3.06
			Middle 2	A.D. 585 to A.D. 420	3.07 - 3.23
			Middle 1	A.D. 420 to 200 B.C.	3.24 - 3.80
Middle Archaic	500 B.C. to 3000 B.C.	4.06 - 5.72	Early/Middle Transition	200 B.C. to 600 B.C.	3.81 - 4.13
			Early	600 B.C to 2100 B.C.	4.14 - 5.18
Lower Archaic	3000 B.C. to 6000 B.C.	5.73 - 7.23			
Paleo-Indian	6000 B.C. to 8000 B.C.	7.24 - 8.08+			

[1] based on Fredrickson (1994)
[2] based on Napa Glass Mountain rate by Origer (1987)
[3] based on Groza *et al.* (2011)
[4] based on Groza *et al.* (2011) and Byrd *et al*. (2017)
[5] based on Origer (1987) and EHT value from vicinity of Santa Rosa, Sonoma County

Ethnography

Linguists and ethnographers tracing the evolution of languages have found that most of the indigenous languages of the California region belong to one of five widespread North American language groups (the Hokan and Penutian phyla, and the Uto-Aztecan, Algic, and Athabaskan language families). The distribution and internal diversity of four of these groups suggest that their original centers of dispersal were outside, or peripheral to, the core territory of California, that is, the Central Valley, the Sierra Nevada, the Coast Range from Cape Mendocino to Point Conception, and the Southern California coast and islands (Golla 2011).

At the time of European settlement, the APE was situated in an area controlled by the Southern Pomo (Barrett 1908; McLendon and Oswalt 1978). The Southern Pomo were hunter-gatherers who lived in rich environments that allowed for dense populations with complex social structures (Barrett 1908; Kroeber 1925). They settled in large, permanent villages about which were distributed seasonal camps and task-specific sites.

Primary village sites were occupied throughout the year, and other sites were visited in order to procure particular resources that were abundant or available only during certain seasons. Sites often were situated near fresh water sources and in ecotones where plant and animal life were diverse and abundant. For more information about the Pomo see Bean and Theodoratus (1978), Kniffen (1939), and Stewart (1943).

History

Historically, this part of Sonoma County was a small area of sectioned land surrounded by the San Miguel, Molinos, Rancho Canada de Jonive, Llano de Santa Rosa, and the Rancho Cabeza de Santa Rosa land grants (Thompson 1877). A 160-acre portion of land containing the APE was acquired by George Walker in 1868; though he is shown owning (or at least leasing and/or residing on the property) as early as 1867 (Bowers 1867). By 1877, Walker had sold his land to Joseph Foster. At this time, Foster was living in a house with his family approximately 1,100 feet northwest of the APE (the address is 2365 Fulton Road and recorded under P-49-003855). The 1898 county atlas shows that Foster divided his land and sold it, with the portion containing the APE acquired by R. Fiege (Reynolds and Proctor 1898). Over the years it appears that the tract of land containing the APE was further subdivided until the 1930s when the parcel was delineated into its current shape and size. Based on county records, the house on the property was constructed in 1930.

Although the APE is within the limits of the City of Santa Rosa, it remained a relatively rural part of the county until recent times when several residential subdivisions were constructed. Like the APE, there are still several parcels in the area that are undeveloped or may only contain a single-family home and associated outbuildings.

Historic period site indicators generally include: fragments of glass, ceramic, and metal objects; milled and split lumber; and structure and feature remains such as building foundations and discrete trash deposits (e.g., wells, privy pits, dumps).

STUDY PROCEDURES AND FINDINGS

Native American Contact

A request was sent to the State of California's Native American Heritage Commission (NAHC) by Tom Origer & Associates seeking information from the Sacred Lands File and the names of Native American individuals and groups that would be appropriate to contact regarding this project. Letters were also sent to the following groups:

Cloverdale Rancheria of Pomo Indians of California
Dry Creek Rancheria of Pomo Indians
Federated Indians of Graton Rancheria
Kashia Band of Pomo Indians of the Stewarts Point Rancheria
Lytton Rancheria of California
Middletown Rancheria of Pomo Indians of California
Mishewal-Wappo Tribe of Alexander Valley

This contact represents notification regarding the project to provide an opportunity for comment. It does not constitute consultation with tribes.

Native American Contact Results

A letter was received via email from Ryan Peterson, administrative assistant for the Middletown Rancheria Tribal Historic Preservation Department, on March 12, 2019. They have no comments at this time, but if evidence of human habitation is found they request that work stop immediately and that they be notified.

A response was received on March 12, 2019 from Brenda Tomaras of Tomaras & Ogas, LLP, representative of the Lytton Rancheria of California. Ms. Tomaras stated that the tribe has no specific information about the project but that the land does fall within their traditional Pomo territory. Ms. Tomaras further stated that artifacts, and sites may be encountered during the project and they will be consulting with the appropriate lead agency.

A response was received on March 12, 2019 from Dino Franklin, Chairman of the Kashia Band of Pomo Indians of the Stewarts Point Rancheria. He stated that he was unable to comment on the project and deferred to Lytton Rancheria of California or the Federated Indians of Graton Rancheria.

A response was received on March 25, 2019 from Buffy McQuillen, Tribal Historic Preservation Officer for the Federated Indians of Graton Rancheria. Ms. McQuillen stated that the project area is within the Tribe's ancestral territory and there may be tribal cultural resource impacts. Ms. McQuillen requested the results of the cultural resources study and the recommendations made based on those results.

No other responses have been received as of the date of this report. A log of contact efforts is appended to this report, along with copies of correspondence (see Appendix A).

Archival Research Procedures

Archival research encompassed lands within a quarter-mile of the APE. Julia Franco reviewed the archaeological site base maps and records, survey reports, and other materials on file at the Northwest Information Center (NWIC) on February 25, 2019 (NWIC File 18-1609). The library and project files at Tom Origer & Associates and various on-line databases were also reviewed. Sources of information included but were not limited to the current listings of properties on the National Register

of Historic Places, California Historical Landmarks, California Register of Historical Resources, and California Points of Historical Interest, as listed in the Office of Historic Preservation's *Historic Property Directory* (OHP 2012).

Ethnographic literature that described appropriate Native American groups was reviewed, and county histories and other primary and secondary sources were consulted. Early maps and aerial photographs were also examined to gain insight into the nature and extent of historical development in the general vicinity, and especially within the APE. All sources reviewed are listed in the "Materials Consulted" section of this report.

As part of the archival research, the potential for buried archaeological deposits was considered, and an assessment made of the APE's geology, historical hydrology, and other environmental factors. A model for predicting a location's sensitivity for buried archaeological sites was formulated by Byrd *et al.* (2017) based on the age of the landform, slope, and proximity to water. A location is considered to have the highest sensitivity if the landform dates to the Holocene, has a slope of five percent or less, is within 150 meters of fresh water, and 150 meters of a confluence. Note: the Holocene Epoch is the current period of geologic time, which began about 11,700 years ago, and coincides with the emergence of human occupation of the area. A basic premise of the model is that archaeological deposits will not be buried within landforms that predate human colonization of the area. Calculating these factors using the buried site model, a location's sensitivity will be scored on a scale of 1-10 and classed as follows: lowest (<1); low (1-3); moderate (3-5.5); high (5.5-7.5); highest (>7.5).

Archival Research Findings

Archival research found that the APE had not been subjected to a prior cultural resources study. Thirty cultural resources studies have been conducted within a half-mile of the APE (Table 2). Three of these studies were conducted adjacent to the APE (Chattan and Greene 2004; Steen and Origer 2008; Ward and Origer 1999). Six resources have been recorded within a half-mile of the APE. All of these resources are historic-era resources and would not extend into the APE (Table 3).

There are no reported ethnographic sites within one mile of the survey area (Barrett 1908).

Review of 19th and 20th century maps found no buildings within the APE until 1935 when a house is shown (Bowers 1867; General Land Office 1865; Reynolds & Proctor; Thompson 1877; USGS 1935). County records indicate that this house was constructed in 1930. The house and one outbuilding is shown on the 1954 USGS map; however, the 1952 aerial photo of the property shows that several outbuildings are present (University of Santa Barbara Library 1952; USGS 1954a).

Analysis of the environmental setting, especially landform age, slope, and distance to water, was weighed against Meyer and Kaijankoski (2017) analysis of sensitivity for buried sites. Per this model, there is the lowest potential (<1.0) for buried archaeological site deposits within the APE.

Table 2. Studies within a Half-mile of the APE

Author	Date	S#
Barrow	2014	45443
Bloomfield	1989	48798
Chattan	2003	27432
Chattan	2008	34979
Chattan and Greene	2004	28856
Clark	1993a	15235
Evans	2016a	49167
Evans	2016d	47901
Evans	2016e	49140
Gerike	1983	6010
Hayes	1986	7822
ICF International	2014	45663
Jordan and Fredrickson	1987	9140
Ledebuhr and Origer	2007	34886
Origer	1988	10258
Origer	1990	13217
Origer	1997	19141
Origer	2017	49226
Origer and Fredrickson	1981	2738
Steen and Origer	2005	30979
Steen and Origer	2008	34917
Thal	2005	29691
Thompson and Fredrickson	1979	1616
Thompson and Origer	2004	29213
URS Corpration	2009	35252
Villemaire and Fredrickson	1988	9731
Ward and Origer	1999	21843
Werner	2005	30926
Werner and Flaherty	2005	31043
Werner and Flaherty	2006	31227

Table 3. Resources within a Half-mile of the APE

Author	Date	P#	Type	Distance from APE
Evans	2016b	P-49-003289	Farm building remains	225 feet
Evans	2016c	P-49-005402	Orchard	2610 feet
Clark	1993b	P-49-001759	Farmstead	1900 feet
Hollins	2008	P-49-004216	Farm/Ranch	2575 feet
Starke and Thomas	2013	P-49-002834	Northwestern Pacific Railroad	1915 feet
Tom Origer & Associates	2005	P-49-003855	House/small dairy	1100 feet

Field Survey Procedures

An intensive field survey of the 28.49-acre APE was completed by a three-person crew on March 14 and 30, 2019; six person-hours were expended. Surface examination consisted of walking in 15-meter transects using hoes as needed to expose the ground surface and examining soils from rodent burrows. Portions of the APE were inundated with water (see Figure 4). This hindered the ability to observe ground surface in these locations.

In addition to the surface survey, three auger borings were excavated using a 4-inch diameter barrel auger to examine subsurface soils (Figure 4). The borings were excavated to 50, 70, and 60 centimeters respectively. All of the augers started as a very wet loam that we easy to excavate. In

Boring 1, the hole began to fill with water at 20 centimeters, but this occurred at 50 centimeters in borings 2 and 3. Other than the influx of water, no changes were observed in the borings. All three borings were terminated when water/mud filled the hole and would not stay in the auger barrel.

Figure 4. Location of inundated areas and auger borings within the APE.

Field Survey Findings

Archaeology

No archaeological site indictors were observed during the survey. Additionally, no archaeological site indicators were found in the auger borings.

Built Environment

A house and six outbuildings are found within the APE. County records indicate that the house was constructed in 1930. The house is a one-and-a-half story, front gabled, frame building on a rectangular plan. The siding is stucco and the roof is composite shingles. Windows in the house are primarily one-over-one double hung sashes, with four exceptions. In the dormers on the north and south sides of the buildings the windows are fixed with bands of small rectangle-shaped panes above. In the gable on the front (west side) of the building, two windows of the same style as those in the dormers are present. At the rear (east side) of the building it appears there is a horizonal slider, and on the north side of the building there is a ribbon of three single-pane fixed windows. There are entrances to the first story on the front and on the rear. At the rear of the building (east side) a staircase has been constructed and provides direct access to the upper half-story of the building.

There are a few Craftsman-style elements added onto the building. These elements include brackets under the gables at both ends of the house (east and west sides), large support columns at the front porch, and the multi-paned windows that were previously mentioned.

The outbuildings consist of a gabled-roof garage, two chicken houses and three sheds. Appendix B contains documentation of this complex.

DISCUSSION AND RECOMMENDATIONS

Field survey of the APE found no archaeological site indicators on the ground surface, and none were observed in the auger borings. The house within the APE was constructed in 1930 according to county records. Observations of the building made during the field survey support this as well as review of aerial photos of the study area.

Recommendations

Archaeology

As no archaeological deposits were observed during the survey, no resource-specific recommendations are warranted. The potential for buried sites within the APE rates a sensitivity score of <1 out of 10, indicating that there is a very low possibility of encountering buried resources. In addition, the auger borings revealed no buried deposits. Estimates have been made that a very low sensitivity rating would mean that there is a less than 1% chance of finding a buried resource (Rosenthal and Meyer 2004:94).

Because of the very low sensitivity for buried resources, no further recommendations are warranted.

Built Environment

The buildings have the potential to meet criteria for inclusion on the CRHR and the National Register and should be evaluated.

Accidental Discovery

If buried materials are encountered, all soil disturbing work should be halted at the location of any discovery until a qualified archaeologist completes a significance evaluation of the find(s) pursuant to Section 106 of the National Historic Preservation Act (36CFR60.4). Prehistoric archaeological site indicators expected within the general area include: chipped chert and obsidian tools and tool manufacture waste flakes; grinding and hammering implements that look like fist-size, river-tumbled stones; and for some rare sites, locally darkened soil that generally contains abundant archaeological specimens. Historical remains expected in the general area commonly include items of ceramic, glass, and metal. Features that might be present include structure remains (e.g., cabins or their foundations) and pits containing historical artifacts.

The following actions are promulgated in the CEQA Guidelines Section 15064.5(d) and pertain to the discovery of human remains. If human remains are encountered, excavation or disturbance of the location must be halted in the vicinity of the find, and the county coroner contacted. If the coroner determines the remains are Native American, the coroner will contact the NAHC. The NAHC will identify the person or persons believed to be most likely descended from the deceased Native

American. The most likely descendent makes recommendations regarding the treatment of the remains with appropriate dignity.

SUMMARY

Tom Origer & Associates completed an archaeological resources study of the property at 2220 Fulton Road, Santa Rosa. The study was requested by Geoff Monk of Geoff Monk & Associates and was conducted in compliance with the US Army Corps of Engineers, Section 106 of the National Historic Preservation Act, the City of Santa Rosa, and CEQA. The buildings on the property could meet eligibility criteria for inclusion on the CRHR and the National Register and recommendations for an evaluation have been made. Documentation pertaining to this study is on file at Tom Origer & Associates (File No. 2019-017).

MATERIALS CONSULTED

Barbour, M. and J. Major, ed.
1988 *Terrestrial Vegetation of California*. California Native Plant Society.

Barrett, S.
1908 *The Ethno-Geography of the Pomo and Neighboring Indians*. University of California Publications in American Archaeology and Ethnology Vol. 6, No. 1:1-322. University of California Press, Berkeley.

Barrow, E.
2014 *A Cultural Resources Study for the Francisco Village Project, 2601 Francisco Avenue (APN 034-030-013), Santa Rosa, Sonoma County, California.* S-45443 on file at the Northwest Information Center, Rohnert Park.

Bean, L. and D. Theodoratus
1978 Western Pomo and Northeast Pomo. In California, edited by R. Heizer, pp. 289-305, Handbook of North American Indians, Vol. 8, W. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

Beardsley, R.
1948 Culture Sequences in Central California Archaeology. In *American Antiquity* Vol. 14, No. 1, pp. 1-28.

1954 *Temporal and Areal Relationships in Central California Archaeology.* Reports of the University of California Archaeological Survey 24-25. Berkeley, California.

Bell and Heymans
1888 *Map of Sonoma County, California. Bell* and Heymans, San Francisco.

Bennyhoff, J. and R. Heizer
1958 Cross-dating Great Basin Sites by Californian Shell Beads. *University of California Archaeological Survey Reports* Vol. 42: 60-92.

Bennyhoff, J. and R. Hughes
1987 *Shell Bead and Ornament Exchange Networks Between California and the Western Great Basin*. Anthropological Papers of the American Museum of Natural History, vol. 64, pt. 2.

Bowers, A.
1867 *Map of Sonoma County, California.* 2nd ed. A. Bowers.

Byrd, B., A. Whitaker, P. Mikkelsen, and J. Rosenthal
2017 *San Francisco Bay-Delta Region Context and Research Design for Native American Archaeological Resources Caltrans District 4.* On file at the Caltrans District 04 Office of Cultural Resource Studies, Oakland, California.

Byrd, B., A. Whitaker, P. Mikkelsen, J. Rosenthal, J. Meyer, and P. Kaijankoski
2017 Discovering Sites: Geoarchaeological Approaches to Site Sensitivity and Predictive Modeling. In, *San Francisco Bay-Delta Region Context and Research Design for Native American Archaeological Resources Caltrans District 4.* B. Byrd, A. Whitaker, P. Mikkelsen,

and J. Rosenthal. Pp 4-1 through 4-13. On file at the Caltrans District 04 Office of Cultural Resource Studies, Oakland, California.

Chattan, C.
2003 *A Cultural Resources Evaluation of the Manes Ranch 2065 San Miguel Avenue, Santa Rosa, MJP03-009.* Document S-27432 on file at the Northwest Information Center, Rohnert Park.

2008 *A Cultural Resources Evaluation the Property Located at 2390 San Miguel Avenue, Santa Rosa, California.* Document S-34979 on file at the Northwest Information Center, Rohnert Park.

Chattan, C. and R. Greene
2004 *A Cultural Resources Evaluation of Two Parcels on San Miguel Avenue, APN 034-041-009 & -010, Santa Rosa, Sonoma County, CA.* Document S-28856 on file at the Northwest Information Center, Rohnert Park.

Clark, S.
1993a *Historic Evaluation and Documentation: Castor Family Farmstead, 2111 San Miguel Avenue, Santa Rosa, CA 94503, Assessor Parcel Numbers: 034-023-02, 034-023-03.* Document S-15235 on file at the Northwest Information Center, Rohnert Park.

1993b Historic Resources Inventory Form for P-49-001759. Document on file at the Northwest Information Center, Rohnert Park.

Department of Parks and Recreation
1976 *California Inventory of Historical Resources*. State of California, Sacramento.

Erlandson, J. T. Rick, T. Jones, J. Porcasi
2007 One if by Land, Two if by Sea: Who Were the First Californians? In: *California Prehistory: Colonization, Culture, and Complexity*. (pp 53-62) T. Jones and K. Klar, editors. AltaMira Press. Lanham, MD.

Evans, S.
2016a *A Cultural Resources Study for the Kerry Ranch I Subdivision Project Located at 2181 Francisco Avenue, Santa Rosa, Sonoma County, California.* Document S-49167 on file at the Northwest Information Center, Rohnert Park.

2016b Continuation Sheet for P-49-003289. Document on file at the Northwest Information Center, Rohnert Park.

2016c Primary Record for P-49-005402. Document on file at the Northwest Information Center, Rohnert Park.

2016d *Results of a Historic Property Survey for the Alton Lane Conservation Bank Project within APN 034-042-081, Sonoma County, California.* Document S-47901 on file at the Northwest Information Center, Rohnert Park.

2016e *Results of a Historic Property Survey of the Alton South Conservation Site within APN 034-042-075, 2779 Piner Road, Santa Rosa, Sonoma County, California.* Document S-49140 on file at the Northwest Information Center, Rohnert Park.

Fredrickson, D.
1973 *Early Cultures of the North Coast Ranges, California*. Ph.D. dissertation. Department of Anthropology, University of California, Davis.

1984 The North Coastal Region. In *California Archaeology*, edited by M. Moratto. Academic Press, San Francisco.

General Land Office (GLO)
1865 Township 7 North; Range 8 West. Mount Diablo Base Meridian. Department of the Interior, Washington, D.C.

Gerike, C.
1983 Letter report regarding an Historical archaeological study of 10.5 acres (A.P. #34-020-91) at the northeast corner of the junction of Piner and Waltzer roads, Santa Rosa, Sonoma County. Document S-6010 on file at the Northwest Information Center, Rohnert Park.

Golla, V.
2007 Linguistic Prehistory. In *California Prehistory: Colonization, Culture, and Complexity* edited by T. Jones and K. Klar, pp. 71-82. Alta Mira Press, Lanham, Maryland.

Groza, R.
2002 An AMS Chronology for Central California *Olivella* Shell Beads. Master's thesis, Department of Anthropology, San Francisco State University, San Francisco, California.

Groza, R., J. Rosenthal, J. Southon, and R. Milliken
2011 A Refined Shell Bead Chronology for Late Holocene Central California. *Journal of California and Great Basin Anthropology* 31(2):13-32.

Hayes, J.
1986 Letter report regarding An archaeological survey of the Quade property at 2369 Piner Road, Santa Rosa, California. (5501/9-86). Document S-7822 on file at the Northwest Information Center, Rohnert Park.

Heizer, R. and F. Fenenga
1939 Archaeological Horizons in Central California. *American Anthropologist*, Vol. 41, pp. 378-399.

Hollins, J.
2008 Primary Record for P-49-004216. Document on file at the Northwest Information Center, Rohnert Park.

Honton, J., and A. Sears
2006 *Restoration and Management Plan: Enhancing and Caring for the Laguna.* Laguna de Santa Rosa Foundation, Santa Rosa. < http://lagunadesantarosa.org/knowledgebase/?q=node/156>

Hoover, M., H. Rensch, E. Rensch, and W. Abeloe
1966 *Historic Spots in California.* 3rd edition. Stanford University Press, Stanford.

Hoover, M., H. Rensch, E. Rensch, W. Abeloe, and D. Kyle
1990 *Historic Spots in California.* 4th edition. Stanford University Press, Stanford.

Hoover, M., H. Rensch, E. Rensch, W. Abeloe, and D. Kyle
2002 *Historic Spots in California.*5th edition. Stanford University Press, Stanford.

ICF International
2014 DRAFT: *Cultural Resources Inventory and Evaluation Report for Sonoma-Marin Area Rail Transit (SMART): IOS-1B and Operations and Maintenance Facility Site, Santa Rosa, Sonoma County (MP 55.2-MP 59.9).* Document S-45663 on file at the Northwest Information Center, Rohnert Park.

Jordan, L. and D. Fredrickson
1987 *An Archaeological Study of the Rancho San Miguel Property at 2001 Waltzer Road, Santa Rosa, Sonoma County, California (APN #34-041-08, #34-043-20, #34-021-15, -16, -17.* Document S-9140 on file at the Northwest Information Center, Rohnert Park.

Kniffen, F.
1939 *Pomo Geography.* University of California Publications in American Archaeology and Ethnology, Vol. 36. Berkeley.

Kroeber, A.
1925 *Handbook of the Indians of California.* Bureau of American Ethnology, Bulletin 78, Smithsonian Institution, Washington, D.C.

Ledebuhr, S. and T. Origer
2007 *A Cultural Resources Survey of the Property at 2318 Francisco Avenue, Sonoma County, California.* Document S-34886 on file at the Northwest Information Center, Rohnert Park.

Lillard, J., R. Heizer, and F. Fenenga
1939 *An Introduction to the Archaeology of Central California.* Sacramento Junior College Department of Anthropology, Bulletin 2, pp. 93, figs. 20 and map, pls. 31).

McIntire and Lewis
1908 *Official Map of the County of Sonoma, California.* County of Sonoma, Santa Rosa.

McLendon, S. and R. Oswalt
1978 Pomo: Introduction. In *California*, edited by R. Heizer, pp. 274-288. Handbook of North American Indians, Vol. 8, W. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

Meighan, C.
1955 *Archaeology of the North Coast Ranges, California.* Reports of the University of California Archaeological Survey No. 30. University of California, Berkeley.

Meyer, J. and J. Rosenthal
2007 *Geoarchaeological Overview of the Nine Bay Area Counties in Caltrans District 4.* Document S-33600 on file at the Northwest Information Center, Sonoma State University, Rohnert Park.

Miller, V.
1972 *Soil Survey of Sonoma County, California.* U.S. Department of Agriculture in cooperation with the University of California Agricultural Experiment Station.

Milliken, R.
1995 *A Time of Little Choice: The Disintegration of Tribal Culture in the San Francisco Bay Area, 1769–1810.* Ballena Press, Menlo Park.

Milliken, R., R. Fitzgerald, M. Hylkema, R. Gorza, T. Origer, D. Bieling, A. Leventhal, R. Wiberg, A. Gottsfield, D. Gillete, V. Bellifemine, E. Strother, R. Cartier, and D. Fredrickson
2007 Punctuated Cultural Change in the San Francisco Bay Area. In *California Prehistory: Colonization, Culture, and Complexity,* edited by Terry L. Jones and Kathryn Klar, pp. 99-124. Altamira Press, Walnut Creek, California.

Moratto, M.
1984 *California Archaeology.* Academic Press, San Francisco.

Munz, P. and D. Keck
1973 *A California Flora and Supplement*. University of California Press, Berkeley.

National Park Service (NPS)
1995 *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation.* Department of the Interior, National Park Service, Washington, D.C.

Office of Historic Preservation
1995 *Instructions for Recording Historical Resources.* California Office of Historic Preservation, Sacramento.

2012 *Historic Property Directory*. Office of Historic Preservation, Sacramento.

Origer, T.
1988 *An Archaeological Survey of the Pineview Estates Project Located at 2307 Piner Road, Santa Rosa, Sonoma County, California.* Document S-10258 on file at the Northwest Information Center, Rohnert Park.

1990 Letter report regarding An Archaeological Survey for the AT&T Fiber Optics Cable, San Francisco to Point Arena, California. Document S-13217 on file at the Northwest Information Center, Rohnert Park.

1997 *A Cultural Resources Study for a 4.55-Acre Parcel at 2293 Fulton Road, Santa Rosa, Sonoma County, California.* Document S-19141 on file at the Northwest Information Center, Rohnert Park.

2017 *A Cultural Resources Study of the Francisco Village Offsite Improvement Areas, Santa Rosa, Sonoma County, California.* Document S-49226 on file at the Northwest Information Center, Rohnert Park.

Origer, T. and D. Fredrickson
1981 *An Archaeological Study for the Northwest Santa Rosa Annexation 17 80 EIR, Santa Rosa, California.* Document S-2738 on file at the Northwest Information Center, Rohnert Park.

Peugh, E.A.
1934 *Map of Sonoma County, California.* E.A. Peugh, Santa Rosa.

Reynolds, W. and T. Proctor

1898 *Illustrated Atlas of Sonoma County, California.* Reynolds and Proctor, Santa Rosa.

Rosenthal, J. and J. Meyer
2004 *Landscape Evolution and the Archaeological Record: A Geoarchaeological Study of the Southern Santa Clara Valley and Surrounding Region.* Publication 14. Center for Archaeological Research, University of California, Davis.

Starke, J. and J. Thomas
2013 Primary Record P-49-002834. Document on file at the Northwest Information Center, Rohnert Park.

Steen, E. and T. Origer
2005 *An Archaeological Survey of the Property at 2365 Fulton Road, Sonoma County, California.* Document S-30979 on file at the Northwest Information Center, Rohnert Park.

2008 *A Cultural Resources Survey of the Property at 2225 Francisco Avenue, Santa Rosa, Sonoma County, California.* Document S-34917 on file at the Northwest Information Center, Rohnert Park.

Stewart, O.
1943 *Notes on Pomo Ethnogeography*. University of California Publications in American Archaeology and Ethnology Vol. 40, No. 2. University of California Press, Berkeley.

Thal, S.
2005 *Request for SHPO Review of FCC Undertaking for the Cambodian Cultural Center/SF-13221A.* Document S-29691 on file at the Northwest Information Center, Rohnert Park.

Thompson, N. and D. Fredrickson
1979 *Archaeological Survey of the Northwest Santa Rosa Annexation 2-77 Project (#931) near Santa Rosa, California.* Document S-1616 on file at the Northwest Information Center, Rohnert Park.

Thompson, N. and T. Origer
2004 *A Cultural Resources Survey for the Smoke Tree Village Residential Project off Fulton Road, Sonoma County, California.* Document S-29213 on file at the Northwest Information Center, Rohnert Park.

Thompson, T.H. & Co.
1877 *Historical Atlas Map of Sonoma County, California.* T.H. Thompson & Co., Oakland.

Tom Origer & Associates
2005 Primary Record P-49-003855. Document on file at the Northwest Information Center, Rohnert Park.

United States Army Corps of Engineers
1922 Sebastopol, California 15' map. Geological Survey, Washington D.C.

University of Santa Barbara Library
1952 FrameFinder web map app search of 2220 Fulton Road, Santa Rosa, California. Database http://mil.library.ucsb.edu/ap_indexes/FrameFinder/ accessed on March 4, 2019.

United States Geological Survey
1915 Sebastopol, California 15' map. Geological Survey, Washington D. C.

1942 Sebastopol, California 15' map. Geological Survey, Washington D. C.

1954 Sebastopol, California 7.5' map. Geological Survey, Washington D. C.

1954 Sebastopol, California 15' map. Geological Survey, Washington D. C.

URS Corporation
2009 *Historical Properties Survey Report: Verizon Cellular Communications Tower Location – Fulton Francisco, 2611 Fulton Road (APN: 059-030-010), Fulton, CA, Sonoma County.* Document S-35252 on file at the Northwest Information Center, Rohnert Park.

Villemaire, A. and D. Fredrickson
1988 *An Archaeological Investigation of 11.67 acres (A.P.N. 034-023-14), Located at 2125 San Miguel Road, Santa Rosa, Sonoma County, California.* Document S-9731 on file at the Northwest Information Center, Rohnert Park.

Ward, C. and T. Origer
1999 *Cultural Resources Study for a Proposed Continuous Center Left Turn Lane on Fulton Road between San Miguel Avenue and Alton Lane, Santa Rosa, Sonoma County, California.* Document S-21843 on file at the Northwest Information Center, Rohnert Park.

Werner, R.
2005 *Archaeological Investigation, A.P.N. 134-042-075 (2779 Piner Road), Santa Rosa, Sonoma County, California.* Document S-30926 on file at the Northwest Information Center, Rohnert Park.

Werner, R. and J. Flaherty
2005 *Archaeological Investigation, Kerry Ranch Phase 1 (APN 034-041-012) 2245 San Miguel Avenue, Santa Rosa, Sonoma County, California.* Document S-31043 on file at the Northwest Information Center, Rohnert Park.

2006 *Archaeological Investigation, Kerry Ranch Phase 3 (APN 035-022-002) 2193 Francisco Avenue, Santa Rosa, Sonoma County, California.* Document S-31227 on file at the Northwest Information Center, Rohnert Park.

APPENDIX A

Native American Contact

Copies of Correspondence

Native American Contact Efforts
2220 Fulton Road, Santa Rosa, Sonoma County

Organization	Contact	Action	Results
Native American Heritage Commission		Email 2/25/19	No response to our request has been received as of the date of this report.
Cloverdale Rancheria of Pomo Indians of California	Patricia Hermosillo	Letter 2/28/19 Email 3/11/19	No response to our letter has been received as of the date of this report.
Dry Creek Rancheria Band of Pomo Indians	Chris Wright	Letter 2/28/19 Email 3/11/19	No response to our letter has been received as of the date of this report.
Federated Indians of Graton Rancheria	Gene Buvelot Buffy McQuillen Greg Sarris	Letter 2/28/19 Email 3/11/19	A response was received on March 25, 2019 from Buffy McQuillen, Tribal Historic Preservation Officer for the tribe. Ms. McQuillen stated that the project area is within the Tribe's ancestral territory and there may be tribal cultural resource impacts. The requested the results of the cultural resources study and the recommendations made based on those results.
Kashia Band of Pomo Indians of the Stewarts Point Rancheria	Dino Franklin	Letter 2/28/19 Email 3/11/19	A response was received on March 12, 2019 from Mr. Franklin. He stated that he was unable to comment on the project and deferred to Lytton Rancheria of California or the Federated Indians of Graton Rancheria.
Lytton Rancheria of California	Marjorie Mejia	Letter 2/28/19 Email 3/11/19	A response was received on March 12, 2019 from Brenda Tomaras of Tomaras & Ogas, LLP, representative of the tribe. Ms. Tomaras stated that the tribe has no specific information about the project but that the land does fall within their traditional Pomo territory. Ms. Tomaras further stated that artifacts, and sites may be encountered during the project and they will be consulting with the appropriate lead agency.

Native American Contact Efforts
2220 Fulton Road, Santa Rosa, Sonoma County

Organization	Contact	Action	Results
Middletown Rancheria of Pomo Indians of California	Jose Simon, III	Letter 2/28/19 Email 3/11/19	No response to our letter has been received as of the date of this report.
Mishewal-Wappo Tribe of Alexander Valley	Scott Gabaldon	Letter 2/28/19 Email 3/11/19	No response to our letter has been received as of the date of this report.

Sacred Lands File & Native American Contacts List Request

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 373-3710
(916) 373-5471 – Fax
nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: 2220 Fulton Road
County: Sonoma

USGS Quadrangles
Name: Sebastopol
Township T7N Range R8W Section(s) 5 MDBM

Date: February 25, 2019
Company/Firm/Agency: Tom Origer & Associates
Contact Person: Eileen Barrow

Address: P.O. Box 1531
City: Rohnert Park Zip: 94927
Phone: (707) 584-8200 Fax: (707) 584-8300
Email: eileen@origer.com

Project Description: The project proponent is preparing an EIR for the development of the 28.5-acre property into residential and wetland mitigation.

Tom Origer & Associates
Archaeology / Historical Research

February 28, 2019

Patricia Hermosillo
Cloverdale Rancheria of Pomo Indians of California
555 South Cloverdale Blvd., Suite A
Cloverdale, CA 95425

RE: 2220 Fulton Road, Santa Rosa, Sonoma County

Dear Ms. Hermosillo:

I am writing to notify you of a proposed project within the City of Santa Rosa, for which our firm is conducting a cultural resources study. The project proponent is proposing to develop a portion of the 28.5-acre property into a residential subdivision and the remainder the property being preserved as wetlands. The City of Santa Rosa is reviewing the project for California Environmental Quality Act compliance. The United States Army Corps of Engineers is reviewing the project for Section 106 of the National Historic Preservation Act compliance

This letter serves as notification of the project and does not constitute consultation.

Enclosed is a portion of the Sebastopol, Calif. 7.5' USGS topographic quadrangle showing the project location.

Sincerely,

Eileen Barrow

Eileen Barrow
Senior Associate

Tom Origer & Associates
Archaeology / Historical Research

February 28, 2019

Chris Wright
Dry Creek Rancheria Band of Pomo Indians
P.O. Box 607
Geyserville, CA 95441

RE: 2220 Fulton Road, Santa Rosa, Sonoma County

Dear Mr. Wright:

I am writing to notify you of a proposed project within the City of Santa Rosa, for which our firm is conducting a cultural resources study. The project proponent is proposing to develop a portion of the 28.5-acre property into a residential subdivision and the remainder the property being preserved as wetlands. The City of Santa Rosa is reviewing the project for California Environmental Quality Act compliance. The United States Army Corps of Engineers is reviewing the project for Section 106 of the National Historic Preservation Act compliance

This letter serves as notification of the project and does not constitute consultation.

Enclosed is a portion of the Sebastopol, Calif. 7.5' USGS topographic quadrangle showing the project location.

Sincerely,

Eileen Barrow
Senior Associate

Tom Origer & Associates
Archaeology / Historical Research

February 28, 2019

Gene Buvelot
Federated Indians of Graton Rancheria
6400 Redwood Drive, Ste. 300
Rohnert Park, CA 94928

RE: 2220 Fulton Road, Santa Rosa, Sonoma County

Dear Mr. Buvelot:

I am writing to notify you of a proposed project within the City of Santa Rosa, for which our firm is conducting a cultural resources study. The project proponent is proposing to develop a portion of the 28.5-acre property into a residential subdivision and the remainder the property being preserved as wetlands. The City of Santa Rosa is reviewing the project for California Environmental Quality Act compliance. The United States Army Corps of Engineers is reviewing the project for Section 106 of the National Historic Preservation Act compliance

This letter serves as notification of the project and does not constitute consultation.

Enclosed is a portion of the Sebastopol, Calif. 7.5' USGS topographic quadrangle showing the project location.

Sincerely,

Eileen Barrow

Eileen Barrow
Senior Associate

Tom Origer & Associates
Archaeology / Historical Research

February 28, 2019

Buffy McQuillen
Federated Indians of Graton Rancheria
6400 Redwood Drive, Ste. 300
Rohnert Park, CA 94928

RE: 2220 Fulton Road, Santa Rosa, Sonoma County

Dear Ms. McQuillen:

I am writing to notify you of a proposed project within the City of Santa Rosa, for which our firm is conducting a cultural resources study. The project proponent is proposing to develop a portion of the 28.5-acre property into a residential subdivision and the remainder the property being preserved as wetlands. The City of Santa Rosa is reviewing the project for California Environmental Quality Act compliance. The United States Army Corps of Engineers is reviewing the project for Section 106 of the National Historic Preservation Act compliance

This letter serves as notification of the project and does not constitute consultation.

Enclosed is a portion of the Sebastopol, Calif. 7.5' USGS topographic quadrangle showing the project location.

Sincerely,

Eileen Barrow
Senior Associate

Tom Origer & Associates
Archaeology / Historical Research

February 29, 2019

Greg Sarris
Federated Indians of Graton Rancheria
6400 Redwood Drive, Ste. 300
Rohnert Park, CA 94928

RE: 2220 Fulton Road, Santa Rosa, Sonoma County

Dear Mr. Sarris:

I am writing to notify you of a proposed project within the City of Santa Rosa, for which our firm is conducting a cultural resources study. The project proponent is proposing to develop a portion of the 28.5-acre property into a residential subdivision and the remainder the property being preserved as wetlands. The City of Santa Rosa is reviewing the project for California Environmental Quality Act compliance. The United States Army Corps of Engineers is reviewing the project for Section 106 of the National Historic Preservation Act compliance

This letter serves as notification of the project and does not constitute consultation.

Enclosed is a portion of the Sebastopol, Calif. 7.5' USGS topographic quadrangle showing the project location.

Sincerely,

Eileen Barrow

Eileen Barrow
Senior Associate

Tom Origer & Associates
Archaeology / Historical Research

February 29, 2019

Dino Franklin
Kashia Band of Pomo Indians of the Stewarts Point Rancheria
1420 Guerneville Rd., Suite 1
Santa Rosa, CA 95403

RE: 2220 Fulton Road, Santa Rosa, Sonoma County

Dear Mr. Franklin:

I am writing to notify you of a proposed project within the City of Santa Rosa, for which our firm is conducting a cultural resources study. The project proponent is proposing to develop a portion of the 28.5-acre property into a residential subdivision and the remainder the property being preserved as wetlands. The City of Santa Rosa is reviewing the project for California Environmental Quality Act compliance. The United States Army Corps of Engineers is reviewing the project for Section 106 of the National Historic Preservation Act compliance

This letter serves as notification of the project and does not constitute consultation.

Enclosed is a portion of the Sebastopol, Calif. 7.5' USGS topographic quadrangle showing the project location.

Sincerely,

Eileen Barrow

Eileen Barrow
Senior Associate

Tom Origer & Associates
Archaeology / Historical Research

February 28, 2019

Marjorie Mejia
Lytton Rancheria of California
437 Aviation Blvd.
Santa Rosa, CA 95403

RE: 2220 Fulton Road, Santa Rosa, Sonoma County

Dear Ms. Mejia:

I am writing to notify you of a proposed project within the City of Santa Rosa, for which our firm is conducting a cultural resources study. The project proponent is proposing to develop a portion of the 28.5-acre property into a residential subdivision and the remainder the property being preserved as wetlands. The City of Santa Rosa is reviewing the project for California Environmental Quality Act compliance. The United States Army Corps of Engineers is reviewing the project for Section 106 of the National Historic Preservation Act compliance

This letter serves as notification of the project and does not constitute consultation.

Enclosed is a portion of the Sebastopol, Calif. 7.5' USGS topographic quadrangle showing the project location.

Sincerely,

Eileen Barrow
Senior Associate

P.O. Box 1531, Rohnert Park, California 94927 ♦ www.origer.com Phone (707) 584-8200

Tom Origer & Associates
Archaeology / Historical Research

February 28, 2019

Jose Simon, III
Middletown Rancheria of Pomo Indians of California
P.O. Box 1035
Middletown, CA 95461

RE: 2220 Fulton Road, Santa Rosa, Sonoma County

Dear Mr. Simon:

I am writing to notify you of a proposed project within the City of Santa Rosa, for which our firm is conducting a cultural resources study. The project proponent is proposing to develop a portion of the 28.5-acre property into a residential subdivision and the remainder the property being preserved as wetlands. The City of Santa Rosa is reviewing the project for California Environmental Quality Act compliance. The United States Army Corps of Engineers is reviewing the project for Section 106 of the National Historic Preservation Act compliance

This letter serves as notification of the project and does not constitute consultation.

Enclosed is a portion of the Sebastopol, Calif. 7.5' USGS topographic quadrangle showing the project location.

Sincerely,

Eileen Barrow

Eileen Barrow
Senior Associate

Tom Origer & Associates
Archaeology / Historical Research

February 28, 2019

Scott Gabaldon
Mishewal-Wappo Tribe of Alexander Valley
2275 Silk Road
Windsor, CA 95492

RE: 2220 Fulton Road, Santa Rosa, Sonoma County

Dear Mr. Gabaldon:

I am writing to notify you of a proposed project within the City of Santa Rosa, for which our firm is conducting a cultural resources study. The project proponent is proposing to develop a portion of the 28.5-acre property into a residential subdivision and the remainder the property being preserved as wetlands. The City of Santa Rosa is reviewing the project for California Environmental Quality Act compliance. The United States Army Corps of Engineers is reviewing the project for Section 106 of the National Historic Preservation Act compliance

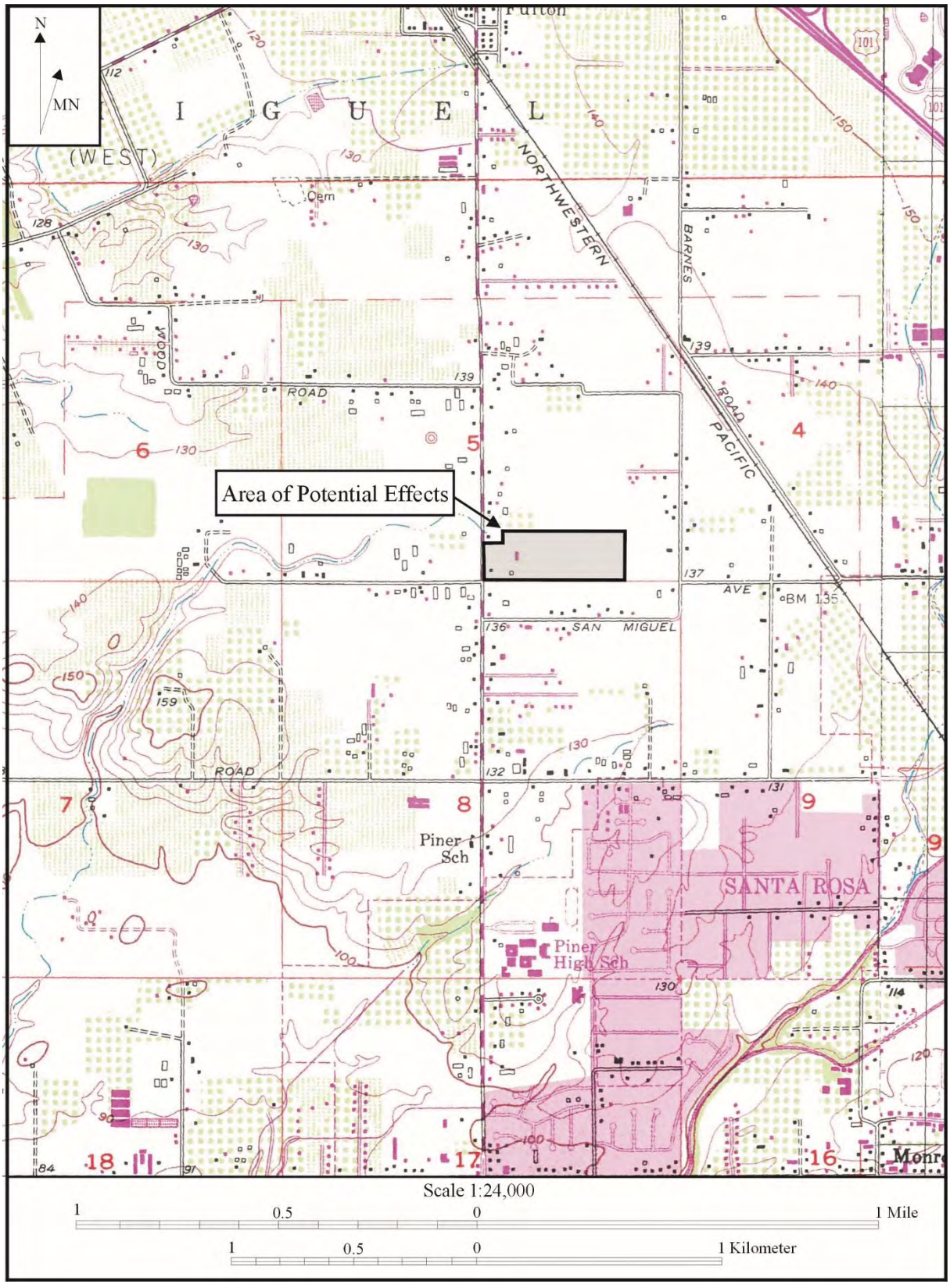
This letter serves as notification of the project and does not constitute consultation.

Enclosed is a portion of the Sebastopol, Calif. 7.5' USGS topographic quadrangle showing the project location.

Sincerely,

Eileen Barrow

Eileen Barrow
Senior Associate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SANTA ROSA
Piner Sch
Piner High Sch
NORTHWESTERN PACIFIC ROAD
BARNES ROAD
WOOD ROAD
ROAD
AVE
BM 135
Cem
Scale 1:24,000
1 0.5 0 1 Mile
1 0.5 0 1 Kilometer

Middletown Rancheria
Tribal Historic Preservation Department
P.O. Box 1035
Middletown, CA 95461

March 11, 2019

Via Electronic Mail

Ms. Eileen Barrow
Tom Origer & Associates
P.O. Box 1531
Rohnert Park, California 94927

Re: 2220 Fulton Road, Santa Rosa, Sonoma County

Dear Ms. Barrow:

The Middletown Rancheria (Tribe) is in receipt of your letter dated February 28, 2019 regarding the above referenced project.

Though we have no specific comments at this time, should any new information or evidence of human habitation be found as the project progresses, we request that all work cease and that you contact us immediately. We do have a process to protect such important and sacred resources.

Thank you for the opportunity to provide comments to the above referenced project. The Tribe looks forward to continuing to be a part of the archaeological process.

Nothing herein should be construed to be a waiver of or limitation of any of the Tribe's rights in law, in equity, or otherwise. All rights, claims and remedies are specifically reserved.

Should you have any questions, please contact me.

Sincerely,

Larry Longee, Jr.
THPO Director

Phone (707) 987-3670 ext 1307

Fax (707) 987-9091

Eileen

From: dino@stewartspoint.org
Sent: Tuesday, March 12, 2019 11:38 AM
To: Eileen
Cc: lorin@stewartspoint.org; janine@origer.com
Subject: RE: 2220 Fulton Road

Thank you for the consideration, at this time I am unable to comment on the project as we will defer off to Graton Miwok tribe and/or Lytton Springs.

Chairman Dino W. Franklin, Jr.
Stewarts Point Rancheria
1420 Guerneville Road - Suite 1
Santa Rosa, CA 95403
Phone: 707.591.0580
Fax: 707.591.0583

-------- Original Message --------
Subject: 2220 Fulton Road
From: "Eileen" <eileen@origer.com>
Date: Mon, March 11, 2019 10:20 am
To: <dino@stewartspoint.org>
Cc: <lorin@stewartspoint.org>, <janine@origer.com>

Dear Mr. Dino,

I am following up on a letter sent to you on February 28, 2019 (please see attached file). We are conducting a cultural resources study of 28.5 acres at 2220 Fulton Road. The project proponent is proposing to develop a portion of the 28.5-acre property into a residential subdivision and the remainder of the property is being preserved as wetlands. The City of Santa Rosa is reviewing the project for California Environmental Quality Act compliance. The United States Army Corps of Engineers is reviewing the project for Section 106 of the National Historic Preservation Act compliance.

Our letter and this email serves as notification of the project and does not constitute consultation.

Eileen

Eileen Barrow
Senior Associate
Tom Origer & Associates
P.O. Box 1531
Rohnert Park, CA 94927

Phone (707) 584-8200
Fax (707) 584-8300

Eileen

From: Brenda L. Tomaras <btomaras@mtowlaw.com>
Sent: Tuesday, March 12, 2019 3:12 PM
To: Eileen
Cc: Brenda L. Tomaras
Subject: RE: 2220 Fulton Road

Good Afternoon Eileen,

Thank you for the letter regarding the above-referenced project. While the Tribe has no specific information which it could provide to you for inclusion in your reports, it believes that the project land falls within traditional Pomo territory and that there is a potential for finding tribal cultural resources on the project site. The Lytton Rancheria is interested in the protection and preservation of Pomo artifacts and sites and believes that such cultural resources may be encountered during the project.

The Tribe will be consulting further on the project with the appropriate lead agency and will get a copy of the survey once completed. We would ask that in your report you note all resources (flakes, isolates, etc.) even if they may not reach a level of significance under CEQA.

Thank you.

Brenda L. Tomaras
Tomaras & Ogas, LLP
10755-F Scripps Poway Parkway #281
San Diego, CA 92131
(858) 554-0550
(858) 777-5765 Facsimile

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From: Eileen [mailto:eileen@origer.com]
Sent: Monday, March 11, 2019 10:31 AM
To: margiemejia@aol.com
Cc: Brenda L. Tomaras <btomaras@mtowlaw.com>; janine@origer.com
Subject: 2220 Fulton Road

Dear Ms. Mejia,

I am following up on a letter sent to you on February 28, 2019 (please see attached file). We are conducting a cultural resources study of 28.5 acres at 2220 Fulton Road. The project proponent is proposing to develop a portion of the 28.5-acre property into a residential subdivision and the remainder of the property is being preserved as wetlands. The City of Santa Rosa is reviewing the project for California Environmental Quality Act compliance. The United States Army Corps of Engineers is reviewing the project for Section 106 of the National Historic Preservation Act compliance.

Our letter and this email serves as notification of the project and does not constitute consultation.

Eileen

Eileen Barrow
Senior Associate
Tom Origer & Associates
P.O. Box 1531
Rohnert Park, CA 94927
Phone (707) 584-8200
Fax (707) 584-8300

Eileen

From: THPO@gratonrancheria.com
Sent: Monday, March 25, 2019 10:58 AM
To: Eileen Barrow (Eileen@origer.com)
Subject: Tom Origer and Associates, 2220 Fulton Road, Santa Rosa, Sonoma County

Dear Eileen Barrow,

Thank you for your outreach and request for identification of cultural resources from the Federated Indians of Graton Rancheria. The project area identified in your correspondence is within the Tribe's ancestral territory and there may be tribal cultural resource impacts. Please provide the Tribe with the results of your research efforts and recommendations. The information can be emailed or mailed to the following address.

Sincerely,
Buffy McQuillen
Tribal Heritage Preservation Officer (THPO)
Native American Graves Protection and Repatriation Act (NAGPRA)
Office: 707.566.2288; ext. 137
Cell: 707.318.0485
FAX: 707.566.2291

Antonette Tomic
THPO Administrative Assistant
Federated Indians of Graton Rancheria
6400 Redwood Drive, Suite 300
Rohnert Park, CA 94928
Office: 707.566.2288, ext. 143
Fax: 707.566.2291
atomic@gratonrancheria.com

please consider our environment before printing this email.

Federated Indians of Graton Rancheria and Tribal TANF of Sonoma & Marin - Proprietary and Confidential
CONFIDENTIALITY NOTICE: This transmittal is a confidential communication or may otherwise be privileged. If you are not the intended recipient, you are hereby notified that you have received this transmittal in error and that any review, dissemination, distribution or copying of this transmittal is strictly prohibited. If you have received this communication in error, please notify this office at 707-566-2288, and immediately delete this message and all its attachments, if any. Thank you.

APPENDIX B

DPR 523 Forms
Resource Documentation

PRIMARY RECORD

Primary # P-
HRI #
Trinomial:
Other Listings:
NRHP Status Code:
Review Code: **Reviewer:** **Date:** **Resource Name or #:** 2220 Fulton Road

P1. Other Identifier: None

P2. Location: Unrestricted **a. County:** Sonoma
b. USGS 7.5' Quad: Sebastopol **Date:** 1980
T 7 **N**/**R** 8 **W**; NW **1/4 of** SE **1/4 of Sec. 5**; **MDBM** (measured from the NW section corner)
c. Address: 2220 Fulton Road **City:** Santa Rosa **Zip:** 95401
d. UTM: Zone: 10 520153**mE** 4258540**mN** (NAD 83)
e. Other Locational Information: From downtown Santa Rosa, take Highway 101 north to the Steele Lane exit. Take this exit and turn left (west). After a short distance, Steele Lane splits and the left split becomes Guerneville Road. Continue onto Guerneville Road and follow it for 2.25 miles to Fulton Road. Turn right and follow Fulton Road for 1.55 miles. The property at 2220 Fulton Road will be on the right side of the road.

P3a. Description: There is a house and six outbuildings. County records indicate that the house was constructed in 1930. The house is a one-and-a-half story, front gabled, frame building on a rectangular plan. The siding is stucco and the roof is composite shingles. Windows in the house are primarily one-over-one double hung sashes, with four exceptions. In the dormers on the north and south sides of the buildings the windows are fixed with bands of small rectangle-shaped panes above. In the gable on the front (west side) of the building, two windows of the same style as those in the dormers are present (see Continuation Sheet for additional description).

P3b. Resource Attributes: HP2. Single family property

P4. Resources Present: Building

P5. Photograph or Drawing:

P5b. Description of Photo: View of house facing north

P6. Date Constructed/Age and Sources:
circa 1930

P7. Owner and Address:
Woodside Holdings, LLC
454 Las Gallinas Avenue, #488
San Rafael, CA 94903

P8. Recorded by:

Tom Origer & Associates
P.O. Box 1531
Rohnert Park, CA 94927

P9. Date Recorded:
March 2019

P10. Type of Survey:
Intensive

P11. Report Citation:
Barrow, E.
2019 *Archaeological Resources Study of the Property at 2220 Fulton Road, Santa Rosa, Sonoma County, California*

P12. Attachments: Continuation Sheet (3), Location Map

P3a. Description: (continued from Primary Record)

At the rear (east side) of the building it appears there is a horizonal slider, and on the north side of the building there is a ribbon of three single-pane fixed windows. There are entrances to the first story on the front and on the rear. At the rear of the building (east side) a staircase has been constructed and provides direct access to the upper half-story of the building

There are a few Craftsman-style elements added onto the building. These elements include brackets under the gables at both ends of the house (east and west sides), large support columns at the front porch, and the multi-paned windows that were previously mentioned. The photo on the Primary Record, and Figures 1 and 2 are photos of the house.

The outbuildings consist of a gabled garage, two chicken houses and three sheds. Figures 3-8 show pictures of the buildings, and Figure 9 is a schematic of the buildings in relation to eachother.

The garage is a wood-framed gabled building on a rectangular plan. The foundation is a concrete slab and the current roof material is corrugated metal. The siding is wood but is different on every side of the building. The siding in the front gable appears to be horizontal drop siding, the south side has lapped siding, the rear had board-on-batten, and the north side has a different style of dropped siding than the front. There is a window that has been covered with corrugated metal and plywood on the south side and a small rectangular opening on the east side that has also been covered with corrugated metal. Figure 3 is a picture of this building.

The northernmost chicken house is a wood-framed gabled building on a rectangular plan. The roof was wood shingles and there are eight square vents in the roof on the east side of the building. There are six doors on the east elevation that would have opened out to pens. There is a covered walkway on the west and south sides of the building. The north end has collapsed and there may have been more roof vents and pen doors. Figure 4 is a picture of this building.

The southernmost chicken house is also a wood-framed gabled building on a rectangular plan. The foundation is a concrete slab. Like the garage, the siding varies, with the north and west wall consisting of vertical boards, the eastern wall and part of the southern wall board-on-batten, and the remainder of the eastern wall a different type of vertical board siding. There are doors on the east and west ends. There are no piercings on the north side, but on the southside there are several square windows, some of which have been covered with corrugated plastic. The roof is wood shingle, though corrugated metal added on top of the shingles at the west end. Figure 5 is a picture of this building.

The northern most shed is a gabled rectangular building clad in corrugated metal. There are two square windows on the west side and one square window on the east side. There is a large door on the north side. The roof is wood shingles. Figure 6 shows a picture of this building.

The central shed is a wood-framed gabled building on a rectangular plan. Like many of the other buildings described, the siding is a mish-mash of types including horizontal boards and dropped siding. There are two doors and a window on the south side and a single window on the north and east sides. Figure 7 is a picture of this building.

The southernmost shed is a small, gabled building on a rectangular plan. Some of the wall material appears to be salvaged from other buildings and tacked on to this building, though the majority of the siding looks like dropped siding. There are two windows on the east side and one on the north side. A door is also on the north side. The roof is wood shingles, though it is mostly collapsed. Figure 8 is a picture of this building.

Figure 1. View of house facing east.

Figure 2. View of house facing southwest.

Figure 3. View of garage facing northeast

Figure 4. View of northern most chicken house facing southeast

Figure 5. View of southernmost chicken house facing south.

Figure 6. View of northern most shed facing southwest

Figure 7. View of central shed and rear of house facing west.

Figure 8. View of southernmost shed facing northwest.

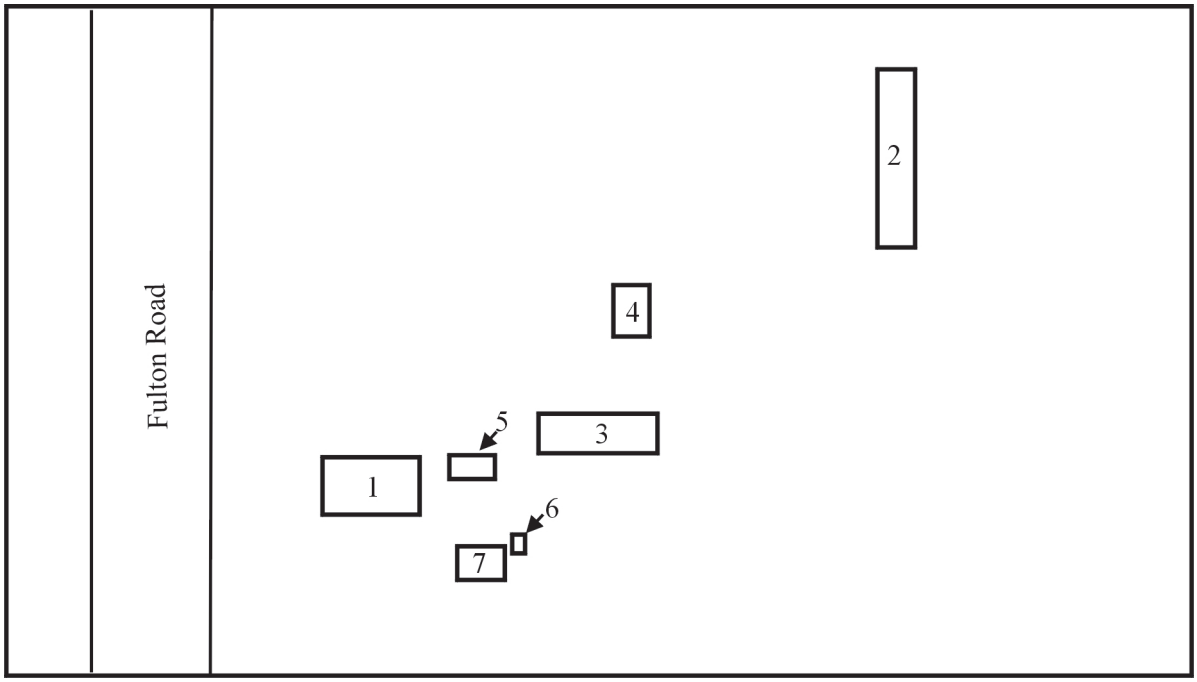


Figure 9. Schematic of buildings within the APE.

LOCATION MAP

Primary #: P-

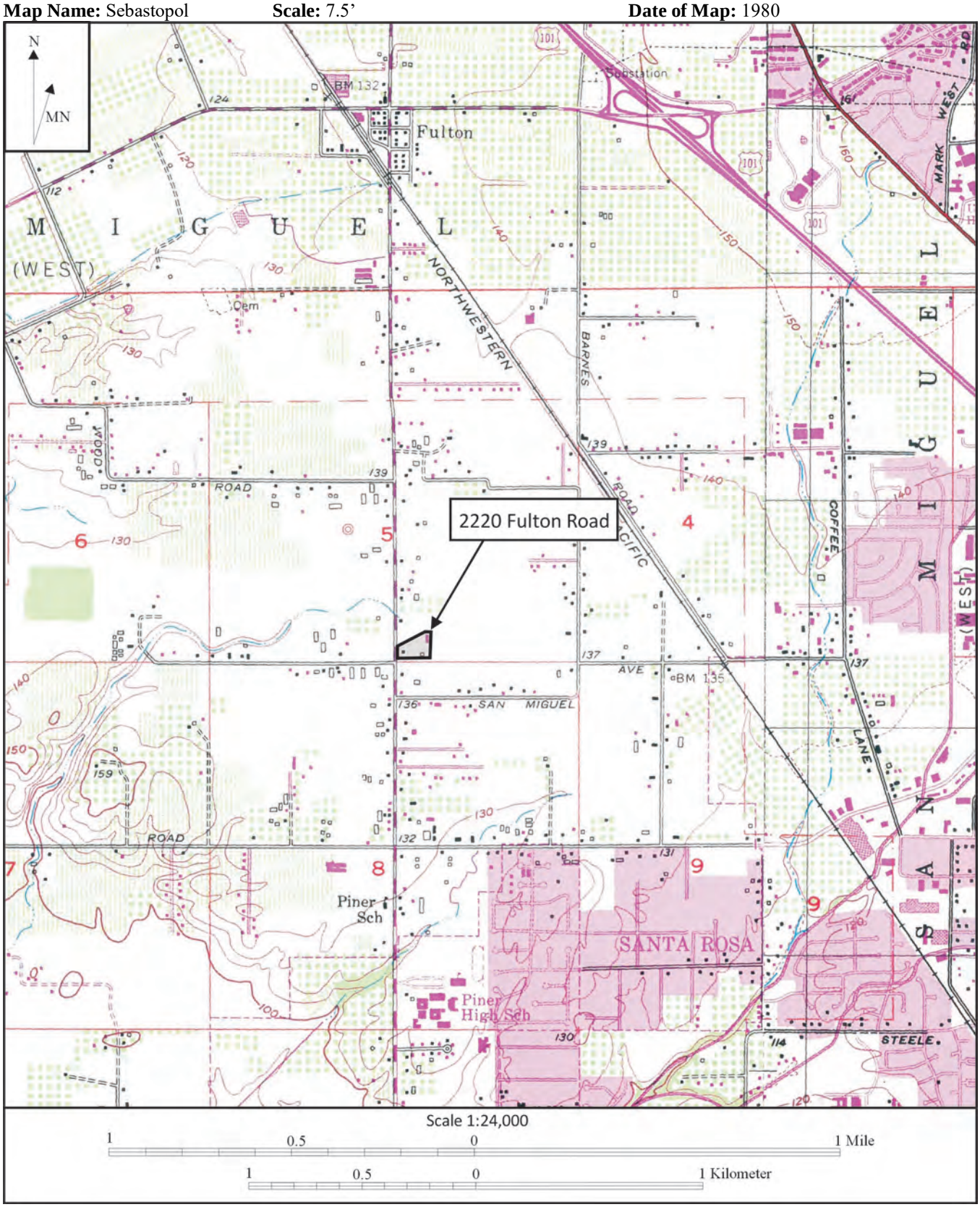
HRI #:

Trinomial:

Page 8 **of** 8

Resource Name or #: 2220 Fulton Road

Map Name: Sebastopol **Scale:** 7.5’ **Date of Map:** 1980



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C.2 - Historic Resources Evaluation

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HISTORICAL RESOURCES EVALUATION
OF
2220 FULTON ROAD
APN: 034-030-070-000
SANTA ROSA, SONOMA COUNTY, CALIFORNIA

Prepared for:
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February 2020

EXECUTIVE SUMMARY

Proposed Undertaking: The proposed project (Project) will encompass a 28.49-acre parcel (APN 034-030-070) at 2220 Fulton Road, and will be comprised of development of the western half of the parcel into a residential subdivision with associated infrastructure, and the eastern half of the parcel into a wetland preserve. The proposed Project will result in the removal of all buildings and structures located on the subject parcel.

Purpose and Scope of the Survey: Daly & Associates was retained to conduct a survey of the proposed Project area and provide a historic evaluation for built-environment resources located at 2220 Fulton Road. The resulting report develops the historic context for the proposed Project area located in Santa Rosa, Sonoma County, California. The Project falls under the regulatory authority of Section 106 of the National Historic Preservation Act (NHPA).

Summary of Investigation: An intensive-level field survey was made of the property by Architectural Historian Pamela Daly, M.S., on December 16, 2019. The fieldwork consisted of inspecting the extant built-environment resources located on the subject property, observing the overall interrelationship of the structure and surrounding landscape, to determine if there is evidence of a historical resource.

Summary of Findings: Our investigation revealed that the house and associated outbuildings located at 2220 Fulton Road were constructed in 1930 by Joseph and Mary Memeo as a home farm. There is no evidence that the subject property was associated with any persons or events from when this area south of Fulton Station was first settled in the 1870s, or with the agricultural history of Sonoma County. The dwelling and outbuildings of the subject property present no unique design or technology that would cause them (individually or collectively) to be considered an advancement in the history of egg or chicken ranches. The subject property was improved in 1930, but does not appear to have the capacity to convey any historic association to the history of Santa Rosa or Sonoma County of the 1930s. While the property at 2220 Fulton Road does not appear to have met the criteria to be determined a historic property for listing in the National Register of Historic Places, it has maintained sufficient levels of physical integrity for its history to be evaluated for significance.

Disposition of Data: Copies of this report will be filed with FirstCarbon Solutions and the Northwest Information Center at California State University, Sonoma. Original documentation will remain on file at Daly & Associates, Riverside, California.

TABLE OF CONTENTS

Executive Summary ..... **i**
1.0 INTRODUCTION **1**
1.1 Report Organization 5
1.2 Legislative Requirements 5
1.3 Previous Historic Property Investigations within the Area of Potential Effects 5
1.4 Data Collection 5
2.0 METHODS **6**
2.1 NRHP Criteria for Historic Property Evaluation 6
2.2 Historical Research 8
2.3 On-Site Evaluation Process 9
3.0 HISTORIC CONTEXT **9**
4.0 HISTORIC STRUCTURES EVALUATION **12**
5.0 NRHP ELIGIBILITY DETERMINATION AND RECOMMENDATION **18**
5.1 Overview 18
5.2 NRHP Recommendations 18
5.3 Mitigation Measures 19
6.0 BIBLIOGRAPHY AND SOURCES **20**

LIST OF FIGURES

Figure 1. Regional Project Location Map 2
Figure 2. Project Location Map 3
Figure 3. Excerpt from 1866 Plat Map 4
Figure 4. Excerpt from 1866 Plat Map 10
Figure 5. Aerial view of property in 1953 12
Figure 6. West (front) and south elevations of house 13
Figure 7. East (rear) and north elevations of house 14
Figure 8. North chicken coop 14
Figure 9. Egg laying coop 15
Figure 10. Feed shed 15
Figure 11. Storage shed 16
Figure 12. Egg boxing shed 16
Figure 13. Sales shed 17

LIST OF APPENDICES

APPENDIX A: Preparer Qualifications
APPENDIX B : DPR 523 Forms

1.0 INTRODUCTION

This report provides a historic evaluation, and develops the historic context, of the built-environment resources located on the property at 2220 Fulton Road, in the City of Santa Rosa, Sonoma County, California (Figure 1). The proposed project (Project) will encompass a 28.49-acre parcel (APN 034-030-070) at 2220 Fulton Road, and will be comprised of development of the western half of the parcel into a residential subdivision with associated infrastructure, and the eastern half of the parcel into a wetland preserve. The proposed Project will result in the removal of all buildings and structures located on the subject parcel.

The Project area is to the northwest of the city center of Santa Rosa, and accessed from Fulton Road, which was known historically as Rural Free Delivery (RFD) Route 2. Before the property was annexed by the City of Santa Rosa in the 1970s, the subject property was most closely associated with the settlement of Fulton, located 1.45 miles directly north of the subject property, and the Piner School District. Figure 2 presents the location of the Project in Section 5 of Township 7 North, Range 8 West, on the Sebastopol 1980 USGS 7.5-minute topographic map (Mount Diablo Base and Meridian). A current aerial view of the Project area is presented in Figure 3.

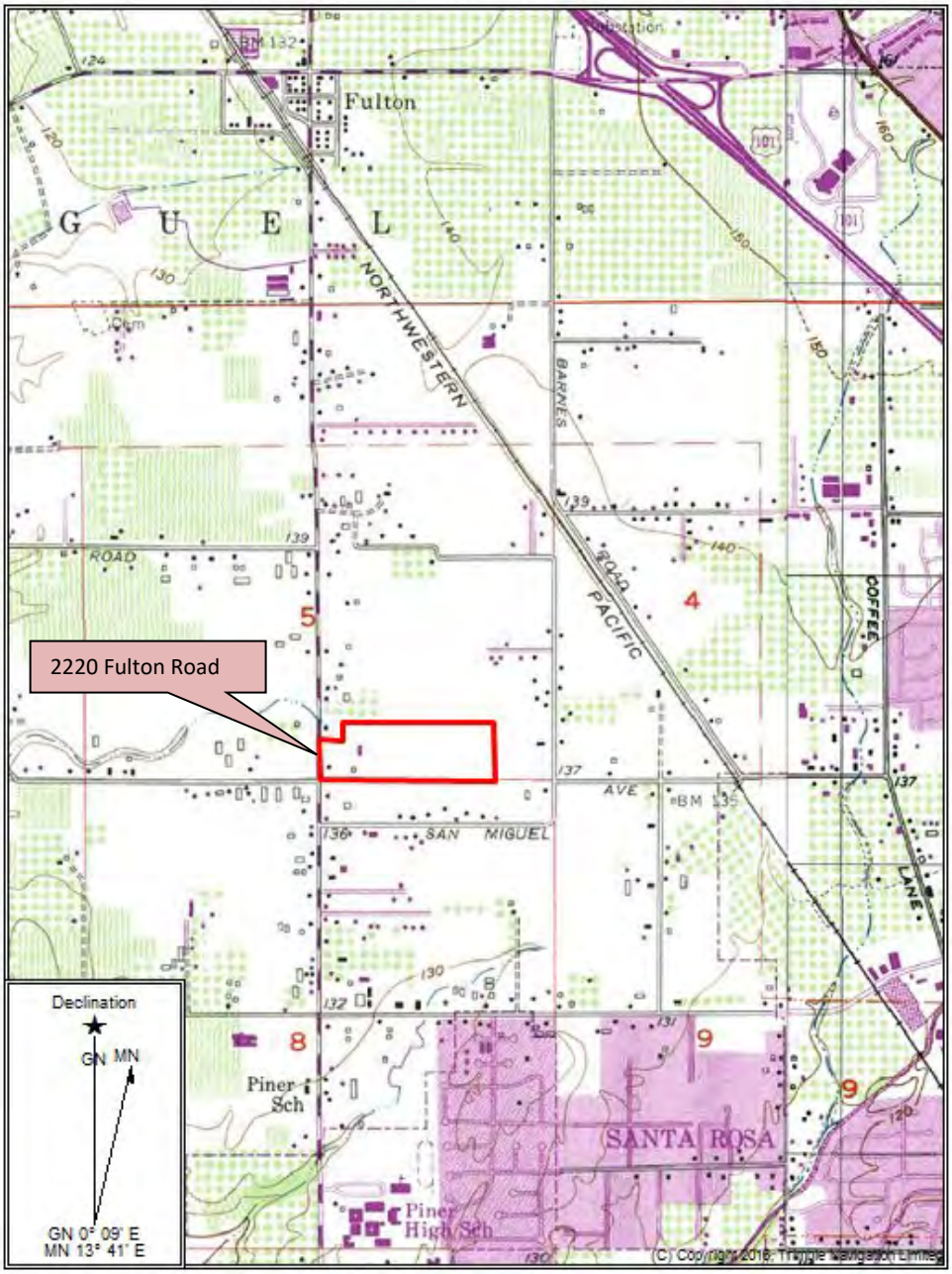
This study was conducted in order to identify any potentially significant built-environment resources over 50 years of age that may be adversely affected by the Project. The evaluation of the built-environment resource in the Project area was conducted by Pamela Daly, M.S., a qualified Architectural Historian, under Section 106 of the National Historic Preservation Act of 1966 (as amended) (NHPA). Contained within this report is the baseline data used to determine the potential eligibility of the built-environment resources located at 2220 Fulton Road for inclusion in the National Register of Historic Places (NRHP).

SCALE 1:100000

0 10000

Feet

Figure 1: Project Vicinity
Stonebridge Project
2220 Fulton Road, Santa Rosa
Sonoma County, CA



SCALE 1:24000

0 1000 2000 3000 4000

Feet

Figure 2: Project Location
Stonebridge Project
2220 Fulton Road, Santa Rosa
Sonoma County, CA

SCALE 1:6200

0 1000

Feet

Figure 3: Aerial View
Stonebridge Project
2220 Fulton Road, Santa Rosa
Sonoma County, CA

1.1 Report Organization

Chapter 1.0 of this report, Introduction, provides an overview of this project and its scope, and presents the legislative requirements that mandate the report's preparation. Chapter 2.0, Methods, details the methods used to inventory the properties located within the proposed Project area, including a discussion of the NRHP criteria. Chapter 3.0, Historic Context, provides a short history of the subject property and the surrounding area. Chapter 4.0 presents a physical description of the built-environment resources located within the proposed Project area. Chapter 5.0 presents the recommendations for NRHP eligibility, and Chapter 6.0, Bibliography and References, presents the cited works and other materials used in the preparation of this report. Appendix A presents the qualifications of the person performing the evaluation of the subject property, and Appendix B contains the California Department of Parks and Recreation series 523 (DPR 523) property inventory forms for the built-environment resources situated on the subject property.

1.2 Legislative Requirements

The NHPA requires federal agencies to consider the effects of a proposed project on historic properties. Section 106 of NHPA stipulates a process for compliance, defines the responsibilities of the federal agency proposing the action, and prescribes the relationships among other involved agencies (e.g., State Historic Preservation Officer [SHPO], tribes, interested parties, and the Advisory Council on Historic Preservation [ACHP]). Compliance with the requirements of Section 106 ideally involves five steps: (1) identification of any cultural resources that could be affected by the implementation of an undertaking; (2) a determination of significance of any cultural resources identified within the area of potential effects (APE); (3) an assessment of the impacts or effects of the undertaking; (4) SHPO and/or ACHP comment; and (5) development and implementation of mitigation measures to address adverse effects. An undertaking can include a broad range of activities, including modification, repair, or maintenance of historic buildings, property transfer, or demolition.

Historic properties, under 36 Code of Federal Regulations (CFR) Part 800.16 (l) (1), are defined as:

> …any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the NRHP maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties….

Only cultural resources determined to be significant (i.e., historic properties) are subject to protection or consideration by a federal agency. Significance criteria and integrity are discussed in Chapter 2.0, Methods.

1.3 Previous Historic Property Investigations within the Area of Potential Effects

Archival research found that the APE had not been subjected to a prior historical resources study. Tom Origer & Associates performed an intensive archaeological field survey of the 28.49-acre APE on March 14 and 30, 2019. No formal evaluation of the built-environment resources has been performed to date.

1.4 Data Collection

The Northwest Information Center (NWIC) is a branch of the California Historic Resources Information System (CHRIS), established by the Office of Historic Preservation (OHP), and maintains information

concerning cultural resources and associated studies recorded in their respective counties. A cultural resources records search for the current Project was performed at the NWIC on February 26, 2019 by Julia Franco of Tom Origer and Associates.[1] The records search provided information on historic resources and associated studies recorded within a half-mile radius surrounding the Study Area. During the records search, the OHP's Historic Property Data File (HPDF), as well as a variety of publications and manuscripts, was consulted. The HPDF includes the following types of properties:

- National Register of Historic Places (NRHP or National Register);
- California Historical Landmarks (CHL);
- California Historical Resources Inventory;
- California Points of Interest (PHI); and
- California Register of Historical Resources (CRHR or California Register).
- 1935 USGS Sebastopol, CA 1:48,000
- 1942 USGS Sebastopol, CA 1:62,500
- 1954 USGS Sebastopol, CA 1:24,000
- 1980 USGS Sebastopol, CA 1:24,000

Resources surveyed within a half-mile of the APE

Author	Date	P#	Type	Distance from APE
Evans	2016b	P-49-003289	Farm building remains	225 feet
Evans	2016c	P-49-005402	Orchard	2,610 feet
Clark	1993b	P-49-001759	Farmstead	1,900 feet
Hollins	2008	P-49-004216	Farm/Ranch	2,575 feet
Starke and Thomas	2013	P-49-002834	Northwestern Pacific Railroad	1,915 feet
Tom Origer & Associates	2005	P-49-003855	House/small dairy	1,100 feet

2.0 METHODS

The current survey of the built-environment resources in the Project area included archival research at local depositories, internet research, and a pedestrian-level inspection of the proposed Project area that contains built-environment resources. These data were used to prepare the descriptions of the built-environment resources currently within the study area, and prepare contextual statements and site-specific history. This will provide sufficient baseline data to formulate conclusions about whether the built-environment resources located in the Project area would, or would not, meet the National Park Service (NPS) criteria for inclusion in the NRHP as stipulated in 36 CFR Part 60.4.

2.1 NRHP Criteria for Historic Property Evaluation

The criteria used to evaluate potential historic properties are stated in 36 CFR Part 60.4, and are restated herein, to provide readers with background regarding the NRHP process.

To be eligible for listing in the NRHP, a resource must be significant in American history, architecture, archaeology, engineering, or culture. Districts, sites, buildings, structures, and objects of potential

[1] Barrow, Eileen. "Archaeological Study of the Property located at 2220 Fulton Road, Santa Rosa, Sonoma County, California." Tom Origer & Associates, Rohnert Park, CA; March 2019.

significance must also possess integrity of location, design, setting, materials, workmanship, feeling, and association. Four criteria have been established to determine the significance of a resource:

A. It is associated with events that have made a significant contribution to the broad patterns of our history;

B. It is associated with the lives of persons significant in our past;

C. It embodies the distinctive characteristics of a type, period, or method of construction or that represents the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction;

D. It yields, or may be likely to yield, information important to prehistory or history.

A property eligible for the NRHP must meet one or more of the above criteria and retain integrity. In addition, unless the property possesses exceptional significance, it must be at least 50 years old to be eligible for NRHP listing.

Ordinarily, cemeteries, birthplaces, or graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and properties that have achieved significance within the past 50 years shall not be considered eligible for inclusion in the NRHP. However, such properties will qualify if they are integral parts of districts that do meet the criteria, or if they fall within the following categories:

a. A religious property deriving primary significance from architectural or artistic distinction or historical importance; or

b. A building or structure removed from its original location but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with a historic person or event; or

c. A birthplace or grave of a historical figure of outstanding importance if there is no appropriate site or building directly associated with his productive life; or

d. A cemetery which derives its primary significance from graves of persons of transcendent importance from age, from distinctive design features, or from association with historic events; or

e. A reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived; or

f. A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own exceptional significance; or

g. A property achieving significance within the past 50 years if it is of exceptional importance.

In addition to meeting the criteria of significance, a property must have integrity. "Integrity is the ability of a property to convey its significance."[2] According to the NRHP Bulletin, *How to Apply the National Register Criteria for Evaluation*, within the concept of integrity, the NRHP criteria recognize seven aspects or qualities that, in various combinations, define integrity. To retain historic integrity a property will always possess several, and usually most, of these seven aspects. The retention of specific aspects of integrity is paramount for a property to convey its significance.

The seven factors that define integrity are location, design, setting, materials, workmanship, feeling, and association. The following is excerpted from NRHP Bulletin, *How to Apply the National Register Criteria for Evaluation*, which provides guidance on the interpretation and application of these factors.

- Location is the place where the historic property was constructed or the place where the historic event occurred.
- Design is the combination of elements that create the form, plan, space, structure, and style of the property.
- Setting is the physical environment of a historic property.
- Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.
- Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.
- Feeling is property's expression of the aesthetic or historic sense of a particular period of time.
- Association is the direct link between an important historic event or person and a historic property.

In assessing a property's integrity, the NRHP criteria recognize that properties change over time; therefore, it is not necessary for a property to retain all its historic physical features or characteristics. The property must, however, retain the essential physical features that enable it to convey its historic identity.

For properties that are considered significant under NRHP Criteria A and B, the NRHP Bulletin, *How to Apply the National Register Criteria for Evaluation* states that a property that is significant for its historic association is eligible if it retains the essential physical features that made up its character or appearance during the period of its association with the important event, historical pattern, or person(s).

In assessing the integrity of properties that are considered significant under NRHP Criterion C, the NRHP Bulletin, *How to Apply the National Register Criteria for Evaluation* provides that a property important for illustrating a particular architectural style or construction technique must retain most of the physical features that constitute that style or technique.

2.2 Historical Research

The evaluation of the built-environment resources located in the Project study area involved a review of the history of Sonoma County and the City of Santa Rosa area that includes the community of Fulton.

[2] *National Register Bulletin 15,* page 44.

Research was performed at the Sonoma County Library History and Genealogy Annex, and with internet resources using historic maps and surveys, historic aerial photographs, historic newspapers, and genealogical information retrieved for persons associated with the subject property.

2.3 On-Site Evaluation Process

An intensive-level field survey was conducted on December 16, 2019 by Architectural Historian Pamela Daly, M.S. The fieldwork consisted of inspecting each of the buildings and structures, and the overall interrelationship of the built-environment resources with the surrounding landscape that is located within the Project area.

The evaluation by Daly & Associates examined each built-environment resource in the context of its surrounding landscape, noting the condition of the existing structure, construction materials, function, and any noteworthy physical elements of the resource. The field survey also included obtaining color digital photos of the structure, elevations, and surrounding landscape. This information was used to create baseline data to determine the potential eligibility of the subject property as a historical resource.

2.4 Interested Parties

For the current study, the Historical Society of Santa Rosa, Sonoma Valley Historical Society, and Western Sonoma County Historical Society were contacted regarding the proposed Project at 2220 Fulton Road. Outreach was in the form of both emails and hard copy letters to each organization. A request was made of these organizations to present any information they may have regarding the history, or historical significance, of the subject property outside of readily available information.

As of February 6, 2020, we have not received a response from any of the organizations by email, telephone, or letter.

3.0 HISTORIC CONTEXT

Sonoma was one of the original counties formed when California became a state in 1850, and the town of Santa Rosa became the county seat in 1854. The settlement of Santa Rosa was created from land that had been part of the San Miguel, Molinos, Rancho Canada de Jonive, Llano de Santa Rosa, and Rancho Cabeza de Santa Rosa holdings (Figure 4). Land grants were sold by the U.S. Government in the nineteenth-century to open settlement into lands that had been previously retained for the paths of the railroads. In the 1860s, Sonoma County was associated primarily with agricultural endeavors, and the towns of Santa Rosa, Petaluma, and Healdsburg were regional centers of commerce and occupation.

The economic future of the town of Santa Rosa improved with the establishment of the San Francisco and North Pacific Railroad (SF&NP) service to Sonoma County in 1869. The California Northwestern Railway Company was formed on the SF&NP lines in 1898 as part of Southern Pacific Railroad (SPRR) ambitions to reach the redwood lumber mills in Northern California.

Both the SPRR and the Atchison, Topeka and Santa Fe Railway (AT&SF) were interested in constructing railway lines to connect San Francisco to the great lumber operations at Eureka and Arcata in Humboldt

County. SPRR and AT&SF formed a partnership to create one railroad line that ran from Sausalito to Eureka. The Northwestern Pacific Railroad (NWP) line was created in 1898 to provide both freight and passenger services on the route that ran through Santa Rosa and Sonoma County. This access to rail service helped the town of Santa Rosa maintain a hold on its being the governmental center of Sonoma County. The Rand-McNally Guide to California via the Santa Fe Route published in 1900, states that Santa Rosa "is an elegant place of residence, in the center of a large fruit and wine district".[3]

With the increased popularity and affordability of automobile and truck usage, and the improvement of roads and highways, both passenger and freight rail service declined in the early 1930s. World War II and the resulting housing boom after the war caused the NWP service to increase - particularly for shipping wood products. While smaller branches off of the main line have been shut down for many years, and rehabilitation of the railbed from severe flooding damage north of Windsor has proved costly, the NWP continues to run (under new ownership) between Schellville and Windsor, with service to Santa Rosa.[4]

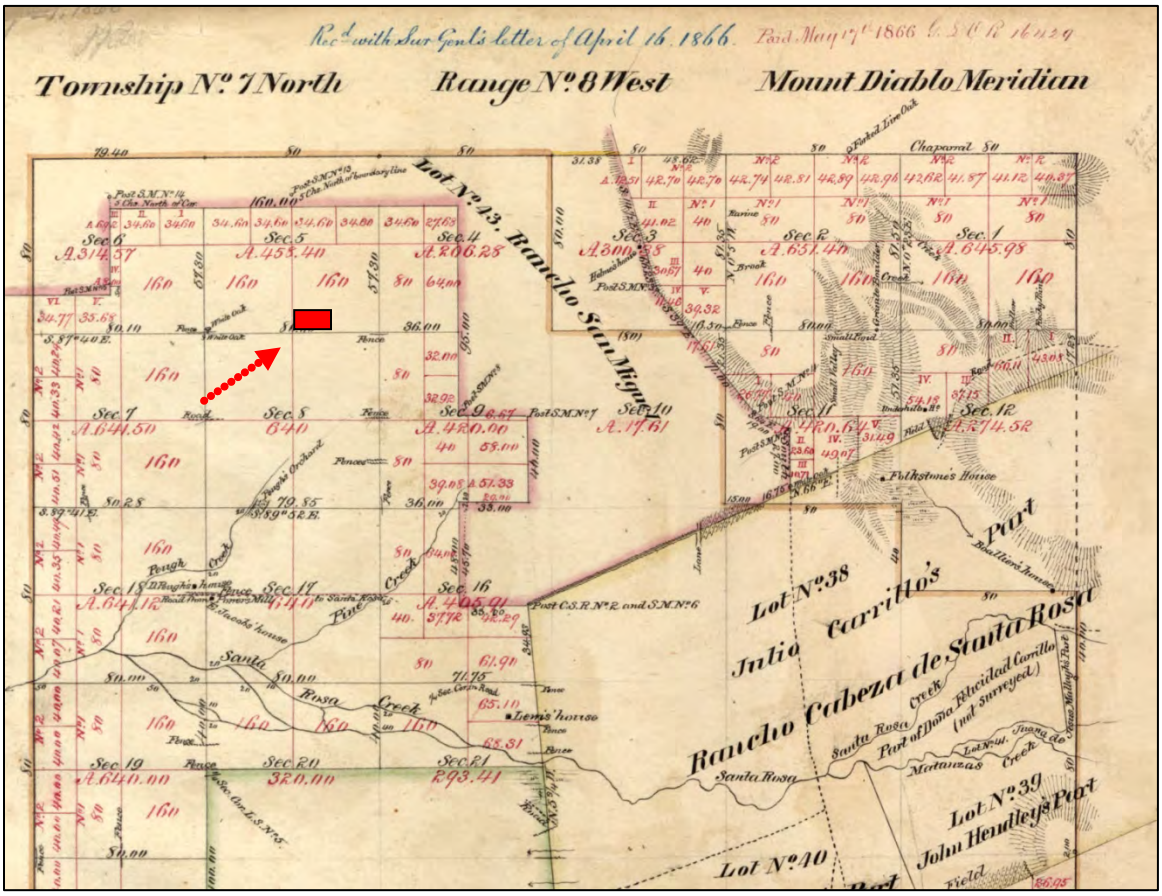


Figure 4: Excerpt from 1866 Plat Map of Township 7 North, Range 8 West, Mount Diablo Base Meridian, showing Section 5. The subject property is located in the southwest quarter, of the southeast quarter of Section 5. (Source: http://www.glorecords.blm.gov)

[3] Rand-McNally & Company. Guide to California via the Santa Fe Route; New York: 1900. Page 195.
[4] Northwestern Pacific Railroad. https://www.nwprailroad.com/history

In 1868, George B. Walker acquired 160 acres of land just south of the small settlement of Fulton Station, which was located on the rail line just 4.75 miles to the north of Santa Rosa. Walker was granted the southeast quarter-section of Section 5, Township 7 North, Range 8 West, in the Mount Diablo Base Meridian. Although George Walker was recorded as a resident of Sonoma County in the 1860 Census, he appears to have acted as a "front man" for E.N.B. Jackson of Santa Rosa. Jackson purchased the property from Walker just one day after Walker had his patent recorded in Sonoma County.[5] Jackson bought the land from Walker for $1,200 (gold coin), and the sale was recorded in the county records by John Brown, Justice of the Peace.

E.N.B. Jackson was a "general merchant" in the City of Santa Rosa, and his name appears occasionally in the local newspapers as being either a buyer or seller of land in the Fulton or Santa Rosa area.[6] Jackson sold 285 acres of his land near Fulton Station that included the subject property for $7,000 to Joseph Foster in 1874, and Foster's holdings are recorded in the regional map in *New Historical Atlas of Sonoma County, California, of 1877*.[7]

Published in 1897, the *Illustrated Atlas of Sonoma County, California*, presents evidence that Foster had to disperse his holdings, and the subject property was now under the ownership of R. Feige.[8] In 1908, the Sonoma County Survey Map has the subject property area owned by the partnership of "[Giovanni] Mazzoni and [Enrico/Henry] Santini".[9] Giovanni Mazzoni was a dairyman who resided on Rural Free Delivery (RFD) Route 3 in Santa Rosa, and Santini in the Fulton Precinct.[10] The *Sonoma County School District Map of 1926-1928*, presents a map of the area showing the subject land is now owned by Joseph [Memeo] Nemeo [sic].[11] The Memeo property of 30 acres is located within the Piner Third Road School District.[12]

Joseph Memeo had been born in Italy in 1892, and immigrated to the United States in 1911. He lived in the area of Crow's Landing in 1917, before settling in the Petaluma area near other members of his extended family. In 1919, he married Mary who had emigrated from Italy in 1902, and they had four children while farming in the Petaluma area until the late 1920s, when they moved to Fulton. It appears he settled on the subject parcel of land located in the area noted as the Fulton East Voting District in 1929-30. Sonoma County Assessor records data states that the house on the property at Box 709, Route 2 (Fulton Road) was constructed in 1930.

Tragically, Joseph Memeo died in 1932 shortly after building the house, but his widow continued to live on the property and raise their four boys. Three of their four sons served in the armed services during World War II, and returned to settle in the Sonoma County area. Mary appears to have stayed at the property until 1948, when she then moved to Maple Street in Santa Rosa.

[5] County of Sonoma, Grantor-Grantee Index for Deeds, 1868. Sonoma County Archives.
[6] *The Press Democrat*, Santa Rosa, California. "Property transactions"; 1877.
[7] *The Press Democrat.* "Property transactions"; October 15, 1874.
[8] Reynolds and Proctor. Illustrated Atlas of Sonoma County, California, 1897.
[9] Sonoma County Board of Supervisors. "Official Map of Sonoma County, 1908".
[10] Ancestry.com. U. S Census records for "Joseph Memeo"; 1900, 1910, 1920, 1930.
[11] Thomas Map Company. "Sonoma County School Districts"; Oakland: 1928. The school district map has incorrectly written Joseph Memeo's name as "Nemeo".
[12] Ibid.

4.0 HISTORIC STRUCTURES EVALUATION

The area surveyed under the current Project is comprised of 28.49 acres, and situated on Assessor Parcel Number 034-030-070-000, Tract 004112. The Project site is accessed from Fulton Road through a gate, with the house and barns scattered on the property. (Figure 5 has a historic aerial of the property in 1953) The property is flat, with large open areas away from the house. Scattered near the house are walnut trees, and an apple and plum tree. Due to confidentiality considerations, Sonoma County Building Department could only provide the date of construction for the house on the property.[13]

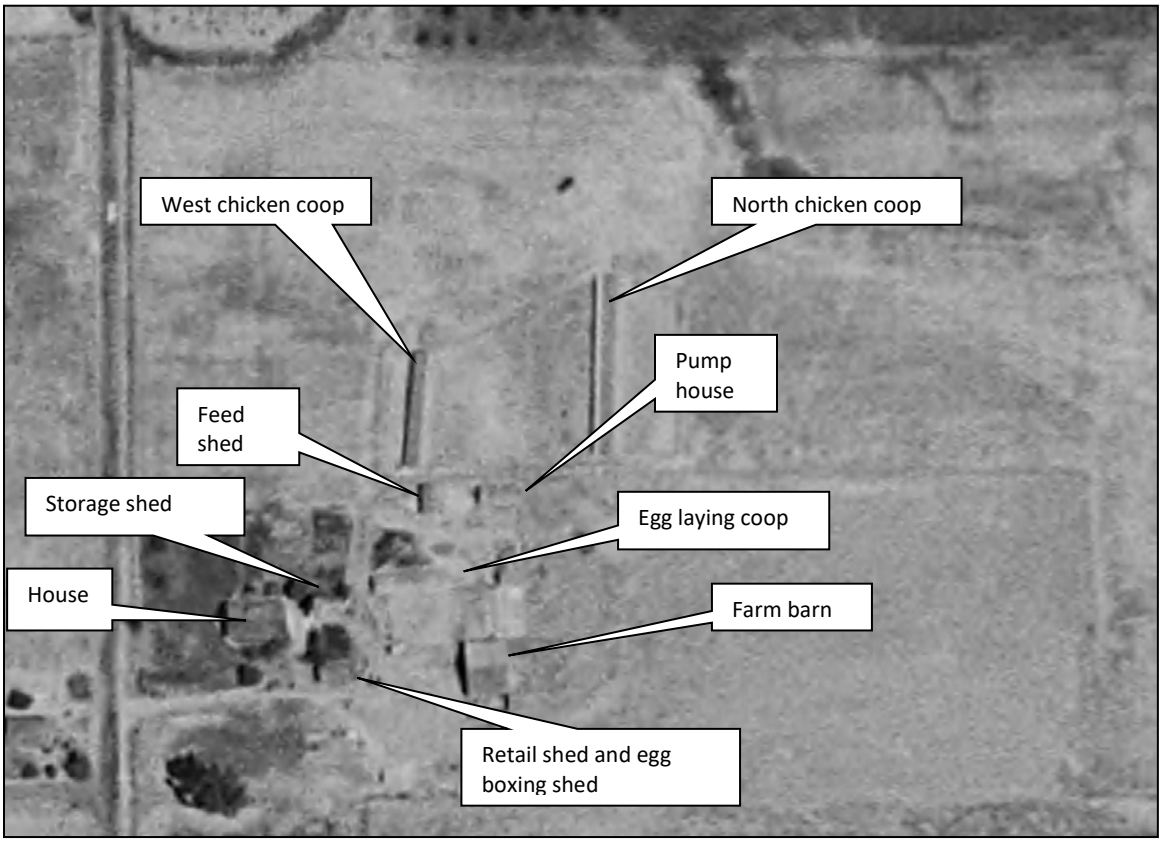


Figure 5: Aerial view of the property in 1953. The West Chicken Coop, Pump House, and Farm Barn no longer exist on the property.

Extant buildings and structures

1. House

   Located to the north of the driveway into the property, is a one-and-one-half story dwelling, which according to Sonoma County records was constructed in 1930 (Figure 6). The house appears to be a Craftsman style house with a gable-front roof and entrance to the building. The structure has a rectangular mass, measuring approximately 53 feet long by 30 feet wide, and is constructed with a basement. There is a poured concrete porch with steps on the front

[13] Without a signed, corporate resolution from the current owners (a private corporation) giving us permission for access, Sonoma County would not allow access to any building permits on-file for the property.

elevation that was created by recessing the first floor entrance approximately 13 feet from the overhang of the half-story. The overhang is supported at each end of a segmental arch by square posts set on a solid porch railing. The gable roof has a medium-high pitch, and set on both the roof slopes are shed roof dormers. Both the main roof and dormer roof have overhanging eaves with exposed rafter tails. Large, decorative brackets support the eaves, and support a decorative window box on the gable-front. Smaller brackets support the outside corners of the dormer roofs. The frame building is clad with a rough stucco finish. The fenestration is primarily one-over-one wood sash windows on the first level, and the dormer windows comprised of small, square, individually framed fixed lights. The rear (east) elevation of the building has been substantially altered at some point in time with the installation of a sliding glass door, wood deck, and staircase to the backyard (Figure 7).

Figure 6: West (front) and south elevations of the house. View looking northeast.

Figure 7: East (rear) and north elevations of the house. View looking southwest.

2. North chicken coop/horse stable

The largest chicken house is located to the northeast of the collection of buildings on the property (Figure 8). This is a wood-framed gabled building on a rectangular plan that measures approximately 154 feet long by 20 feet wide. Based on the evidence of modern horse stable stall guards situated within the sections of the building visible on the east elevation, the building was converted at some point in time to keep horses for recreational use. There are still some remaining wood shingles in place on the roof, but the roof system and the entire building have suffered from the ravages of time. The northern one-third of the structure has totally collapsed.

Figure 8: View from the south of north chicken coop that was converted for use as a horse stable.

3. Egg laying coop

The chicken coop situated closest to the house, is also a wood-framed gabled building on a rectangular plan, and it measures approximately 66 feet long by 16 feet wide (Figure 9). The foundation is a poured concrete slab. The siding on the building appears to primarily be vertically set tongue-and-groove and plank siding. The roof is wood shingle, though corrugated metal has been added on top of the shingles at the west end. Openings were set in the upper portion of the southern wall of the coop to allow chickens access to a large fenced yard. Pedestrian doors are set on the west gable end, and on the south elevation.

Figure 9: South elevation of egg laying coop with chicken yard. View looking north.

4. Feed shed

This shed may have been used to keep the chicken feed safe from rodents, as evidenced by the corrugated steel panel walls and roof (Figure 10). The building measures approximately 24 feet long by 14 feet wide, and is constructed with a wood frame.

Figure 10: West and south elevations of storage/feed shed. View looking northeast.

5. Storage shed

The storage shed is a wood-framed, metal-roofed, gable building that has a rectangular mass and measures approximately 26 feet long by 12 feet wide (Figure 11). The structure is set on a base of stone and concrete supports. The siding appears to be wide shiplap placed over plain flat boards. There are two pedestrian doors on the south elevation, and ground-level openings on the north elevation.

Figure 11: Storage shed located directly east of the house. View looking northwest.

6. Egg boxing shed

This small building set to the rear of the sales shed/garage, may have been where the eggs were cleaned and boxed for sale (Figure 12). During the years of the Great Depression, the farm would have most probably also sold "past their prime" chickens for consumption. The building appears to have the same, wide shiplap siding as found on some of the other outbuildings. The building is severely deteriorated.

Figure 12: Chicken and egg sales prep shed located to the rear of the sales shed. View looking northwest.

7. Sales shed/garage

Our investigation of the rectangular-massed structure that was believed to be a garage for housing automobiles, was instead a farm stand built by the Memeos for selling eggs and chickens to the general public (Figure 13). The wood frame structure with a metal-clad gable roof that measures 24 feet long by 20 feet wide, does not have the large framing members usually found encasing the front entranceway where a garage door would be situated. Instead, set along the interior walls are flat sheets of plywood used as wallboard. The poured concrete floor is very thin, providing only a covering for the floor for pedestrian use, not for supporting automobiles. The Egg Boxing shed is located immediately to the rear of the sales shed, allowing for eggs to be prepped prior to being set out for sale. The sales shed would have been easily accessible from passersby on Fulton Road, and there was plenty of room for parking near the shed.

Figure 13: Open front shed for selling eggs and poultry.

5.0 NRHP ELIGIBILITY DETERMINATION AND RECOMMENDATION

5.1 Overview

The main objective of the assessment of the Project area is to provide an evaluation of significance and NRHP eligibility recommendation for the built-environment resources found within the property. The baseline level of documentation provided in this report presents the information necessary to make such an evaluation. Once the recommendation of eligibility is made, future management considerations for the subject property can be determined.

Pursuant to 36 CFR Section 800.4, it is required that federal agencies perform an evaluation of historic structures that are over 50 years old located within a proposed project area, and that have not been previously evaluated for NRHP eligibility. As part of this current assessment report, the built-environment resources located at 2220 Fulton Road were evaluated using the four NRHP criteria to determine the eligibility of the historic property (see Section 2.0, Methods). Based on the NRHP criteria, the property was then evaluated for its possession of historic integrity: location, design, setting, materials, workmanship, feeling and association, within its historic context.

Physical integrity of the subject property was studied and evaluated during the field inspection. The assessment of the significance of a property within its historic context was based on NPS guidelines.

1. Identify the historic context represented by the property.

2. Determine how the theme of context is significant in local, state, or national history.

3. Determine if the property type represents the context.

4. Determine how the property illustrates an important aspect of history.

5. Determine if the property retains the physical features necessary to convey its significance (historic integrity).

5.2 NRHP Recommendations

The proposed Project calls for the demolition or removal of the existing built-environment resources situated on the property at 2220 Fulton Road. The Project area was subject to an intensive-level survey, and the history of the property and its owners was gathered from Bureau of Land Management Patent Land grant documents, regional and local maps, and historic newspaper articles. Information from these sources and the Sonoma County Assessor's Office revealed Joseph Memeo, his wife Mary and four children, settled on the land and built the house thereon in 1929-1930.

The property at 2220 Fulton Road does not appear to be considered significant under Criterion A of the NRHP. The house was constructed in 1929-1930 on land that had not been improved until that time, possibly due to the natural wetlands that comprise a majority of the eastern portion of the subject parcel. Memeo appears to have established a poultry and egg ranch on his land, and dry-farmed the wetlands when possible. Historic aerial photographs present evidence that these activities continued into the 1980s. Research did not reveal that the Memeo ranch contributed to the history of poultry-

keeping in the area of Fulton or Santa Rosa, or with any events that made a significant contribution to the agricultural history of the region or Sonoma County.

The property at 2220 Fulton Road has not been found to be directly associated with any persons important to the history of Santa Rosa, California, or the United States, and does not appear significant under Criterion B of the NRHP. Research did not uncover any substantial contributions by persons residing at the property important to the history of the local area, Santa Rosa, or Sonoma County.

The residence and outbuildings at 2220 Fulton Road were constructed on the subject property almost 60 years after the land had been sold in 1868 as excess railroad lands by the General Land Office. The residence is not a significant or exceptional example of a Craftsman style house, and the outbuildings are those that would have been constructed to support a home-based egg and chicken ranch. The residence and outbuildings are not the product of the work of a master craftsman or engineer, and do not possess high artistic value. The outbuildings do not embody any distinctive or rare characteristics of method of construction. The property at 2220 Fulton Road does not appear eligible for listing under Criterion C as a resource significant to the history of Santa Rosa, California, or the United Sates.

The property at 2220 Fulton Road does not appear to have the capacity to yield information important to the prehistory or history of Santa Rosa, Sonoma County, or California. The property does not appear eligible for listing in the NRHP under Criterion D.

The property at 2220 Fulton Road has retained most aspects of its historic integrity. Those aspects include its location, design, materials, workmanship, feeling, and association as a rural, agriculturally-based endeavor that dates to the early twentieth-century. The setting of the agricultural property has been compromised by the encroachment of modern housing developments.

The property at 2220 Fulton Road does not appear eligible for listing in the NRHP due to its unremarkable design and its lack of historic significance even though the dwelling and structure has retained its levels of physical integrity.

5.3 Mitigation Measures

As the property at 2220 Fulton Road does not appear eligible for listing in the NRHP, there are no mitigation measures required to be performed before the removal of the buildings and structures within the APE.

6.0 BIBLIOGRAPHY AND SOURCES

Ancestry.com. U. S Census records for "Joseph Memeo"; 1900, 1910, 1920, 1930.

Bureau of Land Management. Plat Map of Township 7 North, Range 8 West, Mount Diablo Base Meridian; 1866. http://www.glorecords.blm.gov

Bureau of Land Management. General Land Office land patent record: CACAAA 016214 for George B. Walker, November 10, 1868; Accession No. CA0020_.451.

County of Sonoma, Grantor-Grantee Index for Deeds, 1868. Sonoma County Archives.

Northwestern Pacific Railroad. https://www.nwprailroad.com/history

Office of State Historic Preservation. California Historic Resources Inventory, Survey Workbook (excerpts). State of California: Sacramento, 1986.

Parker, Patricia L. National Register Bulletin 24, "Guidelines for Local Surveys: A Basis for Preservation Planning." Washington D.C.: U.S. Government Printing Office, 1985.

Rand-McNally & Company. Guide to California via the Santa Fe Route; New York: 1900. Page 195.

Reynolds and Proctor. Illustrated Atlas of Sonoma County, California, 1897. Santa Rosa: 1897

Sonoma County Board of Supervisors. "Official Map of Sonoma County, 1908".

The Press Democrat. "Property transactions"; October 15, 1874.

The Press Democrat, Santa Rosa, California. "Property transactions"; 1877.

Thomas Map Company. "Sonoma County School Districts"; Oakland: 1928.

United States Census

Ninth Census of the United States: 1870. "E.N.B. Jackson". Ancestry.com.
Thirtieth Census of the United States: 1910. "Joseph Memeo". Ancestry.com.

United States Department of the Interior. National Register Bulletin 15, "How to Apply the National Register Criteria for Evaluation." Washington, DC: National Park Service, Interagency Resources Division, rev. 1991.

APPENDIX A:
Preparer Qualifications

Pamela Daly, M.S.H.P., Principal Architectural Historian
Daly & Associates, 4486 University Avenue, Riverside, California 92501
(951) 369-1366 daly.rvrsde@sbcglobal.net

Ms. Daly is a Qualified Architectural Historian with more than 22 years of experience in historic resource management and consulting in California, Vermont, New York, and Nevada. She earned a Bachelor of Science degree in Business Management from Elmira College in Elmira, New York, and a Master of Science degree in Historic Preservation at University of Vermont. Ms. Daly's coursework in Historic Preservation included the study of American Architecture, Historic Landscapes, and Building Conservation Techniques.

Ms. Daly has expertise not only in assessing and evaluating classic residential architectural styles of the United States dating from the eighteenth to the twenty-first century, but she has a wide range of experience in the survey and evaluation of military sites and structures in both the western and eastern United States. She has performed studies on airplane hangars, military housing, helicopter hangers, ammunition bunkers, flight simulators, and Cold War radar arrays. Industrial archaeological sites include automobile and railroad bridges, irrigation canals and ditches, gravity-fed water supply systems, sewer treatments systems, gold mines, water-pumping systems, privately-owned reservoirs, electric transmission line towers, roads, historic signage, airplane hangars, steam-powered belt and pulley systems, and a historic zanja.

Studies of built-environment resources include archival research, field investigation, significance criteria and determinations, assessment of impacts/effects, management plans, and mitigation implementation. Mitigation measures include preparation of Historic American Building Survey (HABS) documentation, Historic American Engineering Record (HAER) documentation, Historic American Landscape (HALS) documentation, interpretive signage, layout and production of brochures, websites, and video displays. Ms. Daly has also worked with clients with historically significant buildings to restore or rehabilitate them in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*.

Ms. Daly has experience with federal agencies including U.S. Air Force, U.S. Navy, U.S. Army Reserve, U.S. Army Corps of Engineers, Bureau of Land Management, the U.S. Forest Service, the National Park Service, and U.S. Fish & Wildlife. She is accepted as a principal investigator for both Architectural History and History by the California State Office of Historic Preservation, and holds the qualifications to work throughout the United States. Ms. Daly belongs to the National Trust for Historic Preservation, Vernacular Architecture Forum, Society of Industrial Archaeology, and Association of Preservation Technology.

APPENDIX B: Series 523 DPR Forms

State of California — The Resources Agency	**Primary #**	UPDATE
DEPARTMENT OF PARKS AND RECREATION	**HRI #**	
PRIMARY RECORD	**Trinomial**	
	NRHP Status Code: 6Z	
Other Listings		
Review Code	**Reviewer**	**Date**

Page 1 **of** 7 ***Resource Name:** 2220 Fulton Road

P1. Other Identifier: APN 034-030-070-000

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted** ***a. County:** Sonoma

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** Sebastopol **Date:** 1980 **T** 7N; **R 8W**; SW **¼ of SE ¼ of Sec** 5 **; M.D.B.M.**

c. Address: 2220 Fulton Road City: Santa Rosa Zip: 95401

d. UTM: Zone: 10 ; 520153 mE/ 4258540 mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation: 142 feet above sea level

1.5 miles south on Fulton Road at the intersection of River Road and Fulton Road. Property is located on the east side of the street.

***P3a. Description:**

The area surveyed under the current Project is comprised of 28.49 acres, and situated on Assessor Parcel Number 034-030-070-000, Tract 004112. The Project site is accessed from Fulton Road through a gate, with the house and barns scattered on the property. The property is flat, with large open areas away from the house. Scattered near the house are walnut trees, and an apple and plum tree. Due to confidentiality considerations, Sonoma County Building Department could only provide the date of construction for the house on the property.

1. House

Located to the north of the driveway into the property, is a one-and-one-half story dwelling, which according to Sonoma County records was constructed in 1930 (Figure 6). The house appears to be a Craftsman style house with a gable-front roof and entrance to the building. The structure has a rectangular mass, measuring approximately 53 feet long by 30 feet wide, and is constructed with a basement. There is a poured concrete porch with steps on the front elevation that was created by recessing the first floor entrance approximately 13 feet from the overhang of the half-story. The overhang is supported at each end of a segmental arch by square posts set on a solid porch railing. The gable roof has a medium-high pitch, and set on both the roof slopes are shed roof dormers. Both the main roof and dormer roof have overhanging eaves with exposed rafter tails. Large, decorative brackets support the eaves, and support a decorative window box on the gable-front. Smaller brackets support the outside corners of the dormer roofs.

***P3b. Resource Attributes:** HP2 (single-family property), HP4 (outbuildings), HP33 (Farm/ranch), HP 32 (Rural open space).

***P4. Resources Present:** ☒Building ☒Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing

P5b. Description of Photo: House, view looking southeast. December 2019.

***P6. Date Constructed/Age and Sources:** ☒Historic ☐Prehistoric ☐Both
1930 per Sonoma County Assessor.

***P7. Owner and Address:**
Woodside Holdings, LLC
454 Las Gallinas Avenue, #488
San Rafael, CA 94903

***P8. Recorded by:**
Pamela Daly, M.S.H.P.
Daly & Associates
2242 El Capitan Drive
Riverside, CA 92506

***P9. Date Recorded:** February 6, 2020.

***P10. Survey Type:** (Describe)
Intensive-level, Section 106.

***P11. Report Citation:** Daly, Pamela. "Historic Resource Evaluation Report of 2220 Fulton Road, Santa Rosa, Sonoma County, California". Daly & Associates, Riverside, CA.

***Attachments:** ☐NONE ☒Location Map ☐Sketch Map ☒Continuation Sheet ☒Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

BUILDING, STRUCTURE, AND OBJECT RECORD

*NRHP Status Code: 6Z

*Resource Name : 2220 Fulton Road

B1. Historic Name: Unknown
B2. Common Name: NA
B3. Original Use: Small family egg & chicken ranch B4. Present Use: Rental, residential property
*B5. **Architectural Style:** Craftsman
*B6. **Construction History:** House constructed in 1930 per Sonoma County Assessor.

*B7. **Moved?** ■No ☐Yes ☐Unknown **Date:** **Original Location:**
*B8. **Related Features:** Outbuildings associated with the operation of a small-scale egg and chicken ranch.

B9a. Architect: Unknown b. Builder: Unknown
*B10. **Significance:** None **Theme:** None **Area:** Santa Rosa
Period of Significance: None **Property Type:** Rural residential **Applicable Criteria:** None

The proposed Project calls for the demolition or removal of the existing built-environment resources situated on the property at 2220 Fulton Road. The Project area was subject to an intensive-level survey, and the history of the property and its owners was gathered from Bureau of Land Management Patent Land grant documents, regional and local maps, and historic newspaper articles. Information from these sources and the Sonoma County Assessor's Office revealed Joseph Memeo, his wife Mary and four children, settled on the land and built the house thereon in 1929-1930.

The property at 2220 Fulton Road does not appear to be considered significant under Criterion A of the NRHP. The house was constructed in 1929-1930 on land that had not been improved until that time, possibly due to the natural wetlands that comprise a majority of the eastern portion of the subject parcel. Memeo appears to have established a poultry and egg ranch on his land, and dry-farmed the wetlands when possible. Historic aerial photographs present evidence that these activities continued into the 1980s. Research did not reveal that the Memeo ranch contributed to the history of poultry-keeping in the area of Fulton or Santa Rosa, or with any events that made a significant contribution to the agricultural history of the region or Sonoma County.

(See Continuation Sheet for additional text.)

B11. Additional Resource Attributes: None.

*B12. **References:**
See Historic Resource Evaluation Report For 2220 Fulton Road, Santa Rosa, Sonoma County, California.

B13. Remarks: None.

*B14. **Evaluator:** Pamela Daly, M.S.H.P.

*Date of Evaluation: **February 6, 2020**

(This space reserved for official comments.)

*Recorded by: Pamela Daly, M.S.H.P. *Date: February 6, 2020 ☒Continuation ☒Update

P3a. Description, continued:

The frame building is clad with a rough stucco finish. The fenestration is primarily one-over-one wood sash windows on the first level, and the dormer windows comprised of small, square, individually framed fixed lights. The rear (east) elevation of the building has been substantially altered at some point in time with the installation of a sliding glass door, wood deck, and staircase to the backyard.

2.North chicken coop/horse stable
The largest chicken house is located to the northeast of the collection of buildings on the property. This is a wood-framed gabled building on a rectangular plan that measures approximately 154 feet long by 20 feet wide. Based on the evidence of modern horse stable stall guards situated within the sections of the building visible on the east elevation, the building was converted at some point in time to keep horses for recreational use. There are still some remaining wood shingles in place on the roof, but the roof system and the entire building have suffered from the ravages of time. The northern one-third of the structure has totally collapsed.

3.Egg laying coop
The chicken coop situated closest to the house, is also a wood-framed gabled building on a rectangular plan, and it measures approximately 66 feet long by 16 feet wide. The foundation is a poured concrete slab. The siding on the building appears to primarily be vertically set tongue-and-groove and plank siding. The roof is wood shingle, though corrugated metal has been added on top of the shingles at the west end. Openings were set in the upper portion of the southern wall of the coop to allow chickens access to a large fenced yard. Pedestrian doors are set on the west gable end, and on the south elevation.

4.Feed shed
This shed may have been used to keep the chicken feed safe from rodents, as evidenced by the corrugated steel panel walls and roof. The building measures approximately 24 feet long by 14 feet wide, and is constructed with a wood frame.

5.Storage shed
The storage shed is a wood-framed, metal-roofed, gable building that has a rectangular mass and measures approximately 26 feet long by 12 feet wide. The structure is set on a base of stone and concrete supports. The siding appears to be wide shiplap placed over plain flat boards. There are two pedestrian doors on the south elevation, and ground-level openings on the north elevation.

6.Egg boxing shed
This small building set to the rear of the sales shed/garage, may have been where the eggs were cleaned and boxed for sale. During the years of the Great Depression, the farm would have most probably also sold “past their prime” chickens for consumption. The building appears to have the same, wide shiplap siding as found on some of the other outbuildings. The building is severely deteriorated.

7.Sales shed/garage
Our investigation of the rectangular-massed structure that was believed to be a garage for housing automobiles, was instead a farm stand built by the Memeos for selling eggs and chickens to the general public. The wood frame structure with a metal-clad gable roof that measures 24 feet long by 20 feet wide, does not have the large framing members usually found encasing the front entranceway where a garage door would be situated. Instead, set along the interior walls are flat sheets of plywood used as wallboard. The poured concrete floor is very thin, providing only a covering for the floor for pedestrian use, not for supporting automobiles. The Egg Boxing shed is located immediately to the rear of the sales shed, allowing for eggs to be prepped prior to being set out for sale. The sales shed would have been easily accessible from passersby on Fulton Road, and there was plenty of room for parking near the shed.

*Recorded by: Pamela Daly, M.S.H.P. *Date: February 6, 2020 ☒Continuation ☒Update

B10. Statement of Significance, continued:

The property at 2220 Fulton Road has not been found to be directly associated with any persons important to the history of Santa Rosa, California, or the United States, and does not appear significant under Criterion B of the NRHP. Research did not uncover any substantial contributions by persons residing at the property important to the history of the local area, Santa Rosa, or Sonoma County.

The residence and outbuildings at 2220 Fulton Road were constructed on the subject property almost 60 years after the land had been sold in 1868 as excess railroad lands by the General Land Office. The residence is not a significant or exceptional example of a Craftsman style house, and the outbuildings are those that would have been constructed to support a home-based egg and chicken ranch. The residence and outbuildings are not the product of the work of a master craftsman or engineer, and do not possess high artistic value. The outbuildings do not embody any distinctive or rare characteristics of method of construction. The property at 2220 Fulton Road does not appear eligible for listing under Criterion C as a resource significant to the history of Santa Rosa, California, or the United Sates.

The property at 2220 Fulton Road does not appear to have the capacity to yield information important to the prehistory or history of Santa Rosa, Sonoma County, or California. The property does not appear eligible for listing in the NRHP under Criterion D.

The property at 2220 Fulton Road has retained most aspects of its historic integrity. Those aspects include its location, design, materials, workmanship, feeling, and association as a rural, agriculturally-based endeavor that dates to the early twentieth-century. The setting of the agricultural property has been compromised by the encroachment of modern housing developments.

The property at 2220 Fulton Road does not appear eligible for listing in the NRHP due to its unremarkable design and its lack of historic significance even though the dwelling and structure has retained its levels of physical integrity.

East (rear) and north elevations of the house. View looking southwest.

View from the south of north chicken coop that was converted for use as a horse stable.

South elevation of egg laying coop with chicken yard. View looking north.

West and south elevations of storage/feed shed. View looking northeast.

Storage shed located directly east of the house. View looking northwest.

Chicken and egg sales prep shed located to the rear of the sales shed. View looking northwest.

Open front shed for selling eggs and poultry. View looking southeast.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

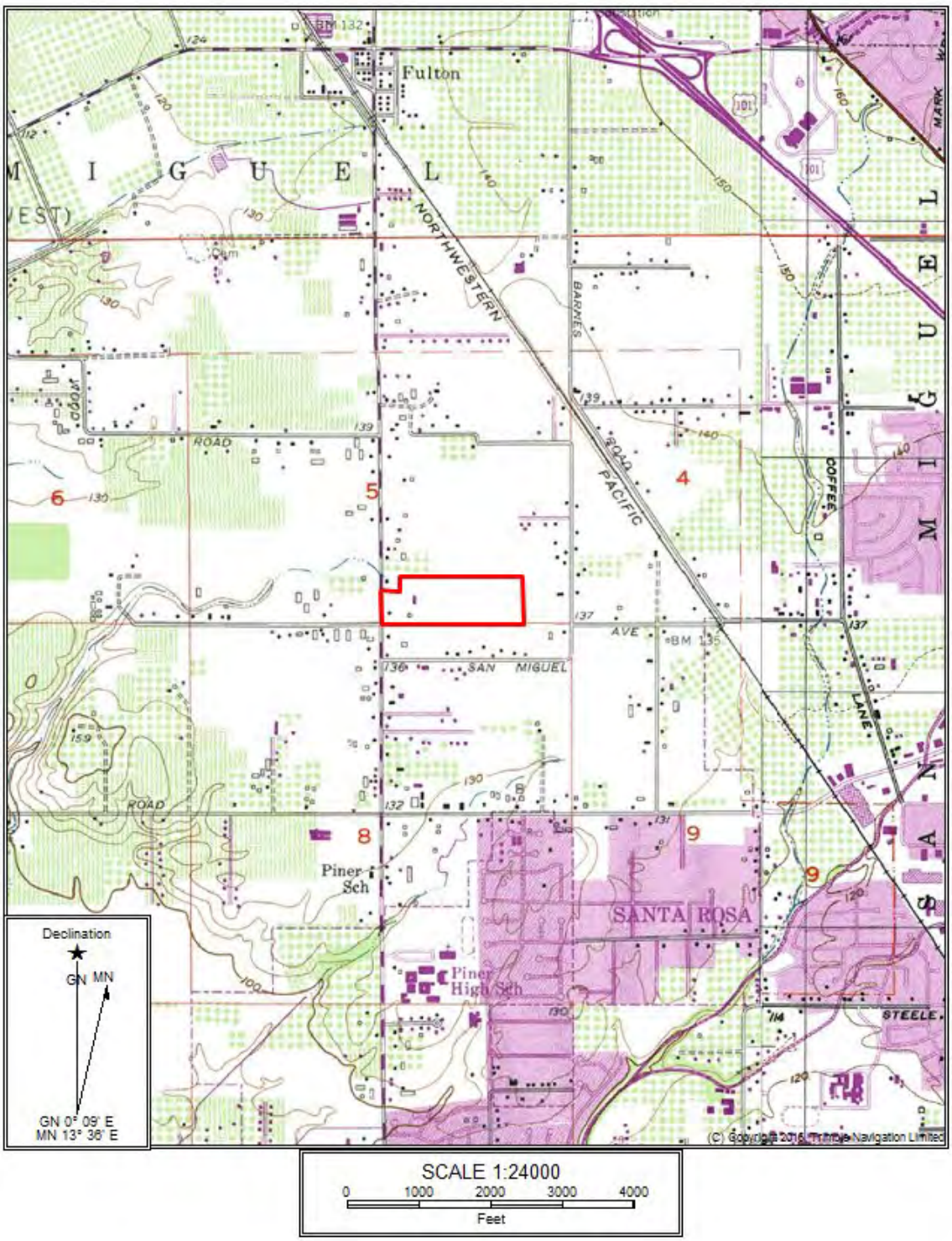
LOCATION MAP

Primary # UPDATE
HRI#
Trinomial

***Resource Name:** 2220 Fulton Road

***Map Name:** Sebastopol

***Scale:** 1:24,000 ***Date of Map:** 1980



***Required information**

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C.3 - Tribal Consultation

draft

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City of Santa Rosa
PLANNING & ECONOMIC DEVELOPMENT

February 18, 2020

Lytton Rancheria of California
Brenda Tomaras
Tomaras & Ogas, LLP
10755-F Scripps Poway Parkway #281
San Diego, CA 92131

Re: 2220 FULTON RD, SANTA ROSA, CA 95403
Stonebridge Subdivision - 28.6 acre parcel to develop 14.6 acre portion with 105 single-family dwelling units with remaining 14.0 acres dedicated as a habitat preserve.
PRJ19-049

Ms. Tomaras:

The subject project is being referred to the Lytton Rancheria of California to provide written notification in compliance with AB-52 (Native Americans: California Environmental Quality Act). As such, a request for consultation with the City of Santa Rosa regarding this project and its potential impacts to tribal cultural resources must be made in writing within 30 days of the date of this letter and addressed to the project planner. Within 30 days of the written request, the City will begin the consultation process.

Any exchange of information regarding tribal cultural resources as a result of consultation with the City, will not be included in the environmental review document or otherwise disclosed by the lead agency or any other public agency to the public, without prior consent of the tribe that provided the information.

Please respond in writing no later than Thursday, March 19, 2020 to KToomians@srcity.org or by mail to:

City of Santa Rosa
Planning and Economic Development
Attention: Kristinae Toomians
100 Santa Rosa Avenue, Room 3
Santa Rosa CA 95404

If you have any questions regarding this application, please contact me at (707) 543-4692.

Kristinae Toomians
Senior Planner

STONEBRIDGE SUBDIVISION

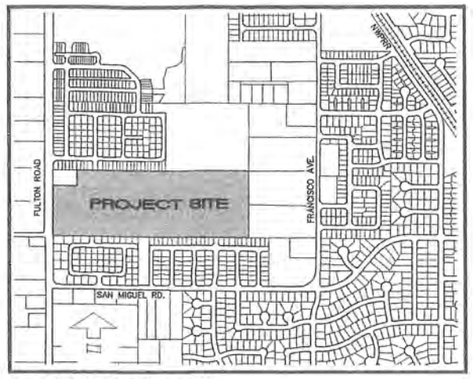
TENTATIVE MAP

GENERAL NOTES

1. EXISTING AND PROPOSED ZONING IS PD-04-007-SR.
2. GENERAL PLAN DESIGNATION IS LOW DENSITY RESIDENTIAL.
3. WATER AND SEWER TO BE PROVIDED AND MAINTAINED BY THE CITY OF SANTA ROSA.
4. PROPOSED SETBACKS ARE AS SHOWN ON THE DEVELOPMENT PLAN.
5. RESIDENTIAL LOT AREAS:
   SMALLEST 3,494 SF (LOT 2)
   LARGEST 8,958 SF (LOT 39)
   AVERAGE 4,203 SF
6. PARCEL AREAS:
   PARCEL A (STORMWATER TREATMENT FACILITY) – 19,557 SF
7. PRESERVE AREA:
   LOT 106 – 14.0 ACRES
8. ALL GRADING TO BE IN CONFORMANCE WITH CHAPTER 33 AND A33 OF THE CURRENT CALIFORNIA BUILDING CODE, AND THE GEOTECHNICAL ENGINEERING REPORT.
9. REMOVE ALL ON-SITE EXISTING FEATURES INCLUDING: STRUCTURES, CONCRETE AND FENCING, UNLESS OTHERWISE NOTED.
10. THE EXISTING LEACHFIELD AND SEPTIC TANK SHALL BE LOCATED AND ABANDONED PER SONOMA COUNTY ENVIRONMENTAL HEALTH STANDARDS.
11. THERE IS AN EXISTING WELL ONSITE, AND IT SHALL BE ABANDONED.
12. ALL PROPOSED UTILITIES WITHIN RIGHT-OF-WAY SHALL BE PUBLIC.
13. THE SUSMP FEATURES, WHICH ARE LOCATED ON PARCEL 'A', SHALL BE MAINTAINED BY A SPECIAL TAX DISTRICT.
14. NO AREAS OF THIS SITE ARE SUBJECT TO INUNDATION. NO HAZARDOUS MATERIALS ARE KNOWN TO EXIST ON THIS SITE.
15. SITE SOILS APPEAR SUITABLE FOR RESIDENTIAL DEVELOPMENT.
16. STREET TREES SHALL BE PLANTED IN ACCORDANCE WITH THE CITY OF SANTA ROSA REQUIREMENTS.
17. STREET LIGHTING SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF SANTA ROSA STANDARDS.
18. SEWER LINE THAT DEVELOPMENT IS TRIBUTARY =
    SOUTH FULTON TRUNK LINE
    EXISTING SEWAGE GENERATION – 406 GALLONS PER DAY
    PROJECTED SEWAGE GENERATION – 0.043 MGD
19. THE PROJECT SITE IS NOT IN A HIGH FIRE SEVERITY ZONE

ABBREVIATIONS

AB	AGGREGATE BASE	MGD	MILLION GALLONS PER DAY
AC	ASPHALT CONCETE	NO	NUMBER
ADU	ACCESSORY DWELLING UNIT	P	PARKING
APN	ASSESSOR'S PARCEL NUMBER	PL	PROPERTY LINE
BLDG	BUILDING	PLNTR	PLANTER
BO	BLOWOFF	PSDE	PRIVATE STORM DRAIN EASEMENT
BSL	BUILDING SETBACK LINE	PUE	PUBLIC UTILITY EASEMENT
CL	CENTERLINE	R	RADIUS
C&G	CURB AND GUTTER	R/W	RIGHT OF WAY
DI	DRAIN INLET	S	GRADE SLOPE
DN	DOCUMENT NUMBER	SD	STORM DRAIN
DWY	DRIVEWAY	SDCB	STORM DRAIN CATCH BASIN
EX	EXISTING	SDMH	STORM DRAIN MANHOLE
EG	EXISTING GRADE	SS	SANITARY SEWER
FC	FACE OF CURB	SSCO	SANITARY SEWER CLEAN OUT
FG	FINISHED GRADE	SSMH	SANITARY SEWER MANHOLE
FH	FIRE HYDRANT	ST	STREET
FL	FLOWLINE	STD	STANDARD
GB	GRADE BREAK	SW	SIDEWALK
GSL	GARAGE SETBACK LINE	SWE	SIDEWALK EASEMENT
GV	GATE VALVE	T	TRAVEL WAY
HP	HIGH POINT	TC	TOP OF CURB
IG	INVERT GRADE	TYP	TYPICAL
L	LENGTH	W	WATER MAIN
LAT	LATERAL	WM	WATER METER
LL	LOT LINE	WS	WATER SERVICE
LP	LOW POINT		
LT	LIGHT		



LOCATION MAP

NO SCALE

BENCHMARK

NAME: E108 ELEVATION: 136.784
DESCRIPTION: SAN MIGUEL AVE. AND FRANCISCO AVE;
CITY DISK IN MONUMENT 10 FT. WEST AND 8 FT. NORTH CL INTERSECTION
CITY OF SANTA ROSA DATUM

OWNER / DEVELOPER

WOODSIDE HOLDINGS, LP
C/O DAVID JACOBSON
434 LAS GALLINAS AVE., PMB 355
SAN RAFAEL, CA 94903
(415) 306-1687

PARAMOUNT HOMES
C/O PETER HELLMANN
1615 BONANZA STREET, SUITE 314
WALNUT CREEK, CA 94596
(510) 612-2027

ENGINEER

CIVIL DESIGN CONSULTANTS, INC.
2200 RANGE AVENUE, SUITE 204
SANTA ROSA, CA 95403
(707) 542-4820

SURVEYOR

CINQUINI & PASSARINO, INC.
1360 NORTH DUTTON AVE., STE 150
SANTA ROSA, CA 95401
(707) 542-6268

LEGEND

	EXISTING	NEW
STREET LIGHT		
SANITARY SEWER		8"SS SSMH SSCO
SANITARY SEWER LAT.		SS-LAT. SSCO
WATER MAIN & SERVICES		FH 8"W OR 12"W GV BO WS
STORM DRAIN SYSTEM		SDMH SDCB DRAIN INLET
CURB & GUTTER		
SIDEWALK		
FLOWLINE / SWALE		
BIO-RETENTION BED		
TREE	(TO BE REMOVED)	(TO BE SAVED)
OVERHEAD UTILITY		
JOINT TRENCH		
ELECTRIC (STREET LIGHT)		
GAS		
UTILITY BOXES		
FENCE		
CONTOURS (1' INTERVALS)		

SHEET INDEX

1. COVER SHEET
2. TENTATIVE MAP – OVERALL SITE PLAN
3. TENTATIVE MAP – RESIDENTIAL SITE PLAN
4. TENTATIVE MAP – GRADING, DRAINAGE AND UTILITY PLAN

City of Santa Rosa
DEC 3 0 2019
Planning & Economic Development Department

CIVIL DESIGN CONSULTANTS, INC.
2200 Range Avenue, Suite 204
Santa Rosa, CA 95403
(707) 542-4820

12/19/19 DATE

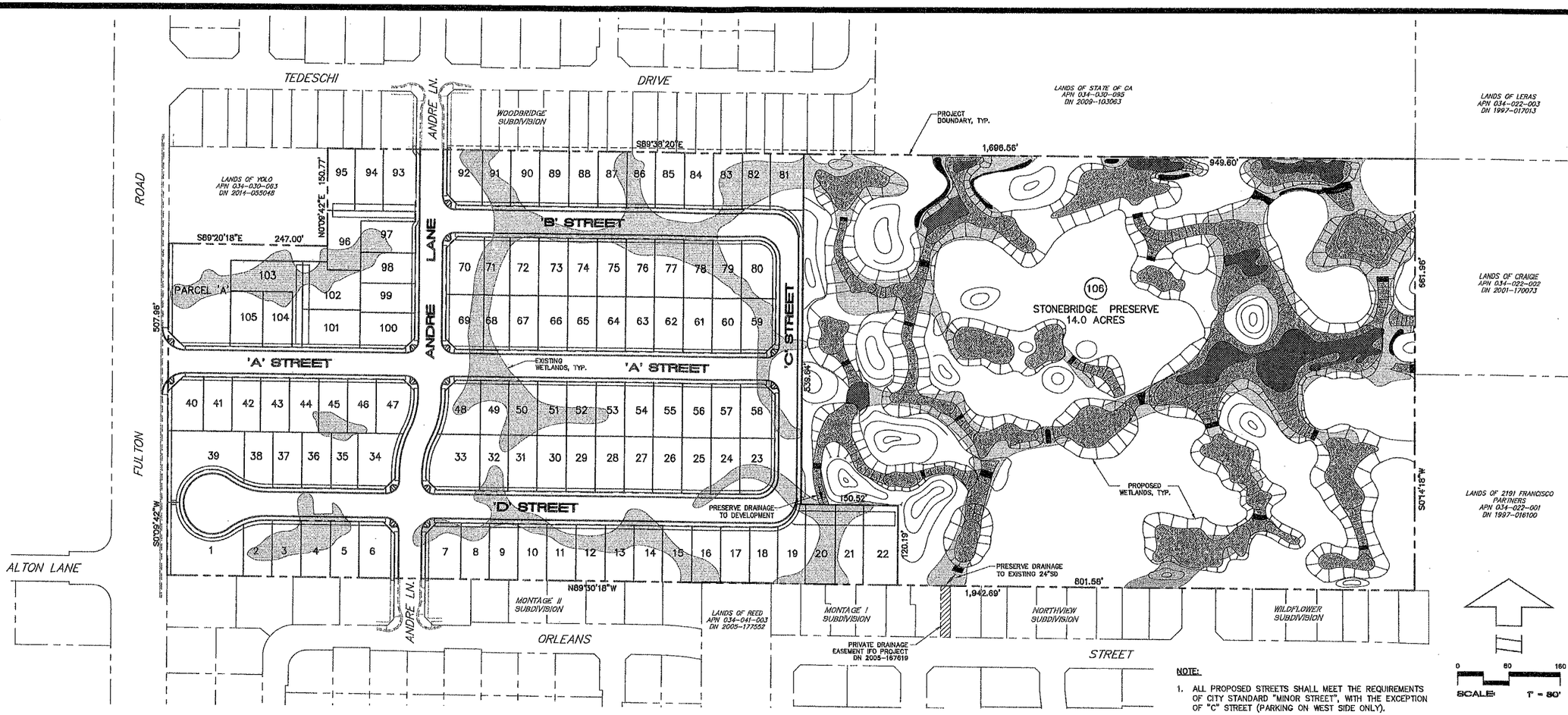
REGISTERED PROFESSIONAL ENGINEER VIRGINIA ANDREW BORDESSA No. 34358 STATE OF CALIFORNIA CIVIL

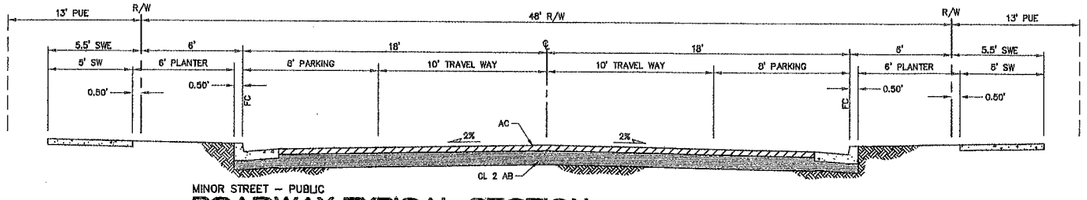
ANDREW BORDESSA
RCE 34358

COVER SHEET
STONEBRIDGE SUBDIVISION
28.6 ACRES
109 LOTS
1 PARCEL
NOVEMBER 2019
2220 FULTON ROAD
SANTA ROSA, CALIFORNIA
DN 2012-003362
APN 034-030-070

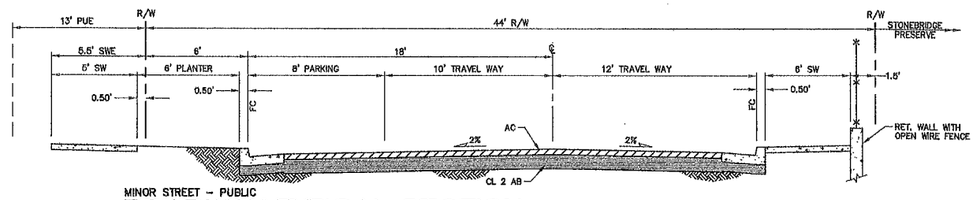
JOB NO. 17-114

SHEET NO. 1 OF 4 SHEETS

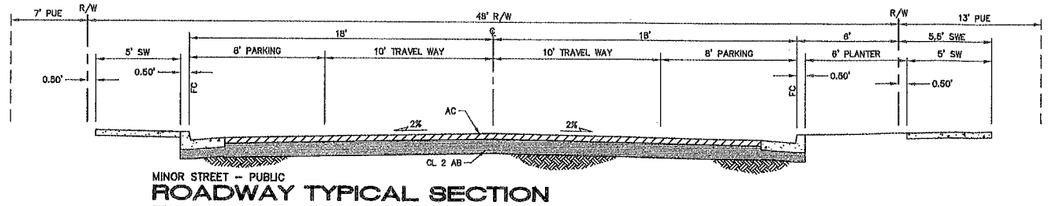




MINOR STREET – PUBLIC
ROADWAY TYPICAL SECTION
ANDRE LANE, 'A', 'B' AND 'D' STREET — NO SCALE



MINOR STREET – PUBLIC
ROADWAY TYPICAL SECTION
'C' STREET — NO SCALE



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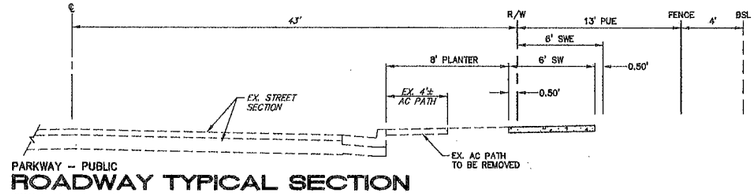
ANDRE LANE (NORTH OF B STREET) — NO SCALE



PARKWAY – PUBLIC
ROADWAY TYPICAL SECTION
FULTON ROAD — NO SCALE

12/19/17
DATE

PROFESSIONAL ENGINEER * REGISTERED * STATE OF CALIFORNIA
ANDREW BORDESSA
No. 34368
CIVIL

ANDREW BORDESSA
RCE 34368

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2200 Range Avenue, Suite 204
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(707) 542-4920

TENTATIVE MAP - OVERALL SITE PLAN
STONEBRIDGE SUBDIVISION
DN 2012-003362
APN 034-030-070
28.6 ACRES
106 LOTS
1 PARCEL
NOVEMBER 2019
2220 FULTON ROAD
SANTA ROSA, CALIFORNIA

JOB NO.
17-114

SHEET NO.
2
OF 4 SHEETS

TENTATIVE MAP - RESIDENTIAL SITE PLAN
STONEBRIDGE SUBDIVISION

2250 FULTON ROAD
SANTA ROSA, CALIFORNIA

DN 2012-003382
APN 034-030-070

±36.6 ACRES
106 LOTS
1 PARCEL
NOVEMBER 2019

JOB NO. 17-114

SHEET NO. 3 OF 4 SHEETS

CIVIL DESIGN CONSULTANTS, INC.
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Santa Rosa, CA 95403
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ANDREW BORDESSA
RCE 34588
DATE 12/19/19

REGISTERED PROFESSIONAL ENGINEER
ANDREW BORDESSA
No. 34588
CIVIL
STATE OF CALIFORNIA

SCALE: 1" = 40'

SEE SHEET 2

STONEBRIDGE PRESERVE

MONTAGE I SUBDIVISION

MONTAGE II SUBDIVISION

WOODRIDGE SUBDIVISION

'A' STREET

'B' STREET

'C' STREET

'D' STREET

ANDRE LANE

FULTON ROAD

PROJECT BOUNDARY, TYP.

PEDESTRIAN CURB RAMP, TYP.

PARCEL 'A' STORMWATER TREATMENT FACILITY

LANDS OF TOLD APN 034-030-067 DN 2014-050048

LOT AREA TABLE

LOT NO.	LOT SIZE SQ. FT.	LOT NO.	LOT SIZE SQ. FT.	LOT NO.	LOT SIZE SQ. FT.	LOT NO.	LOT SIZE SQ. FT.	LOT NO.	LOT SIZE SQ. FT.	LOT NO.	LOT SIZE SQ. FT.
1	6,809	16	3,863	31	3,871	46	3,848	61	3,848	76	3,871	91	3,867
2	3,765	17	3,864	32	3,871	47	4,566	62	3,848	77	3,871	92	4,629
3	3,843	18	3,870	33	6,735	48	4,824	63	3,848	78	3,871	93	4,880
4	3,844	19	4,697	34	5,108	49	3,848	64	3,848	79	3,871	94	4,262
5	3,846	20	5,405	35	3,620	50	3,848	65	3,848	80	4,594	95	4,117
6	4,590	21	5,405	36	3,871	51	3,848	66	3,848	81	4,709	96	4,161
7	4,594	22	6,445	37	3,795	52	3,848	67	3,494	82	3,894	97	3,750
8	3,852	23	4,594	38	6,956	53	3,848	68	4,079	83	3,894	98	3,848
9	3,853	24	3,871	39	4,403	54	3,848	69	4,947	84	3,880	99	4,876
10	3,854	25	3,871	40	3,848	55	3,848	70	4,079	85	3,887	100	4,876
11	3,856	26	3,871	41	3,848	56	3,848	71	3,816	86	3,884	101	5,401
12	3,857	27	3,871	42	3,848	57	3,848	72	3,871	87	3,880	102	5,283
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14	3,860	29	3,871	44	3,848	59	4,591	74	3,871	89	3,874	104	3,956
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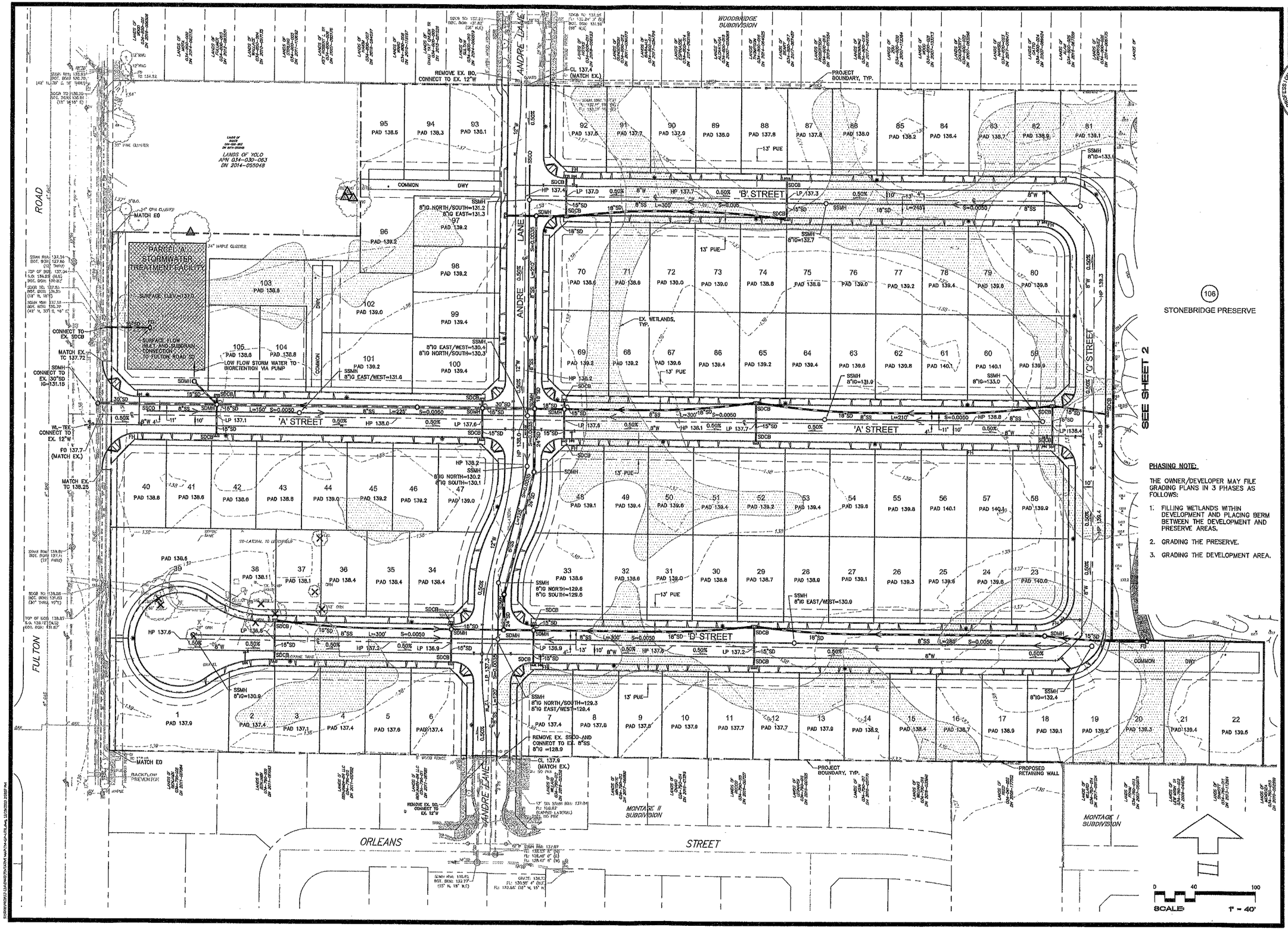
NOTES:

1. ALL PROPOSED STREETS SHALL MEET THE REQUIREMENTS OF CITY STANDARD STREET SECTIONS, WITH THE EXCEPTION OF "C" STREET (PARKING ON WEST SIDE ONLY). SEE SHEET 2 FOR TYPICAL ROADWAY SECTIONS.
2. SEE SHEET 2 FOR COMPLETE BOUNDARY INFORMATION.

D:\2017\17-114\DWG\17-114 TENTATIVE MAP.dwg, 12/19/2019 2:51:04 PM



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REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA
CIVIL
12/9/17
DATE
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TENTATIVE MAP - GRADING, DRAINAGE AND UTILITY PLAN
STONEBRIDGE SUBDIVISION

2220 FULTON ROAD
SANTA ROSA, CALIFORNIA

28.6 ACRES
109 LOTS
1 PARCEL
NOVEMBER 2019

DN 2012-003962
APN 034-030-070

JOB NO.
17-114

SHEET NO.
4
OF 4 SHEETS

City of Santa Rosa
PLANNING & ECONOMIC DEVELOPMENT

February 18, 2020

Federated Indians of Graton Rancheria
Buffy McQuillen
6400 Redwood Dr. Ste. 300
Rohnert Park, CA 94928

Re: 2220 FULTON RD, SANTA ROSA, CA 95403
Stonebridge Subdivision - 28.6 acre parcel to develop 14.6 acre portion with 105 single-family dwelling units with remaining 14.0 acres dedicated as a habitat preserve.
PRJ19-049

Ms. McQuillen:

The subject project is being referred to the Federated Indians of Graton Rancheria to provide written notification in compliance with AB-52 (Native Americans: California Environmental Quality Act). As such, a request for consultation with the City of Santa Rosa regarding this project and its potential impacts to tribal cultural resources must be made in writing within 30 days of the date of this letter and addressed to the project planner. Within 30 days of the written request, the City will begin the consultation process.

Any exchange of information regarding tribal cultural resources as a result of consultation with the City, will not be included in the environmental review document or otherwise disclosed by the lead agency or any other public agency to the public, without prior consent of the tribe that provided the information.

Please respond in writing no later than Thursday, March 19, 2020 to KToomians@srcity.org or by mail to:

City of Santa Rosa
Planning and Economic Development
Attention: Kristinae Toomians
100 Santa Rosa Avenue, Room 3
Santa Rosa CA 95404

If you have any questions regarding this application, please contact me at (707) 543-4692.

Kristinae Toomians
Senior Planner

STONEBRIDGE SUBDIVISION

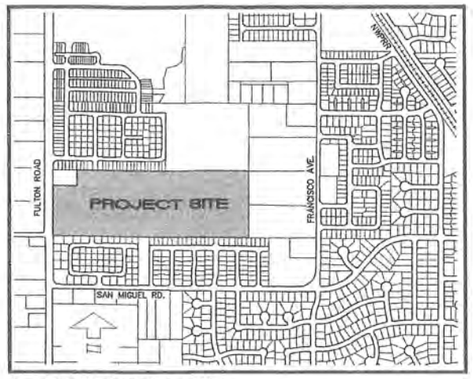
TENTATIVE MAP

GENERAL NOTES

1. EXISTING AND PROPOSED ZONING IS PD-04-007-SR.
2. GENERAL PLAN DESIGNATION IS LOW DENSITY RESIDENTIAL.
3. WATER AND SEWER TO BE PROVIDED AND MAINTAINED BY THE CITY OF SANTA ROSA.
4. PROPOSED SETBACKS ARE AS SHOWN ON THE DEVELOPMENT PLAN.
5. RESIDENTIAL LOT AREAS:
   SMALLEST 3,494 SF (LOT 2)
   LARGEST 8,958 SF (LOT 39)
   AVERAGE 4,203 SF
6. PARCEL AREAS:
   PARCEL A (STORMWATER TREATMENT FACILITY) – 19,557 SF
7. PRESERVE AREA:
   LOT 106 – 14.0 ACRES
8. ALL GRADING TO BE IN CONFORMANCE WITH CHAPTER 33 AND A33 OF THE CURRENT CALIFORNIA BUILDING CODE, AND THE GEOTECHNICAL ENGINEERING REPORT.
9. REMOVE ALL ON-SITE EXISTING FEATURES INCLUDING: STRUCTURES, CONCRETE AND FENCING, UNLESS OTHERWISE NOTED.
10. THE EXISTING LEACHFIELD AND SEPTIC TANK SHALL BE LOCATED AND ABANDONED PER SONOMA COUNTY ENVIRONMENTAL HEALTH STANDARDS.
11. THERE IS AN EXISTING WELL ONSITE, AND IT SHALL BE ABANDONED.
12. ALL PROPOSED UTILITIES WITHIN RIGHT-OF-WAY SHALL BE PUBLIC.
13. THE SUSMP FEATURES, WHICH ARE LOCATED ON PARCEL 'A', SHALL BE MAINTAINED BY A SPECIAL TAX DISTRICT.
14. NO AREAS OF THIS SITE ARE SUBJECT TO INUNDATION. NO HAZARDOUS MATERIALS ARE KNOWN TO EXIST ON THIS SITE.
15. SITE SOILS APPEAR SUITABLE FOR RESIDENTIAL DEVELOPMENT.
16. STREET TREES SHALL BE PLANTED IN ACCORDANCE WITH THE CITY OF SANTA ROSA REQUIREMENTS.
17. STREET LIGHTING SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF SANTA ROSA STANDARDS.
18. SEWER LINE THAT DEVELOPMENT IS TRIBUTARY =
    SOUTH FULTON TRUNK LINE
    EXISTING SEWAGE GENERATION – 406 GALLONS PER DAY
    PROJECTED SEWAGE GENERATION – 0.043 MGD
19. THE PROJECT SITE IS NOT IN A HIGH FIRE SEVERITY ZONE

ABBREVIATIONS

AB	AGGREGATE BASE	MGD	MILLION GALLONS PER DAY
AC	ASPHALT CONCETE	NO	NUMBER
ADU	ACCESSORY DWELLING UNIT	P	PARKING
APN	ASSESSOR'S PARCEL NUMBER	PL	PROPERTY LINE
BLDG	BUILDING	PLNTR	PLANTER
BO	BLOWOFF	PSDE	PRIVATE STORM DRAIN EASEMENT
BSL	BUILDING SETBACK LINE	PUE	PUBLIC UTILITY EASEMENT
CL	CENTERLINE	R	RADIUS
C&G	CURB AND GUTTER	R/W	RIGHT OF WAY
DI	DRAIN INLET	S	GRADE SLOPE
DN	DOCUMENT NUMBER	SD	STORM DRAIN
DWY	DRIVEWAY	SDCB	STORM DRAIN CATCH BASIN
EX	EXISTING	SDMH	STORM DRAIN MANHOLE
EG	EXISTING GRADE	SS	SANITARY SEWER
FC	FACE OF CURB	SSCO	SANITARY SEWER CLEAN OUT
FG	FINISHED GRADE	SSMH	SANITARY SEWER MANHOLE
FH	FIRE HYDRANT	ST	STREET
FL	FLOWLINE	STD	STANDARD
GB	GRADE BREAK	SW	SIDEWALK
GSL	GARAGE SETBACK LINE	SWE	SIDEWALK EASEMENT
GV	GATE VALVE	T	TRAVEL WAY
HP	HIGH POINT	TC	TOP OF CURB
IG	INVERT GRADE	TYP	TYPICAL
L	LENGTH	W	WATER MAIN
LAT	LATERAL	WM	WATER METER
LL	LOT LINE	WS	WATER SERVICE
LP	LOW POINT		
LT	LIGHT		



LOCATION MAP

NO SCALE

BENCHMARK

NAME: E108 ELEVATION: 136.784
DESCRIPTION: SAN MIGUEL AVE. AND FRANCISCO AVE;
CITY DISK IN MONUMENT 10 FT. WEST AND 8 FT. NORTH CL INTERSECTION
CITY OF SANTA ROSA DATUM

OWNER / DEVELOPER

WOODSIDE HOLDINGS, LP
C/O DAVID JACOBSON
434 LAS GALLINAS AVE., PMB 355
SAN RAFAEL, CA 94903
(415) 306-1687

PARAMOUNT HOMES
C/O PETER HELLMANN
1615 BONANZA STREET, SUITE 314
WALNUT CREEK, CA 94596
(510) 612-2027

ENGINEER

CIVIL DESIGN CONSULTANTS, INC.
2200 RANGE AVENUE, SUITE 204
SANTA ROSA, CA 95403
(707) 542-4820

SURVEYOR

CINQUINI & PASSARINO, INC.
1360 NORTH DUTTON AVE., STE 150
SANTA ROSA, CA 95401
(707) 542-6268

LEGEND

	EXISTING	NEW
STREET LIGHT		
SANITARY SEWER		8"SS SSMH SSCO
SANITARY SEWER LAT.		SS-LAT. SSCO
WATER MAIN & SERVICES		FH 8"W OR 12"W GV BO WS
STORM DRAIN SYSTEM		SDMH SDCB DRAIN INLET
CURB & GUTTER		
SIDEWALK		
FLOWLINE / SWALE		
BIO-RETENTION BED		
TREE	(TO BE REMOVED)	(TO BE SAVED)
OVERHEAD UTILITY		
JOINT TRENCH		
ELECTRIC (STREET LIGHT)		
GAS		
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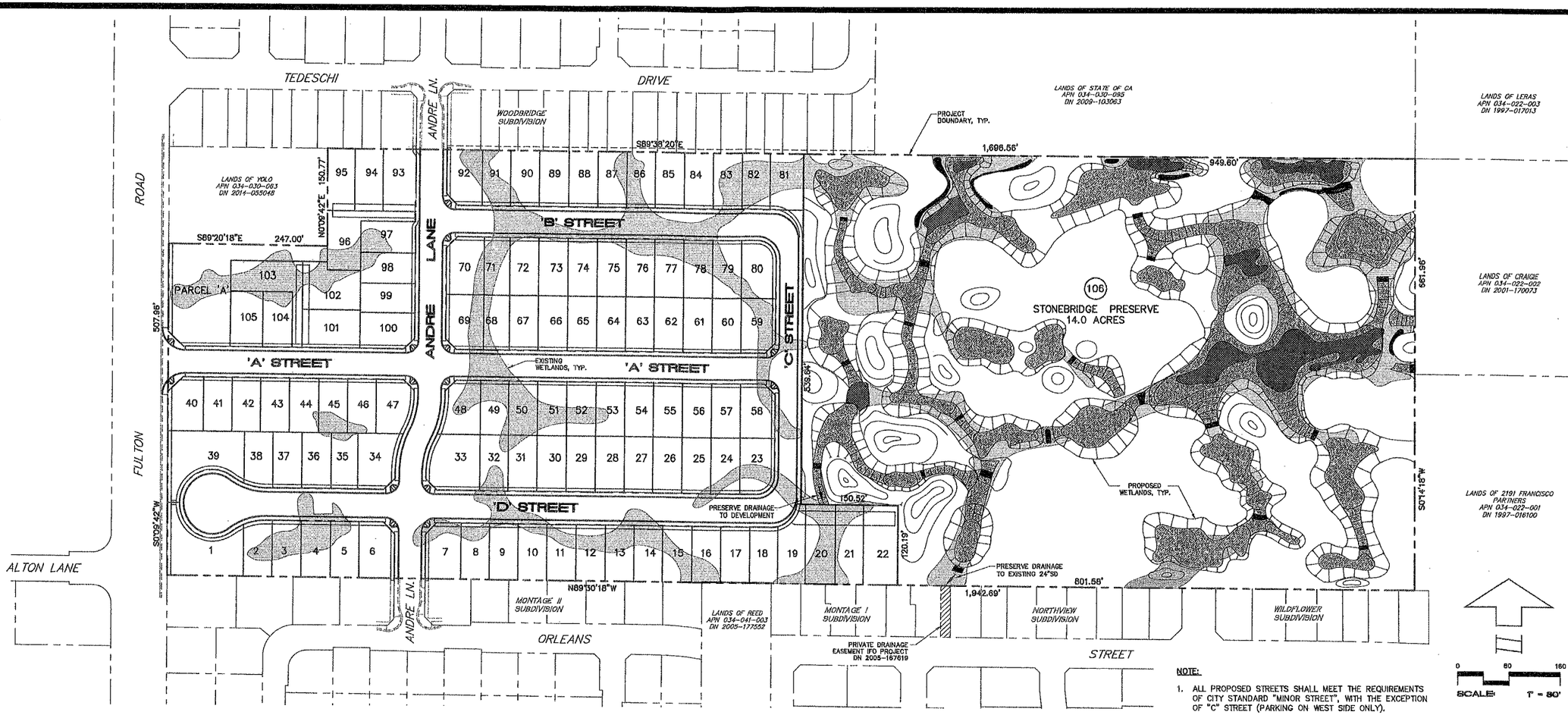

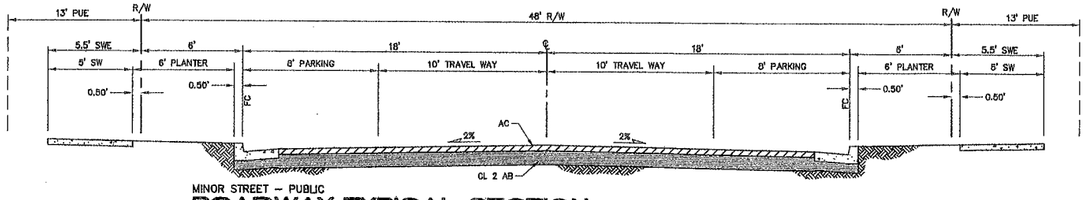

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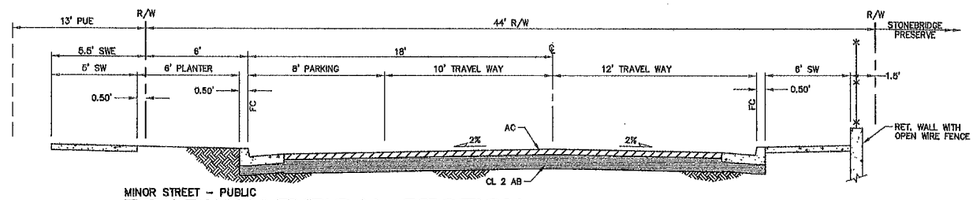

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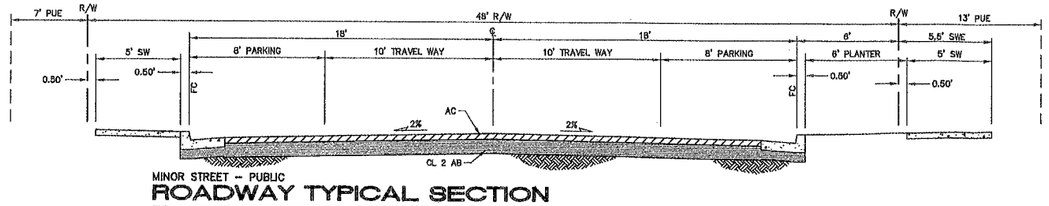

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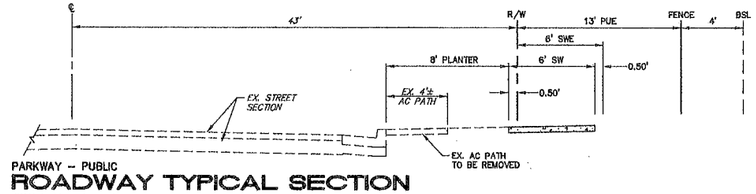

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SCALE: 1" = 40'

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LANDS OF TOLD APN 034-030-067 DN 2014-050048

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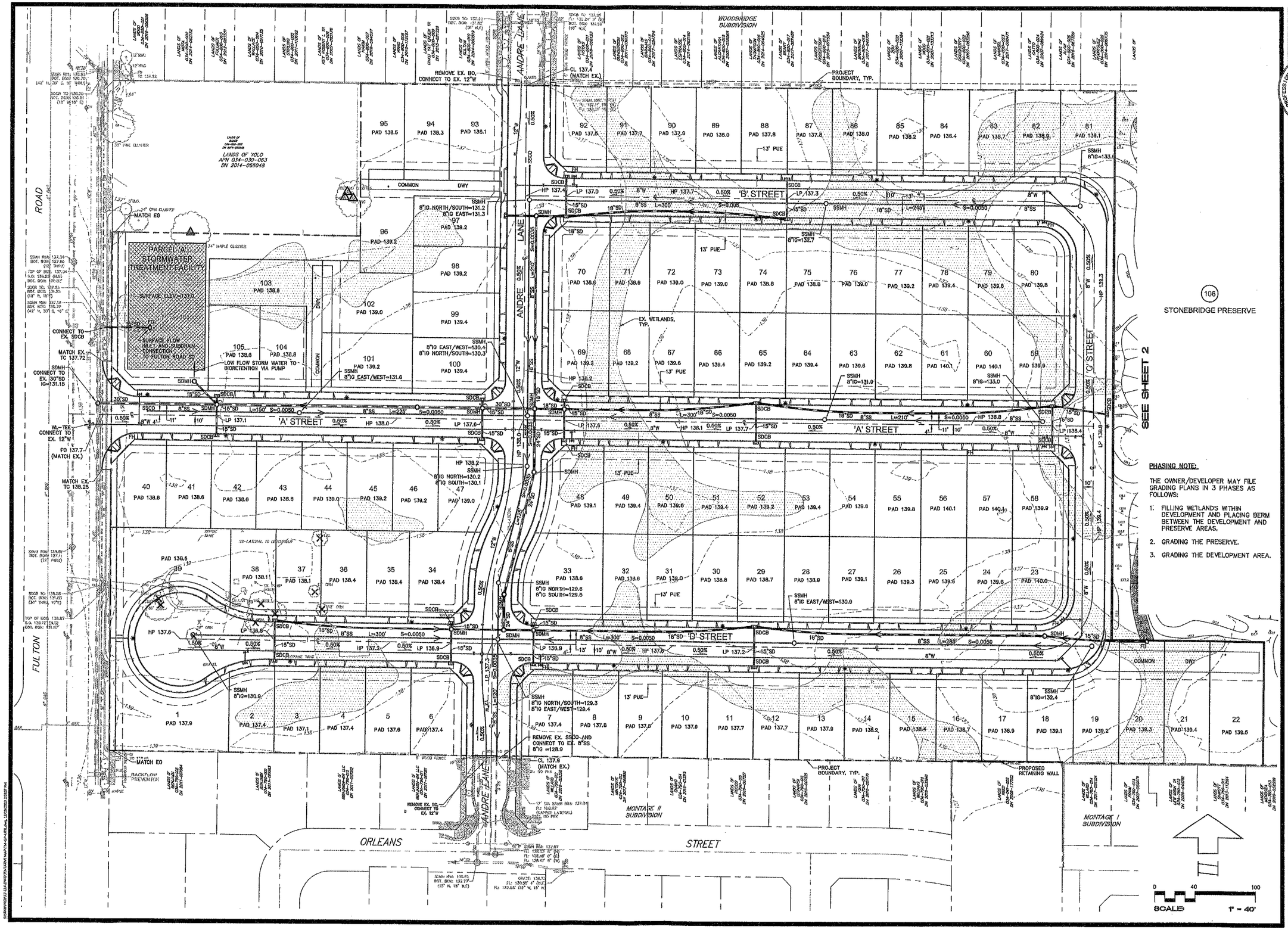

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ANDREW BORDESSA
RCE 34588

TENTATIVE MAP - GRADING, DRAINAGE AND UTILITY PLAN
STONEBRIDGE SUBDIVISION

2220 FULTON ROAD
SANTA ROSA, CALIFORNIA

28.6 ACRES
109 LOTS
1 PARCEL
NOVEMBER 2019

DN 2012-003962
APN 034-030-070

JOB NO.
17-114

SHEET NO.
4
OF 4 SHEETS

Appendix D:
Energy Resources Supporting Information

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Stonebridge Subdivision Project Summary Energy Use

Summary of Energy Use During Construction		(Annually)
Construction off-site vehicle fuel	29,582	gallons (gasoline, diesel)
Construction on-site equipment fuel	88,393	gallons (diesel)
Construction office electricity	32,885	kilowatt hours

Summary of Energy Use During Proposed Operations		(Annually)
Operation vehicle fuel	100,857	gallons (gasoline, diesel)
Operation natural gas	3,051,830	kilo-British Thermal Units
Operation electricity	849,510	kilowatt hours

Summary of Energy Use During Existing Operations		(Annually)
Operation vehicle fuel	830	gallons (gasoline, diesel)
Operation natural gas	29,065	kilo-British Thermal Units
Operation electricity	8,091	kilowatt hours

Increase in Energy Use from Existing Operations to Proposed Operations (Annually)		
Additional operation vehicle fuel	100,027	gallons (gasoline, diesel)
Additional operation natural gas	3,022,765	kilo-British Thermal Units
Additional operation electricity	841,419	kilowatt hours

Construction Vehicle Fuel Calculations

California Air Resource Board. 2019. EMFAC2014 Web Database. March. Website: https://www.arb.ca.gov/emfac/2014/. Accessed December 9, 2019

VMT = Vehicle Miles Traveled
FE = Fuel Economy

EMFAC2014 (v1.0.7) Emissions Inventory
Region Type: County
Region: Sonoma
Calendar Year: 2021
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

									Calculations	
Region	CalYr	VehClass	MdlYr	Speed	Fuel	Population	VMT (mi/day)	Fuel_Consumption (1000 gallons/day)	FE (mi/gallon)	VMT*FE
Sonoma	2021	HHDT	Aggregated	Aggregated	GAS	16.2357747	1901.58782	0.413152808	4.602625917	8752.297397
Sonoma	2021	HHDT	Aggregated	Aggregated	DSL	1990.657711	245931.739	43.4813758	5.656024779	1390996.01
Sonoma	2021	LDA	Aggregated	Aggregated	GAS	127800.6513	5124518.91	176.0277166	29.11200014	149184995.2
Sonoma	2021	LDA	Aggregated	Aggregated	DSL	1744.049132	66522.4195	1.85737646	35.81525929	2382517.703
Sonoma	2021	LDT1	Aggregated	Aggregated	GAS	10787.93283	366089.647	15.28725683	23.94737333	8766885.439
Sonoma	2021	LDT1	Aggregated	Aggregated	DSL	24.12086989	393.849078	0.015190621	25.92712109	10211.37273
Sonoma	2021	LDT2	Aggregated	Aggregated	GAS	37609.02884	1576995.55	71.98203753	21.90818153	34549104.69
Sonoma	2021	LDT2	Aggregated	Aggregated	DSL	61.94278236	2947.49564	0.101025801	29.17567193	85995.16575
Sonoma	2021	LHDT1	Aggregated	Aggregated	GAS	3740.693587	110465.203	11.55172881	9.562655508	1056340.683
Sonoma	2021	LHDT1	Aggregated	Aggregated	DSL	4692.502384	152622.895	8.910520906	17.12839199	2614184.771
Sonoma	2021	LHDT2	Aggregated	Aggregated	GAS	518.3351583	18866.9752	2.158259728	8.741753811	164930.4524
Sonoma	2021	LHDT2	Aggregated	Aggregated	DSL	1142.216547	43547.786	2.801706884	15.5433055	676876.5416
Sonoma	2021	MHDT	Aggregated	Aggregated	GAS	329.7546429	15106.2266	2.391642459	6.31625624	95414.79808
Sonoma	2021	MHDT	Aggregated	Aggregated	DSL	4906.573775	256968.217	30.90363593	8.315145104	2136728.012

Worker Trips
Sum of VMT*FE (Column BI) 194979709.6
Total VMT 7137467.865
Weighted Average FE 27.31777057

Vendor
Sum of VMT*FE (Column BI) 8144223.564
Total VMT 845410.6297
Weighted Average FE 9.633452997

Haul
Sum of VMT*FE (Column BI) 1399748.307
Total VMT 247833.3268
Weighted Average FE 5.647942208

Stonebridge Subdivision Project Construction Assumptions

Site Work Phase
Source: AQ/GHG Appendix, CalEEMod Output
Unmitigated Construction-Demolition,Site Prep,Grading,Paving - Sonoma-San Francisco County, Annual
Date: 12/6/2019 3:39 PM

Construction Schedule	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days
	Demolition	Demolition	4/1/2021	4/28/2021	5	20
	Site Preparation	Site Preparation	4/29/2021	5/12/2021	5	10
	Grading	Grading	5/13/2021	6/23/2021	5	30
	Stormwater Treatment Area	Building Construction	5/13/2021	9/29/2021	5	100
	Paving	Paving	6/24/2021	9/29/2021	5	70

Trips and VMT	Phase Name	Trips per Day			Total Trips				Trips per Phase		VMT per Phase			Fuel Consumption (gallons)		
		Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Num Days	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trips	Vendor Trips	Hauling Trips	Worker Trips	Vendor Trips	Hauling Trips
	Demolition	15	0	17	10.8	7.3	20	20	300	0	17	3,240	0	340	118.60	0.00	3.01
	Site Preparation	18	0	0	10.8	7.3	20	10	180	0	0	1,944	0	0	71.16	0.00	0.00
	Grading	20	0	138	10.8	7.3	20	30	600	0	138	6,480	0	2,760	237.21	0.00	24.43
	Stormwater Treatment Area	337	132	0	10.8	7.3	20	100	33,700	13,200	0	363,960	96,360	0	13,323.20	10,002.64	0.00
	Paving	15	0	0	10.8	7.3	20	70	1,050	0	0	11,340	0	0	415.11	0.00	0.00

Site Work Phase Total Construction VMT (miles)
486,424

Site Work Phase Total Fuel Consumption (gallons)
24,195

Phase 1
Source: AQ/GHG Appendix, CalEEMod Output
Unmitigated Construction-Homes 1-21 - Sonoma-San Francisco County, Annual
Date: 12/6/2019 2:39 PM

Construction Schedule	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days
	Building Construction	Building Construction	9/30/2021	8/3/2022	5	220
	Paving	Paving	8/4/2022	8/17/2022	5	10
	Architectural Coating	Architectural Coating	8/18/2022	8/31/2022	5	10

Trips and VMT	Phase Name	Trips per Day			Total Trips				Trips per Phase		VMT per Phase			Fuel Consumption (gallons)		
		Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Num Days	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trips	Vendor Trips	Hauling Trips	Worker Trips	Vendor Trips	Hauling Trips
	Building Construction	8	2	0	10.8	7.3	20	220	1,760	440	0	19,008	3,212	0	695.81	333.42	0.00
	Paving	15	0	0	10.8	7.3	20	10	150	0	0	1,620	0	0	59.30	0.00	0.00
	Architectural Coating	2	0	0	10.8	7.3	20	10	20	0	0	216	0	0	7.91	0.00	0.00

Phase 1 Total Construction VMT (miles)
24,056

Phase 1 Total Fuel Consumption (gallons)
1,096

Phase 2
Source: AQ/GHG Appendix, CalEEMod Output
Unmitigated Construction-Homes 22-42 - Sonoma-San Francisco County, Annual
Date: 12/6/2019 2:42 PM

Construction Schedule	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days
	Building Construction	Building Construction	4/13/2021	2/14/2022	5	220
	Paving	Paving	2/15/2022	2/28/2022	5	10
	Architectural Coating	Architectural Coating	3/1/2022	3/14/2022	5	10

Trips and VMT	Phase Name	Trips per Day			Total Trips					Trips per Phase		VMT per Phase			Fuel Consumption (gallons)		
		Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Num Days	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trips	Vendor Trips	Hauling Trips	Worker Trips	Vendor Trips	Hauling Trips
	Building Construction	8	2	0	10.8	6.6	20	220	1,760	440	0	19,008	2,904	0	695.81	301.45	0.00
	Paving	15	0	0	10.8	6.6	20	10	150	0	0	1,620	0	0	59.30	0.00	0.00
	Architectural Coating	2	0	0	10.8	6.6	20	10	20	0	0	216	0	0	7.91	0.00	0.00

Phase 2 Total Construction VMT (miles)
23,748

Phase 2 Total Fuel Consumption (gallons)
1,064

Phase 3
Source: AQ/GHG Appendix, CalEEMod Output
Unmitigated Construction-Homes 43-63 - Sonoma-San Francisco County, Annual
Date: 12/6/2019 2:51 PM

Construction Schedule	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days
	Building Construction	Building Construction	10/25/2021	8/26/2022	5	220
	Paving	Paving	8/27/2022	9/9/2022	5	10
	Architectural Coating	Architectural Coating	9/10/2022	9/23/2022	5	10

Trips and VMT	Phase Name	Trips per Day			Total Trips					Trips per Phase		VMT per Phase			Fuel Consumption (gallons)		
		Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Num Days	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trips	Vendor Trips	Hauling Trips	Worker Trips	Vendor Trips	Hauling Trips
	Building Construction	8	2	0	10.8	7.3	20	220	1,760	440	0	19,008	3,212	0	695.81	333.42	0.00
	Paving	15	0	0	10.8	7.3	20	10	150	0	0	1,620	0	0	59.30	0.00	0.00
	Architectural Coating	2	0	0	10.8	7.3	20	10	20	0	0	216	0	0	7.91	0.00	0.00

Phase 3 Total Construction VMT (miles)
24,056

Phase 3 Total Fuel Consumption (gallons)
1,096

Phase 4
Source: AQ/GHG Appendix, CalEEMod Output
Unmitigated Construction-Homes 64-84 - Sonoma-San Francisco County, Annual
Date: 12/6/2019 2:59 PM

Construction Schedule	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days
	Building Construction	Building Construction	5/6/2022	3/9/2023	5	220
	Paving	Paving	3/10/2023	3/23/2023	5	10
	Architectural Coating	Architectural Coating	3/24/2023	4/6/2023	5	10

Trips and VMT	Phase Name	Trips per Day			Total Trips					Trips per Phase		VMT per Phase			Fuel Consumption (gallons)		
		Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Num Days	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trips	Vendor Trips	Hauling Trips	Worker Trips	Vendor Trips	Hauling Trips
	Building Construction	8	2	0	10.8	6.6	20	220	1,760	440	0	19,008	2,904	0	695.81	301.45	0.00
	Paving	15	0	0	10.8	6.6	20	10	150	0	0	1,620	0	0	59.30	0.00	0.00
	Architectural Coating	2	0	0	10.8	6.6	20	10	20	0	0	216	0	0	7.91	0.00	0.00

Phase 4 Total Construction VMT (miles)
23,748

Phase 4 Total Fuel Consumption (gallons)
1,064

Phase 5
Source: AQ/GHG Appendix, CalEEMod Output
Unmitigated Construction-Homes 85-105 - Sonoma-San Francisco County, Annual
Date: 12/6/2019 3:14 PM

Construction Schedule	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days
	Building Construction	Building Construction	11/17/2022	9/20/2023	5	220
	Paving	Paving	9/21/2023	10/4/2023	5	10
	Architectural Coating	Architectural Coating	10/5/2023	10/18/2023	5	10

Trips and VMT	Phase Name	Trips per Day			Total Trips					Trips per Phase		VMT per Phase			Fuel Consumption (gallons)		
		Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Num Days	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trips	Vendor Trips	Hauling Trips	Worker Trips	Vendor Trips	Hauling Trips
	Building Construction	8	2	0	10.8	6.6	20	220	1,760	440	0	19,008	2,904	0	695.81	301.45	0.00
	Paving	15	0	0	10.8	6.6	20	10	150	0	0	1,620	0	0	59.30	0.00	0.00
	Architectural Coating	2	0	0	10.8	6.6	20	10	20	0	0	216	0	0	7.91	0.00	0.00

Phase 5 Total Construction VMT (miles)
23,748

Phase 5 Total Fuel Consumption (gallons)
1,064

Total (All Phases) Construction VMT (miles)
605,780

Total (All Phases) Fuel Consumption (gallons)
29,582

Construction Equipment Fuel Calculation

Site Work Phase

Source: AQ/GHG Appendix, CalEEMod Output

Unmitigated Construction-Demolition,Site Prep,Grading,Paving - Sonoma-San Francisco County, Annual

Date: 12/6/2019 3:39 PM

Construction Schedule	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days
	Demolition	Demolition	4/1/2021	4/28/2021	5	20
	Site Preparation	Site Preparation	4/29/2021	5/12/2021	5	10
	Grading	Grading	5/13/2021	6/23/2021	5	30
	Stormwater Treatment Area	Building Construction	5/13/2021	9/29/2021	5	100
	Paving	Paving	6/24/2021	9/29/2021	5	70

Construction Equipment	Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor	Number of Days	HP Hours	Diesel Fuel Usage
	Demolition	Concrete/Industrial Saws	1	8	81	0.73	20	9,460.80	473.04
	Demolition	Excavators	3	8	158	0.38	20	28,819.20	1,440.96
	Demolition	Rubber Tired Dozers	2	8	247	0.4	20	31,616.00	1,580.80
	Site Preparation	Rubber Tired Dozers	3	8	247	0.4	10	23,712.00	1,185.60
	Site Preparation	Tractors/Loaders/Backhoes	4	8	97	0.37	10	11,484.80	574.24
	Grading	Excavators	2	8	158	0.38	30	28,819.20	1,440.96
	Grading	Graders	1	8	187	0.41	30	18,400.80	920.04
	Grading	Rubber Tired Dozers	1	8	247	0.4	30	23,712.00	1,185.60
	Grading	Scrapers	2	8	367	0.48	30	84,556.80	4,227.84
	Grading	Tractors/Loaders/Backhoes	2	8	97	0.37	30	17,227.20	861.36
	Stormwater Treatment Area	Cranes	1	7	231	0.29	100	46,893.00	2,344.65
	Stormwater Treatment Area	Forklifts	3	8	89	0.2	100	42,720.00	2,136.00
	Stormwater Treatment Area	Generator Sets	1	8	84	0.74	100	49,728.00	2,486.40
	Stormwater Treatment Area	Tractors/Loaders/Backhoes	3	7	97	0.37	100	75,369.00	3,768.45
	Stormwater Treatment Area	Welders	1	8	46	0.45	100	16,560.00	828.00
	Paving	Pavers	2	8	130	0.42	70	61,152.00	3,057.60
	Paving	Paving Equipment	2	8	132	0.36	70	53,222.40	2,661.12
	Paving	Rollers	2	8	80	0.38	70	34,048.00	1,702.40

Total Construction Equipment Fuel Consumption - Site Work Phase **32,875.06 gallons**

Phase 1

Source: AQ/GHG Appendix, CalEEMod Output

Unmitigated Construction-Homes 1-21 - Sonoma-San Francisco County, Annual

Date: 12/6/2019 2:39 PM

Construction Schedule	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days
	Building Construction	Building Construction	9/30/2021	8/3/2022	5	220
	Paving	Paving	8/4/2022	8/17/2022	5	10
	Architectural Coating	Architectural Coating	8/18/2022	8/31/2022	5	10

Construction Equipment	Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor	Number of Days	HP Hours	Diesel Fuel Usage
	Building Construction	Cranes	1	2.8	231	0.29	220	41,265.84	2,063.29
	Building Construction	Forklifts	3	3.2	89	0.2	220	37,593.60	1,879.68
	Building Construction	Generator Sets	1	3.2	84	0.74	220	43,760.64	2,188.03
	Building Construction	Tractors/Loaders/Backhoes	3	2.8	97	0.37	220	66,324.72	3,316.24
	Building Construction	Welders	1	3.2	46	0.45	220	14,572.80	728.64
	Paving	Cement and Mortar Mixers	1	8	9	0.56	10	403.20	20.16
	Paving	Pavers	1	8	130	0.42	10	4,368.00	218.40
	Paving	Paving Equipment	1	8	132	0.36	10	3,801.60	190.08
	Paving	Rollers	2	8	80	0.38	10	4,864.00	243.20
	Paving	Tractors/Loaders/Backhoes	1	8	97	0.37	10	2,871.20	143.56
	Architectural Coating	Air Compressors	1	6	78	0.48	10	2,246.40	112.32

Total Construction Equipment Fuel Consumption - Phase 1 **11,103.60 gallons**

Phase 2

Source: AQ/GHG Appendix, CalEEMod Output

Unmitigated Construction-Homes 22-42 - Sonoma-San Francisco County, Annual

Date: 12/6/2019 2:42 PM

Construction Schedule	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days
	Building Construction	Building Construction	4/13/2021	2/14/2022	5	220
	Paving	Paving	2/15/2022	2/28/2022	5	10
	Architectural Coating	Architectural Coating	3/1/2022	3/14/2022	5	10

Construction Equipment	Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor	Number of Days	HP Hours	Diesel Fuel Usage
	Building Construction	Cranes	1	2.8	231	0.29	220	41,265.84	2,063.29
	Building Construction	Forklifts	3	3.2	89	0.2	220	37,593.60	1,879.68
	Building Construction	Generator Sets	1	3.2	84	0.74	220	43,760.64	2,188.03
	Building Construction	Tractors/Loaders/Backhoes	3	2.8	97	0.37	220	66,324.72	3,316.24
	Building Construction	Welders	1	3.2	46	0.45	220	14,572.80	728.64
	Paving	Cement and Mortar Mixers	1	8	9	0.56	10	403.20	20.16
	Paving	Pavers	1	8	130	0.42	10	4,368.00	218.40
	Paving	Paving Equipment	1	8	132	0.36	10	3,801.60	190.08
	Paving	Rollers	2	8	80	0.38	10	4,864.00	243.20
	Paving	Tractors/Loaders/Backhoes	1	8	97	0.37	10	2,871.20	143.56
	Architectural Coating	Air Compressors	1	6	78	0.48	10	2,246.40	112.32

Total Construction Equipment Fuel Consumption - Phase 2 **11,103.60 gallons**

Phase 3

Source: AQ/GHG Appendix, CalEEMod Output
Unmitigated Construction-Homes 43-63 - Sonoma-San Francisco County, Annual
Date: 12/6/2019 2:51 PM

Construction Schedule	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days
	Building Construction	Building Construction	10/25/2021	8/26/2022	5	220
	Paving	Paving	8/27/2022	9/9/2022	5	10
	Architectural Coating	Architectural Coating	9/10/2022	9/23/2022	5	10

Construction Equipment	Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor	Number of Days	HP Hours	Diesel Fuel Usage
	Building Construction	Cranes	1	2.8	231	0.29	220	41,265.84	2,063.29
	Building Construction	Forklifts	3	3.2	89	0.2	220	37,593.60	1,879.68
	Building Construction	Generator Sets	1	3.2	84	0.74	220	43,760.64	2,188.03
	Building Construction	Tractors/Loaders/Backhoes	3	2.8	97	0.37	220	66,324.72	3,316.24
	Building Construction	Welders	1	3.2	46	0.45	220	14,572.80	728.64
	Paving	Cement and Mortar Mixers	1	8	9	0.56	10	403.20	20.16
	Paving	Pavers	1	8	130	0.42	10	4,368.00	218.40
	Paving	Paving Equipment	1	8	132	0.36	10	3,801.60	190.08
	Paving	Rollers	2	8	80	0.38	10	4,864.00	243.20
	Paving	Tractors/Loaders/Backhoes	1	8	97	0.37	10	2,871.20	143.56
	Architectural Coating	Air Compressors	1	6	78	0.48	10	2,246.40	112.32
							Total Construction Equipment Fuel Consumption - Phase 3		**11,103.60 gallons**

Phase 4

Source: AQ/GHG Appendix, CalEEMod Output
Unmitigated Construction-Homes 64-84 - Sonoma-San Francisco County, Annual
Date: 12/6/2019 2:59 PM

Construction Schedule	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days
	Building Construction	Building Construction	5/6/2022	3/9/2023	5	220
	Paving	Paving	3/10/2023	3/23/2023	5	10
	Architectural Coating	Architectural Coating	3/24/2023	4/6/2023	5	10

Construction Equipment	Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor	Number of Days	HP Hours	Diesel Fuel Usage
	Building Construction	Cranes	1	2.8	231	0.29	220	41,265.84	2,063.29
	Building Construction	Forklifts	3	3.2	89	0.2	220	37,593.60	1,879.68
	Building Construction	Generator Sets	1	3.2	84	0.74	220	43,760.64	2,188.03
	Building Construction	Tractors/Loaders/Backhoes	3	2.8	97	0.37	220	66,324.72	3,316.24
	Building Construction	Welders	1	3.2	46	0.45	220	14,572.80	728.64
	Paving	Cement and Mortar Mixers	1	8	9	0.56	10	403.20	20.16
	Paving	Pavers	1	8	130	0.42	10	4,368.00	218.40
	Paving	Paving Equipment	1	8	132	0.36	10	3,801.60	190.08
	Paving	Rollers	2	8	80	0.38	10	4,864.00	243.20
	Paving	Tractors/Loaders/Backhoes	1	8	97	0.37	10	2,871.20	143.56
	Architectural Coating	Air Compressors	1	6	78	0.48	10	2,246.40	112.32
							Total Construction Equipment Fuel Consumption - Phase 4		**11,103.60 gallons**

Phase 5

Source: AQ/GHG Appendix, CalEEMod Output
Unmitigated Construction-Homes 85-105 - Sonoma-San Francisco County, Annual
Date: 12/6/2019 3:14 PM

Construction Schedule	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days
	Building Construction	Building Construction	11/17/2022	9/20/2023	5	220
	Paving	Paving	9/21/2023	10/4/2023	5	10
	Architectural Coating	Architectural Coating	10/5/2023	10/18/2023	5	10

Construction Equipment	Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor	Number of Days	HP Hours	Diesel Fuel Usage
	Building Construction	Cranes	1	2.8	231	0.29	220	41,265.84	2,063.29
	Building Construction	Forklifts	3	3.2	89	0.2	220	37,593.60	1,879.68
	Building Construction	Generator Sets	1	3.2	84	0.74	220	43,760.64	2,188.03
	Building Construction	Tractors/Loaders/Backhoes	3	2.8	97	0.37	220	66,324.72	3,316.24
	Building Construction	Welders	1	3.2	46	0.45	220	14,572.80	728.64
	Paving	Cement and Mortar Mixers	1	8	9	0.56	10	403.20	20.16
	Paving	Pavers	1	8	130	0.42	10	4,368.00	218.40
	Paving	Paving Equipment	1	8	132	0.36	10	3,801.60	190.08
	Paving	Rollers	2	8	80	0.38	10	4,864.00	243.20
	Paving	Tractors/Loaders/Backhoes	1	8	97	0.37	10	2,871.20	143.56
	Architectural Coating	Air Compressors	1	6	78	0.48	10	2,246.40	112.32
							Total Construction Equipment Fuel Consumption - Phase 5		**11,103.60 gallons**

	Total Construction Equipment Fuel Consumption - All Phases	**88,393.06 gallons**

Notes:
Equipment assumptions are provided in the CalEEMod output files.
Fuel usage estimate of 0.05 gallons of diesel fuel per horsepower-hour is from the SCAQMD CEQA Air Quality Handbook, Table A9-3E.
South Coast Air Quality Management District. 1993. Air Quality Handbook, Table A9-3E.
Website: http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook. Accessed April 18, 2019.

Construction Office Electricity Calculation

Energy Appendix: CalEEMod Typical Construction Trailer

Typical Construction Trailer - Sonoma-San Francisco County, Annual

Date: 12/9/2019 12:30 PM

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	12837.6	2.2748	1.7000e-004	3.0000e-005	2.2894
Total		**2.2748**	**1.7000e-004**	**3.0000e-005**	**2.2894**

kWh/yr = kilowatt hours per year

Energy by Land Use - Electricity

Annual	12,837.6	kWh/yr
Total Over Construction	**32,885.359**	**kWh**

Total Construction Schedule	
Start	4/1/2021
End	10/23/2023
Total Calender Days	935
Years	2.56

Proposed Operation Fuel Calculation

California Air Resource Board (ARB). 2019. EMFAC2014 Web Database. Website: https://www.arb.ca.gov/emfac/2014/. Accessed December 6, 2019.

EMFAC2014 (v1.0.7) Emissions Inventory
Region Type: County
Region: Sonoma
Calendar Year: 2023
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

VMT = Vehicle Miles Traveled
FE = Fuel Economy

Given *Calculations*

Region	CalYr	VehClass	MdlYr	Speed	Fuel	Population	VMT	Fuel Consumption	FE	VMT*FE
Sonoma	2023	HHDT	Aggregated	Aggregated	GAS	15.7921137	1915.82923	0.406162509	4.716903	9036.78101
Sonoma	2023	HHDT	Aggregated	Aggregated	DSL	2026.45049	262377.919	44.1264226	5.94605	1560112.244
Sonoma	2023	LDA	Aggregated	Aggregated	GAS	131740.806	5232325.79	169.3754821	30.89187	161636340.8
Sonoma	2023	LDA	Aggregated	Aggregated	DSL	1830.07426	69161.557	1.818928881	38.02323	2629746.01
Sonoma	2023	LDT1	Aggregated	Aggregated	GAS	9835.57677	342710.039	13.28620674	25.79442	8840007.763
Sonoma	2023	LDT1	Aggregated	Aggregated	DSL	21.1372624	342.355783	0.012601421	27.16803	9301.132206
Sonoma	2023	LDT2	Aggregated	Aggregated	GAS	37182.887	1570398.27	66.34723722	23.66938	37170360.52
Sonoma	2023	LDT2	Aggregated	Aggregated	DSL	68.4421596	3145.30001	0.101278513	31.05595	97680.26589
Sonoma	2023	LHDT1	Aggregated	Aggregated	GAS	3248.98104	93060.1141	9.689461783	9.60426	893773.5683
Sonoma	2023	LHDT1	Aggregated	Aggregated	DSL	4259.82543	134470.385	7.779018281	17.28629	2324494.392
Sonoma	2023	LHDT2	Aggregated	Aggregated	GAS	465.626052	16974.9664	1.920725447	8.837789	150021.1735
Sonoma	2023	LHDT2	Aggregated	Aggregated	DSL	1064.98752	40269.4807	2.548835573	15.79917	636224.2806
Sonoma	2023	MCY	Aggregated	Aggregated	GAS	7219.59756	47125.1132	1.336180746	35.26852	1662032.853
Sonoma	2023	MDV	Aggregated	Aggregated	GAS	28502.7581	944468.156	55.91709375	16.89051	15952547.57
Sonoma	2023	MDV	Aggregated	Aggregated	DSL	475.0018	19880.7105	0.849399146	23.40562	465320.2822
Sonoma	2023	MH	Aggregated	Aggregated	GAS	824.685098	6990.84224	1.058401602	6.605094	46175.17129
Sonoma	2023	MH	Aggregated	Aggregated	DSL	241.833838	2132.10557	0.222229451	9.594163	20455.7683
Sonoma	2023	MHDT	Aggregated	Aggregated	GAS	317.157457	15041.1913	2.34462842	6.415171	96491.80874
Sonoma	2023	MHDT	Aggregated	Aggregated	DSL	5268.40201	272457.103	32.33188789	8.426885	2295964.69
Sonoma	2023	OBUS	Aggregated	Aggregated	GAS	148.894149	7849.06819	1.189541763	6.598396	51791.26397
Sonoma	2023	OBUS	Aggregated	Aggregated	DSL	267.595855	21731.9337	2.928975321	7.419637	161243.0593
Sonoma	2023	SBUS	Aggregated	Aggregated	GAS	24.606765	1255.66669	0.10478637	11.98311	15046.79306
Sonoma	2023	SBUS	Aggregated	Aggregated	DSL	186.005273	7047.36746	0.968964327	7.273093	51256.15746
Sonoma	2023	UBUS	Aggregated	Aggregated	GAS	50.4541115	7343.41343	1.471591499	4.990117	36644.49053
Sonoma	2023	UBUS	Aggregated	Aggregated	DSL	60.797577	8741.84971	1.957538525	4.465736	39038.79048

	Vehicles	
Sum of VMT*FE	**236851107.6**	
Total VMT	**9129216.523**	
Weighted Average FE	**25.9442973**	**miles/gallon**

Total VMT

Source: AQ/GHG Appendix, CalEEMod Output
Stonebridge Subdivision Project-Existing Emissions - Solano-San Francisco County, Annual
Date: 12/5/2019 7:43 PM

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	1,132.95	1,132.95	1132.95	2,616,670	2,616,670
Total	1,132.95	1,132.95	1,132.95	2,616,670	2,616,670

	VMT	Fuel Consumption
Vehicles	2,616,670	100,857
Total	**2,616,670**	**100,857**

Total VMT	**2,616,670**	**miles**
Fuel consumption	**100,857**	**gallons per year**

Operation Natural Gas Use

Source: AQ/GHG Appendix, CalEEMod Output

Stonebridge Subdivision Project- Unmitigated Operational Only - Sonoma-San Francisco County, Annual

Date: 12/5/2019 7:04 PM

kBTU/yr = kilo-British Thermal Units/year

CF = cubic feet

Single Family Housing	3,051,830	kBTU/yr
Total	3,051,830	kBTU/yr

Dwellings	Per dwelling	
105	29065.05	kBTU/yr

Conversion from kBTU/yr to CF/yr

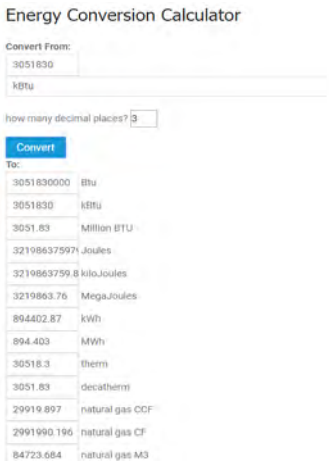
Abraxas. 2019. Energy Conversion Calculator.

Website: https://www.abraxasenergy.com/energy-resources/toolbox/conversion-calculators/energy/. Accessed December 6, 2019.

Equivalency:

3,051,830 kBTU/yr

2,991,990 CF/yr natural gas



Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	3.05183e+006	0.0165	0.1406	0.0598	9.0000e-004		0.0114	0.0114		0.0114	0.0114	0.0000	162.8575	162.8575	3.1200e-003	2.9900e-003	163.8253
Total		**0.0165**	**0.1406**	**0.0598**	**9.0000e-004**		**0.0114**	**0.0114**		**0.0114**	**0.0114**	**0.0000**	**162.8575**	**162.8575**	**3.1200e-003**	**2.9900e-003**	**163.8253**

Proposed Operation Electricity Use

Source: AQ/GHG Appendix, CalEEMod Output

Stonebridge Subdivision Project- Unmitigated Operational Only - Sonoma-San Francisco County, Annual

Date: 12/5/2019 7:04 PM

kWh/yr = kilowatt hours per year

Land Use	Electricity Use (kWh/yr)
Other Asphalt Surfaces	0
Other Non-Asphalt Surfaces	0
Single Family Housing	849510

Total **849,510 kWh/yr**

Dwellings	Per dwelling
105	8091 kWh/year

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	849510	150.5296	0.0112	2.3100e-003	151.4980
Total		**150.5296**	**0.0112**	**2.3100e-003**	**151.4980**

Electricity Use after accounting for onsite renewable (amount to be obtained from the grid):

Land Use	Electricity Use (kWh/yr)
Other Asphalt Surfaces	-77029.3
Other Non-Asphalt Surfaces	-77029.3
Single Family Housing	772481

Total **618,422 kWh/yr**

Dwellings	Per dwelling
105	5890 kWh/year

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	-77029.3	-13.6493	-0.0010	-0.0002	-13.7371
Other Non-Asphalt Surfaces	-77029.3	-13.6493	-0.0010	-0.0002	-13.7371
Single Family Housing	772481	136.8804	0.0102	2.1000e-003	137.7609
Total		**109.5818**	**8.1400e-003**	**1.6800e-003**	**110.2867**

Existing Operation Fuel Calculation

California Air Resource Board (ARB). 2019. EMFAC2014 Web Database. Website: https://www.arb.ca.gov/emfac/2014/. Accessed December 6, 2019.

EMFAC2014 (v1.0.7) Emissions Inventory
Region Type: County
Region: Sonoma
Calendar Year: 2023
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

VMT = Vehicle Miles Traveled
FE = Fuel Economy

Given									*Calculations*	
Region	CalYr	VehClass	MdlYr	Speed	Fuel	Population	VMT	Fuel Consumption	FE	VMT*FE
Sonoma	2023	HHDT	Aggregated	Aggregated	GAS	15.7921137	1915.82923	0.406162509	4.716903	9036.78101
Sonoma	2023	HHDT	Aggregated	Aggregated	DSL	2026.45049	262377.919	44.1264226	5.94605	1560112.244
Sonoma	2023	LDA	Aggregated	Aggregated	GAS	131740.806	5232325.79	169.3754821	30.89187	161636340.8
Sonoma	2023	LDA	Aggregated	Aggregated	DSL	1830.07426	69161.557	1.818928881	38.02323	2629746.01
Sonoma	2023	LDT1	Aggregated	Aggregated	GAS	9835.57677	342710.039	13.28620674	25.79442	8840007.763
Sonoma	2023	LDT1	Aggregated	Aggregated	DSL	21.1372624	342.355783	0.012601421	27.16803	9301.132206
Sonoma	2023	LDT2	Aggregated	Aggregated	GAS	37182.887	1570398.27	66.34723722	23.66938	37170360.52
Sonoma	2023	LDT2	Aggregated	Aggregated	DSL	68.4421596	3145.30001	0.101278513	31.05595	97680.26589
Sonoma	2023	LHDT1	Aggregated	Aggregated	GAS	3248.98104	93060.1141	9.689461783	9.60426	893773.5683
Sonoma	2023	LHDT1	Aggregated	Aggregated	DSL	4259.82543	134470.385	7.779018281	17.28629	2324494.392
Sonoma	2023	LHDT2	Aggregated	Aggregated	GAS	465.626052	16974.9664	1.920725447	8.837789	150021.1735
Sonoma	2023	LHDT2	Aggregated	Aggregated	DSL	1064.98752	40269.4807	2.548835573	15.79917	636224.2806
Sonoma	2023	MCY	Aggregated	Aggregated	GAS	7219.59756	47125.1132	1.336180746	35.26852	1662032.853
Sonoma	2023	MDV	Aggregated	Aggregated	GAS	28502.7581	944468.156	55.91709375	16.89051	15952547.57
Sonoma	2023	MDV	Aggregated	Aggregated	DSL	475.0018	19880.7105	0.849399146	23.40562	465320.2822
Sonoma	2023	MH	Aggregated	Aggregated	GAS	824.685098	6990.84224	1.058401602	6.605094	46175.17129
Sonoma	2023	MH	Aggregated	Aggregated	DSL	241.833838	2132.10557	0.222229451	9.594163	20455.7683
Sonoma	2023	MHDT	Aggregated	Aggregated	GAS	317.157457	15041.1913	2.34462842	6.415171	96491.80874
Sonoma	2023	MHDT	Aggregated	Aggregated	DSL	5268.40201	272457.103	32.33188789	8.426885	2295964.69
Sonoma	2023	OBUS	Aggregated	Aggregated	GAS	148.894149	7849.06819	1.189541763	6.598396	51791.26397
Sonoma	2023	OBUS	Aggregated	Aggregated	DSL	267.595855	21731.9337	2.928975321	7.419637	161243.0593
Sonoma	2023	SBUS	Aggregated	Aggregated	GAS	24.606765	1255.66669	0.10478637	11.98311	15046.79306
Sonoma	2023	SBUS	Aggregated	Aggregated	DSL	186.005273	7047.36746	0.968964327	7.273093	51256.15746
Sonoma	2023	UBUS	Aggregated	Aggregated	GAS	50.4541115	7343.41343	1.471591499	4.990117	36644.49053
Sonoma	2023	UBUS	Aggregated	Aggregated	DSL	60.797577	8741.84971	1.957538525	4.465736	39038.79048

	Vehicles	
Sum of VMT*FE	**236851107.6**	
Total VMT	**9129216.523**	
Weighted Average FE	**25.9442973**	**miles/gallon**

Total VMT

Source: AQ/GHG Appendix, CalEEMod Output
Stonebridge Subdivision Project- Unmitigated Operational Only - Sonoma-San Francisco County, Annual
Date: 12/5/2019 7:04 PM

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	9.44	9.54	8.55	21,542	21,542
Total	9.44	9.54	8.55	21,542	21,542

	VMT	**Fuel Consumption**
Vehicles	21,542	830
Total	**21,542**	**830**

Total VMT	**21,542**	**miles**
Fuel consumption	**830**	**gallons per year**

Existing Operation Natural Gas Use

Source: AQ/GHG Appendix, CalEEMod Output

Stonebridge Subdivision Project-Existing Emissions - Solano-San Francisco County, Annual

Date: 12/5/2019 7:43 PM

kBTU/yr = kilo-British Thermal Units/year

CF = cubic feet

Single Family Housing	29065.1	kBTU/yr
Total	29,065	kBTU/yr

Dwellings	Per dwelling	
1	29065.1	kBTU/yr

Conversion from kBTU/yr to CF/yr

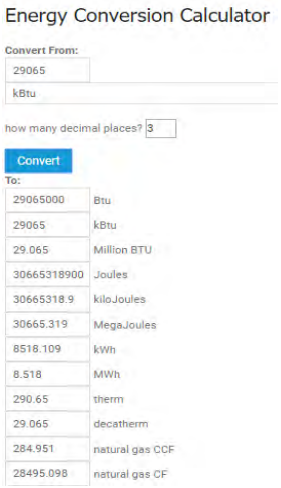
Abraxas. 2019. Energy Conversion Calculator.

Website: https://www.abraxasenergy.com/energy-resources/toolbox/conversion-calculators/energy/. Accessed December 6, 2019.

Equivalency:

29,065 kBTU/yr

28,495 CF/yr natural gas



Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	29065.1	1.6000e-004	1.3400e-003	5.7000e-004	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.5510	1.5510	3.0000e-005	3.0000e-005	1.5602
Total		**1.6000e-004**	**1.3400e-003**	**5.7000e-004**	**1.0000e-005**		**1.1000e-004**	**1.1000e-004**		**1.1000e-004**	**1.1000e-004**	**0.0000**	**1.5510**	**1.5510**	**3.0000e-005**	**3.0000e-005**	**1.5602**

Existing Operation Electricity Use

Source: AQ/GHG Appendix, CalEEMod Output

Stonebridge Subdivision Project-Existing Emissions - Solano-San Francisco County, Annual

Date: 12/5/2019 7:43 PM

kWh/yr = kilowatt hours per year

Land Use	Electricity Use (kWh/yr)
Single Family Housing	8090.57
Total	**8,091 kWh/yr**

Dwellings	Per dwelling
1	8091 kWh/year

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	8090.57	1.4336	1.1000e-004	2.0000e-005	1.4428
Total		**1.4336**	**1.1000e-004**	**2.0000e-005**	**1.4428**

Typical Construction Trailer - Sonoma-San Francisco County, Annual

Typical Construction Trailer

Sonoma-San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	0.72	1000sqft	0.02	720.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	75
Climate Zone	4			**Operational Year**	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	390.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Typical construction trailer for estimate of energy usage
CO2 intensity factor adjusted based on Renewable Portfolio Standard

Land Use - 12'x60' single-wide unit (720 sq ft)

Construction Phase - Typical construction trailer for energy use estimates - estimates would be included in the operational component of the results

Off-road Equipment - Zeroed out construction equipment

Table Name	Column Name	Default Value	New Value
tblProjectCharacteristics	CO2IntensityFactor	641.35	390.65

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2.2748	2.2748	1.7000e-004	3.0000e-005	2.2894
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2.2748	2.2748	1.7000e-004	3.0000e-005	2.2894
NaturalGas Mitigated	6.0000e-005	5.8000e-004	4.9000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.6290	0.6290	1.0000e-005	1.0000e-005	0.6327
NaturalGas Unmitigated	6.0000e-005	5.8000e-004	4.9000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.6290	0.6290	1.0000e-005	1.0000e-005	0.6327

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	12837.6	2.2748	1.7000e-004	3.0000e-005	2.2894
Total		**2.2748**	**1.7000e-004**	**3.0000e-005**	**2.2894**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	12837.6	2.2748	1.7000e-004	3.0000e-005	2.2894
Total		**2.2748**	**1.7000e-004**	**3.0000e-005**	**2.2894**

Appendix E:
Paleontological Records Search

draft

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Kenneth L. Finger, Ph.D.
Consulting Paleontologist

18208 Judy St., Castro Valley, CA 94546-2306 510.305.1080 klfpaleo@comcast.net

August 14, 2019

Dana DePietro
FirstCarbon Solutions
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

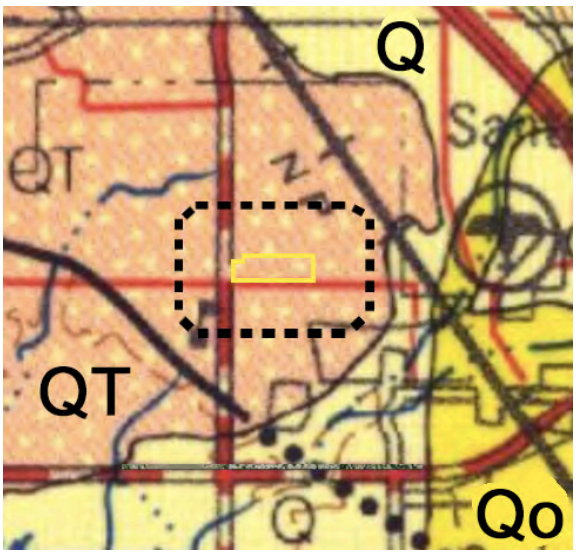
Re: Paleontological Records Search: Stoneridge Subdivision Project (5144.0001), City of Santa Rosa, Sonoma County

Dear Dr. DePietro:

As per your request, I have performed a records search on the University of California Museum of Paleontology (UCMP) database for the proposed Stoneridge Subdivision project in Santa Rosa. This 26.5 project site is on flat terrain on the east side of Fulton Road, between Tedeschi Drive and Orleans Street. Its PRS location is S½, S½, SE¼, Sec. 5, T7N, R8W, Sebastopol quadrangle (2015 USGS 7.5'-series topographic map). Google Earth imagery shows the parcel is barren of structures, mostly covered with grass and a few trees in the NW and SW corners. It may have been used as an agricultural field in the past.

Geologic Mapping

On the part of the Wagner and Bortugno (1982) geologic map shown here, the surface of the project site (yellow outline at center) and surrounding half-mile search area (dashed black outline) are entirely on Pliocene beds of the Huichica and Glen Ellen Formations (QT). The other units shown on this part of the map are Holocene alluvium (Q) and older (late Pleistocene) alluvium (Qo); being younger than QT, neither would be present in the subsurface of the project site.



Paleontological Records Search

A paleontological records search of the UCMP database revealed that Sonoma County has 10 late Pleistocene (Rancholabrean) vertebrate localities. The recovered fossils include *Clemmys* (Western pond turtle), *Mammut americanum* (American mammoth), *Bison antiquus* (extinct bison), *Glossotherium harlani* (Harlan's ground sloth), *G. robustus* (robust ground sloth), and *Equus* (horse). Although there are 11 Pliocene vertebrate localities in Sonoma County, none are in the Huichica or Glen Ellen formations. Sonoma County is also represented by 11 Pliocene plant lo-

calities in the Sonoma Tuffs (Sonoma Volcanics), which yielded a diverse Pliocene flora that includes numerous type specimens established by Dorf (1930), but that unit is not mapped in the vicinity of the project site.

Paleontological Assessment and Mitigation Recommendations

Although the Glen Ellen or Huichica formations are continental deposits that could contain significant paleontological resources, no significant paleontological resources are recorded from those units on the UCMP database. Hence, the project site appears to have no paleontological potential or sensitivity. I therefore do not recommend a pre-construction paleontological walkover of the site or paleontological monitoring of earth-disturbing activities. In the highly unlikely event that any significant fossils (i.e., bones, teeth, or unusually abundant and well-preserved invertebrates or plants) are unearthed, construction activities are to be diverted at least 15 feet away from the discovery until a professional paleontologist assesses the find for possible salvage and deposition in an appropriate repository such as the UCMP.

Sincerely,

Ken Finger

References Cited

Dorf, E., 1930, The Pliocene floras of California: Sonoma flora. Carnegie Institute of Washington Publication 412: 37-48.

Wagner, D.L,, and Bortugno, E.J., 1982, Geologic map of the Santa Rosa quadrangle, California, 1:250,000. California Geological Survey, Regional Geologic Map Series, Map No. 2A (Geology).

Appendix F:
Phase I Environmental Site Assessment

draft

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PHASE I
ENVIRONMENTAL
SITE ASSESSMENT

2220 Fulton Road
Santa Rosa
California

FOR

D.M. Jacobson and Sons, Inc.
454 Las Gallinas, #355
San Rafael, CA 94903

March 21, 2019
19-ENV5373

655 12TH STREET, #126 • OAKLAND, CA • 94607 • TEL / FAX 510-834-9099 / 9098

March 21, 2019
19-ENV5373

D.M. Jacobson and Sons, Inc.
454 Las Gallinas, #355
San Rafael, CA 94903

Attention: Mr. David Jacobson

Subject: Phase I Environmental Site Assessment Report
2220 Fulton Road
Santa Rosa, California 95403

Dear Mr. Jacobson:

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-13/AAI of 2220 Fulton Road in Santa Rosa, California, the property. Any exceptions to, or deletions from, this practice are described in Section 1 of this report. This assessment has revealed **no obvious evidence of a recognized environmental condition** in connection with the property that warrants further investigation and/or documentation at this time.

Should you have any questions regarding this report, please contact the undersigned.

Sincerely,

Basics Environmental, Inc.

Zachary Shamroukh
Project Manager

TABLE OF CONTENTS

PROFESSIONAL CERTIFICATION

1.0 INTRODUCTION 1-1

1.1 Purpose of Investigation 1-1
1.2 Scope of Work 1-1
1.3 Special Terms and Conditions 1-2
1.4 Limitations and Exceptions 1-2
1.5 User Responsibilities 1-2

2.0 SITE DESCRIPTION AND RECONNAISSANCE 2-1

2.1 Site Description and Uses 2-1
2.1.1 Interviews 2-1
2.2 Adjacent Properties 2-4
2.2.1 Immediate Adjacent Properties 2-4
2.2.2 Wells 2-4
2.3 Non-ASTM E1527 Considerations 2-5
2.3.1 Asbestos Containing Construction Materials 2-5
2.3.2 Lead-Based Paint 2-5
2.3.3 Radon 2-6
2.3.4 Mold 2-6
2.3.5 Wetlands 2-8

3.0 PHYSICAL SITE SETTING 3-1

3.1 Geomorphic Description 3-1
3.2 Geologic Setting 3-1
3.3 Hydrogeologic Setting 3-2

4.0 HISTORICAL REVIEW 4-1

5.0 ENVIRONMENTAL DATABASE REVIEW 5-1

5.1 Agency Record Review 5-1
5.2 Local Agency File Review 5-2

6.0 CONCLUSIONS AND RECOMMENDATIONS 6-1

6.1 Conclusions 6-1
6.1.1 Data Gaps 6-1
6.1.2 Environmental Issues/*De Minimis* Conditions 6-2
6.1.3 Recognized Environmental Conditions (RECs) 6-5
6.1.4 Controlled Recognized Environmental Conditions (CRECs) 6-5
6.1.5 Historical Recognized Environmental Conditions (HRECs) 6-6
6.1.6 Recommendations 6-6

List of Drawings

Drawing 1: Site Location
Drawing 2: Aerial Photograph (2018)
Drawing 3: Site Plan

Assessor's Parcel Map
Photographs: 1-11

Appendices

APPENDIX A: Environmental Data Resources, Inc. Report
APPENDIX B: Historical Aerial Photographs
APPENDIX C: Historical U.S.G.S. Topographic Maps
APPENDIX D: Statement of Qualifications

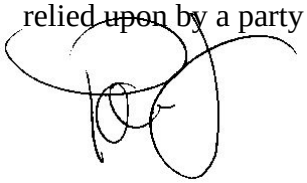
PROFESSIONAL CERTIFICATION

PHASE I ENVIRONMENTAL SITE ASSESSMENT
2220 Fulton Road
Santa Rosa, California
For
D.M. Jacobson and Sons, Inc.
19-ENV5373
March 21, 2019

I declare that, to the best of my professional knowledge and belief, 1 meet the definition of “Environmental Professional” as defined by the Environmental Protection Agency's Final Rule (40 CFR 312.21). I have the specific qualifications based on education, training and experience to assess a property of the nature, history and setting. In performing Phase I Environmental Site Assessments, I develop and perform the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

The findings, interpretations of data, recommendations, specifications or professional opinions are presented within the limits prescribed by available information at the time the report was prepared, in accordance with generally accepted professional environmental practice and within the requirements by the Client. There is no other warranty, either expressed or implied. The data and findings of this report are based on the readily available data and information obtained from numerous public and private agencies regarding the subject site and its immediate vicinity. Additional search (at greater cost) may or may not disclose information which may significantly modify the findings of this report. We accept no liability on completeness or accuracy of the information presented and or provided to us, or any conclusions and decisions which may be made by the Client or others regarding the subject site.

This report was prepared solely for the benefit of Basic's Client. Basics consents to the release of this report to third parties involved in the transaction for which the report was prepared, including without limitation, lenders, title companies, public institutions, attorneys, and other consultants. However, any use of or reliance upon this report shall be solely at the risk of such party and without legal recourse against Basics, or its subcontractors, affiliates, or their respective employees, officers, or directors, regardless of whether the action in which recovery of damage is sought is based upon contract, tort (including the sole, concurrent or other negligence and strict liability of Basics), statute or otherwise. This report shall not be used or relied upon by a party that does not agree to be bound by the above statements.



Donavan G. Tom, M.B.A., E.P., R.E.P.A.
Principal Consultant

1.0 INTRODUCTION

1.1 Purpose of Investigation

Basics Environmental, Inc. (Basics) has performed this Phase I Environmental Site Assessment (ESA) for D.M. Jacobson and Sons, Inc. pursuant to our signed agreement on March 4, 2019. The "subject site" is at 2220 Fulton Road, Santa Rosa, California (APN 034-030-070). The purpose of this ESA is to:

- Observe site conditions at the property in accordance with the protocols set forth by the *American Society for Testing and Materials (ASTM) Standard E1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* and *U.S. Environmental Protection Agency's All Appropriate Inquiry (AAI) Final Rule 40 CFR Part 312*, except where modified by the proposal;

- Identify to the extent feasible recognized environmental conditions in connection with the subject site. The ESA is intended to evaluate the potential for the presence of hazardous or toxic chemicals in the soil and/or groundwater resulting from past and present land use activities. To the extent possible, potential sources of hazardous or toxic chemicals from adjacent off-site operations will also be evaluated; and

- Render findings and professional opinion regarding the potential for adverse environmental impacts on or adjacent to the site.

1.2 Scope of Work

The scope of work performed for this ESA consisted of the following tasks:

- Field reconnaissance and personal interviews to evaluate environmental land-use conditions on the subject site and view adjacent properties;

- Aerial photograph, City Directory and/or Fire Insurance/Topographic Map review (typically back to 1940 or first developed use of the property) to evaluate former environmental land-use conditions on the subject site and adjacent properties;

- Review of federal, state and county files and environmental database search report obtained from a commercial service providing up to date and current information;

- Evaluation of the physical setting (geomorphic, geologic and hydrogeologic) of the subject site property; and

- Preparation of this ESA report to present the findings and professional opinions regarding potential recognized environmental conditions on the site.

The work for this ESA was performed within the client approved scope of work and budget for the investigation.

1.3 Special Terms and Conditions

The goal of this ESA is to identify recognized environmental conditions indicating the presence or likely presence of any hazardous substances or petroleum hydrocarbons in structures, ground, groundwater, or surface water of the property. Recognized environmental conditions are not intended to include *de minimis* conditions that do not present risks to public health or environment and that would not be subject to enforcement actions by government agencies.

1.4 Limitations and Exceptions

This ESA only includes a visual evaluation of the presence of asbestos, lead paint, radon, or mold, if applicable. In addition, this ESA does not include the results of any sampling, monitoring, or other types of field and/or laboratory testing or investigation.

1.5 User Responsibilities

The user of this ESA will be responsible for: (1) determining the relationship of the purchase price to the value of the property; (2) disclosure of specialized knowledge, experience or information which may affect the environmental condition of the subject site; and (3) disclosure of any environmental cleanup liens against the property within recorded land title records, if applicable. None of the above was provided by the client for our review, however a previous Phase I Environmental Site Assessment was provided for our review.

2.0 SITE DESCRIPTION AND RECONNAISSANCE

2.1 Site Description and Uses

2.1.1 Interviews

A Basics representative (Mr. Zachary Shamroukh) visited the subject site on March 20, 2019. Basics observed the various facilities and operations conducted at the site and also noted the land-use in the vicinity of the site. Ms. Linda Peterson arranged access with to available areas. Ms. Peterson was also briefly interviewed prior to the site visit. A standard environmental questionnaire was provided to Mr. David Jacobson, owner's representative for the subject site, to obtain disclosure of specialized knowledge, experience or information that may affect the environmental condition of the subject site; however, Mr. Jacobson did not complete the questionnaire prior to report submission.

Discussions with Ms. Peterson indicated to her knowledge that the site is currently developed with a small residential dwelling on the southwest portion. According to Mr. Peter Hellmann of Builders Land Group, the rest of the roughly 28–acres currently consists of both uplands and federally protected wetlands. Ms. Peterson indicated that, for purposes of this assessment, she has no other specialized knowledge or experience pertaining to the site or the adjacent properties that is material to RECs in connection with the subject property.

Additional information obtained from the interviews is incorporated within the appropriate sections of this report.

2.1.2 Site Description and Uses

The subject site is located in the City of Santa Rosa, along the west side of Fulton Road, approximately 500-feet to the north of the corner of Fulton Road and San Miguel Avenue, and approximately one mile to the northwest of the Santa Rosa Creek (See Drawings 1 and 2). The subject site consists a 28.49-acre "rectangular" shaped parcel of land improved on the southwestern portion with a five (5) bedroom, one (1) bathroom, 1,824-square foot two-story residential dwelling (See Photos 1-4) with associated sheds, paved and landscaped areas.

The two-story residential dwelling is composed of wood framing on concrete perimeter foundation with stucco covered masonry exterior walls.

Utilities including electric and natural gas are publicly supplied. An onsite well is located on site and supplies water. Sewage is handled by an onsite septic system. Underground services for natural gas, water, and sanitary sewers traverse the sidewalk and street along the west side of the subject site. No obvious evidence of electrical transformers was observed at the subject site. However, telephone mounted electrical transformers were noted along Fulton Road. Such units are notable because they may be a polychlorinated biphenyl (PCB) source. PCB units may subject the owner/operator to various requirements. The release of PCB fluids or their combustion products (in the event of a fire) is a potential environmental liability and may require remediation. Observations of the area surrounding these features did not reveal any obvious signs of PCBs, hazardous material stains and/or spills. In addition, these features appeared to fairly new with no labels identifying PCBs. Due to the age of the features and lack of PCB labels the probability of PCBs is low.

The general area surrounding the property is developed residential. The subject site is zoned Planned Development (PD 04-007). A site plan illustrating the site and adjacent properties is shown in Drawing 3.

The two-story residential dwelling (2220 Fulton Road) is currently occupied by private residents and utilized as a residential dwelling.

2.1.3 Environmental Land-Use Conditions

The subject site was evaluated for the use and storage of hazardous substances and petroleum products; use of aboveground and underground storage tanks, storage and disposal of hazardous wastes; evidence of releases from hazardous materials, and identification of conduits to the subsurface.

Two-Story Residential Dwelling and Associated Sheds (2220 Fulton Road) (circa 1930) - The five bedroom one bathroom two-story residential dwelling is located on the southwestern portion of the subject site. The main entrance to the building is located on the west side of the building. Two additional doors are located along the east side of the building, one of which is

accessible via an exterior stairway and provides access to the second floor (See Photos 1-3). Discussions with Ms. Peterson indicated to her knowledge no hazardous materials, underground fuel storage, or heating oil tanks are utilized onsite. She stated that a roughly 80-year old couple has occupied the residential dwelling for a long time. Discussions with Mr. Jacobson indicated that a septic tank is currently utilized onsite. Due to private occupancy, visual observations were limited to the exterior areas. General observations of the exterior of the dwelling did not reveal any obvious signs of hazardous materials, stains and/or spills.

The two-story residential dwelling is bordered on the eastern portion with five (5) dilapidated sheds. All five sheds are constructed with wood framing and wood exterior walls, and most are extremely run-down with no doors or a crumbling frame. The sheds are utilized to store common household items and supplies (bikes, tools, storage, etc.) (See Photos 1-4). General observations of the sheds did not reveal any obvious signs of hazardous materials, stains and/or spills.

Associated Outside Areas – The outside areas consist of the large federally protected wetlands, and paved and landscaped area.

Wetlands – Occupying the eastern portion of the subject site are federally protected wetlands. Throughout this area are several surface water ponds and vernal pools supporting biodiversity in the Santa Rosa plain (See Photos 5-11). General observations of the wetlands area did not reveal any obvious evidence of hazardous materials. Visual observations of the wetlands area did not reveal any other obvious evidence of drains, sumps of other conduits to the subsurface.

Associated Paved and Landscaped Areas - The associated paved and landscaped area is located on southwest portion of the subject site, along the north, south, east and west perimeters of the residential dwelling. A gravel driveway and parking area for the residential dwelling is located along the southern perimeter of the house and is accessible via Fulton Road to the west. The associated landscaped areas are located along the subject site perimeters and interspersed between the subject site buildings and associated paved areas.

Visual observations of the rest of the associated paved and landscaped areas did not reveal any obvious signs of hazardous materials or spills. No obvious evidence of underground

fuel storage tanks, distressed vegetation, or surface impoundments were observed throughout the associated paved and landscaped areas during the inspection.

2.2 Adjacent Properties

2.2.1 Immediate Adjacent Properties

Sites in the vicinity of the subject site were observed during the site reconnaissance to evaluate conditions or businesses indicative of hazardous or potentially toxic materials use.

The following are the uses of the adjoining properties.

North - Several Two-Story Residential Dwellings (2324-2480 Tedeschi Drive) and Wetlands
South - Several Two-Story Residential Dwellings (2255-2487 Orleans Street)
East - Residential Dwelling with Associated Sheds (2193 Francisco Avenue) and Undeveloped Land
West - Fulton Road followed by a Residential Dwelling and Associated Sheds (2265 Fulton Road)

Visual observations of the immediate adjacent properties did not reveal any obvious potential business activities indicative to the use, storage and/or treatment of hazardous materials. In addition, no obvious evidence was noted at the immediate adjacent properties that would represent a significant environmental concern to the subject site.

2.2.2 Wells

Located within the western portion of the subject site, near the residential dwelling, is an onsite well and associated well house. The interior of the well house was not observed. General observations of the exterior of the well house did not reveal any obvious evidence of hazardous materials, stains or spills. No obvious evidence of groundwater monitoring wells was noted on or nearby the subject site.

2.3 Non-ASTM E1527 Considerations

2.3.1 Asbestos Containing Construction Materials

An asbestos survey was not conducted at the property as part of this assessment. However, the subject site structures were confirmed to have been constructed before 1979, the year asbestos containing construction materials was banned, thus, asbestos may have been utilized in their construction. No obvious evidence of friable or non-friable suspect asbestos containing materials was observed within easily accessible areas of the structure. Visual observations of the easily accessible areas of the structure appeared to be in fair condition with no obvious signs of significant health risk concerns.

Asbestos is a mineral fiber that occurs in rock and soil. Because of its fiber strength and heat resistance asbestos has been used in a variety of building construction materials for insulation and as a fire retardant. Original building materials not easily accessible including, but not limited to, flooring and masting materials, sheet rock muds and taping compounds, ceiling and roofing materials, and ducting and surfacing materials may contain ACCMs. To confirm if any asbestos materials are contained within the structure on the subject site, an asbestos survey should be performed by an AHERA trained asbestos professional. If the property building is slated for renovation or demolition, an asbestos inspection will be required, pursuant to the National Emission Standards for Hazardous Air Pollutant (NESHAPs).

2.3.2 Lead-Based Paint

A lead-based paint survey was not conducted at the property as a part of this assessment. However, the subject site structures were confirmed to have been constructed before the ban on lead-based paints in 1978, thus, lead-based paints may have been utilized in their construction. Visual observations of the painted surfaces of the subject site structure appeared to be in fair condition with no obvious signs of chipping, cracking, and/or significant health risk concerns.

Lead-based paint is any paint, varnish, stain, or other applied coating that has 1 mg per square cm (or 5,000 µg/g by dry weight) or more of lead. In Section 1017 of the Housing and

Urban Development Guidelines, Residential Lead-Based Paint Hazard Reduction Act of 1992, otherwise known as " Title X", states that a lead-based paint hazard is "any condition that causes exposure to lead that would result in adverse human health effects" resulting from lead-contaminated dust, bare, lead-contaminated soil, and/or lead-contaminated paint that is deteriorated or present on accessible, friction, or impact surfaces. Therefore, under Title X, intact lead-based paint on most walls and ceilings would not be considered a "hazard," although the paint should be maintained and its condition monitored to ensure that it does not deteriorate and become a hazard.

2.3.3 Radon

Radon testing was not conducted at the property as a part of this assessment. However, based on the Map of Radon Zones provided by the United States Environmental Protection Agency (EPA), there is a moderate potential that radon concentrations at, or above, 4 picocuries per liter (pCi/l) are present at the site. Concentrations at, or above, 4 pCi/l are considered to be concentrations of concern per Cal-EPA and EPA. Based on the map, radon has been detected in Sonoma County at average levels below 2 pCi/l. Additional information can also be obtained from the California Department of Public Health's Radon Program which provides a list of radon test results from throughout the state which are sorted by zip code.

Radon is a naturally occurring radioactive gas that is odorless, invisible, and without taste. It is released during the natural decay of uranium, which is present in most rock, soil and water. Its occurrence in the state is influenced primarily by geology. Radon can be found throughout California because uranium exists in all rock and soil. Although certain areas of the state are more likely to contain higher radon levels than others, radon is a house-to-house issue. You may live in an area of low radon potential yet your house can have elevated radon but your neighbor's house has a low radon level. Radon, in its natural state cannot be detected with the human senses. To confirm if any radon is contained within the structure on the subject site, testing should be performed by an EPA-authorized state certified radon testing professional.

2.3.4 Mold

A mold survey was not conducted at the property as a part of this assessment. However, no obvious evidence of mold or water damaged materials were observed within easily accessible areas of the structures.

In general, mold is a subset of the fungi family. Fungi are common and found in most ecosystems. Fungi is needed to help recycle organic material to sustain plant and animal life. In order to reproduce, mold release tiny spores into the air, which eventually attach onto surfaces favorable for growth. A class of fungi, molds have been found to cause a variety of health problems in humans, including allergic, toxicological, and infectious responses. Molds are decomposers of organic materials, and thrive in humid environments, and produce spores to reproduce as plants produce seeds. When mold spores land on a damp spot indoors, they may begin growing and digesting whatever they are growing on in order to survive. When excessive moisture or water accumulates indoors, mold growth will often occur, particularly if the moisture problems remain undiscovered or not addressed.

Currently, there are no established “sound, science-based Permissible Exposure Limits (PELs) for indoor molds at this time”. As mold becomes a more prevalent issue, building owners will need to stay informed on the subject. There are dozens of Internet web sites geared to the topic, and increased litigation in this area is also fueling increased interest. With any new trend there often is misinformation, incorrect conclusions, and conflicting information. Those involved in the building industry should consider the source and weight of information carefully before drawing conclusions and making decisions.

To confirm if any mold is present within the structure on the subject site, laboratory test and sampling can be performed by a qualified industrial hygienist for various species of fungi such as Aspergillus, Cladosporium, Stachybotris and other mycotoxyns, and bacteria families such as Legionella, etc. However, the only types of evidence that have been related consistently to adverse health effects are the presence of current or past water damage, damp materials, visible mold, and mold odor, *not* the number or type of mold spores nor the presence of other markers of mold in indoor air or dust.

2.3.5 Wetlands

A wetlands survey was not conducted at the property as a part of this assessment. However, the subject site is currently the site of large surface water ponds and marshland. As such, the subject site area may be considered marsh or wetlands.

Wetlands occur where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes, and includes those areas where vegetation is lacking and soil is poorly developed or absent as a result of frequent or drastic fluctuations of surface water levels, wave action, water flow, turbidity, or high concentrations of salt or other substances in the substrate.

The California Environmental Protection Agency and its State Water Resources Control Board (SWRCB) monitor wetlands in the state. The SWRCB, in particular, is responsible for updating the state's wetland inventory resources. The Board also has authority under the Porter-Cologne Water Quality Control Act to regulate the placement of clean fill dirt into state waters. The Department of Parks and Recreation, Department of Fish and Game, and the California Coastal Conservancy preserve wetlands according to provisions in the California Public Resources Code. Wetlands are regulated through a §401 water quality certification process, although The California Coastal Act is the primary statutory scheme regulating activities in coastal wetlands.

The California Environmental Quality Act (CEQA) requires that project proponents study and disclose a project's anticipated water quality and other environmental impacts and specify means to avoid or minimize those impacts. A proponent for any project needing state or local agency approval must comply with CEQA or indicate that its project is exempt from CEQA, pursuant to the exemptions described in CEQA regulations.

3.0 PHYSICAL SITE SETTING

3.1 Geomorphic Description

The subject site is within the Santa Rosa Valley of the Coast Ranges Geomorphic Province, just northwest of the Sacramento-San Joaquin Delta region of the Great Valley Geomorphic Province of California, and at approximately 139-142 feet above mean sea level (msl). The Santa Rosa Valley occupies a northwest-trending structural depression in the southern part of the Coast Ranges of northern California. This depression divides the Mendocino Range on the west from the Mayacamas and Sonoma Mountains on the east. The Santa Rosa Plain Sub Basin is approximately 22 miles long; and 0.2 miles wide at the northern end, approximately 9 miles wide through the Santa Rosa area, and about 6 miles wide at the south end of the valley near the City of Cotati. The Santa Rosa Plain Sub Basin is bounded on the northwest by the Russian River plain, approximately one-mile south of the City of Healdsburg and the Healdsburg sub basin; and mountains of the Mendocino Range flank the remaining western boundary. The southern end of the sub basin is marked by a series of low hills, which form a drainage divide that separates the Santa Rosa Valley from the Petaluma Valley basin south of Cotati. The eastern sub basin boundary is flanked by the Sonoma Mountains south of Santa Rosa and the Mayacamas Mountains north of Santa Rosa. The Rincon Valley sub basin is situated east of the City of Santa Rosa and is separated from the Santa Rosa Plain sub basin by a narrow constriction formed in rocks of the Sonoma Volcanics.

3.2 Geologic Setting

Sonoma County is bisected by the San Andreas Fault. To the west on the tip of Bodega Head are ancient continental rocks formed far to the south and moved north at least 335 miles by the fault. To the east of the fault lies the Franciscan Complex, a system of oceanic rocks mixed by faulting as the ocean floor slid eastward under the edge of the continent. Both areas are covered by a thin mantle of more recent rocks formed in shallow seas, beaches, volcanoes and rivers. Recent sharp uplift and ongoing river erosion has sculpted the region.

Information regarding oil and gas fields was researched at the California Department of Conservations website. Based on the well finder produced by the Division of Oil, Gas, and Geothermal Resources (http://maps.conservation.ca.gov/doggr/), the subject site does not fall within a known oil or gas field. In addition, no oil or gas wells, or plugged and abandoned dry holes were noted on or nearby the subject site. Note: This does not refer to the previous gas holder and gas manufacturing stored and conveyed throughout the western portion of the site.

Information regarding soil lithology was researched at the California Water Resources Control Board's website https://geotracker.waterboards.ca.gov/. Based on previous subsurface investigations performed at the *Private Residence site (located at 3075 Marlow Road, approximately 4500-feet to the southwest of the subject site)*, the subject site is underlain with sandy silt topsoil from 0-3 feet bgs; very moist, gray clayey gravel from 3-5 feet bgs; yellowish brown very moist silt from 5-7 feet bgs; very moist brown gravelly sand from 7-9 feet bgs; yellowish brown very moist sandy silt from 9-11 feet bgs; olive-brown, very moist sandy silty clay from 11-16 feet bgs; brown wet sand from 16-18 feet bgs; olive-brown very moist clayey silt from 18-23 feet bgs; very moist silty clayey sand from 23-26 feet bgs; gray, dry to moist, sandy silty clay from 26-31 feet bgs; olive yellowish brown moist sandy silt from 31-32 feet bgs; wet silty sand from 32-34 feet bgs; and wet gravelly sand from 34-35 feet bgs. Soil boring data was terminated at 35 feet bgs (Edd Clark & Associates, 2004).

3.3 Hydrogeologic Setting

Information regarding first depth to groundwater and flow direction were researched at the California Water Resources Control Board's website at https://gis.water.ca.gov/app/gicima/#bookmark_DepthBelowGroundSurface. The Santa Rosa Plain Sub basin is drained principally by the Santa Rosa and Mark West Creeks that flow westward and collect into the Laguna de Santa Rosa. The Laguna de Santa Rosa flows northward and discharges into the Russian River. The Santa Rosa Plain sub-basin has one main water-bearing unit (Merced Formation) and several units with lower water-bearing capacities (Glen Ellen Formation and Alluvium). The groundwater is not everywhere continuous because many of the units only have lenses of water-bearing material, and the valley is cut by northwest trending

faults.

Locally, topography gently slopes southeasterly towards Santa Rosa Creek, roughly illustrating the direction of the ground water flow direction.

Based on a previous subsurface investigation performed at the *Station 384637N1227767W001 site (located at 38.463700N, 122.776W, approximately 4400-feet to the southwest of the subject site),* ground water in the general area has been encountered at depths of was 45.7 feet bgs (3/13/19). Historically depth to GW at this point has ranged from 33.8 to 63.8 bgs from 1989-2019. Seasonal variations, hillside runoff, aquifer pumping, tidal fluctuations or other factors may influence ground water levels.

4.0 HISTORICAL REVIEW

Site historical information was obtained from a review of Sanborn Fire Insurance Maps, United States Geological Survey (U.S.G.S.) Topographic Maps, aerial photographs, Polk and Haines City Directories. In addition, local building department records were also reviewed. The following Sanborn maps, topographic maps, and city directories were reviewed on March 20, 2019, within the libraries maintained by the University of California in Berkeley, California and City of Santa Rosa, in Santa Rosa, California. The aerial photographs were reviewed online within the sites maintained by National Environmental Title Research, LLC, TerraServer, and Google Earth. In addition, aerial photographs were obtained from Environmental Data Resources, Inc. (EDR).

Note: Copies of supporting aerials, city directories and maps are not typically included in the report. The historical references are reviewed within local public libraries and are copyright protected and cannot be reproduced without the consent of the owner. As such, our reports properly cite and reference the historical reference in accordance with ASTM E1527-13/AAI protocols. Any incorporation of these documents without the permission of the owner would be against the law.

Reference	Date
Sanborn Fire Insurance Map	1885
Sanborn Fire Insurance Map	1888
Sanborn Fire Insurance Map	1893
Sanborn Fire Insurance Map	1904
Sanborn Fire Insurance Map	1908
Polk City Directory	1926
USGS Topographic Maps	1935
Aerial Photograph	1942
USGS Topographic Maps	1942
Polk City Directory	1947
Polk City Directory	1949
Sanborn Fire Insurance Map	1950
Aerial Photograph	1952
USGS Topographic Maps	1954
Polk City Directory	1955
Polk City Directory	1960
Polk City Directory	1965

Aerial Photograph	1968
USGS Topographic Maps	1968
Sanborn Fire Insurance Map	1969
Polk City Directory	1970
Aerial Photograph	1973
Haines City Directory	1975
USGS Topographic Maps	1980
Haines City Directory	1981
Aerial Photograph	1983
Haines City Directory	1985
Haines City Directory	1990
Aerial Photograph	1993
Haines City Directory	1995
Haines City Directory	2000
Haines City Directory	2006
Aerial Photograph	2006
Aerial Photograph	2009
Haines City Directory	2010
Aerial Photograph	2012
Haines City Directory	2015
Aerial Photograph	2016
Aerial Photograph	2018
Haines City Directory	2019

In the Santa Rosa Sanborn Fire Insurance Maps of 1885, 1888, 1893, 1904, 1908, 1950, and 1969, the subject site falls beyond the area of coverage and no site-specific map is available.

In the city directories of 1926, 1947, 1949, 1955 and 1960, neither the subject site address nor Fulton Road are listed (2220 Fulton Road).

According to the Santa Rosa County Assessor Parcel information, the current five (5) bedrooms, one (1) bathroom 1,832 square foot house was built in 1930.

In the topographic maps of 1935 and 1942, the subject site is shown as developed and the southwestern portion with a nondescript structure, and undeveloped on the rest of the site. During this time, surrounding the subject site is a nondescript structure to the north; a small nondescript structure to the south; a nondescript structure to the east; and Fulton Road followed by two nondescript structures to the west.

In the aerial photographs of 1942 and 1952, the subject site appears developed on the southwestern portion with the current residential dwelling, associated sheds, and collected hay bales/grazing land; the eastern portion appears covered with surface ponds at this time. During

this time, bordering the subject site are small structures (likely residential) and associated agricultural orchards to the north; small structures (likely residential) to the south; small structures (likely residential) to the east; and Fulton Road followed by small structures (likely residential) and associated agricultural orchards to the west.

Since at least 1942, the eastern portion of the subject site has been primarily covered in surface ponds as part of the Santa Rosa Plains Wetlands. According to the U.S. Fish and Wildlife Service[1], the Santa Rosa Plain (Plain) is located in central Sonoma County, bordered on the south and west by the Laguna de Santa Rosa, on the east by the foothills, and on the north by the Russian River. The Plain and adjacent areas are characterized by vernal pools, seasonal wetlands, and associated grassland habitat, which support – among other flora and fauna – the threatened California tiger salamander (CTS) and four endangered plant species: Burke's goldfields, Sonoma sunshine, Sebastopol meadowfoam, and many-flowered navarretia (listed plants). These listed plants grow only in seasonal wetlands; the CTS uses seasonal wetlands for breeding, and the surrounding uplands for dispersal, feeding, growth, maturation and maintenance of the juvenile and adult population (upland habitat). The distribution of Burke's goldfields, Sonoma sunshine, and Sebastopol meadowfoam is confined almost entirely to the Plain. Many-flowered navarretia occurs mostly outside the Plain, but its only Sonoma County population is present on the Plain.

Urban and rural growth on the Plain has taken place for over one hundred years, and for the past twenty years urban growth has encroached into areas inhabited by the CTS and the listed plants discussed above. The loss of seasonal wetlands caused by development on the Plain has led to declines in the populations of the listed plants and the CTS. Voters in the cities of Cotati, Rohnert Park, Santa Rosa, and Sebastopol, and the Town of Windsor have established urban growth boundaries (UGBs) for their communities. This is intended to accomplish the goal of city-centered growth, resulting in rural and agricultural land uses being maintained between the urbanized areas. There are also acreages of publicly owned property and preserves located in the Plain, which will further protect against development. Some of the areas within these UGBs, however, include lands inhabited by CTS and the listed plant species. Agricultural practices have

[1] https://www.fws.gov/sacramento/es/Recovery-Planning/Santa-Rosa/Documents/Main_body.pdf

also disturbed seasonal wetlands, CTS and listed plant habitat on the Plain. Some agricultural practices, such as irrigated or grazed pasture, have protected habitat from intensive development.

The Lacustrine, Riverine, and Palustrine systems are represented in the subject area (Santa Rosa Plains). Deepwater habitats include perennial rivers such as Napa River and lakes and reservoirs such as Lake Hennessey and Rector Reservoir. Wetlands include narrow forested and shrub dominated zones on banks and benches along streams; broader floodplain areas that are seasonally flooded and usually dominated by trees; wet meadows; and seeps near the base of hills. Many small wetlands have been created or modified by human activity (e.g., excavation) such as farm ponds and impoundments[2].

In the publication "Press Democrat" dated July 15, 1951, the subject site occupant is reported to have been selling Alfalfa and Hay at 2220 Fulton Road.

In the publication "Press Democrat" dated January 20, 1952, the subject site occupant is reported to have been selling a calf at 2220 Fulton Road.

In the topographic maps of 1954, 1968 and 1980 the subject site is shown as developed and the southwestern portion with a nondescript structure, and undeveloped on the rest of the site. During this time, surrounding the subject site is a nondescript structure and agricultural orchards to the north; a small nondescript structure to the south; a nondescript structure to the east; and Fulton Road followed by two nondescript structures and agricultural orchards to the west.

In the city directories of 1965 and 1970, the subject site address is not listed (2220 Fulton Road). However, Fulton Road is listed.

In the aerial photographs of 1968, 1973, 1983, 1993 and 2006, the subject site appears developed on the southwestern portion with the current residential dwelling and associated sheds; the eastern portion appears covered with surface ponds at this time. During this time, bordering the subject site are small structures (likely residential) to the north; small structures (likely residential) to the south; small structures (likely residential) to the east; and Fulton Road followed by a small structure (likely residential) to the west.

[2] https://www.fws.gov/wetlands/Data/HisMapRep/Santa_Rosa_SE.pdf

In the city directory of 1975, the subject site address is listed as being occupied by private residences, Kane Donald, (2220 Fulton Road).

In the city directories of 1981 and 1985, the subject site address is listed as being occupied by private residences, Kane Donald, and Kane Donald Plumbing (2220 Fulton Road).

In the city directory of 1990, the subject site address is listed as being occupied by private residences (2220 Fulton Road).

In the city directory of 1995, the subject site address is listed as unlisted denoted with "xxxx" (2220 Fulton Road).

In the city directories of 2000, 2006, 2010, 2015 and 2019, the subject site address is listed as being occupied by private residences (2220 Fulton Road).

In the aerial photographs of 2009, 2012, 2016 and 2018, the subject site appears developed on the southwestern portion with the current residential dwelling and associated sheds; the eastern portion appears covered with surface ponds at this time. During this time, bordering the subject site are several small structures (likely residential) and paved roads as part of a newly developed neighborhood and wetlands to the north; several small structures (likely residential) and paved roads as part of a newly developed neighborhood to the south; small structures (likely residential) and undeveloped land to the east; and Fulton Road followed by a small structure (likely residential) to the west.

5.0 ENVIRONMENTAL DATABASE REVIEW

5.1 Agency Record Review

Environmental Data Resources, Inc. (EDR) was contracted to compile data from available government agency databases on locations of actual and potentially impacted sites within a one-mile radius of the subject property. Copies of the environmental database lists and the location map for the subject site are included in Appendix A.

The results of the database search by EDR revealed 7 mapped sites and 0 unmapped sites within a one-mile radius, of which 3 mapped sites are within a one-eighth mile radius of the subject site. Based on distance from the subject property and regional hydrogeology the following selected site(s) identified by EDR were deemed to have the highest potential to impact the subject site. In addition, a Tier 1 Vapor Encroachment Screen (VES) pursuant to ASTM E2600-10 was performed on the following selected site(s) to assess whether a potential vapor encroachment condition (VEC) exists at the subject property caused by the release of vapors from contaminated soil or groundwater either on or near the subject site. These sites identified by EDR were located either at, adjacent or possibly up gradient of the subject site.

- **Jerry Deakins** – 2341 Jaine Lane, Santa Rosa.
  Located several parcels to the north and perceived up/cross gradient.
  Listed on the Haznet list.

  According to the information provided by EDR this site is listed as manifesting other organic solids in 2011 (CAL EPA# CAC002672144). No reports of spills or unauthorized releases were reported for this site by EDR. According to the information provided by the CAL EPA DTSC EnviroStor and RWQCB GeoTracker online databases, this site is not listed as an active or inactive leak case. Based on this information, the probability of a subsurface environmental impact and/or potential vapor encroachment from this site to the subject site is low at this time.

- **Beach Street Builders** – 2323 San Miguel Avenue, Santa Rosa.
  Located several parcels to the south and perceived down/cross gradient. Listed on the Haznet list.

  According to the information provided by EDR this site is listed as manifesting asbestos containing waste in 2016 (CAL EPA# CAC002870674). No reports of spills or unauthorized releases were reported for this site by EDR. According to the information provided by the CAL EPA DTSC EnviroStor and RWQCB GeoTracker online databases, this site is not listed as an active or inactive leak case. Based on this information, the probability of a subsurface environmental impact and/or potential vapor encroachment from this site to the subject site is low at this time.

- **North Bay Classic Restoration** – 2385 San Miguel Avenue, Santa Rosa.
  Located several parcels to the south and perceived down/cross gradient. Listed on the Haznet list.

  According to the information provided by EDR this site is listed as manifesting Oxygenated solvents (acetone, butanol, ethyl acetate, etc.) from 2000-2001 (CAL EPA# CAL000182413). No reports of spills or unauthorized releases were reported for this site by EDR. According to the information provided by the CAL EPA DTSC EnviroStor and RWQCB GeoTracker online databases, this site is not listed as an active or inactive leak case. Based on this information, the probability of a subsurface environmental impact and/or potential vapor encroachment from this site to the subject site is low at this time.

5.2 Local Agency File Review

On December 17, 2018, a Basics representative contacted the California EPA - Department of Toxic Substance Control (CAL EPA DTSC) in Berkeley, California, in regards to any information concerning the subject site.

- **2220 Fulton Road, Santa Rosa**
  The subject site.

  No information regarding the subject site was available within the CAL EPA DTSC files or Regulated Site Portal online database. No information regarding hazardous materials, underground storage tanks or unauthorized releases was available for the subject site.

On December 17, 2018, a Basics representative contacted the Regional Water Quality Control Board (RWQCB) in Santa Rosa, California, in regards to any information concerning the subject site.

- **2220 Fulton Road, Santa Rosa**
  The subject site.

  No information regarding the subject site was available within the RWQCB files or GeoTracker online database. No information regarding hazardous materials, underground storage tanks or unauthorized releases was available for the subject site.

On December 17, 2018, a Basics representative contacted the Bay Area Air Quality Management District (BAAQMD) in San Francisco, California, in regards to any information concerning the subject site.

- **2220 Fulton Road, Santa Rosa**
  The subject site.

  No information regarding the subject site was available within the BAAQMD files. No information regarding hazardous materials, underground storage tanks or unauthorized releases was available for the subject site.

On December 17, 2018, a Basics representative contacted the Sonoma County Department of Environmental Health (SCDEH) in Santa Rosa, California, in regards to any information concerning the subject site:

- **2220 Fulton Road, Santa Rosa**
  The subject site.

  No information regarding the subject site was available within the SCDEH files. No information regarding hazardous materials, underground storage tanks or unauthorized releases was available for the subject site.

On December 17, 2018, a Basics representative contacted the City of Santa Rosa Fire Department – Hazardous Materials Division (SRFD) in Santa Rosa, California, in regards to any information concerning the subject site:

- **2220 Fulton Road, Santa Rosa**
  The subject site.

  No information regarding the subject site was available within the SRFD files. No information regarding hazardous materials, underground storage tanks or unauthorized releases was available for the subject site.

On March 20, 2019, a Basics representative reviewed the following files maintained by the Santa Rosa Building Department (SRBD) in Santa Rosa, California and online files maintained by the County of Sonoma , in regards to any information concerning the subject site:

- **2220 Fulton Road, Santa Rosa**
  The subject site.

  According to the information provided by the SRBD, the following files were available for the subject site:

  2220 Fulton Road

  On August 21, 2001, a planning file log was opened for a neighborhood meeting outlining the planned developments of the "Woodbridge" and "North Village" residential developments.

  On April 21, 2004, a building permit was issued by the county to re-roof the residential dwelling.

  On January 25, 2005, the subject site was annexed by the City of Santa Rosa.

  On August 28, 2006, a code enforcement log was completed stating that a neighbor was cutting the eucalyptus tree without the benefit of a permit.

  On October 29, 2017, a post disaster assessment was conducted of the residential building to assess impacts of the 2017 Tubbs-Adobe fire.

  No information regarding hazardous materials, underground storage tanks or unauthorized releases was available for the subject site.

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

These conclusions are based on the data collected during performance of this ESA and are therefore subject to the time limitations associated with accessing governmental and site data. The purpose of this assessment was to evaluate the likelihood of soil and ground water degradation as a result of the use, storage, treatment, and/or disposal of hazardous materials/waste on the subject site and sites located within a one-mile radius. Findings are based on a geological and hydrogeological information study, and an evaluation of historical and present property use (historical resource review, regulatory agency database and file review, personal interviews and site reconnaissance study).

6.1.1 Data Gaps

A data gap is the failure to obtain information required by the standard despite good faith efforts by the environmental professional to gather the information. During the course of this assessment the following data gaps were identified:

(1) According to the Santa Rosa County Assessor Parcel information, the current five (5) bedrooms, one (1) bathroom 1,832 square foot house was built in 1930.

No other information regarding the subject site prior to 1951 was obtained and the specific use could not be determined within this scope of work and is deemed a data gap. However, it appears the site was utilized as residential. This data gap does not appear to be significant.

Based on the findings of our investigation, it is our opinion that this data gap is considered “not significant” at this time. If additional information is uncovered that significantly changes the conclusion of this report an addendum will be issued. Because ultimately it remains the user who accepts the liability for having entered into a chain of title, it remains important that the user recognize that if information is later uncovered that fills this data gap, our opinion regarding the presence of obvious recognized environmental conditions on site may or may not change.

6.1.2 Environmental Issues/*De Minimis* Conditions

De Minimis Condition are defined by the ASTM Standard Practice E1527-13 as condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. On the basis of the information compiled and reviewed by Basics, our findings indicate the following *de minimis* conditions:

(1) In 1930, the five (5) bedroom, one (1) bathroom, 1,832-square residential dwelling with associated sheds was developed along the southwest portion of the subject site (2220 Fulton Road). Prior to this the site was shown as undeveloped. Additionally, since 1942 the eastern portion of the subject site has appeared as wetlands.

Based on the historical references reviewed, the subject site has been listed as being occupied by agricultural grazing (Early 1950s), private residences (1950-Present), Kane and Donald Plumbing (Early 1980s).

Agricultural Grazing Operations (Early 1950s)

In the 1950s, the subject site and immediate surrounding areas are shown as agricultural grazing land.

In the publication "Press Democrat" dated July 15, 1951, the subject site occupant is reported to have been selling Alfalfa and Hay at 2220 Fulton Road.

In the publication "Press Democrat" dated January 20, 1952, the subject site occupant is reported to have been selling a calf at 2220 Fulton Road.

By the mid 1960s, the agricultural row crops were no longer shown.

The prior use as agricultural land may have a high potential environmental risk due to the potential use of pesticides and associated farm equipment. Such chemicals are notable because they may be organophosphate sources. Information from the County Agricultural Department revealed these chemicals do not persist in the soil and ground water and will break down over time. In addition, the site area is not known for subsurface impacts from pesticides or herbicides.

Generally, sampling of soil, sediment in drainage ditches, and/or groundwater should occur at former agricultural sites if any of the following applies:

- Persistent pesticides were or are likely to have been used.
- Pesticides were or are likely to have been stored, mixed, or disposed of on the property, or pesticide-application equipment was cleaned there.
- There are known or suspected spills or accumulations of pesticides.
- Pesticides are present in groundwater or there is reason to believe they may be present in groundwater.
- The site has ever had intensive management for orchard, nursery, or other high-value crops, including significant use of pesticides and irrigation.

However, no information regarding the use of hazardous materials was uncovered during this time frame within the scope of work performed. As such, it does not appear that pesticides were stored, mixed, or disposed of onsite. In addition, it did not appear that underground or aboveground fuel tanks, equipment storage, repair, or maintenance was located onsite. Due to the passage of approximately 50+ years since the subject site was utilized as agricultural land, the probability of pesticides or herbicides within the soil or ground water is low.

Federally Protected Wetlands (Early 1940s-Present)

Since at least 1942, the eastern portion of the subject site has been primarily covered in surface ponds as part of the Santa Rosa Plains Wetlands. According to the U.S. Fish and Wildlife Service[3], the Santa Rosa Plain (Plain) is located in central Sonoma County, bordered on the south and west by the Laguna de Santa Rosa, on the east by the foothills, and on the north by the Russian River. The Plain and adjacent areas are characterized by vernal pools, seasonal wetlands, and associated grassland habitat, which support – among other flora and fauna – the threatened California tiger salamander (CTS) and four endangered plant species: Burke's goldfields, Sonoma sunshine, Sebastopol meadowfoam, and many-flowered navarretia (listed plants). These listed plants grow only in seasonal wetlands; the CTS uses seasonal wetlands for breeding, and the surrounding uplands for dispersal, feeding, growth, maturation and maintenance of the juvenile and adult population (upland habitat).

Urban and rural growth on the Plain has taken place for over one hundred years, and for the past twenty years urban growth has encroached into areas inhabited by the CTS and the listed plants discussed above. The loss of seasonal wetlands caused by development on the Plain has led to declines in the populations of the listed plants and the CTS. Agricultural practices have also disturbed seasonal wetlands, CTS and listed plant habitat on the Plain. Some agricultural practices, such as irrigated or grazed pasture, have protected habitat from intensive development. The Lacustrine, Riverine, and Palustrine systems are represented in the subject area (Santa Rosa Plains). Deepwater habitats include perennial rivers such as Napa River and lakes and reservoirs such as Lake Hennessey and Rector Reservoir. Wetlands include narrow forested and shrub dominated

[3] https://www.fws.gov/sacramento/es/Recovery-Planning/Santa-Rosa/Documents/Main_body.pdf

zones on banks and benches along streams; broader floodplain areas that are seasonally flooded and usually dominated by trees; wet meadows; and seeps near the base of hills. Many small wetlands have been created or modified by human activity (e.g., excavation) such as farm ponds and impoundments[4].

A wetlands survey was not conducted at the property as a part of this assessment. However, the subject site is currently the site of large ponds and marshland. As such, the subject site area may be considered marsh or wetlands.

Wetlands occur where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes, and includes those areas where vegetation is lacking and soil is poorly developed or absent as a result of frequent or drastic fluctuations of surface water levels, wave action, water flow, turbidity, or high concentrations of salt or other substances in the substrate.

The California Environmental Protection Agency and its State Water Resources Control Board (SWRCB) monitor wetlands in the state. The SWRCB, in particular, is responsible for updating the state's wetland inventory resources. The Board also has authority under the Porter-Cologne Water Quality Control Act to regulate the placement of clean fill dirt into state waters. The Department of Parks and Recreation, Department of Fish and Game, and the California Coastal Conservancy preserve wetlands according to provisions in the California Public Resources Code. Wetlands are regulated through a §401 water quality certification process, although The California Coastal Act is the primary statutory scheme regulating activities in coastal wetlands.

The California Environmental Quality Act (CEQA) requires that project proponents study and disclose a project's anticipated water quality and other environmental impacts and specify means to avoid or minimize those impacts. A proponent for any project needing state or local agency approval must comply with CEQA or indicate that its project is exempt from CEQA, pursuant to the exemptions described in CEQA regulations.

During Basics' site reconnaissance, the subject site facilities were noted as relatively clean with no obvious indications of stains or spills from the use of hazardous materials. In addition, no obvious evidence of collection drains, sumps, underground tanks, underground hydraulic hoists or other conduits to the subsurface within subject site facilities were noted during the site visit, which would suggest a high potential discharge of hazardous materials to the subsurface. In addition, no compelling evidence was discovered that a hazardous substance has been released from its operation onto (or into) the surface.

[4] https://www.fws.gov/wetlands/Data/HisMapRep/Santa_Rosa_SE.pdf

Because ultimately it remains the user who accepts the liability for having entered into a chain of title, it remains important that the user recognize that the “risk tolerance” of a regulatory agency could change, as could be the case if information is later uncovered to suggest that the de minimis conditions (i.e., those that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies) are of greater significance than once thought.

Based on the de minimis conditions stated above, additional scope of services (i.e. baseline environmental sampling), but not limited to, may or may not disclose information which may significantly reduce the “risk tolerance” in connection with the acquisition of a parcel of commercial real estate.

6.1.3 Recognized Environmental Conditions (RECs)

Recognized Environmental Conditions (RECs) are defined by the ASTM Standard Practice E1527-13 as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. Based on the findings of our investigation, it is our opinion that there are no apparent obvious RECs on site that warrant further investigation or documentation at this time.

6.1.4 Controlled Recognized Environmental Conditions (CRECs)

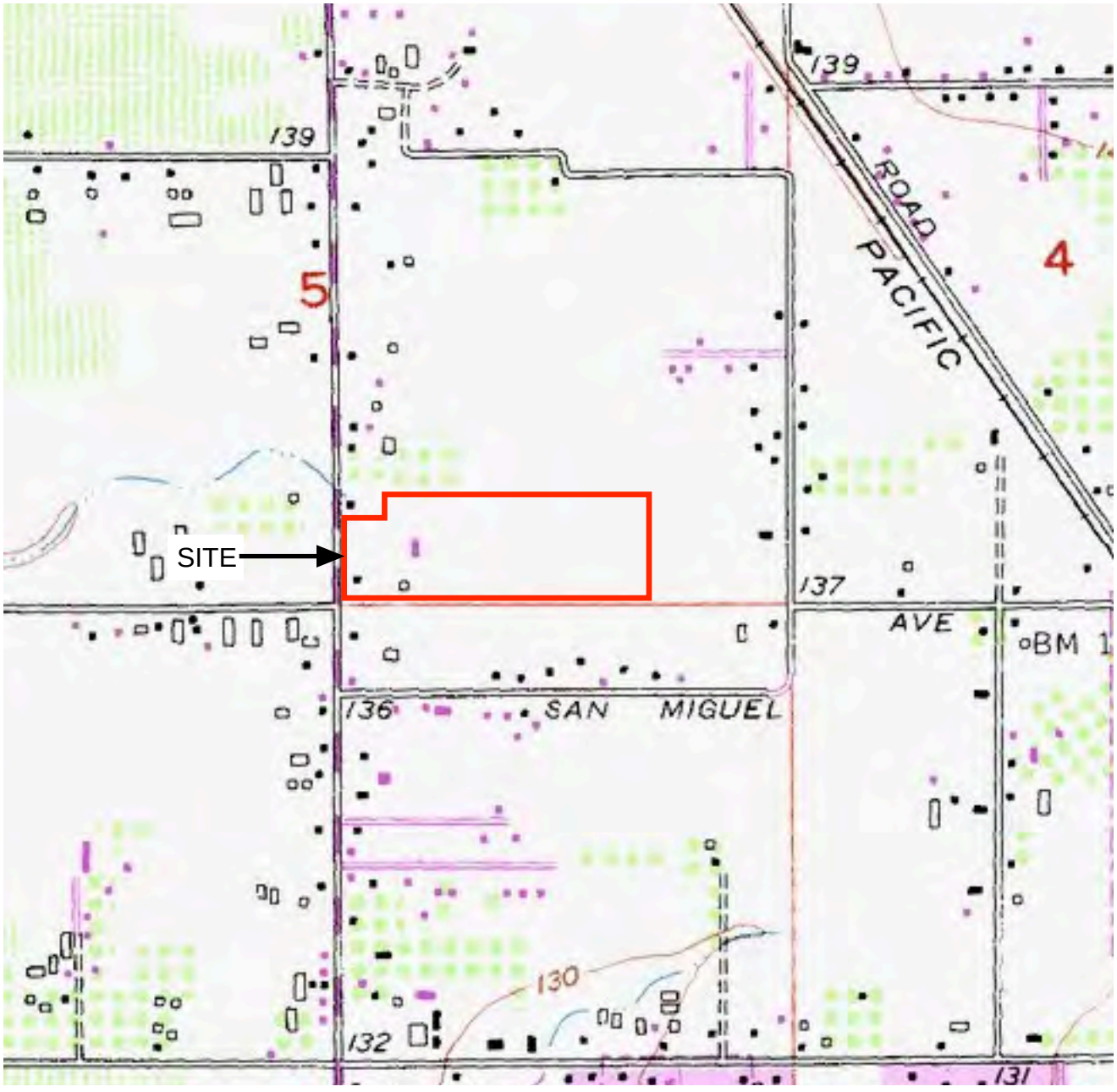
Controlled Recognized Environmental Conditions (CRECs) are defined by the ASTM Standard Practice E1527-13 as a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls. Based on the findings of our investigation, no apparent CRECs were identified onsite.

6.1.5 Historical Recognized Environmental Conditions (HRECs)

Historical Recognized Environmental Condition (HRECs) are defined by the ASTM Standard Practice E1527-13 as a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls. Based on the findings of our investigation, no apparent HRECs were identified onsite.

6.1.6 Recommendations

This assessment has revealed **no** obvious evidence of recognized environmental conditions in connection with the property that warrants further investigation and/or documentation at this time.



Topographic Map Source: U.S. Geological Survey, 1980 Sebastopol Quadrangle, California

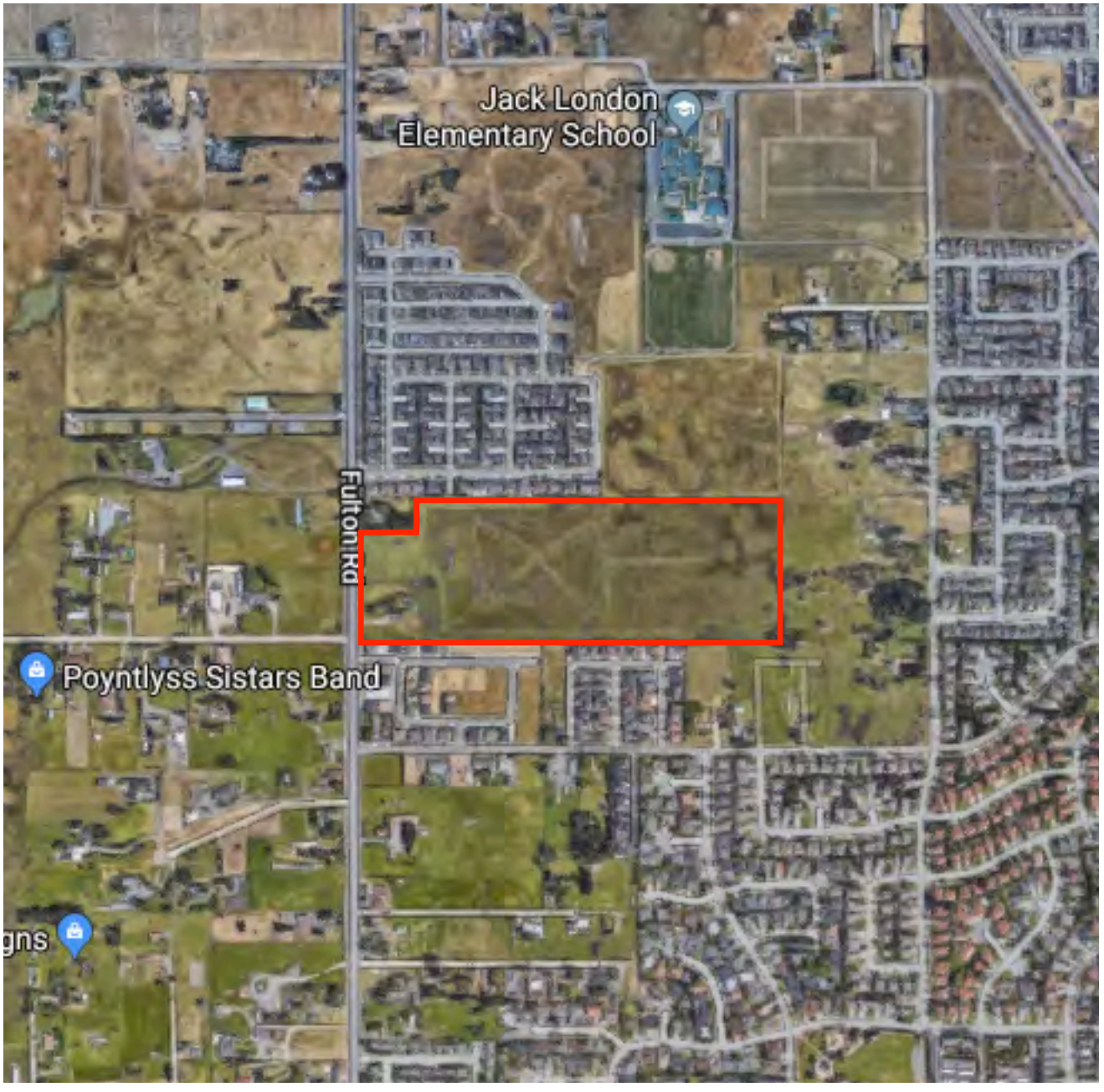
Site Location

basics ENVIRONMENTAL

Phase I Environmental Site Assessment
2220 Fulton Road
Santa Rosa, California

PROJECT NO.
19-ENV5373

DRAWING NO.
1



0 500 1000

APPROXIMATE SCALE IN FEET AS DETERMINED FROM GOOGLE MAPS

N

SITE Aerial Photo Source:U.S. Geological Survey & Google Maps

Aerial Photograph (2017)

basics ENVIRONMENTAL

Phase I Environmental Site Assessment
2220 Fulton Road
Santa Rosa, California

PROJECT NO.
19-ENV5373

DRAWING NO.
2

Site Plan

basics ENVIRONMENTAL

Phase I Environmental Site Assessment
2220 Fulton Road
Santa Rosa, California

PROJECT NO.
19-ENV5373

DRAWING NO.
3

Prepared for
PARCELQUEST

COUNTY ASSESSOR'S PARCEL MAP

TAX RATE AREA
139-010
4-112
4-170

034-03

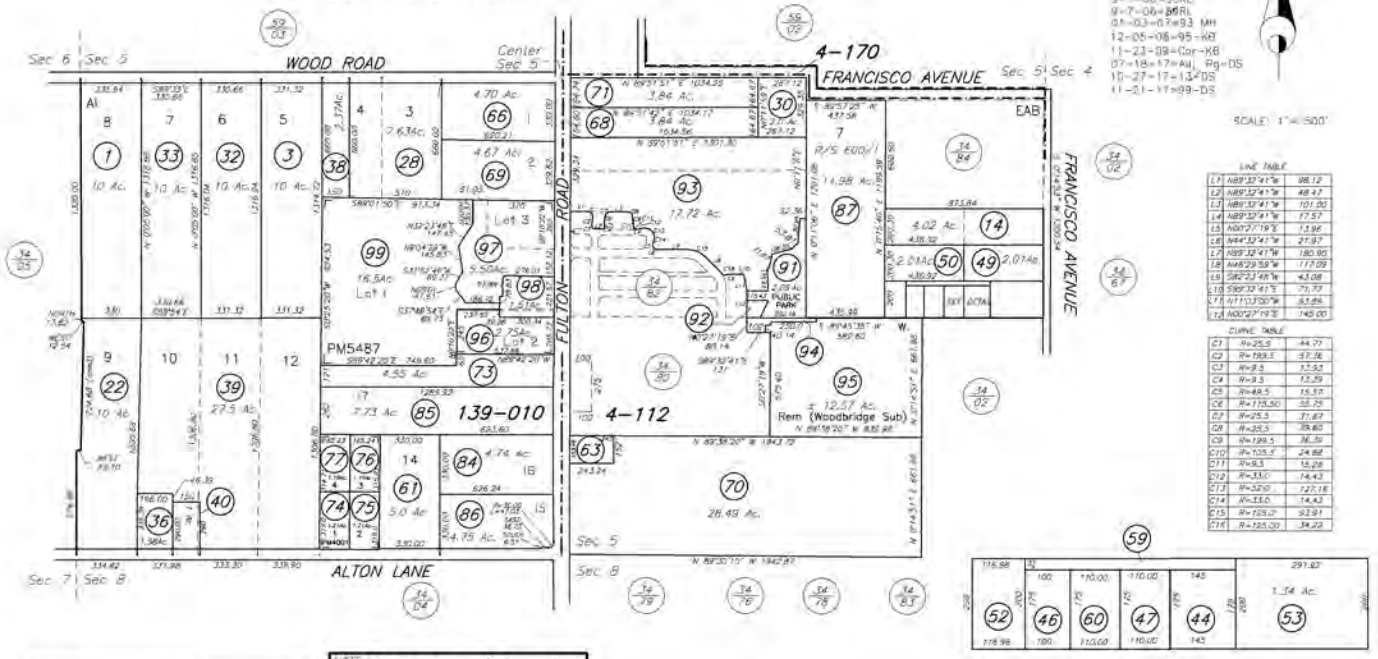
PTN. WOODBRIDGE
REC. 05-09-2006 IN BK. 693 , MAPS, PGS. 44-50.

LANDS OF ALFRED IRWIN
REC. 09-23-1903 IN BK. 'E' , MAPS, PGS. 2-00.

E.A. BARNES 1ST SUBDIVISION
REC. 10-20-1914 IN BK. 31 , MAPS, PGS. 23-00.

Pcl. Map No. 4001
REC. 11-28-1973 IN BK. 201 , MAPS, PGS. 11-28.

Pcl. Map No. 5487
REC. 08-24-1978 IN BK. 274 , MAPS, PGS. 01-00.



REVISED
8-1-06=90NL
9-7-06=89RL
01-03-07=93 MH
12-05-08=95-KB
11-23-09=Cor-KB
07-18-17=All, Pg-DS
10-27-17=13-DS
11-21-17=09-DS

SCALE: 1" = 500'

LINE TABLE

L1	N89°32'41"W	98.12
L2	N89°32'41"W	48.47
L3	N89°32'41"W	101.00
L4	N89°32'41"W	17.57
L5	N00°27'19"E	13.96
L6	N44°32'41"W	21.97
L7	N89°32'41"W	180.90
L8	N46°29'59"W	117.09
L9	S89°23'48"W	43.08
L10	S89°32'41"E	71.73
L11	N11°03'50"W	83.86
L12	N00°27'19"E	145.00

CURVE TABLE

C1	R=25.5	44.71
C2	R=193.5	57.36
C3	R=9.5	17.53
C4	R=9.5	13.39
C5	R=48.5	15.51
C6	R=115.50	55.75
C7	R=25.5	31.87
C8	R=25.5	39.65
C9	R=139.5	36.30
C10	R=105.5	24.88
C11	R=9.5	15.28
C12	R=33.0	14.43
C13	R=321.0	127.18
C14	R=33.0	14.43
C15	R=105.0	52.91
C16	R=125.00	34.23

NOTE: Assessor's parcels do not necessarily constitute legal lots. To verify legal parcel status, check with the appropriate city or county community development or planning division.

NOTE: This map was prepared for assessment purposes only and does not indicate either parcel legality or a valid building site. No liability is assumed for the accuracy of the data delineated. The acreages and sizes on the information supplied to the Assessor (i.e. recorded survey maps, recorded deeds, prior assessment maps, etc.)

Assessor's Map Bk. 034, Pg. 03
Sonoma County, Calif. (ROAD)

KEY 12/20/08 RI:

Photo 1: Subject Site (Facing Northeast)
Two-Story Residential Dwelling
And Associated Sheds

Photo 2: Subject Site (Facing Northwest)
Two-Story Residential Dwelling
And Associated Sheds

Site Photographs

Photo 3: Subject Site (Facing Southeast)
Two-Story Residential Dwelling
And Associated Sheds

Photo 4: Subject Site (Facing Northwest)
Associated Sheds and Lanscaped Area

Site Photographs

Photo 5: Subject Site (Facing Norhwest)
Wetlands Area

Photo 6: Subject Site (Facing West)
Wetlands Area

Site Photographs

Photo 7: Subject Site (Facing Southeast)
Wetlands Area

Photo 8: Subject Site (Facing Southwest)
Wetlands Area

Site Photographs

Photo 9: Subject Site (Facing Southeast)
Wetlands Area

Photo 10: Subject Site (Facing Northwest)
Wetlands Area

Site Photographs

Photo 11: Subject Site (Facing Northeast)
Wetlands Area

Site Photographs

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Appendix G:
Noise Supporting Information

draft

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TABLE Existing-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2019
ROADWAY SEGMENT: Fulton Road - North Village Drive to Tedeschi Drive
NOTES: 2220 Fulton Road/Stonebridge Residential - Existing

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 25800 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	NIGHT
AUTOS	88.08	9.34
M-TRUCKS	1.65	0.19
H-TRUCKS	0.66	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

Ldn AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.02

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO Ldn

70 Ldn	65 Ldn	60 Ldn	55 Ldn
64.9	132.0	280.6	602.7

TABLE Existing-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2019
ROADWAY SEGMENT: Fulton Road - Tedeschi Drive to New Project Road
NOTES: 2220 Fulton Road/Stonebridge Residential - Existing

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 26900 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	NIGHT
AUTOS	88.08	9.34
M-TRUCKS	1.65	0.19
H-TRUCKS	0.66	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

Ldn AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.21

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO Ldn

70 Ldn	65 Ldn	60 Ldn	55 Ldn
66.4	135.6	288.5	619.6

TABLE Existing-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2019
ROADWAY SEGMENT: Fulton Road - New Project Road to San Miguel Road
NOTES: 2220 Fulton Road/Stonebridge Residential - Existing

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 27100 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	
DAY	NIGHT
AUTOS	
88.08	9.34
M-TRUCKS	
1.65	0.19
H-TRUCKS	
0.66	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

Ldn AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.24

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO Ldn			
70 Ldn	65 Ldn	60 Ldn	55 Ldn
66.7	136.2	289.9	622.7

TABLE Existing-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2019
ROADWAY SEGMENT: Fulton Road - San Miguel Road to Piner Road
NOTES: 2220 Fulton Road/Stonebridge Residential - Existing

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 26500 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	NIGHT
AUTOS	88.08	9.34
M-TRUCKS	1.65	0.19
H-TRUCKS	0.66	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

Ldn AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.14

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO Ldn			
70 Ldn	65 Ldn	60 Ldn	55 Ldn
65.9	134.3	285.6	613.5

TABLE Existing + Project-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2019
ROADWAY SEGMENT: Fulton Road - North Village Drive to Tedeschi Drive
NOTES: 2220 Fulton Road/Stonebridge Residential - Existing + Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 25900 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	NIGHT
AUTOS	88.08	9.34
M-TRUCKS	1.65	0.19
H-TRUCKS	0.66	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

Ldn AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.04

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO Ldn			
70 Ldn	65 Ldn	60 Ldn	55 Ldn
65.0	132.3	281.3	604.2

TABLE Existing + Project-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2019
ROADWAY SEGMENT: Fulton Road - Tedeschi Drive to New Project Road
NOTES: 2220 Fulton Road/Stonebridge Residential - Existing + Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 27500 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	NIGHT
AUTOS	88.08	9.34
M-TRUCKS	1.65	0.19
H-TRUCKS	0.66	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

Ldn AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.30

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO Ldn

70 Ldn	65 Ldn	60 Ldn	55 Ldn
67.3	137.5	292.7	628.8

TABLE Existing + Project-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2019
ROADWAY SEGMENT: Fulton Road - New Project Road to San Miguel Road
NOTES: 2220 Fulton Road/Stonebridge Residential - Existing + Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 28100 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	NIGHT
AUTOS	88.08	9.34
M-TRUCKS	1.65	0.19
H-TRUCKS	0.66	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

Ldn AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.40

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO Ldn

70 Ldn	65 Ldn	60 Ldn	55 Ldn
68.1	139.5	296.9	637.9

TABLE Existing + Project-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2019
ROADWAY SEGMENT: Fulton Road - San Miguel Road to Piner Road
NOTES: 2220 Fulton Road/Stonebridge Residential - Existing + Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 27200 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	NIGHT
AUTOS	88.08	9.34
M-TRUCKS	1.65	0.19
H-TRUCKS	0.66	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

Ldn AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.25

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO Ldn

70 Ldn	65 Ldn	60 Ldn	55 Ldn
66.9	136.6	290.6	624.2

TABLE Baseline-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2019
ROADWAY SEGMENT: Fulton Road - North Village Drive to Tedeschi Drive
NOTES: 2220 Fulton Road/Stonebridge Residential - Baseline

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 26900 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	NIGHT
AUTOS	88.08	9.34
M-TRUCKS	1.65	0.19
H-TRUCKS	0.66	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

Ldn AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.21

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO Ldn

70 Ldn	65 Ldn	60 Ldn	55 Ldn
66.4	135.6	288.5	619.6

TABLE Baseline-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2019
ROADWAY SEGMENT: Fulton Road - Tedeschi Drive to New Project Road
NOTES: 2220 Fulton Road/Stonebridge Residential - Baseline

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 28000 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	NIGHT
AUTOS	88.08	9.34
M-TRUCKS	1.65	0.19
H-TRUCKS	0.66	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

Ldn AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.38

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO Ldn

70 Ldn	65 Ldn	60 Ldn	55 Ldn
68.0	139.1	296.2	636.4

TABLE Baseline-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2019
ROADWAY SEGMENT: Fulton Road - New Project Road to San Miguel Road
NOTES: 2220 Fulton Road/Stonebridge Residential - Baseline

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 28200 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	NIGHT
AUTOS	88.08	9.34
M-TRUCKS	1.65	0.19
H-TRUCKS	0.66	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

Ldn AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.41

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO Ldn

70 Ldn	65 Ldn	60 Ldn	55 Ldn
68.3	139.8	297.6	639.4

TABLE Baseline-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2019
ROADWAY SEGMENT: Fulton Road - San Miguel Road to Piner Road
NOTES: 2220 Fulton Road/Stonebridge Residential - Baseline

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 27700 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	NIGHT
AUTOS	88.08	9.34
M-TRUCKS	1.65	0.19
H-TRUCKS	0.66	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

Ldn AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.33

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO Ldn

70 Ldn	65 Ldn	60 Ldn	55 Ldn
67.6	138.2	294.1	631.8

TABLE Baseline + Project-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2019
ROADWAY SEGMENT: Fulton Road - North Village Drive to Tedeschi Drive
NOTES: 2220 Fulton Road/Stonebridge Residential - Baseline + Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 27000 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	NIGHT
AUTOS	88.08	9.34
M-TRUCKS	1.65	0.19
H-TRUCKS	0.66	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

Ldn AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.22

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO Ldn

70 Ldn	65 Ldn	60 Ldn	55 Ldn
66.6	135.9	289.2	621.2

TABLE Baseline + Project-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2019
ROADWAY SEGMENT: Fulton Road - Tedeschi Drive to New Project Road
NOTES: 2220 Fulton Road/Stonebridge Residential - Baseline + Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 28500 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	NIGHT
AUTOS	88.08	9.34
M-TRUCKS	1.65	0.19
H-TRUCKS	0.66	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

Ldn AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.46

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO Ldn

70 Ldn	65 Ldn	60 Ldn	55 Ldn
68.7	140.8	299.7	643.9

TABLE Baseline + Project-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2019
ROADWAY SEGMENT: Fulton Road - New Project Road to San Miguel Road
NOTES: 2220 Fulton Road/Stonebridge Residential - Baseline + Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 29200 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	NIGHT
AUTOS	88.08	9.34
M-TRUCKS	1.65	0.19
H-TRUCKS	0.66	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

Ldn AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.56

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO Ldn

70 Ldn	65 Ldn	60 Ldn	55 Ldn
69.7	143.0	304.6	654.4

TABLE Baseline + Project-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/29/2019
ROADWAY SEGMENT: Fulton Road - San Miguel Road to Piner Road
NOTES: 2220 Fulton Road/Stonebridge Residential - Baseline + Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 28400 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	NIGHT
AUTOS	88.08	9.34
M-TRUCKS	1.65	0.19
H-TRUCKS	0.66	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

Ldn AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.44

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO Ldn

70 Ldn	65 Ldn	60 Ldn	55 Ldn
68.6	140.4	299.0	642.4

Appendix H:
Traffic Impact Study

draft

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Traffic Impact Study for the 2220 Fulton Road Project

Prepared for the City of Santa Rosa

Submitted by
W-Trans

October 22, 2019

TRAFFIC ENGINEERING
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Table of Contents

Executive Summary 1

Introduction 2

Transportation Setting 4

Capacity Analysis 7

Alternative Modes 21

Access and Circulation 22

Conclusions and Recommendations 24

Study Participants and References 25

Figures

1. Study Area and Existing Lane Configurations 3
2. Existing Traffic Volumes 10
3. Baseline Traffic Volumes 12
4. Site Plan 14
5. Project Traffic Volumes and Trip Distribution 15
6. Existing plus Project Traffic Volumes 17
7. Baseline plus Project Traffic Volumes 19

Tables

1. Collision Rates at the Study Intersections 5
2. Bicycle Facility Summary 6
3. Intersection Level of Service Criteria 8
4. Existing Peak Hour Intersection Levels of Service 9
5. Baseline Peak Hour Intersection Levels of Service 11
6. Trip Generation Summary 13
7. Trip Distribution Assumptions 16
8. Existing and Existing plus Project Peak Hour Intersection Levels of Service 18
9. Baseline and Baseline plus Project Peak Hour Intersection Levels of Service 20

Appendices

A. Collision Rate Calculations
B. Intersection Level of Service Calculations
C. Signal Warrant Spreadsheets
D. Auto-Turn Emergency Access

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Executive Summary

The proposed 2220 Fulton Road project would result in construction of 120 single-family homes. The project's anticipated trip generation includes 1,124 daily trips on average during a weekday, with 88 trips during the a.m. peak hour and 118 during the p.m. peak hour with deductions from the existing single-family home taken into account.

The study area was established by the City and includes nine intersections surrounding the project site. The collision histories of the nine study intersections were reviewed, and all were determined to be operating with below-average crash rates compared to similar facilities statewide, indicating that there is not a readily apparent safety issue at any of the nine locations. Analysis indicates that the nine study intersections are operating acceptably under Existing conditions both without and with project traffic added. All intersections would be expected to continue operating at LOS D or better overall with project traffic added, though side-street approaches currently operating at LOS E or F would be expected to continue doing so. Because the arterial corridors would continue to operate at high service levels, the project's impact is considered less-than-significant.

For the Baseline scenario, anticipated volumes from approved projects in the vicinity of the proposed project were added to the roadway network. Under the Baseline plus Project scenario the study intersections are expected to operate acceptably overall. The additional delay due to project-added trips would again be expected to have a less-than-significant impact, with all intersections expected to continue operating at LOS D or better overall, though some side-street movements are operating at LOS E or F, and these conditions would be expected to continue.

In the future, the City plans to convert Piner Road/Waltzer Road to a signalized intersection. Because this is a planned future improvement, it is assumed that this signalization project is included in the City's "Public Facilities Fee" (PFF), so payment of the fee as part of the approval process would provide the project's contribution to the cost of the signal project.

Vehicles would access the project via a New Project Street connecting to Fulton Road. Sight distances at the proposed location for the New Project Street would be adequate for both entering and exiting drivers if clear lines of sight are maintained through avoidance of installing signs or landscaping in the vision area. The is a two-way-left-turn lane on Fulton Road at the New Project Street; it is recommended that the striping be modified to provide a dedicated southbound left-turn lane at the New Project Street. A traffic signal is not warranted at Fulton Road/New Project Street under volumes for either Existing or Baseline plus Project scenarios during either peak hour. The project would also make a roadway connection between Tedeschi Street and Orleans Street using Andre Lane. Access for emergency response vehicles is expected to be adequate.

The project site is generally served by adequate facilities for alternative modes. Sidewalks would be provided along all new project streets as well as along frontages of existing streets where new connections are to be made. The site would be served by bike lanes along Fulton Road and Piner Road. There are, however, no transit lines within an acceptable walking distance of the project site, so it is recommended that the applicant contact Santa Rosa CityBus to request that consideration be given to extending a route into the adjacent neighborhood to better serve the project site and nearby residential neighborhoods.

Introduction

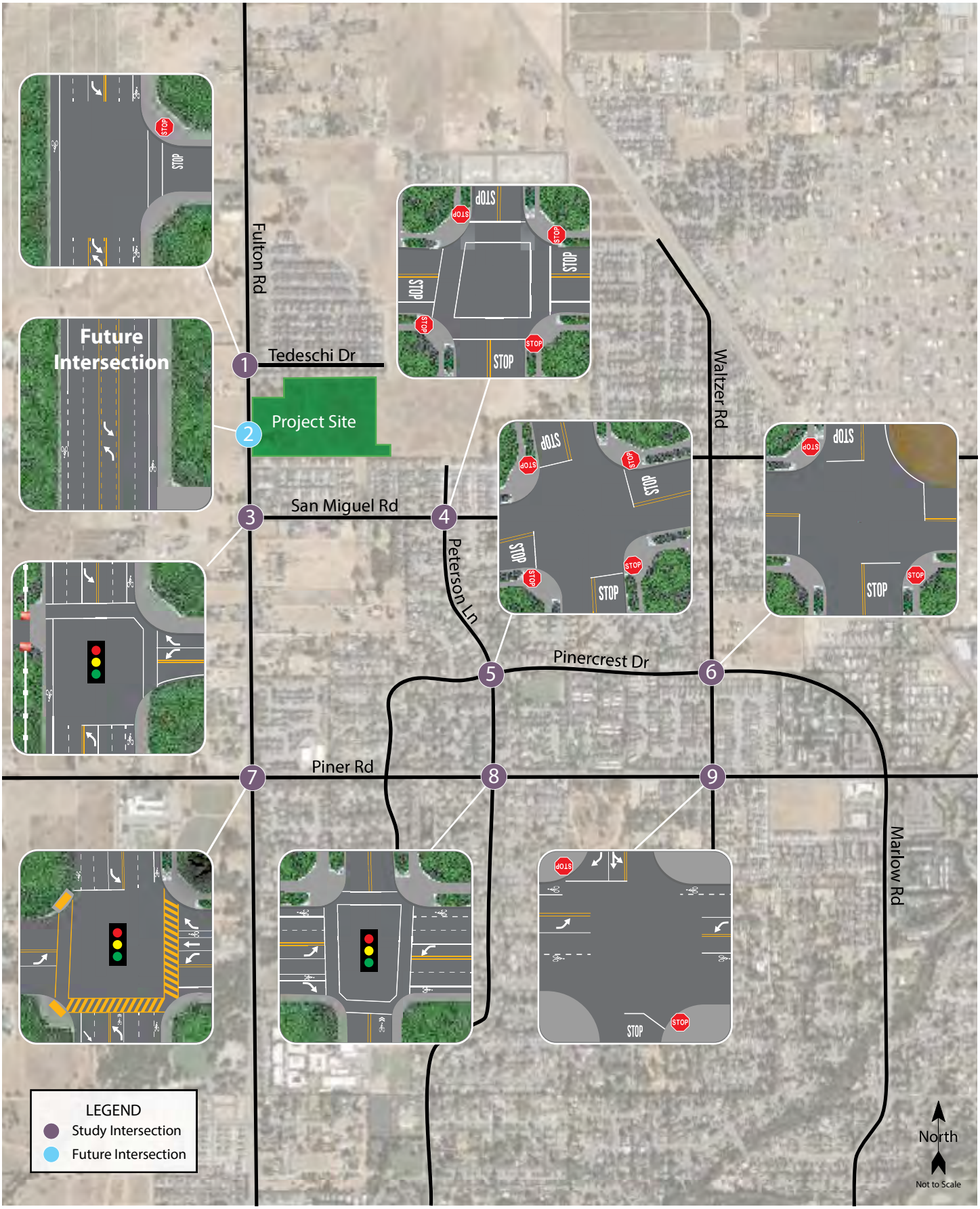
This report presents an analysis of the potential traffic impacts that would be associated with the proposed development of 120 single-family homes at 2220 Fulton Road in the City of Santa Rosa. The traffic study was completed in accordance with the criteria established by the City of Santa Rosa that reflects a scope of work reviewed and approved by City Staff and is consistent with standard traffic engineering techniques.

Prelude

The purpose of a traffic impact study is to provide City staff and policy makers with data they can use to make an informed decision regarding the potential traffic impacts of a proposed project, and any associated improvements that would be required to mitigate these impacts to a level of insignificance as defined by the City's General Plan or other policies. Vehicular traffic impacts are typically evaluated by determining the number of new trips that the proposed use would be expected to generate, distributing these trips to the surrounding street system based on existing travel patterns or anticipated travel patterns specific to the proposed project, then analyzing the impact the new traffic would be expected to have on critical intersections or roadway segments. Impacts relative to access for pedestrians, bicyclists, and to transit are also addressed.

Project Profile

The project as proposed includes construction of 120 detached single-family homes on a site that currently has one single-family dwelling and which will be accessed from Fulton Road via a new road, and a proposed road connection between Andre Lane and Orleans Street which would connect the project to San Miguel Avenue and Tedeschi Drive. The project site is located at 2220 Fulton Road, as shown in Figure 1.



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Traffic Impact Study for the 2220 Fulton Road Project

Figure 1 – Study Area and Existing Lane Configurations

W-Trans

Transportation Setting

Operational Analysis

Study Area and Periods

The study area consists of the following intersections:

1. Fulton Road/Tedeschi Drive
2. Fulton Road/New Project Street
3. Fulton Road/San Miguel Road
4. Peterson Lane/San Miguel Road
5. Peterson Lane/Pinercrest Drive
6. Waltzer Road/Pinercrest Drive
7. Fulton Road/Piner Road
8. Peterson Lane/Piner Road
9. Waltzer Road/Piner Road

Operating conditions during the a.m. and p.m. peak periods were evaluated to capture the highest potential impacts for the proposed project as well as the highest volumes on the local transportation network. The morning peak hour occurs between 7:00 and 9:00 a.m. and reflects conditions during the home to work or school commute, while the p.m. peak hour occurs between 4:00 and 6:00 p.m. and typically reflects the highest level of congestion during the homeward bound commute.

Study Intersections

Fulton Road/Tedeschi Drive is a stop-controlled tee-intersection, with a stop control at the westbound Tedeschi Drive approach. There are bicycle lanes along Fulton Road and a crosswalk on the east leg.

Fulton Road/New Project Street would be a new intersection constructed with the proposed project approximately 0.10 mile north of Fulton Road/San Miguel Road. As proposed, the New Project Street would form the eastern leg of the intersection. There are bicycle lanes along Fulton Road at the new project street.

Fulton Road/San Miguel Road is a signalized four-legged intersection with protected left-turn phasing on the northbound, southbound, and westbound approaches. It should be noted that the west leg is a driveway to a single-family dwelling. Crosswalks and associated pedestrian signal heads are present on the north and east legs.

Peterson Lane/San Miguel Road is an all-way stop-controlled four-legged intersection. Crosswalks and curb ramps are present on all legs of the intersection.

Peterson Lane/Pinercrest Drive is a four-legged all-way stop-controlled intersection. While curb ramps are present on all four curbs, there are no associated crosswalks on any leg of the intersection.

Waltzer Road/Pinercrest Drive is an all-way stop-controlled four-legged intersection. Curb ramps are present on three of the four curbs, with no associated crosswalks on any of the legs.

Fulton Road/Piner Road is a signalized four-legged intersection, with protected left-turn phasing on all four approaches. Crosswalks, as well as associated pedestrian signal heads and phasing, are present on the south, east, and west legs of the intersection. Bicycle lanes exist along Fulton Road and along Piner Road east of the intersection.

Peterson Lane/Piner Road is a four-legged, signalized intersection. Left-turn protected-permitted phasing is present on the eastbound and westbound approaches of Piner Road. Bicycle lanes exist along Piner Road, and crosswalks are present on all four legs with associated pedestrian signal phasing.

Waltzer Road/Piner Road is a four-legged, two-way stop-controlled intersection with stop controls at the northbound and southbound Waltzer Road approaches. Bicycle lanes exist along Piner Road, and there are curb ramps at all four legs but no associated crosswalks.

The locations of the study intersections and the existing lane configurations and controls are shown in Figure 1.

Collision History

The collision history for the study area was reviewed to determine any trends or patterns that may indicate a safety issue. Collision rates were calculated based on records available from the California Highway Patrol as published in their Statewide Integrated Traffic Records System (SWITRS) reports. The most current five-year period available is October 1, 2013 through September 30, 2018.

Calculated collision rates for the study intersections were compared to average collision rates for similar facilities statewide, as indicated in *2014 Collision Data on California State Highways*, California Department of Transportation (Caltrans). The average collision rates for intersections differ based on whether the intersection is controlled by a traffic signal, all-way stop signs, or is uncontrolled, as well as the number of approaches (three or four).

As presented in Table 1, all nine intersections had lower collision rates than the statewide averages within the most recent five-year period. The collision rate calculation output is provided in Appendix A.

Table 1 – Collision Rates at the Study Intersections

Study Intersection	Number of Collisions (2013-2018)	Calculated Collision Rate (c/mve)	Statewide Average Collision Rate (c/mve)
1. Fulton Rd/Tedeschi Dr	2	0.05	0.14
3. Fulton Rd/San Miguel Rd	4	0.12	0.43
4. Peterson Ln/San Miguel Rd	0	0.00	0.14
5. Peterson Ln/Pinercrest Dr	1	0.23	0.32
6. Waltzer Rd/Pinercrest Dr	0	0.00	0.32
7. Fulton Rd/Piner Rd	9	0.19	0.43
8. Peterson Ln/Piner Rd	7	0.25	0.43
9. Waltzer Rd/Piner Rd	3	0.11	0.26

Note: c/mve = collisions per million vehicles entering

Alternative Modes

Pedestrian Facilities

Pedestrian facilities include sidewalks, crosswalks, pedestrian signal phases, curb ramps, curb extensions, and various streetscape amenities such as lighting, benches, etc. In general, a network of sidewalks, crosswalks, and curb ramps provide access for pedestrians in the residential areas near the proposed project site. Currently there are sidewalks along Fulton Road and plans for a connected sidewalk network throughout the project site.

Bicycle Facilities

The *Highway Design Manual*, Caltrans, 2017, classifies bikeways into four categories:

- **Class I Multi-Use Path** – a completely separated right-of-way for the exclusive use of bicycles and pedestrians with cross flows of motorized traffic minimized.
- **Class II Bike Lane** – a striped and signed lane for one-way bike travel on a street or highway.
- **Class III Bike Route** – signing only for shared use with motor vehicles within the same travel lane on a street or highway.
- **Class IV Bikeway** – also known as a separated bikeway, a Class IV Bikeway is for the exclusive use of bicycles and includes a separation between the bikeway and the motor vehicle traffic lane. The separation may include, but is not limited to, grade separation, flexible posts, inflexible physical barriers, or on-street parking.

Fronting the proposed project, Class II bike lanes exist on Fulton Road between the Santa Rosa North City Limits and Sebastopol Road. There are also existing Class II bicycle lanes on Piner Road between Fulton Road and Marlow Road. According to the *City of Santa Rosa Bicycle & Pedestrian Master Plan Update 2018,* a trail is planned behind the proposed project site. Bicyclists ride in the roadway and/or on sidewalks along all other streets within the project study area. Table 2 summarizes the existing and planned bicycle facilities in the project vicinity, as contained in the *City of Santa Rosa Bicycle & Pedestrian Master Plan Update 2018*.

Table 2 – Bicycle Facility Summary

Status Facility	Class	Length (miles)	Begin Point	End Point
Existing				
Fulton Rd	II	3.95	City Limits North	Sebastopol Rd
Piner Rd	II	1.00	Fulton Rd	Marlow Rd
Planned				
Trail	I	0.44	Village Dr	Orleans St
San Miguel Ave	II	0.50	Fulton Rd	Francisco Ave
Francisco Ave	II	1.00	City Limits North	San Miguel Ave

Source: *City of Santa Rosa Bicycle & Pedestrian Master Plan Update 2018*, City of Santa Rosa, 2018

Transit Facilities

There are no public transit service or facilities within one-quarter mile of the project site. The nearest transit service stop is located south of Fulton Road/Piner Road, approximately 0.8 mile from the proposed project site, and it is served by the Santa Rosa City Bus Route 6.

Capacity Analysis

Intersection Level of Service Methodologies

Level of Service (LOS) is used to rank traffic operation on various types of facilities based on traffic volumes and roadway capacity using a series of letter designations ranging from A to F. Generally, Level of Service A represents free flow conditions and Level of Service F represents forced flow or breakdown conditions. A unit of measure that indicates a level of delay generally accompanies the LOS designation.

The study intersections were analyzed using methodologies published in the *Highway Capacity Manual* (HCM), Transportation Research Board, 2010. This source contains methodologies for various types of intersection control, all of which are related to a measurement of delay in average number of seconds per vehicle.

The Levels of Service for the intersections with side street stop controls, or those which are unsignalized and have one or two approaches stop controlled, were analyzed using the "Two-Way Stop-Controlled" intersection capacity method from the HCM. This methodology determines a level of service for each minor turning movement by estimating the level of average delay in seconds per vehicle. Results are presented for individual movements together with the weighted overall average delay for the intersection.

The study intersections with stop signs on all approaches were analyzed using the "All-Way Stop-Controlled" Intersection methodology from the HCM. This methodology evaluates delay for each approach based on turning movements, opposing and conflicting traffic volumes, and the number of lanes. Average vehicle delay is computed for the intersection as a whole and then related to a Level of Service.

The study intersections that are currently controlled by a traffic signal, or may be in the future, were evaluated using the signalized methodology from the HCM. This methodology is based on factors including traffic volumes, green time for each movement, phasing, whether the signals are coordinated or not, truck traffic, and pedestrian activity. Average stopped delay per vehicle in seconds is used as the basis for evaluation in this LOS methodology. For purposes of this study, delays were calculated using signal timing obtained from the City of Santa Rosa.

The ranges of delay associated with the various levels of service are indicated in Table 3.

Table 3 – Intersection Level of Service Criteria			
LOS	**Two-Way Stop-Controlled**	**All-Way Stop-Controlled**	**Signalized**
A	Delay of 0 to 10 seconds. Gaps in traffic are readily available for drivers exiting the minor street.	Delay of 0 to 10 seconds. Upon stopping, drivers are immediately able to proceed.	Delay of 0 to 10 seconds. Most vehicles arrive during the green phase, so do not stop at all.
B	Delay of 10 to 15 seconds. Gaps in traffic are somewhat less readily available than with LOS A, but no queuing occurs on the minor street.	Delay of 10 to 15 seconds. Drivers may wait for one or two vehicles to clear the intersection before proceeding from a stop.	Delay of 10 to 20 seconds. More vehicles stop than with LOS A, but many drivers still do not have to stop.
C	Delay of 15 to 25 seconds. Acceptable gaps in traffic are less frequent, and drivers may approach while another vehicle is already waiting to exit the side street.	Delay of 15 to 25 seconds. Drivers will enter a queue of one or two vehicles on the same approach, and wait for vehicle to clear from one or more approaches prior to entering the intersection.	Delay of 20 to 35 seconds. The number of vehicles stopping is significant, although many still pass through without stopping.
D	Delay of 25 to 35 seconds. There are fewer acceptable gaps in traffic, and drivers may enter a queue of one or two vehicles on the side street.	Delay of 25 to 35 seconds. Queues of more than two vehicles are encountered on one or more approaches.	Delay of 35 to 55 seconds. The influence of congestion is noticeable, and most vehicles have to stop.
E	Delay of 35 to 50 seconds. Few acceptable gaps in traffic are available, and longer queues may form on the side street.	Delay of 35 to 50 seconds. Longer queues are encountered on more than one approach to the intersection.	Delay of 55 to 80 seconds. Most, if not all, vehicles must stop and drivers consider the delay excessive.
F	Delay of more than 50 seconds. Drivers may wait for long periods before there is an acceptable gap in traffic for exiting the side streets, creating long queues.	Delay of more than 50 seconds. Drivers enter long queues on all approaches.	Delay of more than 80 seconds. Vehicles may wait through more than one cycle to clear the intersection.

Reference: *Highway Capacity Manual,* Transportation Research Board, 2010

Traffic Operation Standards

City of Santa Rosa

The City of Santa Rosa's adopted Level of Service (LOS) Standard is contained in *Santa Rosa General Plan 2035*. Standard TD-1 states that the City will try to maintain a Level of Service (LOS) D or better along all major corridors. Exceptions to meeting this standard are allowed where attainment would result in significant environmental degradation; where topography or environmental impacts make the improvement impossible; or where attainment would ensure loss of an area's unique character.

While a corridor level of service is applied by the City in its analysis of the entire City as part of the environmental documentation supporting the General Plan, this type of analysis only provides relevant data when performed on a much longer segment than the ones included as the study area for the project. Therefore, although the City's standard does not specify criteria for intersections, for the purposes of this study, as is standard practice for such studies, a minimum operation of LOS D for the overall operation of signalized intersections was applied.

Because delay on a stop-controlled side-street does not impact operation of the through corridor on which the City's service level standard is based, delay indicative of LOS E or F on a side-street approach was considered acceptable as long as the average for the intersection as a whole is LOS D or better.

Existing Conditions

The Existing Conditions scenario provides an evaluation of current operation based on existing traffic volumes during the a.m. and p.m. peak periods. This condition does not include project-generated traffic volumes. Volume data was provided by the City of Santa Rosa for the intersections of Fulton Road/San Miguel Road, Peterson Lane/Piner Road, Fulton Road/Piner Road, and the segment of Fulton Road between the City Limits and San Miguel Road. Since these intersections and the segment were taken between 2017 and 2018, a yearly growth rate for each intersection was calculated and applied to the turning movement volumes.

Volumes were collected on April 30, 2019, while local schools were in session, for the remaining intersections. Because current traffic volumes are substantially lower due to the loss of homes and businesses in the area during the firestorm of October 2017, a growth factor of 1.33 was applied to volumes for both peak hours to account for the anticipated traffic that would return as the area is rebuilt. Because traffic volumes for Fulton Road/Piner Road and Peterson Lane/Piner Road were taken before the firestorm, the firestorm-related growth factor was not applied to these two intersections.

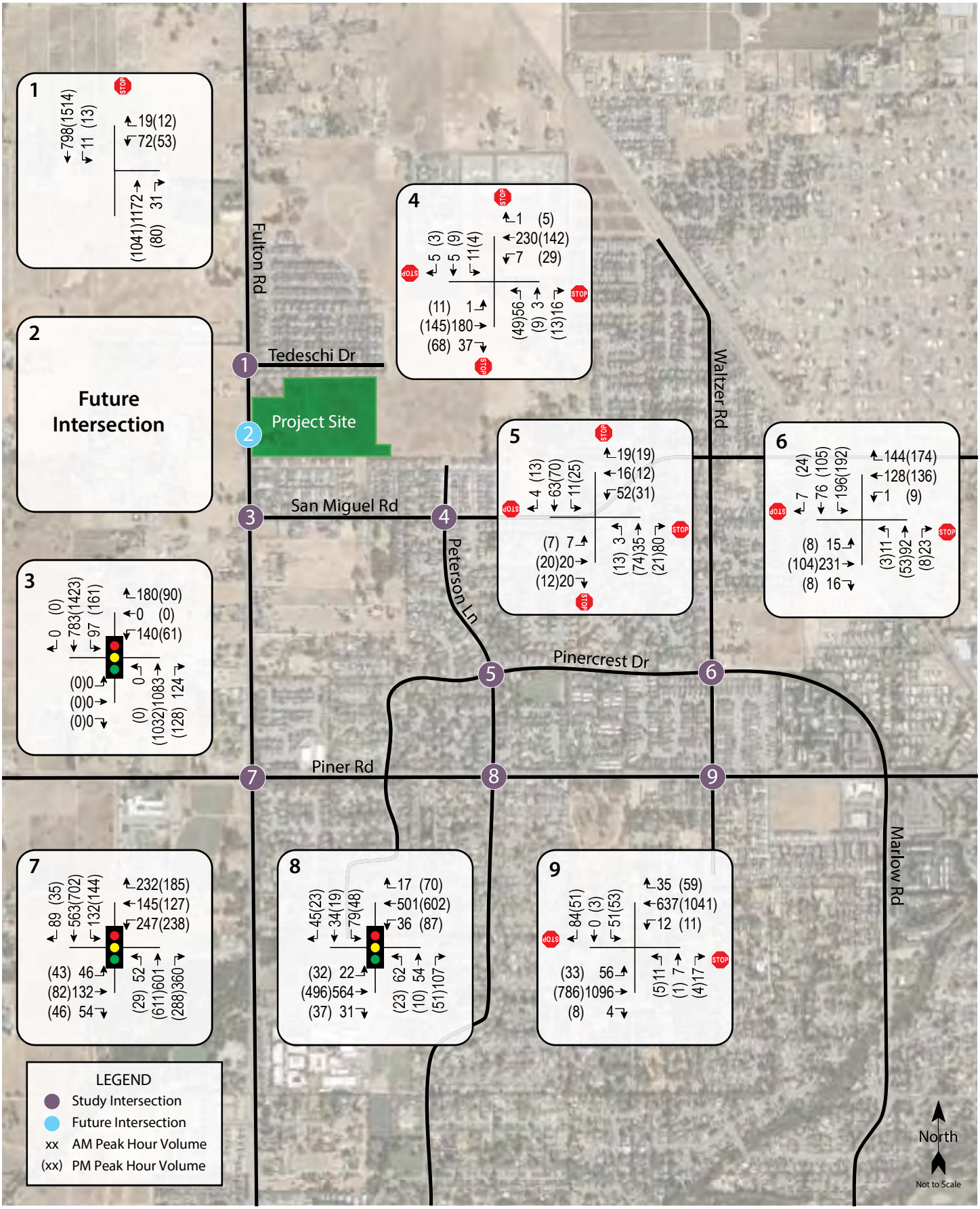
Intersection Levels of Service

Under existing conditions, all study intersections are operating acceptably overall at LOS C or better. A summary of the intersection level of service calculations is contained in Table 4, and copies of the Level of Service calculations are provided in Appendix B. The existing traffic volumes are shown in Figure 2.

Table 4 – Existing Peak Hour Intersection Levels of Service

	Study Intersection ***Approach***	**AM Peak**		**PM Peak**	
		Delay	**LOS**	**Delay**	**LOS**
1.	Fulton Rd/Tedeschi Dr	4.9	A	4.0	A
	Westbound (Tedeschi Dr) Approach	*110.9*	*F*	**	*F*
2.	Fulton Rd/New Project St	-	-	-	-
3.	Fulton Rd/San Miguel Rd	13.9	B	13.9	B
4.	Peterson Ln/San Miguel Rd	9.0	A	8.6	A
5.	Peterson Ln/Pinercrest Dr	7.7	A	7.8	A
6.	Waltzer Rd/Pinercrest Dr	12.2	B	11.6	B
7.	Fulton Rd/Piner Rd	33.3	C	30.1	C
8.	Peterson Ln/Piner Rd	9.9	A	9.0	A
9.	Waltzer Rd/Piner Rd	11.6	B	10.8	B
	Northbound (Waltzer Rd) Approach	*78.1*	*F*	*75.7*	*F*
	Southbound (Waltzer Rd) Approach	**	*F*	**	*F*

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service; Results for minor approaches to two-way stop-controlled intersections are indicated in *italics;* ** = delay greater than 120 seconds



sro497.ai 6/19

Traffic Impact Study for the 2220 Fulton Road Project

Figure 2 – Existing Traffic Volumes

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Baseline Conditions

The Baseline Conditions scenario provides an evaluation of operation with traffic added from approved or pending projects in the study area that could be operational within the next two to three years. At the request of City staff, the following three approved projects were included in the Baseline Conditions analysis:

- Kerry Ranch (Phases 1-3) – 95 detached single-family dwelling units at 2181 Francisco Avenue.
- Francisco Village – 77 single family dwelling unit development at 2601 Francisco Avenue.
- North Village II – 164 multi-family dwelling units at 2406 Fulton Road (based on original traffic study from 2002). For the purposes of the study, while the development is listed as including 116 multi-family dwelling units on the City of Santa Rosa's *Citywide Summary of Pending Development*, the original buildout of 164 units was conservatively used to match the trip generation from the project's traffic study.

The trip generation rates assumed in the traffic studies for the three approved projects were used for the Baseline scenario; it is noted that they differ slightly from the 10th Edition rates as the reports were written before the newest edition was published.

Under estimated Baseline volumes the study intersections would be expected to continue operating at the same levels of service as under existing volumes except for Peterson Lane/Piner Road, which would be anticipated to continue operating acceptably but experience a change in service level during the morning peak hour from LOS A to LOS B. These results are summarized in Table 5, and Baseline volumes are shown in Figure 3.

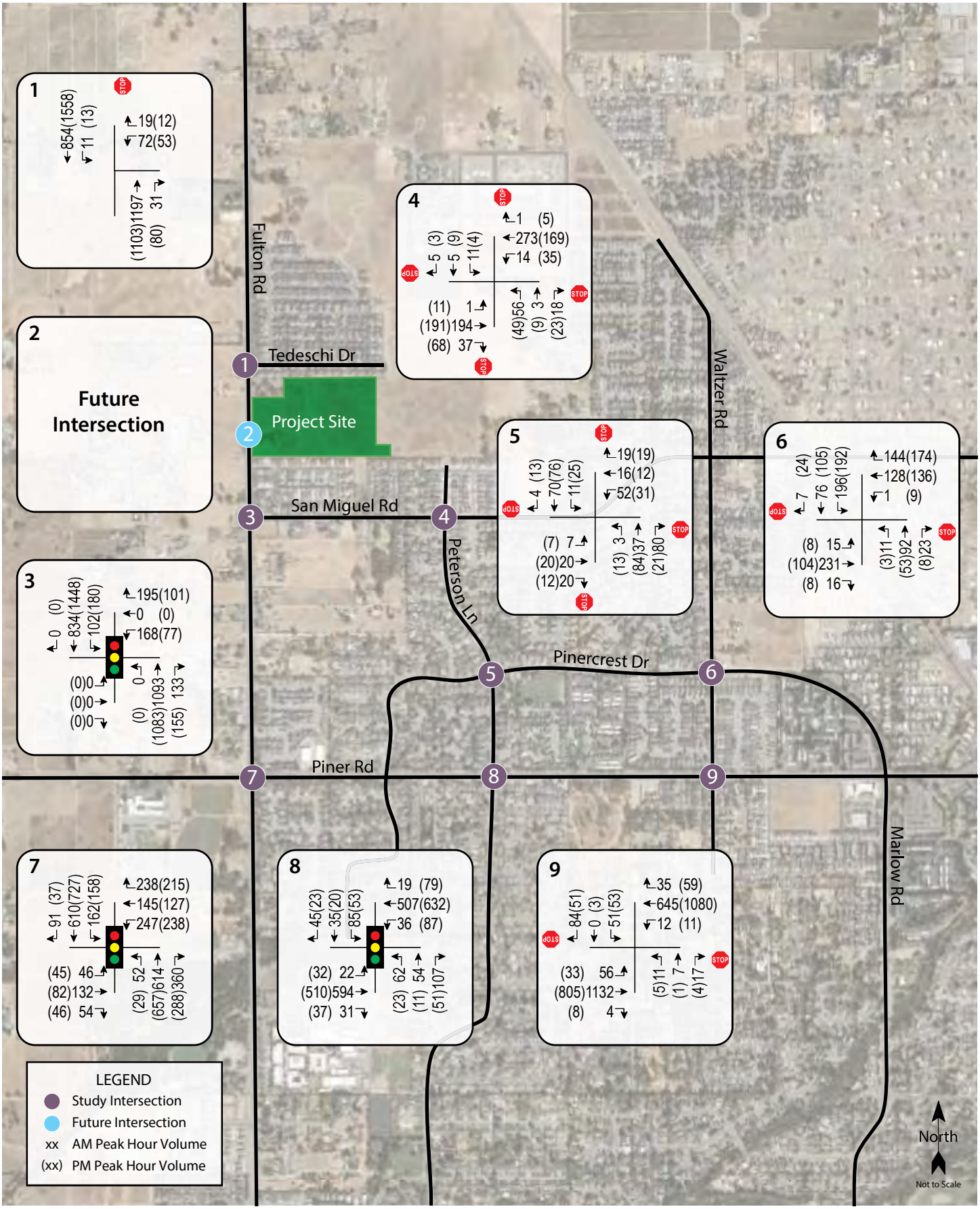
Table 5 – Baseline Peak Hour Intersection Levels of Service

Study Intersection ***Approach***	AM Peak		PM Peak	
	Delay	**LOS**	**Delay**	**LOS**
1. Fulton Rd/Tedeschi Dr	5.6	A	5.0	A
Westbound (Tedeschi Dr) Approach	**	*F*	**	*F*
2. Fulton Rd/New Project St	-	-	-	-
3. Fulton Rd/San Miguel Rd	14.1	B	14.4	B
4. Peterson Ln/San Miguel Rd	9.4	A	9.1	A
5. Peterson Ln/Pinercrest Dr	7.7	A	7.8	A
6. Waltzer Rd/Pinercrest Dr	12.2	B	11.6	B
7. Fulton Rd/Piner Rd	34.0	C	30.7	C
8. Peterson Ln/Piner Rd	10.5	B	9.1	A
9. Waltzer Rd/Piner Rd	12.9	B	12.3	A
Northbound (Waltzer Rd) Approach	*86.4*	*F*	*85.1*	*F*
Southbound (Waltzer Rd) Approach	**	*F*	**	*F*

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service; Results for minor approaches to two-way stop-controlled intersections are indicated in *italics;* **= delay greater than 120 seconds

Future (Cumulative) Conditions

A future conditions scenario was considered for evaluation for the project's impact on the surrounding network with future planned development. The City of Santa Rosa is in the process of updating the transportation element for the General Plan, as well as their Traffic Impact Study Guidelines. Since the proposed project is consistent with its zoning and General Plan land use designation, its traffic would be included in volumes projected for analysis of



sro497.ai 6/19

Traffic Impact Study for the 2220 Fulton Road Project

Figure 3 – Baseline Traffic Volumes

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the General Plan, so analysis of a future scenario is not necessary under the policies contained in the draft traffic study guidelines. It is noted that at the discretion of the Public Works staff such a scenario could be requested, though one was not for this project.

Project Description

The project as proposed would entail constructing 120 single-family homes on a lot currently occupied by a single home and located north of San Miguel Avenue and east of Fulton Road. The project would be accessed by a new street connecting to Fulton Road and another between Orleans Street and Andre Lane connecting the site to San Miguel Road and Tedeschi Drive. Neighborhoods off Andre Lane would benefit from the road connection south, providing a more direct route south of the neighborhood and the option of traveling south along Fulton via the signalized intersection at Fulton Road/San Miguel Road instead of waiting to turn left at Fulton Road/Tedeschi Drive. The proposed project site plan is shown in Figure 4.

Trip Generation

The anticipated trip generations for the proposed project as well as the existing home were estimated using standard rates published by the Institute of Transportation Engineers (ITE) in *Trip Generation Manual*, 10th Edition, 2017 for "Single Family Detached Housing" (ITE LU 210). As shown in Table 6, the proposed project is expected to generate an average of 1,133 trips per day, including 89 trips during the a.m. peak hour and 119 during the p.m. peak hour. After deductions are taken into account for the home to be removed, the project would be expected to generate 1,124 new trips on a daily basis, including 88 during the morning peak hour and 118 during the evening peak hour; these new trips represent the increase in traffic associated with the project compared to existing volumes.

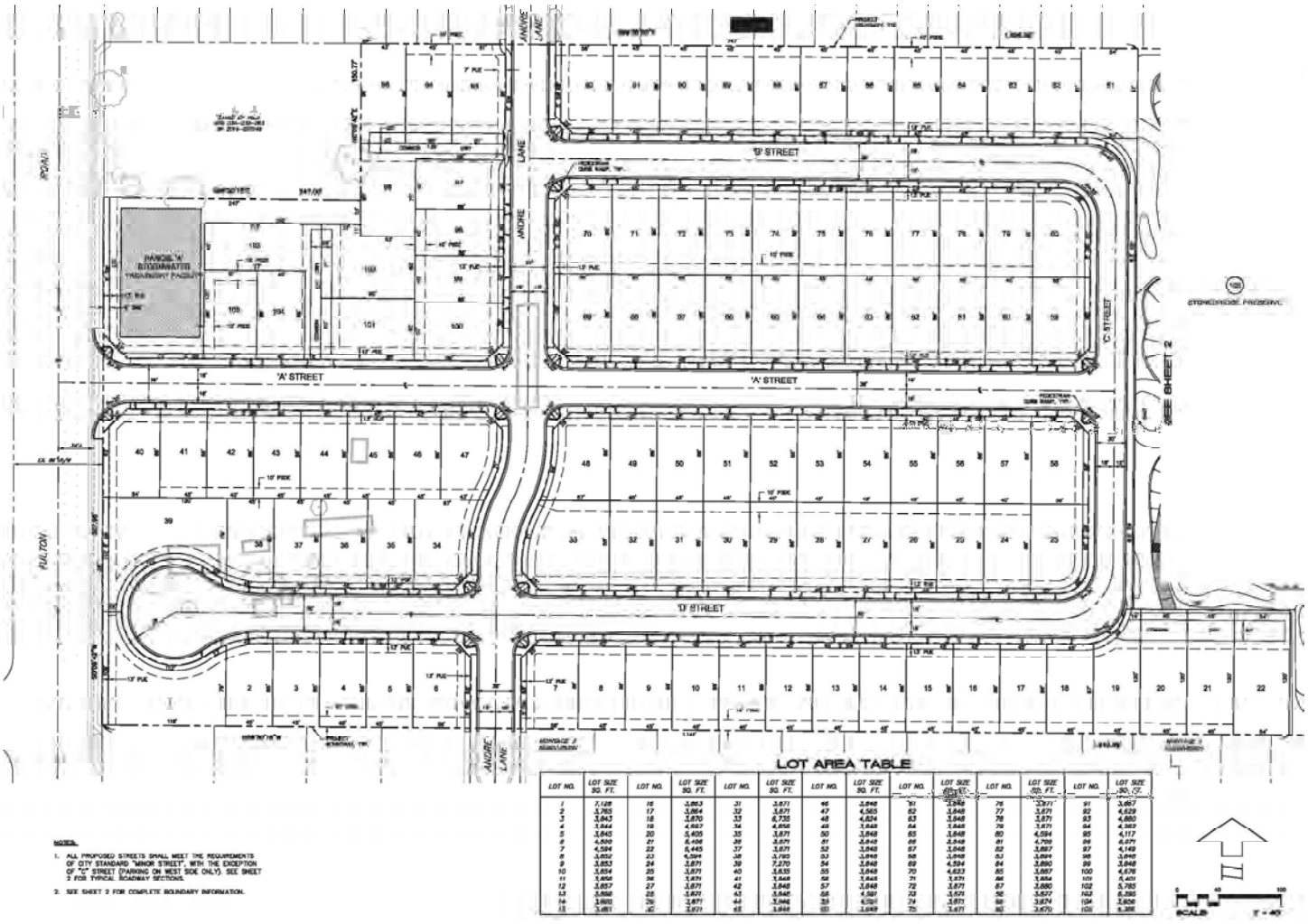
Table 6 – Trip Generation Summary

Land Use	Units	Daily		AM Peak Hour				PM Peak Hour			
		Rate	Trips	Rate	Trips	In	Out	Rate	Trips	In	Out
Existing											
Single Family Detached Housing	-1 du	9.44	-9	0.74	-1	0	-1	0.99	-1	-1	0
Proposed											
Single Family Detached Housing	120 du	9.44	1,133	0.74	89	22	67	0.99	119	75	44
Total (net new trips)			**1,124**		**88**	**22**	**66**		**118**	**74**	**44**

Note: du = dwelling unit

Trip Distribution

The pattern used to allocate new project trips to the street network was based on data from the 2000 Census for home-to-work trips. It should be noted that of the five percent of trips anticipated to travel to and from the north via Fulton Road, one percent of the trips were allocated to travel via Andre Lane to the intersection of Fulton Road/Tedeschi Drive to account for the 25 units (approximately 20 percent of the total proposed dwelling units) on the northern section of the proposed project site that might use this route rather than directly onto Fulton Road via the New Project Street. It was conservatively assumed all the project trips going south on Fulton Road would use the New Project Street, resulting in the maximum potential for improvements to be warranted at this location. The applied distribution assumptions and resulting trips are shown in Figure 5 and Table 7.



Source: Civil Design Consultants, Inc. 5/19 sro497.ai 6/19

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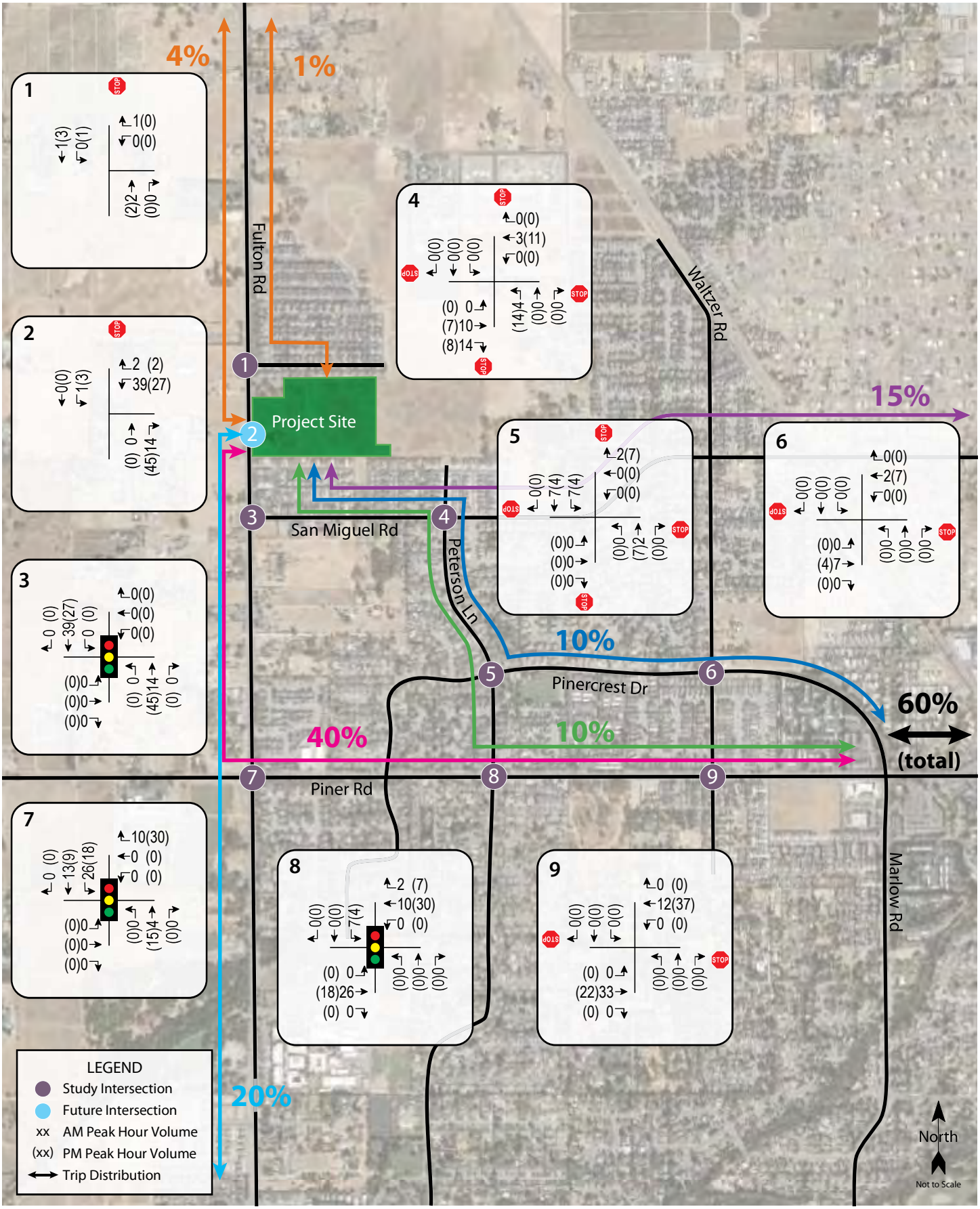
Figure 4 – Site Plan



sro497.ai 8/19

Traffic Impact Study for the 2220 Fulton Road Project

Figure 5 – Project Traffic Volumes and Trip Distribution

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Table 7 – Trip Distribution Assumptions				
Route	**Percent**	**Daily Trips**	**AM Trips**	**PM Trips**
To/from the north on Fulton Rd via Tedeschi Dr	1%	11	1	1
To/from the north on Fulton Rd via New Project St	4%	45	4	5
To/from the east on San Miguel Rd	15%	169	13	18
To/from the east on Piner Rd via Peterson Ln	10%	112	9	12
To/from the east on Piner Rd via Pinercrest Dr	10%	112	9	12
To/from the east on Piner Rd	40%	450	35	47
To/from the south on Fulton Rd	20%	225	18	24
TOTAL	**100%**	**1,124**	**89***	**119***

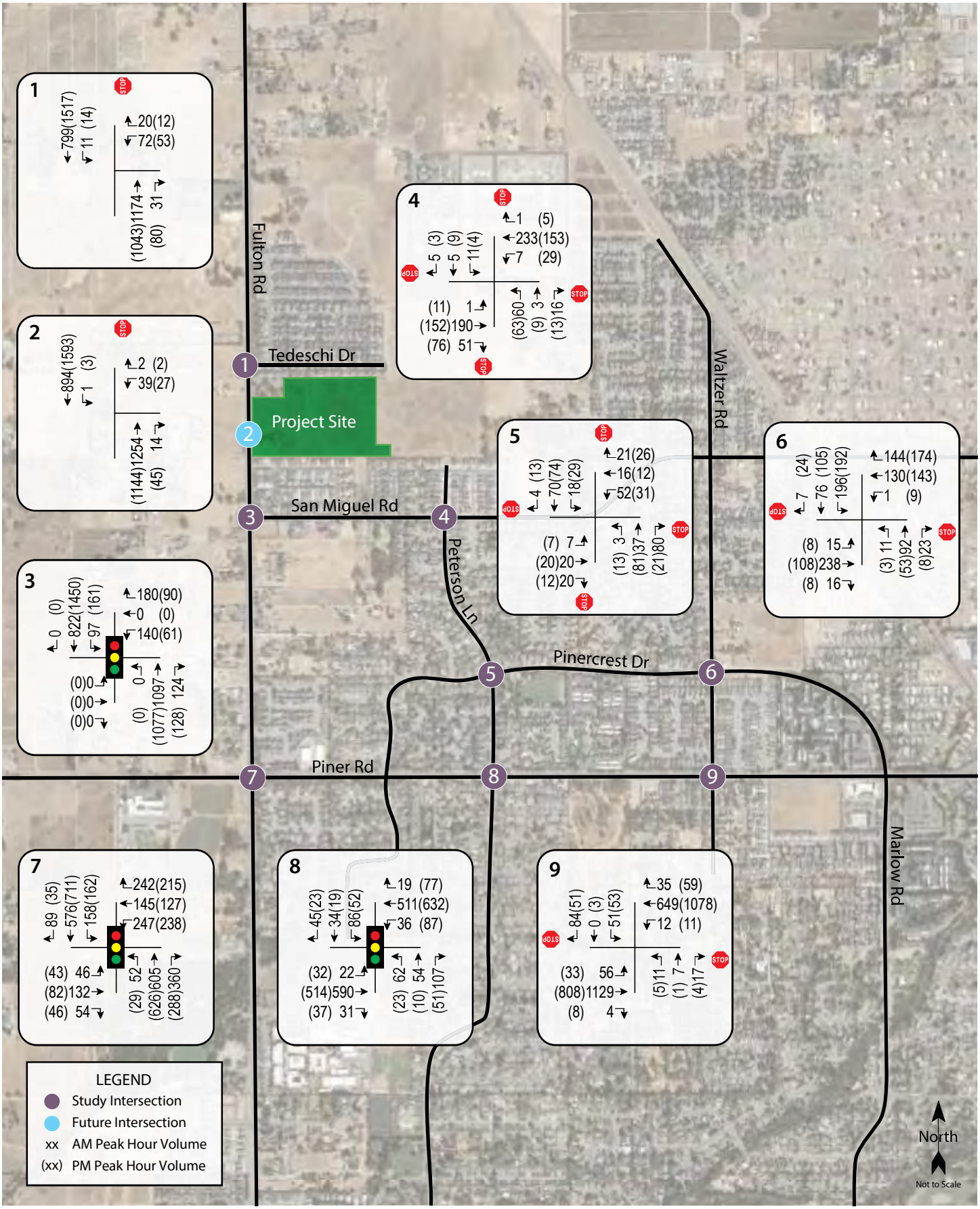
Note: * Trips do not add up to the calculated trip generation due to rounding

The proposed project is expected to result in a nominal number of trips through the adjacent neighborhoods because few destinations are to the north and for most of the new homes, exiting via the new project street would provide the most direct and convenient route. The project is therefore expected to generate only one new trip during each peak period through the neighborhood to the north to reach Tedeschi Drive and connect to Fulton Road.

Intersection Operation

Existing plus Project Conditions

Upon the addition of project-related traffic to the Existing volumes, the study intersections are expected to continue operating acceptably overall. Existing plus Project traffic volumes are shown in Figure 6. These results are summarized in Table 8.



sro497.ai 6/19

Traffic Impact Study for the 2220 Fulton Road Project

Figure 6 – Existing plus Project Traffic Volumes

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Table 8 – Existing and Existing plus Project Peak Hour Intersection Levels of Service

Study Intersection *Approach*		Existing Conditions				Existing plus Project			
		AM Peak		PM Peak		AM Peak		PM Peak	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1.	Fulton Rd/Tedeschi Dr	4.9	A	4.0	A	4.9	A	4.1	A
	Westbound (Tedeschi Dr) Approach	*110.9*	*F*	**	*F*	*111.6*	*F*	**	*F*
2.	Fulton Rd/New Project St	-	-	-	-	1.5	A	1.2	A
	Westbound (New Project St) Approach	-	-	-	-	*82.0*	*F*	*118.7*	*F*
3.	Fulton Rd/San Miguel Rd	13.9	B	13.9	B	13.9	B	13.9	B
4.	Peterson Ln/San Miguel Rd	9.0	A	8.6	A	9.1	A	8.8	A
5.	Peterson Ln/Pinercrest Dr	7.7	A	7.8	A	7.8	A	7.9	A
6.	Waltzer Rd/Pinercrest Dr	12.2	B	11.6	B	12.4	B	11.7	B
7.	Fulton Rd/Piner Rd	33.3	C	30.1	C	34.1	C	30.8	C
8.	Peterson Ln/Piner Rd	9.9	A	9.0	A	10.4	B	9.1	A
9.	Waltzer Rd/Piner Rd	11.6	B	10.8	B	12.9	B	12.4	B
	Northbound (Waltzer Rd) Approach	*78.1*	*F*	*75.7*	*F*	*86.7*	*F*	*85.2*	*F*
	Southbound (Waltzer Rd) Approach	**	*F*	**	*F*	**	*F*	**	*F*

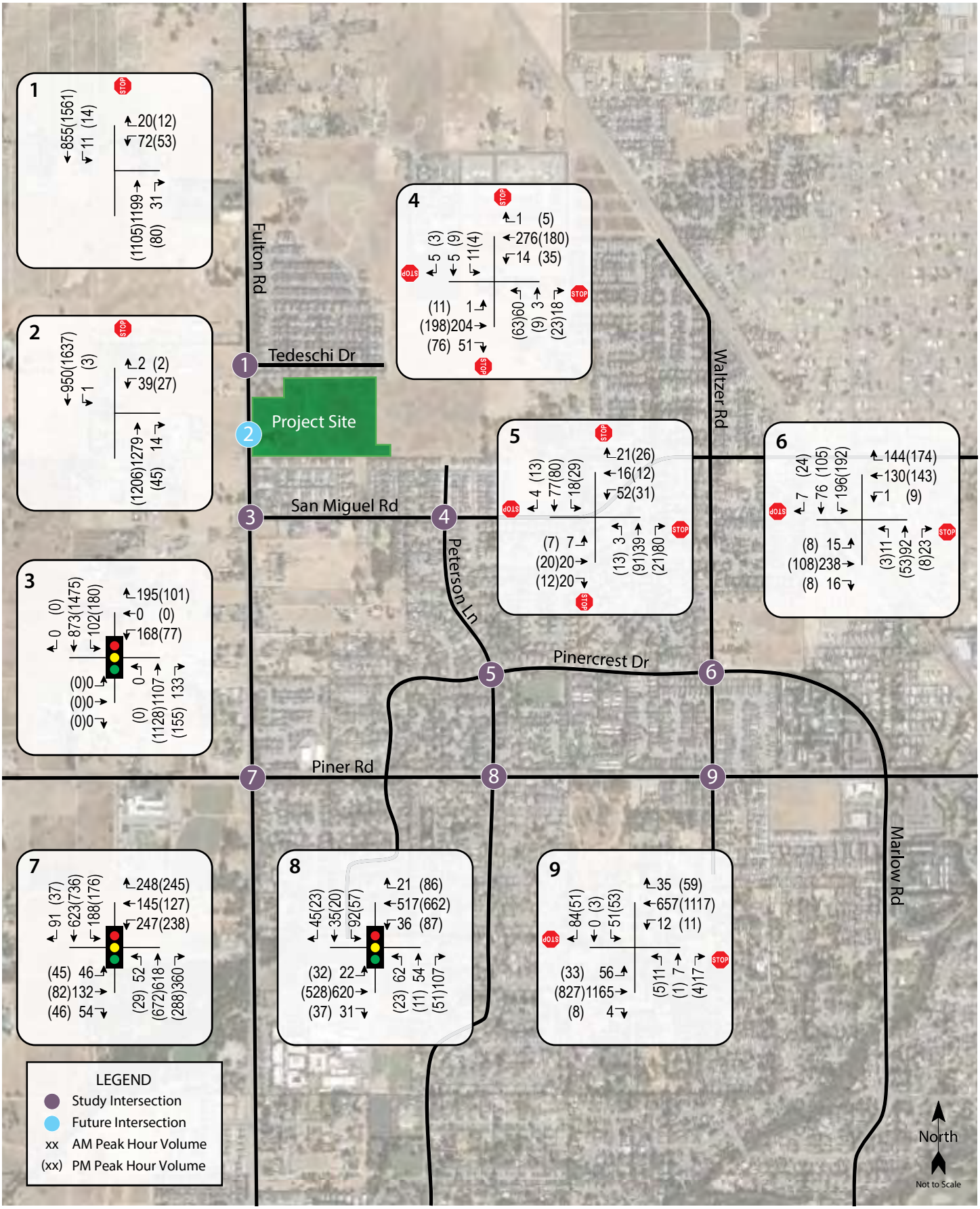
Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service; Results for minor approaches to two-way stop-controlled intersections are indicated in *italics;* **= delay greater than 120 seconds

It is noted that while the minor approach at Fulton Road/Tedeschi Drive is expected to operate at LOS F, with the construction of the proposed project, existing trips from the adjacent neighborhood off Andre Lane may reroute and benefit from the proposed road connection between Andre Lane and the signalized intersection of Fulton Road/San Miguel, thus improving the intersection's operation with the construction of the project. No diversion of trips was assumed, however, to retain a conservative analysis.

Finding – The study intersections are expected to continue operating acceptably overall upon the addition of project-generated traffic. It is noted that while some stop-controlled approaches are projected to operate at LOS E or F, this is considered acceptable as these intersections would be expected to operate at LOS A or B overall. The project's impact under Existing plus Project conditions is therefore less-than-significant.

Baseline plus Project Conditions

With project-related traffic added to Baseline volumes, the study intersections are expected to operate at the same levels of service overall with as without project-added volumes. Baseline plus Project traffic volumes are shown in Figure 7. These results are summarized in Table 9.



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Traffic Impact Study for the 2220 Fulton Road Project

Figure 7 – Baseline plus Project Traffic Volumes

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Table 9 – Baseline and Baseline plus Project Peak Hour Intersection Levels of Service								
Study Intersection ***Approach***	**Baseline Conditions**				**Baseline plus Project**			
	AM Peak		**PM Peak**		**AM Peak**		**PM Peak**	
	Delay	**LOS**	**Delay**	**LOS**	**Delay**	**LOS**	**Delay**	**LOS**
1. Fulton Rd/Tedeschi Dr	5.6	A	5.0	A	5.7	A	5.1	A
Westbound (Tedeschi Dr) Approach	**	*F*	**	*F*	**	*F*	**	*F*
2. Fulton Rd/New Project St	-	-	-	-	1.7	A	1.5	A
Westbound (New Project St) Approach	-	-	-	-	*93.3*	*F*	**	*F*
3. Fulton Rd/San Miguel Rd	14.1	B	14.4	B	14.1	B	14.6	B
4. Peterson Ln/San Miguel Rd	9.4	A	9.1	A	9.6	A	9.3	A
5. Peterson Ln/Pinercrest Dr	7.7	A	7.8	A	7.8	A	7.9	A
6. Waltzer Rd/Pinercrest Dr	12.2	B	11.6	B	12.4	B	11.7	B
7. Fulton Rd/Piner Rd	34.0	C	30.7	C	34.8	C	31.4	C
8. Peterson Ln/Piner Rd	10.5	B	9.1	A	11.0	B	9.4	A
9. Waltzer Rd/Piner Rd	12.9	B	12.3	B	14.4	B	14.0	B
Northbound (Waltzer Rd) Approach	*86.4*	*F*	*85.1*	*F*	*96.3*	*F*	*96.3*	*F*
Southbound (Waltzer Rd) Approach	**	*F*	**	*F*	**	*F*	**	*F*

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service; Results for minor approaches to two-way stop-controlled intersections are indicated in *italics;* **= delay greater than 120 seconds

Finding – The study intersections are expected to continue operating acceptably overall at the same levels of service upon the addition of project-generated traffic, resulting in a less-than-significant impact on traffic operation.

Proportional Share for Future Improvements

It is understood that the City of Santa Rosa is planning to install a traffic signal at Piner Road/Waltzer Road and it is assumed that this future improvement is included in the City's Public Facilities Fee (PFF). Payment of the PFF would therefore provide a contribution to the signalization project.

Alternative Modes

Pedestrian Facilities

Given the proximity of residential neighborhoods as well as Piner High School to the south of the site, it is reasonable to assume that some project residents will want to walk, bicycle, and/or use transit for trips from and to the project site. Sidewalks exist along the project frontage, and site plans show that sidewalks will be provided along new project streets.

Finding – Pedestrian facilities serving the project site will be adequate upon completion of improvements planned as part of the project.

Bicycle Facilities

Existing bicycle facilities, including bike lanes on Fulton Road, together with shared use of minor streets provide adequate access for bicyclists.

Bicycle Storage

As proposed, all units would have a garage in which to store their bicycles, therefore additional bicycle storage facilities are not necessary.

Finding – Bicycle facilities serving the project site are adequate. Residents would be able to store bicycles in their private garages, so no bike parking facilities are required.

Transit

There are no existing transit routes or stops within an acceptable walking distance of the site; however, based on the distance between the project site and employment centers, it is reasonable to expect that some residents would want to travel using transit if it were available.

Finding – Transit facilities serving the project site are inadequate.

Recommendation – The project applicant should request that Santa Rosa CityBus evaluate the potential for modifying Route 6 to better serve residents living north of Piner Road and east of Fulton Road.

Access and Circulation

Site Access

The project would be accessible via a new roadway connecting to Fulton Road to be built as part of the project. The new project street would also connect to Orleans Street and Tedeschi Drive. There is an existing two-way left-turn lane (TWLTL) on Fulton Road at the New Project Street. As part of the project construction the TWLTL should be converted to provide a dedicated left-turn pocket in the southbound direction.

Sight Distance

Sight distance along Fulton Road at the proposed new project street was evaluated based on sight distance criteria contained in the *Highway Design Manual* published by Caltrans. The recommended sight distance at intersections of public streets is based on corner sight distances, with approach travel speeds used as the basis for determining the recommended sight distance. Additionally, the stopping sight distance needed for a following driver to stop if there is a vehicle waiting to turn into a side street or driveway is evaluated based on stopping sight distance criterion and the approach speed on the major street.

Sight distance at the proposed new project driveway was field measured. Based on a design speed of 45 mph, the minimum corner sight distance needed is 495 feet. Based on observations during a field visit, there is more than adequate sight lines in both directions at the project driveway along Fulton Road.

Finding – Sight distance along Fulton Road at the New Project Street driveway is expected to be more adequate, with sight lines of more than 495 feet in both directions from the new street approach.

Recommendation – The two-way-left-turn lane on Fulton Road at the New Project Street should be converted to a dedicated left-turn lane in the southbound direction.

Traffic Signal Warrants

A signal warrant analysis was performed to determine potential need for a traffic signal at Fulton Road/New Project Street.

Chapter 4C of the *California Manual on Uniform Traffic Control Devices* (CA-MUTCD) provides guidance on when a traffic signal should be considered.

Warrant 3, peak hour volumes, which is often the first warrant to be met, is based on the volumes during the highest-volume hour of the day. Under the Peak Hour Warrant the need for a traffic control signal shall be considered if an engineering study finds that the criteria in either of the following two categories are met:

A. If all three of the following conditions exist for the same one hour (any four consecutive 15-minute periods) of an average day:

    1. The total stopped time delay experienced by the traffic on one minor-street approach (one direction only) controlled by a STOP sign equals or exceeds: four vehicle-hours for a one-lane approach; or five vehicle-hours for a two-lane approach, and
    2. The volume on the same minor-street approach (one direction only) equals or exceeds 100 vehicles per hour for one moving lane of traffic or 150 vehicles per hour for two moving lanes, and

3. The total entering volume serviced during the hour equals or exceeds 650 vehicles per hour for intersections with three approaches or 800 vehicles per hour for intersections with four or more approaches.

B. The plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the higher-volume minor-street approach (one direction only) for one hour (any four consecutive 15-minute periods) of an average day falls above the applicable curve in Figure 4C-3 for the existing combination of approach lanes.

The intersection of Fulton Road/New Project Street would not warrant a traffic signal under volumes for either the Existing or Baseline plus project scenarios during either peak hour. Copies of the Signal Warrant Spreadsheets are provided in Appendix C.

On-Site Circulation

Based on a standard-sized fire truck size and the proposed site plan, on-site circulation would be adequate to accommodate emergency vehicle turning-movements. AutoTURN output for emergency vehicle access is provided in Appendix D. The site plan was also reviewed for compliance with the City of Santa Rosa neighborhood street design features. All streets widths are adequate to meet the City's standards.

Finding – Emergency access would be adequate.

Conclusions and Recommendations

Conclusions

- The proposed project would generate an average of 1,124 new daily trips to the surrounding roadway network with 88 trips during the weekday a.m. peak hour and 118 trips during the weekday p.m. peak hour.
- Under Existing Conditions all the study intersections are operating acceptably at LOS C or better overall during both peak hours, and is are expected to continue operating acceptably with the addition of project generated traffic.
- Under the anticipated Existing plus Approved, or "Baseline," volumes, the study intersections are expected to operate acceptably overall, without and with project-added traffic.
- Upon completion of sidewalks on both sides of all streets constructed by the project, pedestrian facilities would be connected and adequate.
- There are adequate bicycle facilities along the project frontage.
- There are no bus routes within an acceptable walking distance of the project site.
- Adequate sight distance is available at the proposed new project roadway connection.
- The intersection of Fulton Road/New Project Street was evaluated to determine potential need for a traffic signal; however, a signal is not warranted based on volumes during both peak hours for the Existing and Baseline plus Project scenarios.

Recommendations

- The project application should request that Santa Rosa CityBus investigate the potential for modifying Route 6 to better serve the neighborhood north of Piner Road and east of Fulton Road.
- The two-way left-turn lane on Fulton Road should be restriped at the New Project Street to a southbound left-turn lane.
- Piner Road/Waltzer Road is planned to be converted to a signalized intersection in the future. The applicant should pay the City's Public Facilities Fee, which is assumed to include the cost of improvements to the intersection.

Study Participants and References

Study Participants

Principal in Charge	Dalene J. Whitlock, PE, PTOE
Assistant Engineer	Allison Jaromin, EIT
Assistant Planner	Julia Walker
Graphics	Katia Wolfe
Editing/Formatting	Alex Scrobonia
Quality Control	Dalene J. Whitlock, PE, PTOE

References

2014 Collision Data on California State Highways, California Department of Transportation, 2017

California Manual on Uniform Traffic Control Devices for Streets and Highways, California Department of Transportation, 2014

City of Santa Rosa Bicycle & Pedestrian Master Plan Update 2018, City of Santa Rosa, 2018

Citywide Summary of Pending Development, City of Santa Rosa Department of Planning and Economic Development, 2019

Highway Capacity Manual, Transportation Research Board, 2010

Highway Design Manual, 6th Edition, California Department of Transportation, 2017

Santa Rosa CityBus, http://srcity.org/1661/Maps-and-Schedules

Santa Rosa City Code, Quality Code Publishing, 2017

Santa Rosa General Plan 2035, City of Santa Rosa, 2014

Sonoma County Transit, http://sctransit.com/

Statewide Integrated Traffic Records System (SWITRS), California Highway Patrol, 2013-2018

Trip Generation Manual, 10th Edition, Institute of Transportation Engineers, 2017

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Appendix A

Collision Rate Calculations

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Intersection Collision Rate Calculations

Traffic Impact Study for 2220 Fulton Road Project

Intersection # 1: Fulton Road & Tedeschi Drive
Date of Count: Tuesday, April 30, 2019

Number of Collisions: 2
Number of Injuries: 2
Number of Fatalities: 0
ADT: 20400
Start Date: September 30, 2013
End Date: October 1, 2018
Number of Years: 5

Intersection Type: Tee
Control Type: Stop & Yield Controls
Area: Suburban

$$\text{collision rate} = \frac{\text{Number of Collisions x 1 Million}}{\text{ADT x 365 Days per Year x Number of Years}}$$

$$\text{collision rate} = \frac{2 \times 1{,}000{,}000}{20{,}400 \times 365 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	**0.05 c/mve**	**0.0%**	**100.0%**
Statewide Average*	**0.14 c/mve**	**0.7%**	**38.0%**

ADT = average daily total vehicles entering intersection
c/mve = collisions per million vehicles entering intersection
* 2013 Collision Data on California State Highways, Caltrans

Intersection # 3: Fulton Road & San Miguel Road
Date of Count: Thursday, May 10, 2018

Number of Collisions: 4
Number of Injuries: 3
Number of Fatalities: 0
ADT: 18100
Start Date: September 30, 2013
End Date: October 1, 2018
Number of Years: 5

Intersection Type: Four-Legged
Control Type: Signals
Area: Suburban

$$\text{collision rate} = \frac{\text{Number of Collisions x 1 Million}}{\text{ADT x 365 Days per Year x Number of Years}}$$

$$\text{collision rate} = \frac{4 \times 1{,}000{,}000}{18{,}100 \times 365 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	**0.12 c/mve**	**0.0%**	**75.0%**
Statewide Average*	**0.43 c/mve**	**0.4%**	**37.9%**

ADT = average daily total vehicles entering intersection
c/mve = collisions per million vehicles entering intersection
* 2013 Collision Data on California State Highways, Caltrans

Intersection Collision Rate Calculaions

Traffic Impact Study for 2220 Fulton Road Project

Intersection # 4: Peterson Lane & San Miguel Road

Date of Count: Tuesday, April 30, 2019

Number of Collisions: 0
Number of Injuries: 0
Number of Fatalities: 0
ADT: 3700
Start Date: September 30, 2013
End Date: October 1, 2018
Number of Years: 5

Intersection Type: Tee
Control Type: Stop & Yield Controls
Area: Suburban

$$\text{collision rate} = \frac{\text{Number of Collisions x 1 Million}}{\text{ADT x 365 Days per Year x Number of Years}}$$

$$\text{collision rate} = \frac{0 \times 1{,}000{,}000}{3{,}700 \times 365 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	**0.00 c/mve**	**0.0%**	**0.0%**
Statewide Average*	**0.14 c/mve**	**0.7%**	**38.0%**

ADT = average daily total vehicles entering intersection
c/mve = collisions per million vehicles entering intersection
* 2013 Collision Data on California State Highways, Caltrans

Intersection # 5: Peterson Lane & Pinercrest Drive

Date of Count: Tuesday, April 30, 2019

Number of Collisions: 1
Number of Injuries: 1
Number of Fatalities: 0
ADT: 2400
Start Date: September 30, 2013
End Date: October 1, 2018
Number of Years: 5

Intersection Type: Four-Legged
Control Type: 4 Way Stop
Area: Suburban

$$\text{collision rate} = \frac{\text{Number of Collisions x 1 Million}}{\text{ADT x 365 Days per Year x Number of Years}}$$

$$\text{collision rate} = \frac{1 \times 1{,}000{,}000}{2{,}400 \times 365 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	**0.23 c/mve**	**0.0%**	**100.0%**
Statewide Average*	**0.32 c/mve**	**0.4%**	**44.7%**

ADT = average daily total vehicles entering intersection
c/mve = collisions per million vehicles entering intersection
* 2013 Collision Data on California State Highways, Caltrans

Intersection Collision Rate Calculaions

Traffic Impact Study for 2220 Fulton Road Project

Intersection # 6: Waltzer Road & Pinercrest Drive

Date of Count: Tuesday, April 30, 2019

Number of Collisions: 0
Number of Injuries: 0
Number of Fatalities: 0
ADT: 6200
Start Date: September 30, 2013
End Date: October 1, 2018
Number of Years: 5

Intersection Type: Four-Legged
Control Type: 4 Way Stop
Area: Suburban

$$\text{collision rate} = \frac{\text{Number of Collisions x 1 Million}}{\text{ADT x 365 Days per Year x Number of Years}}$$

$$\text{collision rate} = \frac{0 \times 1{,}000{,}000}{6{,}200 \times 365 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	**0.00 c/mve**	**0.0%**	**0.0%**
Statewide Average*	**0.32 c/mve**	**0.4%**	**44.7%**

ADT = average daily total vehicles entering intersection
c/mve = collisions per million vehicles entering intersection
* 2013 Collision Data on California State Highways, Caltrans

Intersection # 7: Fulton Road & Piner Road

Date of Count: Thursday, March 2, 2017

Number of Collisions: 9
Number of Injuries: 4
Number of Fatalities: 0
ADT: 26500
Start Date: September 30, 2013
End Date: October 1, 2018
Number of Years: 5

Intersection Type: Four-Legged
Control Type: Signals
Area: Suburban

$$\text{collision rate} = \frac{\text{Number of Collisions x 1 Million}}{\text{ADT x 365 Days per Year x Number of Years}}$$

$$\text{collision rate} = \frac{9 \times 1{,}000{,}000}{26{,}500 \times 365 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	**0.19 c/mve**	**0.0%**	**44.4%**
Statewide Average*	**0.43 c/mve**	**0.4%**	**37.9%**

ADT = average daily total vehicles entering intersection
c/mve = collisions per million vehicles entering intersection
* 2013 Collision Data on California State Highways, Caltrans

Intersection Collision Rate Calculaions

Traffic Impact Study for 2220 Fulton Road Project

Intersection # 8: Peterson Lane & Piner Road

Date of Count: Thursday, March 2, 2017

Number of Collisions: 7
Number of Injuries: 6
Number of Fatalities: 0
ADT: 15500
Start Date: September 30, 2013
End Date: October 1, 2018
Number of Years: 5

Intersection Type: Four-Legged
Control Type: Signals
Area: Suburban

$$\text{collision rate} = \frac{\text{Number of Collisions x 1 Million}}{\text{ADT x 365 Days per Year x Number of Years}}$$

$$\text{collision rate} = \frac{7 \times 1{,}000{,}000}{15{,}500 \times 365 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	**0.25 c/mve**	**0.0%**	**85.7%**
Statewide Average*	**0.43 c/mve**	**0.4%**	**37.9%**

ADT = average daily total vehicles entering intersection
c/mve = collisions per million vehicles entering intersection
* 2013 Collision Data on California State Highways, Caltrans

Intersection # 9: Waltzer Road & Piner Road

Date of Count: Tuesday, April 30, 2019

Number of Collisions: 3
Number of Injuries: 3
Number of Fatalities: 0
ADT: 15500
Start Date: September 30, 2013
End Date: October 1, 2018
Number of Years: 5

Intersection Type: Four-Legged
Control Type: Stop & Yield Controls
Area: Suburban

$$\text{collision rate} = \frac{\text{Number of Collisions x 1 Million}}{\text{ADT x 365 Days per Year x Number of Years}}$$

$$\text{collision rate} = \frac{3 \times 1{,}000{,}000}{15{,}500 \times 365 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	**0.11 c/mve**	**0.0%**	**100.0%**
Statewide Average*	**0.26 c/mve**	**0.9%**	**37.4%**

ADT = average daily total vehicles entering intersection
c/mve = collisions per million vehicles entering intersection
* 2013 Collision Data on California State Highways, Caltrans

Appendix B

Intersection Level of Service Calculations

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Intersection Level Of Service Report
Intersection 1: Fulton Rd/Tedeschi Dr

Control Type:	Two-way stop	Delay (sec / veh):	117.2
Analysis Method:	HCM 2010	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.768

Intersection Setup

Name	Fulton Rd		Fulton Rd		Tedeschi Dr	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	50.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name	Fulton Rd		Fulton Rd		Tedeschi Dr	
Base Volume Input [veh/h]	881	23	8	600	54	14
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1172	31	11	798	72	19
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	293	8	3	200	18	5
Total Analysis Volume [veh/h]	1172	31	11	798	72	19
Pedestrian Volume [ped/h]	0		0		0	

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Intersection Settings

Priority Scheme	Free		Free		Stop	
Flared Lane					No	
Storage Area [veh]	0		0		0	
Two-Stage Gap Acceptance					No	
Number of Storage Spaces in Median	0		0		0	

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.02	0.01	0.77	0.04
d_M, Delay for Movement [s/veh]	0.00	0.00	11.37	0.00	117.23	86.94
Movement LOS	A	A	B	A	F	F
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.06	0.00	4.67	4.67
95th-Percentile Queue Length [ft/ln]	0.00	0.00	1.46	0.00	116.66	116.66
d_A, Approach Delay [s/veh]	0.00		0.15		110.91	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	4.86					
Intersection LOS	F					

2220 Fulton Road Project TIS
AM Existing Conditions
W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 3: Fulton Rd/San Miguel Ave

Control Type:	Signalized	Delay (sec / veh):	13.9
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.501

Intersection Setup

Name	Fulton Rd			Fulton Rd						San Miguel Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	11.00	12.00	11.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	1	0	0
Pocket Length [ft]	50.00	100.00	100.00	50.00	100.00	100.00	100.00	100.00	100.00	60.00	100.00	100.00
Speed [mph]	45.00			45.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	Fulton Rd			Fulton Rd						San Miguel Ave		
Base Volume Input [veh/h]	0	814	93	73	589	0	0	0	0	105	0	135
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.0000	1.3300	1.3300	1.3300	1.3300	1.0000	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1083	124	97	783	0	0	0	0	140	0	180
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	271	31	24	196	0	0	0	0	35	0	45
Total Analysis Volume [veh/h]	0	1083	124	97	783	0	0	0	0	140	0	180
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	9			13			8			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Split	Split	Split	Split	Permis	Split
Signal Group	3	8	0	7	4	0	5	2	0	6	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	7	0	4	7	0	0	7	0	9	0	0
Maximum Green [s]	7	35	0	25	35	0	0	7	0	30	0	0
Amber [s]	4.7	4.7	0.0	4.7	4.7	0.0	0.0	3.0	0.0	3.6	0.0	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	43	28	0	35	20	0	0	27	0	27	0	0
Vehicle Extension [s]	1.0	3.0	0.0	3.0	3.0	0.0	0.0	1.0	0.0	2.0	0.0	0.0
Walk [s]	0	5	0	0	0	0	0	0	0	5	0	0
Pedestrian Clearance [s]	0	8	0	0	0	0	0	0	0	18	0	0
Rest In Walk		No			No			No		No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	2.7	2.7	0.0	2.7	2.7	0.0	0.0	1.0	0.0	1.6	0.0	0.0
Minimum Recall	No	Yes		No	Yes			No		No		
Maximum Recall	No	No		No	No			No		No		
Pedestrian Recall	No	No		No	No			No		No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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6/26/2019

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	R
C, Cycle Length [s]	48	48	48	48	48	48	48	48
L, Total Lost Time per Cycle [s]	4.70	4.70	4.70	4.70	4.70	3.00	3.60	3.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.70	2.70	2.70	2.70	2.70	1.00	1.60	1.60
g_i, Effective Green Time [s]	0	19	19	3	23	0	9	9
g / C, Green / Cycle	0.00	0.40	0.40	0.07	0.48	0.00	0.19	0.19
(v / s)_i Volume / Saturation Flow Rate	0.00	0.33	0.33	0.05	0.22	0.00	0.08	0.11
s, saturation flow rate [veh/h]	1774	1863	1784	1774	3547	1863	1774	1583
c, Capacity [veh/h]	0	755	723	128	1694	0	331	295
d1, Uniform Delay [s]	0.00	12.57	12.62	21.67	8.34	0.00	17.11	17.78
k, delay calibration	0.04	0.11	0.11	0.11	0.11	0.04	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00	2.19	2.39	8.65	0.20	0.00	0.32	0.76
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.81	0.82	0.76	0.46	0.00	0.42	0.61
d, Delay for Lane Group [s/veh]	0.00	14.75	15.01	30.32	8.54	0.00	17.43	18.54
Lane Group LOS	A	B	B	C	A	A	B	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.00	4.39	4.30	1.20	1.73	0.00	1.26	1.70
50th-Percentile Queue Length [ft/ln]	0.00	109.82	107.47	30.01	43.17	0.00	31.46	42.61
95th-Percentile Queue Length [veh/ln]	0.00	7.83	7.70	2.16	3.11	0.00	2.26	3.07
95th-Percentile Queue Length [ft/ln]	0.00	195.75	192.47	54.02	77.71	0.00	56.62	76.70

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	14.87	15.01	30.32	8.54	0.00	0.00	0.00	0.00	17.43	0.00	18.54
Movement LOS	A	B	B	C	A		A	A	A	B		B
d_A, Approach Delay [s/veh]	14.88			10.94			0.00			18.06		
Approach LOS	B			B			A			B		
d_I, Intersection Delay [s/veh]	13.86											
Intersection LOS	B											
Intersection V/C	0.501											

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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AM Existing Conditions
W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 4: Peterson Ln/San Miguel Ave

Control Type:	All-way stop	Delay (sec / veh):	9.0
Analysis Method:	HCM 2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.293

Intersection Setup

Name	Peterson Ln			Peterson Ln			San Miguel Ave			San Miguel Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Peterson Ln			Peterson Ln			San Miguel Ave			San Miguel Ave		
Base Volume Input [veh/h]	42	2	12	8	4	4	1	135	28	5	173	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	56	3	16	11	5	5	1	180	37	7	230	1
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	14	1	4	3	1	1	0	45	9	2	58	0
Total Analysis Volume [veh/h]	56	3	16	11	5	5	1	180	37	7	230	1
Pedestrian Volume [ped/h]	0			2			0			3		

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Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	718	715	828	814
Degree of Utilization, x	0.10	0.03	0.26	0.29

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.35	0.09	1.06	1.22
95th-Percentile Queue Length [ft]	8.70	2.27	26.42	30.50
Approach Delay [s/veh]	8.59	8.19	8.89	9.24
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	8.98			
Intersection LOS	A			

2220 Fulton Road Project TIS
AM Existing Conditions
W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 5: Peterson Ln/Pinercrest Dr

Control Type:	All-way stop	Delay (sec / veh):	7.7
Analysis Method:	HCM 2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.129

Intersection Setup

Name	Peterson Ln			Peterson Ln			Pinercrest Dr			Pinercrest Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Peterson Ln			Peterson Ln			Pinercrest Dr			Pinercrest Dr		
Base Volume Input [veh/h]	2	26	60	8	47	3	5	15	15	39	12	14
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	35	80	11	63	4	7	20	20	52	16	19
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	9	20	3	16	1	2	5	5	13	4	5
Total Analysis Volume [veh/h]	3	35	80	11	63	4	7	20	20	52	16	19
Pedestrian Volume [ped/h]	2			4			0			3		

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Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	918	827	851	819
Degree of Utilization, x	0.13	0.09	0.06	0.11

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.44	0.31	0.18	0.36
95th-Percentile Queue Length [ft]	11.02	7.79	4.38	8.88
Approach Delay [s/veh]	7.50	7.81	7.48	7.92
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	7.68			
Intersection LOS	A			

2220 Fulton Road Project TIS
AM Existing Conditions
W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 6: Waltzer Rd/Pinercrest Dr

Control Type:	All-way stop	Delay (sec / veh):	12.2
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.448

Intersection Setup

Name	Waltzer Rd			Waltzer Rd			Pinercrest Dr					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name	Waltzer Rd			Waltzer Rd			Pinercrest Dr					
Base Volume Input [veh/h]	8	69	17	147	57	5	11	174	12	1	96	108
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	92	23	196	76	7	15	231	16	1	128	144
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	23	6	49	19	2	4	58	4	0	32	36
Total Analysis Volume [veh/h]	11	92	23	196	76	7	15	231	16	1	128	144
Pedestrian Volume [ped/h]	4			0			5			0		

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Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	612	623	645	681
Degree of Utilization, x	0.21	0.45	0.41	0.40

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.77	2.31	1.97	1.94
95th-Percentile Queue Length [ft]	19.19	57.72	49.29	48.45
Approach Delay [s/veh]	10.40	13.38	12.35	11.80
Approach LOS	B	B	B	B
Intersection Delay [s/veh]	12.23			
Intersection LOS	B			

2220 Fulton Road Project TIS
AM Existing Conditions
W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 7: Fulton Rd/Piner Rd

Control Type:	Signalized	Delay (sec / veh):	33.3
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.597

Intersection Setup

Name	Fulton Rd			Fulton Rd			Piner Rd			Piner Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	1
Pocket Length [ft]	110.00	100.00	100.00	90.00	100.00	100.00	70.00	100.00	100.00	245.00	100.00	110.00
Speed [mph]	45.00			45.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Fulton Rd			Fulton Rd			Piner Rd			Piner Rd		
Base Volume Input [veh/h]	52	601	360	132	563	89	46	132	54	247	145	232
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	52	601	360	132	563	89	46	132	54	247	145	232
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	150	90	33	141	22	12	33	14	62	36	58
Total Analysis Volume [veh/h]	52	601	360	132	563	89	46	132	54	247	145	232
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	6			0			0			10		
Bicycle Volume [bicycles/h]	0			0			1			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	85.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lag	-	-	Lead	-	-	Lead	-	-	Lag	-	-
Minimum Green [s]	4	8	0	4	8	0	4	8	0	4	8	0
Maximum Green [s]	20	50	0	25	50	0	20	50	0	35	70	0
Amber [s]	3.0	4.3	0.0	3.0	4.3	0.0	3.0	3.9	0.0	3.0	3.9	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	14	54	0	15	55	0	14	30	0	31	47	0
Vehicle Extension [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	0	0
Pedestrian Clearance [s]	0	19	0	0	18	0	0	19	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	1.0	2.3	0.0	1.0	2.3	0.0	1.0	1.9	0.0	1.0	1.9	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

2220 Fulton Road Project TIS
AM Existing Conditions
W-Trans
6/26/2019

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	3.00	4.30	4.30	3.00	4.30	4.30	3.00	3.90	3.00	3.90	3.90
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.00	2.30	2.30	1.00	2.30	2.30	1.00	1.90	1.00	1.90	1.90
g_i, Effective Green Time [s]	5	68	68	12	74	74	4	17	20	32	32
g / C, Green / Cycle	0.04	0.52	0.52	0.09	0.57	0.57	0.03	0.13	0.15	0.25	0.25
(v / s)_i Volume / Saturation Flow Rate	0.03	0.27	0.28	0.07	0.18	0.18	0.03	0.11	0.14	0.08	0.15
s, saturation flow rate [veh/h]	1774	1863	1619	1774	1863	1775	1774	1756	1774	1863	1583
c, Capacity [veh/h]	68	967	840	158	1062	1012	60	226	274	464	394
d1, Uniform Delay [s]	62.00	20.75	20.81	58.34	14.66	14.67	62.35	55.25	54.05	39.77	42.97
k, delay calibration	0.04	0.50	0.50	0.04	0.50	0.50	0.04	0.04	0.04	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.66	2.08	2.43	4.43	0.78	0.82	7.49	2.89	4.43	0.14	0.52
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.77	0.53	0.53	0.84	0.31	0.31	0.77	0.82	0.90	0.31	0.59
d, Delay for Lane Group [s/veh]	68.66	22.83	23.24	62.77	15.43	15.48	69.84	58.15	58.47	39.91	43.49
Lane Group LOS	E	C	C	E	B	B	E	E	E	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.80	10.30	9.13	4.38	5.08	4.87	1.62	6.04	8.15	3.76	6.53
50th-Percentile Queue Length [ft/ln]	44.90	257.45	228.19	109.50	127.10	121.66	40.39	150.96	203.68	94.01	163.16
95th-Percentile Queue Length [veh/ln]	3.23	15.56	14.08	7.81	8.78	8.48	2.91	10.07	12.83	6.77	10.72
95th-Percentile Queue Length [ft/ln]	80.82	389.02	352.06	195.31	219.55	212.10	72.70	251.71	320.71	169.22	267.90

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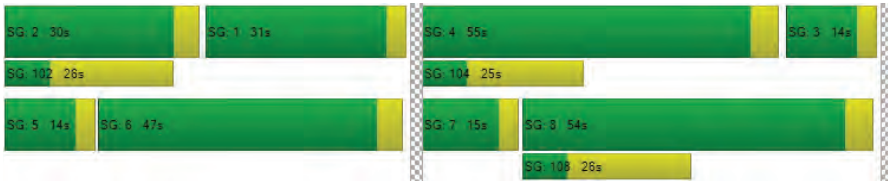
Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	68.66	22.89	23.24	62.77	15.45	15.48	69.84	58.15	58.15	58.47	39.91	43.49
Movement LOS	E	C	C	E	B	B	E	E	E	E	D	D
d_A, Approach Delay [s/veh]	25.36			23.42			60.47			48.59		
Approach LOS	C			C			E			D		
d_I, Intersection Delay [s/veh]	33.32											
Intersection LOS	C											
Intersection V/C	0.597											

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



2220 Fulton Road Project TIS
AM Existing Conditions
W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 8: Peterson Ln/Piner Rd

Control Type:	Signalized	Delay (sec / veh):	9.9
Analysis Method:	HCM 2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.442

Intersection Setup

Name	Peterson Ln			Peterson Ln			Piner Rd			Piner Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	1	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	80.00	100.00	180.00	80.00	100.00	100.00
Speed [mph]	30.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Peterson Ln			Peterson Ln			Piner Rd			Piner Rd		
Base Volume Input [veh/h]	62	54	107	79	34	45	22	564	31	36	501	17
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	62	54	107	79	34	45	22	564	31	36	501	17
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	14	27	20	9	11	6	141	8	9	125	4
Total Analysis Volume [veh/h]	62	54	107	79	34	45	22	564	31	36	501	17
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	5			1			3			5		
Bicycle Volume [bicycles/h]	0			2			1			1		

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Version 7.00-05

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	ProtPer	Permis	Permis	ProtPer	Permis	Permis
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lag	-	-
Minimum Green [s]	0	7	0	0	7	0	5	5	0	5	5	0
Maximum Green [s]	0	20	0	0	20	0	15	40	0	15	40	0
Amber [s]	0.0	3.6	0.0	0.0	3.6	0.0	4.3	4.3	0.0	4.3	4.3	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	35	0	0	35	0	14	45	0	10	41	0
Vehicle Extension [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	24	0	0	24	0	0	14	0	0	14	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	1.6	0.0	0.0	1.6	0.0	2.3	2.3	0.0	2.3	2.3	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

2220 Fulton Road Project TIS
AM Existing Conditions
W-Trans
6/26/2019

Lane Group Calculations

Lane Group	C	C	L	C	R	L	C	C
C, Cycle Length [s]	32	32	32	32	32	32	32	32
L, Total Lost Time per Cycle [s]	3.60	3.60	4.30	4.30	4.30	4.30	4.30	4.30
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	1.60	1.60	0.00	2.30	2.30	0.00	2.30	2.30
g_i, Effective Green Time [s]	7	7	17	12	12	17	12	12
g / C, Green / Cycle	0.21	0.21	0.54	0.36	0.36	0.54	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.13	0.11	0.02	0.30	0.02	0.03	0.14	0.14
s, saturation flow rate [veh/h]	1656	1398	1249	1863	1539	1259	1863	1838
c, Capacity [veh/h]	487	459	656	679	561	546	713	704
d1, Uniform Delay [s]	11.56	11.12	6.15	9.25	6.58	9.14	7.07	7.08
k, delay calibration	0.04	0.04	0.04	0.09	0.04	0.04	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.25	0.17	0.01	2.38	0.02	0.02	0.12	0.12
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.46	0.34	0.03	0.83	0.06	0.07	0.36	0.37
d, Delay for Lane Group [s/veh]	11.81	11.29	6.16	11.64	6.60	9.16	7.19	7.20
Lane Group LOS	B	B	A	B	A	A	A	A
Critical Lane Group	Yes	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.09	0.74	0.02	2.30	0.07	0.03	0.67	0.66
50th-Percentile Queue Length [ft/ln]	27.31	18.49	0.42	57.45	1.87	0.71	16.72	16.58
95th-Percentile Queue Length [veh/ln]	1.97	1.33	0.03	4.14	0.13	0.05	1.20	1.19
95th-Percentile Queue Length [ft/ln]	49.16	33.28	0.76	103.41	3.36	1.27	30.09	29.84

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Version 7.00-05

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	11.81	11.81	11.81	11.29	11.29	11.29	6.16	11.64	6.60	9.16	7.19	7.20
Movement LOS	B	B	B	B	B	B	A	B	A	A	A	A
d_A, Approach Delay [s/veh]	11.81			11.29			11.19			7.32		
Approach LOS	B			B			B			A		
d_I, Intersection Delay [s/veh]	9.91											
Intersection LOS	A											
Intersection V/C	0.442											

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

2220 Fulton Road Project TIS
AM Existing Conditions
W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 9: Waltzer Rd/Piner Rd

Control Type:	Two-way stop	Delay (sec / veh):	367.6
Analysis Method:	HCM 2010	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.228

Intersection Setup

Name	Waltzer Rd			Waltzer Rd			Piner Rd			Piner Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	1	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	50.00	100.00	100.00	100.00	95.00	100.00	100.00
Speed [mph]	25.00			25.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			No		

Volumes

Name	Waltzer Rd			Waltzer Rd			Piner Rd			Piner Rd		
Base Volume Input [veh/h]	8	5	13	38	0	63	42	824	3	9	479	26
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	7	17	51	0	84	56	1096	4	12	637	35
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	2	4	13	0	21	14	274	1	3	159	9
Total Analysis Volume [veh/h]	11	7	17	51	0	84	56	1096	4	12	637	35
Pedestrian Volume [ped/h]	2			5			0			0		

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Intersection Settings

Priority Scheme	Stop		Stop		Free		Free	
Flared Lane	Yes							
Storage Area [veh]	1		0		0		0	
Two-Stage Gap Acceptance	No		No					
Number of Storage Spaces in Median	0		0		0		0	

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.27	0.11	0.07	1.23	0.00	0.18	0.06	0.01	0.00	0.02	0.01	0.00
d_M, Delay for Movement [s/veh]	120.08	90.09	45.99	367.57	337.71	14.54	9.21	0.00	0.00	10.80	0.00	0.00
Movement LOS	F	F	E	F	F	B	A	A	A	B	A	A
95th-Percentile Queue Length [veh/ln]	1.66	1.66	1.66	5.00	5.00	0.66	0.20	0.00	0.00	0.06	0.00	0.00
95th-Percentile Queue Length [ft/ln]	41.56	41.56	41.56	125.10	125.10	16.48	4.91	0.00	0.00	1.45	0.00	0.00
d_A, Approach Delay [s/veh]	78.10			147.90			0.45			0.19		
Approach LOS	F			F			A			A		
d_I, Intersection Delay [s/veh]	11.61											
Intersection LOS	F											

2220 Fulton Road Project TIS
AM Existing Conditions
W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 1: Fulton Rd/Tedeschi Dr

Control Type:	Two-way stop	Delay (sec / veh):	173.0
Analysis Method:	HCM 2010	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.843

Intersection Setup

Name	Fulton Rd		Fulton Rd		Tedeschi Dr	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	50.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name	Fulton Rd		Fulton Rd		Tedeschi Dr	
Base Volume Input [veh/h]	783	60	10	1138	40	9
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1041	80	13	1514	53	12
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	260	20	3	379	13	3
Total Analysis Volume [veh/h]	1041	80	13	1514	53	12
Pedestrian Volume [ped/h]	0		0		1	

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Version 7.00-05

Intersection Settings

Priority Scheme	Free		Free		Stop	
Flared Lane					No	
Storage Area [veh]	0		0		0	
Two-Stage Gap Acceptance					No	
Number of Storage Spaces in Median	0		0		0	

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.02	0.02	0.84	0.03
d_M, Delay for Movement [s/veh]	0.00	0.00	10.95	0.00	173.01	123.39
Movement LOS	A	A	B	A	F	F
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.06	0.00	4.36	4.36
95th-Percentile Queue Length [ft/ln]	0.00	0.00	1.61	0.00	109.02	109.02
d_A, Approach Delay [s/veh]	0.00		0.09		163.85	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	3.98					
Intersection LOS	F					

2220 Fulton Road Project TIS
PM Existing Conditions
W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 3: Fulton Rd/San Miguel Ave

Control Type:	Signalized	Delay (sec / veh):	13.8
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.468

Intersection Setup

Name	Fulton Rd			Fulton Rd						San Miguel Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	11.00	12.00	11.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	1	0	0
Pocket Length [ft]	50.00	100.00	100.00	50.00	100.00	100.00	100.00	100.00	100.00	60.00	100.00	100.00
Speed [mph]	45.00			45.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	Fulton Rd			Fulton Rd						San Miguel Ave		
Base Volume Input [veh/h]	0	776	96	121	1070	0	0	0	0	46	0	68
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.0000	1.3300	1.3300	1.3300	1.3300	1.0000	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1032	128	161	1423	0	0	0	0	61	0	90
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	258	32	40	356	0	0	0	0	15	0	23
Total Analysis Volume [veh/h]	0	1032	128	161	1423	0	0	0	0	61	0	90
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	15			12			3			0		

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Version 7.00-05

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Split	Split	Split	Split	Permis	Split
Signal Group	3	8	0	7	4	0	5	2	0	6	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	7	0	4	7	0	0	7	0	9	0	0
Maximum Green [s]	7	35	0	25	35	0	0	7	0	30	0	0
Amber [s]	4.7	4.7	0.0	4.7	4.7	0.0	0.0	3.0	0.0	3.6	0.0	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	43	28	0	35	20	0	0	27	0	27	0	0
Vehicle Extension [s]	1.0	3.0	0.0	3.0	3.0	0.0	0.0	1.0	0.0	2.0	0.0	0.0
Walk [s]	0	5	0	0	0	0	0	0	0	5	0	0
Pedestrian Clearance [s]	0	8	0	0	0	0	0	0	0	18	0	0
Rest In Walk		No			No			No		No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	2.7	2.7	0.0	2.7	2.7	0.0	0.0	1.0	0.0	1.6	0.0	0.0
Minimum Recall	No	Yes		No	Yes			No		No		
Maximum Recall	No	No		No	No			No		No		
Pedestrian Recall	No	No		No	No			No		No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

2220 Fulton Road Project TIS
PM Existing Conditions
W-Trans
6/26/2019

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	R
C, Cycle Length [s]	49	49	49	49	49	49	49	49
L, Total Lost Time per Cycle [s]	4.70	4.70	4.70	4.70	4.70	3.00	3.60	3.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.70	2.70	2.70	2.70	2.70	1.00	1.60	1.60
g_i, Effective Green Time [s]	0	19	19	6	25	0	8	8
g / C, Green / Cycle	0.00	0.39	0.39	0.12	0.51	0.00	0.16	0.16
(v / s)_i Volume / Saturation Flow Rate	0.00	0.32	0.32	0.09	0.40	0.00	0.03	0.06
s, saturation flow rate [veh/h]	1774	1863	1776	1774	3547	1863	1774	1583
c, Capacity [veh/h]	0	728	694	215	1815	0	286	255
d1, Uniform Delay [s]	0.00	13.29	13.35	20.78	9.73	0.00	17.83	18.25
k, delay calibration	0.04	0.11	0.11	0.11	0.11	0.04	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00	2.24	2.48	5.21	0.77	0.00	0.14	0.31
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.81	0.82	0.75	0.78	0.00	0.21	0.35
d, Delay for Lane Group [s/veh]	0.00	15.53	15.83	25.99	10.50	0.00	17.96	18.56
Lane Group LOS	A	B	B	C	B	A	B	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.00	4.52	4.41	1.79	3.83	0.00	0.56	0.85
50th-Percentile Queue Length [ft/ln]	0.00	112.94	110.28	44.75	95.84	0.00	14.03	21.33
95th-Percentile Queue Length [veh/ln]	0.00	8.00	7.86	3.22	6.90	0.00	1.01	1.54
95th-Percentile Queue Length [ft/ln]	0.00	200.08	196.39	80.54	172.52	0.00	25.26	38.40

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	15.66	15.83	25.99	10.50	0.00	0.00	0.00	0.00	17.96	0.00	18.56
Movement LOS	A	B	B	C	B		A	A	A	B		B
d_A, Approach Delay [s/veh]	15.67			12.08			0.00			18.32		
Approach LOS	B			B			A			B		
d_I, Intersection Delay [s/veh]	13.85											
Intersection LOS	B											
Intersection V/C	0.468											

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 4: Peterson Ln/San Miguel Ave

Control Type:	All-way stop	Delay (sec / veh):	8.6
Analysis Method:	HCM 2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.260

Intersection Setup

Name	Peterson Ln			Peterson Ln			San Miguel Ave			San Miguel Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Peterson Ln			Peterson Ln			San Miguel Ave			San Miguel Ave		
Base Volume Input [veh/h]	37	7	10	3	7	2	8	109	51	22	107	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	49	9	13	4	9	3	11	145	68	29	142	5
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	2	3	1	2	1	3	36	17	7	36	1
Total Analysis Volume [veh/h]	49	9	13	4	9	3	11	145	68	29	142	5
Pedestrian Volume [ped/h]	3			3			4			1		

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Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	740	741	862	818
Degree of Utilization, x	0.10	0.02	0.26	0.22

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.32	0.07	1.04	0.81
95th-Percentile Queue Length [ft]	7.93	1.65	25.98	20.36
Approach Delay [s/veh]	8.38	7.96	8.63	8.61
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	8.56			
Intersection LOS	A			

2220 Fulton Road Project TIS
PM Existing Conditions
W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 5: Peterson Ln/Pinercrest Dr

Control Type:	All-way stop	Delay (sec / veh):	7.8
Analysis Method:	HCM 2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.128

Intersection Setup

Name	Peterson Ln			Peterson Ln			Pinercrest Dr			Pinercrest Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Peterson Ln			Peterson Ln			Pinercrest Dr			Pinercrest Dr		
Base Volume Input [veh/h]	10	56	16	19	53	10	5	15	9	23	9	14
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	13	74	21	25	70	13	7	20	12	31	12	19
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	19	5	6	18	3	2	5	3	8	3	5
Total Analysis Volume [veh/h]	13	74	21	25	70	13	7	20	12	31	12	19
Pedestrian Volume [ped/h]	1			4			1			3		

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Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	860	847	831	824
Degree of Utilization, x	0.13	0.13	0.05	0.08

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.43	0.44	0.15	0.24
95th-Percentile Queue Length [ft]	10.73	10.92	3.69	6.09
Approach Delay [s/veh]	7.79	7.87	7.55	7.73
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	7.78			
Intersection LOS	A			

2220 Fulton Road Project TIS
PM Existing Conditions
W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 6: Waltzer Rd/Pinercrest Dr

Control Type:	All-way stop	Delay (sec / veh):	11.6
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.469

Intersection Setup

Name	Waltzer Rd			Waltzer Rd			Pinercrest Dr					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name	Waltzer Rd			Waltzer Rd			Pinercrest Dr					
Base Volume Input [veh/h]	2	40	6	144	79	18	6	78	6	7	102	131
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	53	8	192	105	24	8	104	8	9	136	174
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	13	2	48	26	6	2	26	2	2	34	44
Total Analysis Volume [veh/h]	3	53	8	192	105	24	8	104	8	9	136	174
Pedestrian Volume [ped/h]	5			0			5			0		

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Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	649	685	660	738
Degree of Utilization, x	0.10	0.47	0.18	0.43

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.33	2.51	0.66	2.19
95th-Percentile Queue Length [ft]	8.17	62.71	16.51	54.77
Approach Delay [s/veh]	9.16	12.81	9.66	11.53
Approach LOS	A	B	A	B
Intersection Delay [s/veh]	11.57			
Intersection LOS	B			

2220 Fulton Road Project TIS
PM Existing Conditions
W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 7: Fulton Rd/Piner Rd

Control Type:	Signalized	Delay (sec / veh):	30.1
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.549

Intersection Setup

Name	Fulton Rd			Fulton Rd			Piner Rd			Piner Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	1
Pocket Length [ft]	110.00	100.00	100.00	90.00	100.00	100.00	70.00	100.00	100.00	245.00	100.00	110.00
Speed [mph]	45.00			45.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Fulton Rd			Fulton Rd			Piner Rd			Piner Rd		
Base Volume Input [veh/h]	29	611	288	144	702	35	43	82	46	238	127	185
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	29	611	288	144	702	35	43	82	46	238	127	185
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	153	72	36	176	9	11	21	12	60	32	46
Total Analysis Volume [veh/h]	29	611	288	144	702	35	43	82	46	238	127	185
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	2			0			0			3		
Bicycle Volume [bicycles/h]	2			0			2			2		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	27.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lag	-	-	Lead	-	-	Lead	-	-	Lag	-	-
Minimum Green [s]	4	8	0	4	8	0	4	8	0	4	8	0
Maximum Green [s]	20	50	0	25	50	0	20	50	0	35	70	0
Amber [s]	3.0	4.3	0.0	3.0	4.3	0.0	3.0	3.9	0.0	3.0	3.9	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	15	54	0	15	55	0	14	30	0	30	46	0
Vehicle Extension [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	0	0
Pedestrian Clearance [s]	0	19	0	0	18	0	0	19	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	1.0	2.3	0.0	1.0	2.3	0.0	1.0	1.9	0.0	1.0	1.9	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

2220 Fulton Road Project TIS
PM Existing Conditions
W-Trans
6/26/2019

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	3.00	4.30	4.30	3.00	4.30	4.30	3.00	3.90	3.00	3.90	3.90
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.00	2.30	2.30	1.00	2.30	2.30	1.00	1.90	1.00	1.90	1.90
g_i, Effective Green Time [s]	3	72	72	12	82	82	4	12	19	27	27
g / C, Green / Cycle	0.02	0.55	0.55	0.10	0.63	0.63	0.03	0.09	0.15	0.21	0.21
(v / s)_i Volume / Saturation Flow Rate	0.02	0.25	0.26	0.08	0.20	0.20	0.02	0.07	0.13	0.07	0.12
s, saturation flow rate [veh/h]	1774	1863	1635	1774	1863	1832	1774	1735	1774	1863	1561
c, Capacity [veh/h]	37	1031	905	170	1170	1151	56	160	265	391	328
d1, Uniform Delay [s]	63.38	17.41	17.52	57.87	11.23	11.23	62.53	57.87	54.36	43.56	46.05
k, delay calibration	0.04	0.50	0.50	0.04	0.50	0.50	0.04	0.04	0.04	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	12.14	1.48	1.74	4.40	0.71	0.73	7.99	3.47	4.40	0.18	0.57
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.78	0.46	0.47	0.85	0.32	0.32	0.77	0.80	0.90	0.32	0.56
d, Delay for Lane Group [s/veh]	75.52	18.90	19.27	62.26	11.94	11.95	70.52	61.34	58.76	43.74	46.62
Lane Group LOS	E	B	B	E	B	B	E	E	E	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.06	8.42	7.62	4.77	4.80	4.72	1.52	4.23	7.86	3.46	5.34
50th-Percentile Queue Length [ft/ln]	26.59	210.54	190.62	119.21	119.97	118.09	37.98	105.65	196.38	86.38	133.57
95th-Percentile Queue Length [veh/ln]	1.91	13.18	12.15	8.35	8.39	8.29	2.73	7.60	12.45	6.22	9.13
95th-Percentile Queue Length [ft/ln]	47.85	329.52	303.84	208.74	209.78	207.20	68.36	189.94	311.29	155.49	228.34

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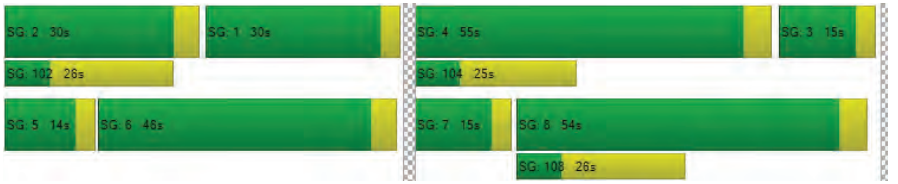
Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	75.52	18.98	19.27	62.26	11.95	11.95	70.52	61.34	61.34	58.76	43.74	46.62
Movement LOS	E	B	B	E	B	B	E	E	E	E	D	D
d_A, Approach Delay [s/veh]	20.84			20.17			63.65			51.21		
Approach LOS	C			C			E			D		
d_I, Intersection Delay [s/veh]	30.10											
Intersection LOS	C											
Intersection V/C	0.549											

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



2220 Fulton Road Project TIS
PM Existing Conditions
W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 8: Peterson Ln/Piner Rd

Control Type:	Signalized	Delay (sec / veh):	9.0
Analysis Method:	HCM 2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.335

Intersection Setup

Name	Peterson Ln			Peterson Ln			Piner Rd			Piner Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	1	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	80.00	100.00	180.00	80.00	100.00	100.00
Speed [mph]	30.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Peterson Ln			Peterson Ln			Piner Rd			Piner Rd		
Base Volume Input [veh/h]	23	10	51	48	19	23	32	496	37	87	602	70
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	23	10	51	48	19	23	32	496	37	87	602	70
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	3	13	12	5	6	8	124	9	22	151	18
Total Analysis Volume [veh/h]	23	10	51	48	19	23	32	496	37	87	602	70
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	5			1			16			6		
Bicycle Volume [bicycles/h]	2			2			4			3		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	ProtPer	Permis	Permis	ProtPer	Permis	Permis
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lag	-	-
Minimum Green [s]	0	7	0	0	7	0	5	5	0	5	5	0
Maximum Green [s]	0	20	0	0	20	0	15	40	0	15	40	0
Amber [s]	0.0	3.6	0.0	0.0	3.6	0.0	4.3	4.3	0.0	4.3	4.3	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	35	0	0	35	0	10	31	0	24	45	0
Vehicle Extension [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	24	0	0	24	0	0	14	0	0	14	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	1.6	0.0	0.0	1.6	0.0	2.3	2.3	0.0	2.3	2.3	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

2220 Fulton Road Project TIS
PM Existing Conditions
W-Trans
6/26/2019

Lane Group Calculations

Lane Group	C	C	L	C	R	L	C	C
C, Cycle Length [s]	31	31	31	31	31	31	31	31
L, Total Lost Time per Cycle [s]	3.60	3.60	4.30	4.30	4.30	4.30	4.30	4.30
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	1.60	1.60	0.00	2.30	2.30	0.00	2.30	2.30
g_i, Effective Green Time [s]	6	6	17	10	10	17	11	11
g / C, Green / Cycle	0.18	0.18	0.56	0.33	0.33	0.56	0.36	0.36
(v / s)_i Volume / Saturation Flow Rate	0.05	0.05	0.03	0.27	0.02	0.06	0.18	0.18
s, saturation flow rate [veh/h]	1625	1667	1239	1863	1533	1356	1863	1785
c, Capacity [veh/h]	448	487	656	618	509	637	672	644
d1, Uniform Delay [s]	10.76	10.76	6.65	9.32	7.01	7.68	7.66	7.67
k, delay calibration	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.07	0.07	0.01	0.94	0.02	0.04	0.22	0.24
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.19	0.18	0.05	0.80	0.07	0.14	0.51	0.51
d, Delay for Lane Group [s/veh]	10.83	10.82	6.66	10.26	7.03	7.71	7.88	7.91
Lane Group LOS	B	B	A	B	A	A	A	A
Critical Lane Group	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.37	0.39	0.02	1.74	0.09	0.04	0.92	0.89
50th-Percentile Queue Length [ft/ln]	9.19	9.82	0.39	43.53	2.29	1.10	23.07	22.36
95th-Percentile Queue Length [veh/ln]	0.66	0.71	0.03	3.13	0.17	0.08	1.66	1.61
95th-Percentile Queue Length [ft/ln]	16.54	17.68	0.70	78.36	4.13	1.98	41.52	40.25

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	10.83	10.83	10.83	10.82	10.82	10.82	6.66	10.26	7.03	7.71	7.89	7.91
Movement LOS	B	B	B	B	B	B	A	B	A	A	A	A
d_A, Approach Delay [s/veh]	10.83			10.82			9.85			7.88		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	8.96											
Intersection LOS	A											
Intersection V/C	0.335											

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

2220 Fulton Road Project TIS
PM Existing Conditions
W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 9: Waltzer Rd/Piner Rd

Control Type:	Two-way stop	Delay (sec / veh):	356.5
Analysis Method:	HCM 2010	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.188

Intersection Setup

Name	Waltzer Rd			Waltzer Rd			Piner Rd			Piner Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	1	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	50.00	100.00	100.00	100.00	95.00	100.00	100.00
Speed [mph]	25.00			25.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			No		

Volumes

Name	Waltzer Rd			Waltzer Rd			Piner Rd			Piner Rd		
Base Volume Input [veh/h]	4	1	3	40	2	38	25	591	6	8	783	44
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	1	4	53	3	51	33	786	8	11	1041	59
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	0	1	13	1	13	8	197	2	3	260	15
Total Analysis Volume [veh/h]	5	1	4	53	3	51	33	786	8	11	1041	59
Pedestrian Volume [ped/h]	1			2			0			0		

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Intersection Settings

Priority Scheme	Stop		Stop		Free		Free	
Flared Lane	Yes							
Storage Area [veh]	1		0		0		0	
Two-Stage Gap Acceptance	No		No					
Number of Storage Spaces in Median	0		0		0		0	

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.14	0.02	0.01	1.19	0.05	0.19	0.05	0.01	0.00	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	116.10	78.07	24.56	356.47	336.30	21.62	11.01	0.00	0.00	9.42	0.00	0.00
Movement LOS	F	F	C	F	F	C	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.52	0.52	0.52	5.30	5.30	0.69	0.16	0.00	0.00	0.04	0.00	0.00
95th-Percentile Queue Length [ft/ln]	13.00	13.00	13.00	132.61	132.61	17.25	4.12	0.00	0.00	1.01	0.00	0.00
d_A, Approach Delay [s/veh]	75.68			196.30			0.44			0.09		
Approach LOS	F			F			A			A		
d_I, Intersection Delay [s/veh]	10.82											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 1: Fulton Rd/Tedeschi Dr

Control Type:	Two-way stop	Delay (sec / veh):	139.2
Analysis Method:	HCM 2010	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.834

Intersection Setup

Name	Fulton Rd		Fulton Rd		Tedeschi Dr	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	50.00	100.00	100.00	100.00
Speed [mph]	45.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name	Fulton Rd		Fulton Rd		Tedeschi Dr	
Base Volume Input [veh/h]	881	23	8	600	54	14
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	0.00	2.00	2.00	0.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	25	0	0	56	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1197	31	11	854	72	19
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	299	8	3	214	18	5
Total Analysis Volume [veh/h]	1197	31	11	854	72	19
Pedestrian Volume [ped/h]	0		0		0	

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Intersection Settings

Priority Scheme	Free		Free		Stop	
Flared Lane					No	
Storage Area [veh]	0		0		0	
Two-Stage Gap Acceptance					No	
Number of Storage Spaces in Median	0		0		0	

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.02	0.01	0.83	0.04
d_M, Delay for Movement [s/veh]	0.00	0.00	11.39	0.00	139.20	105.70
Movement LOS	A	A	B	A	F	F
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.06	0.00	5.10	5.10
95th-Percentile Queue Length [ft/ln]	0.00	0.00	1.46	0.00	127.43	127.43
d_A, Approach Delay [s/veh]	0.00		0.14		132.20	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	5.57					
Intersection LOS	F					

2220 Fulton Road Project TIS
AM Baseline Conditions
W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 3: Fulton Rd/San Miguel Ave

Control Type:	Signalized	Delay (sec / veh):	14.1
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.519

Intersection Setup

Name	Fulton Rd			Fulton Rd						San Miguel Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	11.00	12.00	11.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	1	0	0
Pocket Length [ft]	50.00	100.00	100.00	50.00	100.00	100.00	100.00	100.00	100.00	60.00	100.00	100.00
Speed [mph]	45.00			45.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	Fulton Rd			Fulton Rd						San Miguel Ave		
Base Volume Input [veh/h]	0	814	93	73	589	0	0	0	0	105	0	135
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.0000	1.3300	1.3300	1.3300	1.3300	1.0000	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	10	9	5	51	0	0	0	0	28	0	15
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1093	133	102	834	0	0	0	0	168	0	195
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	273	33	26	209	0	0	0	0	42	0	49
Total Analysis Volume [veh/h]	0	1093	133	102	834	0	0	0	0	168	0	195
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	9			13			8			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	190
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Split	Split	Split	Split	Permis	Split
Signal Group	3	8	0	7	4	0	5	2	0	6	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	7	0	4	7	0	0	7	0	9	0	0
Maximum Green [s]	7	35	0	25	35	0	0	7	0	30	0	0
Amber [s]	4.7	4.7	0.0	4.7	4.7	0.0	0.0	3.0	0.0	3.6	0.0	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	61	120	0	25	84	0	0	45	0	45	0	0
Vehicle Extension [s]	1.0	3.0	0.0	3.0	3.0	0.0	0.0	1.0	0.0	2.0	0.0	0.0
Walk [s]	0	5	0	0	0	0	0	0	0	5	0	0
Pedestrian Clearance [s]	0	8	0	0	0	0	0	0	0	18	0	0
Rest In Walk		No			No			No		No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	2.7	2.7	0.0	2.7	2.7	0.0	0.0	1.0	0.0	1.6	0.0	0.0
Minimum Recall	No	Yes		No	Yes			No		No		
Maximum Recall	No	No		No	No			No		No		
Pedestrian Recall	No	No		No	No			No		No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

2220 Fulton Road Project TIS
AM Baseline Conditions
W-Trans
6/26/2019

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	R
C, Cycle Length [s]	48	48	48	48	48	48	48	48
L, Total Lost Time per Cycle [s]	4.70	4.70	4.70	4.70	4.70	3.00	3.60	3.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.70	2.70	2.70	2.70	2.70	1.00	1.60	1.60
g_i, Effective Green Time [s]	0	20	20	4	24	0	9	9
g / C, Green / Cycle	0.00	0.41	0.41	0.08	0.49	0.00	0.18	0.18
(v / s)_i Volume / Saturation Flow Rate	0.00	0.33	0.34	0.06	0.24	0.00	0.09	0.12
s, saturation flow rate [veh/h]	1774	1863	1780	1774	3547	1863	1774	1583
c, Capacity [veh/h]	0	763	729	135	1724	0	327	292
d1, Uniform Delay [s]	0.00	12.71	12.78	21.97	8.38	0.00	17.84	18.42
k, delay calibration	0.04	0.11	0.11	0.11	0.11	0.04	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00	2.22	2.45	8.14	0.21	0.00	0.47	0.99
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.82	0.83	0.75	0.48	0.00	0.51	0.67
d, Delay for Lane Group [s/veh]	0.00	14.94	15.22	30.11	8.59	0.00	18.31	19.41
Lane Group LOS	A	B	B	C	A	A	B	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.00	4.59	4.49	1.27	1.88	0.00	1.59	1.93
50th-Percentile Queue Length [ft/ln]	0.00	114.65	112.15	31.67	47.09	0.00	39.66	48.27
95th-Percentile Queue Length [veh/ln]	0.00	8.10	7.96	2.28	3.39	0.00	2.86	3.48
95th-Percentile Queue Length [ft/ln]	0.00	202.46	198.99	57.00	84.76	0.00	71.39	86.89

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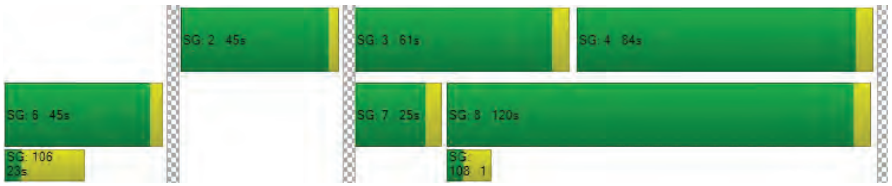
Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	15.06	15.22	30.11	8.59	0.00	0.00	0.00	0.00	18.31	0.00	19.41
Movement LOS	A	B	B	C	A		A	A	A	B		B
d_A, Approach Delay [s/veh]	15.08			10.94			0.00			18.90		
Approach LOS	B			B			A			B		
d_I, Intersection Delay [s/veh]	14.09											
Intersection LOS	B											
Intersection V/C	0.519											

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



2220 Fulton Road Project TIS
AM Baseline Conditions
W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 4: Peterson Ln/San Miguel Ave

Control Type:	All-way stop	Delay (sec / veh):	9.4
Analysis Method:	HCM 2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.357

Intersection Setup

Name	Peterson Ln			Peterson Ln			San Miguel Ave			San Miguel Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Peterson Ln			Peterson Ln			San Miguel Ave			San Miguel Ave		
Base Volume Input [veh/h]	42	2	12	8	4	4	1	135	28	5	173	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	2	0	0	0	0	14	0	7	43	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	56	3	18	11	5	5	1	194	37	14	273	1
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	14	1	5	3	1	1	0	49	9	4	68	0
Total Analysis Volume [veh/h]	56	3	18	11	5	5	1	194	37	14	273	1
Pedestrian Volume [ped/h]	0			2			0			3		

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Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	700	693	814	807
Degree of Utilization, x	0.11	0.03	0.28	0.36

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.37	0.09	1.18	1.62
95th-Percentile Queue Length [ft]	9.23	2.34	29.42	40.61
Approach Delay [s/veh]	8.78	8.36	9.18	9.92
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	9.44			
Intersection LOS	A			

2220 Fulton Road Project TIS
AM Baseline Conditions
W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 5: Peterson Ln/Pinercrest Dr

Control Type:	All-way stop	Delay (sec / veh):	7.7
Analysis Method:	HCM 2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.131

Intersection Setup

Name	Peterson Ln			Peterson Ln			Pinercrest Dr			Pinercrest Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Peterson Ln			Peterson Ln			Pinercrest Dr			Pinercrest Dr		
Base Volume Input [veh/h]	2	26	60	8	47	3	5	15	15	39	12	14
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	2	0	0	7	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	37	80	11	70	4	7	20	20	52	16	19
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	9	20	3	18	1	2	5	5	13	4	5
Total Analysis Volume [veh/h]	3	37	80	11	70	4	7	20	20	52	16	19
Pedestrian Volume [ped/h]	2			4			0			3		

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Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	914	826	847	815
Degree of Utilization, x	0.13	0.10	0.06	0.11

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.45	0.34	0.18	0.36
95th-Percentile Queue Length [ft]	11.29	8.57	4.40	8.93
Approach Delay [s/veh]	7.53	7.86	7.50	7.95
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	7.72			
Intersection LOS	A			

2220 Fulton Road Project TIS
AM Baseline Conditions
W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 6: Waltzer Rd/Pinercrest Dr

Control Type:	All-way stop	Delay (sec / veh):	12.2
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.448

Intersection Setup

Name	Waltzer Rd			Waltzer Rd			Pinercrest Dr			Pinercrest Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name	Waltzer Rd			Waltzer Rd			Pinercrest Dr			Pinercrest Dr		
Base Volume Input [veh/h]	8	69	17	147	57	5	11	174	12	1	96	108
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	92	23	196	76	7	15	231	16	1	128	144
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	23	6	49	19	2	4	58	4	0	32	36
Total Analysis Volume [veh/h]	11	92	23	196	76	7	15	231	16	1	128	144
Pedestrian Volume [ped/h]	4			0			5			0		

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Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	612	623	645	681
Degree of Utilization, x	0.21	0.45	0.41	0.40

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.77	2.31	1.97	1.94
95th-Percentile Queue Length [ft]	19.19	57.72	49.29	48.45
Approach Delay [s/veh]	10.40	13.38	12.35	11.80
Approach LOS	B	B	B	B
Intersection Delay [s/veh]	12.23			
Intersection LOS	B			

2220 Fulton Road Project TIS
AM Baseline Conditions
W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 7: Fulton Rd/Piner Rd

Control Type:	Signalized	Delay (sec / veh):	34.0
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.617

Intersection Setup

Name	Fulton Rd			Fulton Rd			Piner Rd			Piner Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	1
Pocket Length [ft]	110.00	100.00	100.00	90.00	100.00	100.00	70.00	100.00	100.00	245.00	100.00	110.00
Speed [mph]	45.00			45.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Fulton Rd			Fulton Rd			Piner Rd			Piner Rd		
Base Volume Input [veh/h]	52	601	360	132	563	89	46	132	54	247	145	232
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	13	0	30	47	2	0	0	0	0	0	6
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	52	614	360	162	610	91	46	132	54	247	145	238
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	154	90	41	153	23	12	33	14	62	36	60
Total Analysis Volume [veh/h]	52	614	360	162	610	91	46	132	54	247	145	238
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	6			0			0			10		
Bicycle Volume [bicycles/h]	0			0			1			0		

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Version 7.00-05

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	85.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lag	-	-	Lead	-	-	Lead	-	-	Lag	-	-
Minimum Green [s]	4	8	0	4	8	0	4	8	0	4	8	0
Maximum Green [s]	20	50	0	25	50	0	20	50	0	35	70	0
Amber [s]	3.0	4.3	0.0	3.0	4.3	0.0	3.0	3.9	0.0	3.0	3.9	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	14	54	0	15	55	0	14	30	0	31	47	0
Vehicle Extension [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	0	0
Pedestrian Clearance [s]	0	19	0	0	18	0	0	19	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	1.0	2.3	0.0	1.0	2.3	0.0	1.0	1.9	0.0	1.0	1.9	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

2220 Fulton Road Project TIS
AM Baseline Conditions
W-Trans
6/26/2019

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	3.00	4.30	4.30	3.00	4.30	4.30	3.00	3.90	3.00	3.90	3.90
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.00	2.30	2.30	1.00	2.30	2.30	1.00	1.90	1.00	1.90	1.90
g_i, Effective Green Time [s]	5	65	65	14	74	74	4	17	20	32	32
g / C, Green / Cycle	0.04	0.50	0.50	0.11	0.57	0.57	0.03	0.13	0.15	0.25	0.25
(v / s)_i Volume / Saturation Flow Rate	0.03	0.28	0.28	0.09	0.19	0.19	0.03	0.11	0.14	0.08	0.15
s, saturation flow rate [veh/h]	1774	1863	1621	1774	1863	1779	1774	1756	1774	1863	1583
c, Capacity [veh/h]	68	935	814	188	1062	1014	60	226	274	464	394
d1, Uniform Delay [s]	62.00	22.36	22.43	57.21	14.90	14.90	62.35	55.25	54.05	39.77	43.16
k, delay calibration	0.04	0.50	0.50	0.04	0.50	0.50	0.04	0.04	0.04	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.66	2.37	2.77	4.45	0.86	0.90	7.49	2.89	4.43	0.14	0.56
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.77	0.55	0.56	0.86	0.34	0.34	0.77	0.82	0.90	0.31	0.60
d, Delay for Lane Group [s/veh]	68.66	24.73	25.20	61.66	15.76	15.81	69.84	58.15	58.47	39.91	43.72
Lane Group LOS	E	C	C	E	B	B	E	E	E	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.80	10.97	9.75	5.35	5.56	5.32	1.62	6.04	8.15	3.76	6.73
50th-Percentile Queue Length [ft/ln]	44.90	274.31	243.71	133.86	138.95	133.10	40.39	150.96	203.68	94.01	168.17
95th-Percentile Queue Length [veh/ln]	3.23	16.40	14.87	9.15	9.42	9.11	2.91	10.07	12.83	6.77	10.98
95th-Percentile Queue Length [ft/ln]	80.82	410.12	371.72	228.74	235.61	227.71	72.70	251.71	320.71	169.22	274.51

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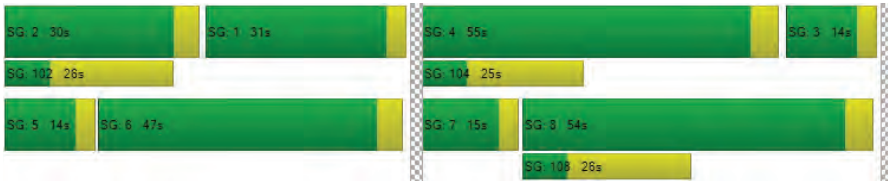
Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	68.66	24.80	25.20	61.66	15.78	15.81	69.84	58.15	58.15	58.47	39.91	43.72
Movement LOS	E	C	C	E	B	B	E	E	E	E	D	D
d_A, Approach Delay [s/veh]	27.17			24.40			60.47			48.63		
Approach LOS	C			C			E			D		
d_I, Intersection Delay [s/veh]	34.02											
Intersection LOS	C											
Intersection V/C	0.617											

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 8: Peterson Ln/Piner Rd

Control Type:	Signalized	Delay (sec / veh):	10.5
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.459

Intersection Setup

Name	Peterson Ln			Peterson Ln			Piner Rd			Piner Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	1	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	80.00	100.00	180.00	80.00	100.00	100.00
Speed [mph]	30.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Peterson Ln			Peterson Ln			Piner Rd			Piner Rd		
Base Volume Input [veh/h]	62	54	107	79	34	45	22	564	31	36	501	17
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	6	1	0	0	30	0	0	6	2
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	62	54	107	85	35	45	22	594	31	36	507	19
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	14	27	21	9	11	6	149	8	9	127	5
Total Analysis Volume [veh/h]	62	54	107	85	35	45	22	594	31	36	507	19
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	5			1			3			5		
Bicycle Volume [bicycles/h]	0			2			1			1		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	ProtPer	Permis	Permis	ProtPer	Permis	Permis
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lag	-	-
Minimum Green [s]	0	7	0	0	7	0	5	5	0	5	5	0
Maximum Green [s]	0	20	0	0	20	0	15	40	0	15	40	0
Amber [s]	0.0	3.6	0.0	0.0	3.6	0.0	4.3	4.3	0.0	4.3	4.3	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	35	0	0	35	0	14	45	0	10	41	0
Vehicle Extension [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	24	0	0	24	0	0	14	0	0	14	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	1.6	0.0	0.0	1.6	0.0	2.3	2.3	0.0	2.3	2.3	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

2220 Fulton Road Project TIS
AM Baseline Conditions
W-Trans
6/26/2019

Lane Group Calculations

Lane Group	C	C	L	C	R	L	C	C
C, Cycle Length [s]	33	33	33	33	33	33	33	33
L, Total Lost Time per Cycle [s]	3.60	3.60	4.30	4.30	4.30	4.30	4.30	4.30
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	1.60	1.60	0.00	2.30	2.30	0.00	2.30	2.30
g_i, Effective Green Time [s]	7	7	18	12	12	18	13	13
g / C, Green / Cycle	0.20	0.20	0.55	0.38	0.38	0.55	0.40	0.40
(v / s)_i Volume / Saturation Flow Rate	0.14	0.12	0.02	0.32	0.02	0.03	0.14	0.14
s, saturation flow rate [veh/h]	1647	1353	1230	1863	1540	1229	1863	1836
c, Capacity [veh/h]	476	442	658	705	583	534	738	728
d1, Uniform Delay [s]	11.98	11.63	6.09	9.31	6.47	9.52	6.96	6.97
k, delay calibration	0.04	0.04	0.04	0.14	0.04	0.04	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.27	0.19	0.01	3.56	0.01	0.02	0.11	0.11
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.47	0.37	0.03	0.84	0.05	0.07	0.36	0.36
d, Delay for Lane Group [s/veh]	12.25	11.82	6.09	12.86	6.48	9.54	7.07	7.08
Lane Group LOS	B	B	A	B	A	A	A	A
Critical Lane Group	Yes	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.15	0.82	0.02	2.71	0.08	0.03	0.69	0.68
50th-Percentile Queue Length [ft/ln]	28.79	20.59	0.43	67.78	1.88	0.72	17.17	17.02
95th-Percentile Queue Length [veh/ln]	2.07	1.48	0.03	4.88	0.14	0.05	1.24	1.23
95th-Percentile Queue Length [ft/ln]	51.83	37.07	0.77	122.00	3.39	1.30	30.91	30.63

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	12.25	12.25	12.25	11.82	11.82	11.82	6.09	12.86	6.48	9.54	7.08	7.08
Movement LOS	B	B	B	B	B	B	A	B	A	A	A	A
d_A, Approach Delay [s/veh]	12.25			11.82			12.33			7.23		
Approach LOS	B			B			B			A		
d_I, Intersection Delay [s/veh]	10.47											
Intersection LOS	B											
Intersection V/C	0.459											

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

2220 Fulton Road Project TIS
AM Baseline Conditions
W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 9: Waltzer Rd/Piner Rd

Control Type:	Two-way stop	Delay (sec / veh):	423.4
Analysis Method:	HCM 2010	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.334

Intersection Setup

Name	Waltzer Rd			Waltzer Rd			Piner Rd			Piner Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	1	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	50.00	100.00	100.00	100.00	95.00	100.00	100.00
Speed [mph]	25.00			25.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			No		

Volumes

Name	Waltzer Rd			Waltzer Rd			Piner Rd			Piner Rd		
Base Volume Input [veh/h]	8	5	13	38	0	63	42	824	3	9	479	26
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	36	0	0	8	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	7	17	51	0	84	56	1132	4	12	645	35
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	2	4	13	0	21	14	283	1	3	161	9
Total Analysis Volume [veh/h]	11	7	17	51	0	84	56	1132	4	12	645	35
Pedestrian Volume [ped/h]	2			5			0			0		

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Intersection Settings

Priority Scheme	Stop		Stop		Free		Free	
Flared Lane	Yes							
Storage Area [veh]	1		0		0		0	
Two-Stage Gap Acceptance	No		No					
Number of Storage Spaces in Median	0		0		0		0	

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.29	0.12	0.07	1.33	0.00	0.18	0.06	0.01	0.00	0.02	0.01	0.00
d_M, Delay for Movement [s/veh]	132.01	99.01	51.72	423.42	389.88	14.66	9.24	0.00	0.00	10.99	0.00	0.00
Movement LOS	F	F	F	F	F	B	A	A	A	B	A	A
95th-Percentile Queue Length [veh/ln]	1.80	1.80	1.80	5.24	5.24	0.67	0.20	0.00	0.00	0.06	0.00	0.00
95th-Percentile Queue Length [ft/ln]	44.91	44.91	44.91	131.06	131.06	16.68	4.94	0.00	0.00	1.50	0.00	0.00
d_A, Approach Delay [s/veh]	86.41			169.08			0.43			0.19		
Approach LOS	F			F			A			A		
d_I, Intersection Delay [s/veh]	12.90											
Intersection LOS	F											

2220 Fulton Road Project TIS
AM Baseline Conditions
W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 1: Fulton Rd/Tedeschi Dr

Control Type:	Two-way stop	Delay (sec / veh):	223.6
Analysis Method:	HCM 2010	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.962

Intersection Setup

Name	Fulton Rd		Fulton Rd		Tedeschi Dr	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	50.00	100.00	100.00	100.00
Speed [mph]	45.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name	Fulton Rd		Fulton Rd		Tedeschi Dr	
Base Volume Input [veh/h]	783	60	10	1138	40	9
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	0.00	2.00	2.00	0.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	62	0	0	44	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1103	80	13	1558	53	12
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	276	20	3	390	13	3
Total Analysis Volume [veh/h]	1103	80	13	1558	53	12
Pedestrian Volume [ped/h]	0		0		1	

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Intersection Settings

Priority Scheme	Free		Free		Stop	
Flared Lane					No	
Storage Area [veh]	0		0		0	
Two-Stage Gap Acceptance					No	
Number of Storage Spaces in Median	0		0		0	

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.02	0.02	0.96	0.03
d_M, Delay for Movement [s/veh]	0.00	0.00	11.17	0.00	223.64	166.26
Movement LOS	A	A	B	A	F	F
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.07	0.00	4.89	4.89
95th-Percentile Queue Length [ft/ln]	0.00	0.00	1.67	0.00	122.21	122.21
d_A, Approach Delay [s/veh]	0.00		0.09		213.04	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	4.96					
Intersection LOS	F					

2220 Fulton Road Project TIS
PM Baseline Conditions
W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 3: Fulton Rd/San Miguel Ave

Control Type:	Signalized	Delay (sec / veh):	14.4
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.509

Intersection Setup

Name	Fulton Rd			Fulton Rd						San Miguel Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	11.00	12.00	11.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	1	0	0
Pocket Length [ft]	50.00	100.00	100.00	50.00	100.00	100.00	100.00	100.00	100.00	60.00	100.00	100.00
Speed [mph]	45.00			45.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	Fulton Rd			Fulton Rd						San Miguel Ave		
Base Volume Input [veh/h]	0	776	96	121	1070	0	0	0	0	46	0	68
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.0000	1.3300	1.3300	1.3300	1.3300	1.0000	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	51	27	19	25	0	0	0	0	16	0	11
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1083	155	180	1448	0	0	0	0	77	0	101
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	271	39	45	362	0	0	0	0	19	0	25
Total Analysis Volume [veh/h]	0	1083	155	180	1448	0	0	0	0	77	0	101
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	15			12			3			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Split	Split	Split	Split	Permis	Split
Signal Group	3	8	0	7	4	0	5	2	0	6	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	7	0	4	7	0	0	7	0	9	0	0
Maximum Green [s]	7	35	0	25	35	0	0	7	0	30	0	0
Amber [s]	4.7	4.7	0.0	4.7	4.7	0.0	0.0	3.0	0.0	3.6	0.0	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	43	28	0	35	20	0	0	27	0	27	0	0
Vehicle Extension [s]	1.0	3.0	0.0	3.0	3.0	0.0	0.0	1.0	0.0	2.0	0.0	0.0
Walk [s]	0	5	0	0	0	0	0	0	0	5	0	0
Pedestrian Clearance [s]	0	8	0	0	0	0	0	0	0	18	0	0
Rest In Walk		No			No			No		No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	2.7	2.7	0.0	2.7	2.7	0.0	0.0	1.0	0.0	1.6	0.0	0.0
Minimum Recall	No	Yes		No	Yes			No		No		
Maximum Recall	No	No		No	No			No		No		
Pedestrian Recall	No	No		No	No			No		No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

2220 Fulton Road Project TIS
PM Baseline Conditions
W-Trans
6/26/2019

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	R
C, Cycle Length [s]	53	53	53	53	53	53	53	53
L, Total Lost Time per Cycle [s]	4.70	4.70	4.70	4.70	4.70	3.00	3.60	3.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.70	2.70	2.70	2.70	2.70	1.00	1.60	1.60
g_i, Effective Green Time [s]	0	22	22	7	29	0	8	8
g / C, Green / Cycle	0.00	0.41	0.41	0.13	0.54	0.00	0.16	0.16
(v / s)_i Volume / Saturation Flow Rate	0.00	0.34	0.34	0.10	0.41	0.00	0.04	0.06
s, saturation flow rate [veh/h]	1774	1863	1765	1774	3547	1863	1774	1583
c, Capacity [veh/h]	0	761	721	236	1921	0	279	249
d1, Uniform Delay [s]	0.00	14.07	14.17	22.24	9.44	0.00	19.73	20.16
k, delay calibration	0.04	0.11	0.11	0.11	0.11	0.04	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00	2.42	2.75	5.04	0.62	0.00	0.20	0.39
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.83	0.84	0.76	0.75	0.00	0.28	0.41
d, Delay for Lane Group [s/veh]	0.00	16.49	16.91	27.28	10.06	0.00	19.93	20.56
Lane Group LOS	A	B	B	C	B	A	B	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.00	5.44	5.32	2.18	4.08	0.00	0.80	1.08
50th-Percentile Queue Length [ft/ln]	0.00	136.05	132.90	54.45	102.06	0.00	20.02	27.01
95th-Percentile Queue Length [veh/ln]	0.00	9.27	9.10	3.92	7.35	0.00	1.44	1.94
95th-Percentile Queue Length [ft/ln]	0.00	231.70	227.43	98.00	183.71	0.00	36.04	48.62

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	16.67	16.91	27.28	10.06	0.00	0.00	0.00	0.00	19.93	0.00	20.56
Movement LOS	A	B	B	C	B		A	A	A	B		C
d_A, Approach Delay [s/veh]	16.70			11.96			0.00			20.29		
Approach LOS	B			B			A			C		
d_I, Intersection Delay [s/veh]	14.37											
Intersection LOS	B											
Intersection V/C	0.509											

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

2220 Fulton Road Project TIS
PM Baseline Conditions
W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 4: Peterson Ln/San Miguel Ave

Control Type:	All-way stop	Delay (sec / veh):	9.1
Analysis Method:	HCM 2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.321

Intersection Setup

Name	Peterson Ln			Peterson Ln			San Miguel Ave					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Peterson Ln			Peterson Ln			San Miguel Ave					
Base Volume Input [veh/h]	37	7	10	3	7	2	8	109	51	22	107	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	10	0	0	0	0	46	0	6	27	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	49	9	23	4	9	3	11	191	68	35	169	5
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	2	6	1	2	1	3	48	17	9	42	1
Total Analysis Volume [veh/h]	49	9	23	4	9	3	11	191	68	35	169	5
Pedestrian Volume [ped/h]	3			3			4			1		

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Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	723	710	842	802
Degree of Utilization, x	0.11	0.02	0.32	0.26

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.38	0.07	1.39	1.04
95th-Percentile Queue Length [ft]	9.41	1.73	34.75	26.10
Approach Delay [s/veh]	8.60	8.18	9.29	9.07
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	9.08			
Intersection LOS	A			

2220 Fulton Road Project TIS
PM Baseline Conditions
W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 5: Peterson Ln/Pinercrest Dr

Control Type:	All-way stop	Delay (sec / veh):	7.8
Analysis Method:	HCM 2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.138

Intersection Setup

Name	Peterson Ln			Peterson Ln			Pinercrest Dr			Pinercrest Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Peterson Ln			Peterson Ln			Pinercrest Dr			Pinercrest Dr		
Base Volume Input [veh/h]	10	56	16	19	53	10	5	15	9	23	9	14
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	10	0	0	6	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	13	84	21	25	76	13	7	20	12	31	12	19
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	21	5	6	19	3	2	5	3	8	3	5
Total Analysis Volume [veh/h]	13	84	21	25	76	13	7	20	12	31	12	19
Pedestrian Volume [ped/h]	1			4			1			3		

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Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	857	844	823	816
Degree of Utilization, x	0.14	0.14	0.05	0.08

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.48	0.47	0.15	0.25
95th-Percentile Queue Length [ft]	11.92	11.66	3.72	6.15
Approach Delay [s/veh]	7.87	7.93	7.59	7.77
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	7.84			
Intersection LOS	A			

2220 Fulton Road Project TIS
PM Baseline Conditions
W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 6: Waltzer Rd/Pinercrest Dr

Control Type:	All-way stop	Delay (sec / veh):	11.6
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.469

Intersection Setup

Name	Waltzer Rd			Waltzer Rd			Pinercrest Dr			Pinercrest Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name	Waltzer Rd			Waltzer Rd			Pinercrest Dr			Pinercrest Dr		
Base Volume Input [veh/h]	2	40	6	144	79	18	6	78	6	7	102	131
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	53	8	192	105	24	8	104	8	9	136	174
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	13	2	48	26	6	2	26	2	2	34	44
Total Analysis Volume [veh/h]	3	53	8	192	105	24	8	104	8	9	136	174
Pedestrian Volume [ped/h]	5			0			5			0		

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Version 7.00-05

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	649	685	660	738
Degree of Utilization, x	0.10	0.47	0.18	0.43

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.33	2.51	0.66	2.19
95th-Percentile Queue Length [ft]	8.17	62.71	16.51	54.77
Approach Delay [s/veh]	9.16	12.81	9.66	11.53
Approach LOS	A	B	A	B
Intersection Delay [s/veh]	11.57			
Intersection LOS	B			

2220 Fulton Road Project TIS
PM Baseline Conditions
W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 7: Fulton Rd/Piner Rd

Control Type:	Signalized	Delay (sec / veh):	30.7
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.569

Intersection Setup

Name	Fulton Rd			Fulton Rd			Piner Rd			Piner Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	1
Pocket Length [ft]	110.00	100.00	100.00	90.00	100.00	100.00	70.00	100.00	100.00	245.00	100.00	110.00
Speed [mph]	45.00			45.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Fulton Rd			Fulton Rd			Piner Rd			Piner Rd		
Base Volume Input [veh/h]	29	611	288	144	702	35	43	82	46	238	127	185
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	46	0	14	25	2	2	0	0	0	0	30
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	29	657	288	158	727	37	45	82	46	238	127	215
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	164	72	40	182	9	11	21	12	60	32	54
Total Analysis Volume [veh/h]	29	657	288	158	727	37	45	82	46	238	127	215
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	2			0			0			3		
Bicycle Volume [bicycles/h]	2			0			2			2		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	85.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lag	-	-	Lead	-	-	Lead	-	-	Lag	-	-
Minimum Green [s]	4	8	0	4	8	0	4	8	0	4	8	0
Maximum Green [s]	20	50	0	25	50	0	20	50	0	35	70	0
Amber [s]	3.0	4.3	0.0	3.0	4.3	0.0	3.0	3.9	0.0	3.0	3.9	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	14	54	0	15	55	0	14	30	0	31	47	0
Vehicle Extension [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	0	0
Pedestrian Clearance [s]	0	19	0	0	18	0	0	19	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	1.0	2.3	0.0	1.0	2.3	0.0	1.0	1.9	0.0	1.0	1.9	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

2220 Fulton Road Project TIS
PM Baseline Conditions
W-Trans
6/26/2019

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	3.00	4.30	4.30	3.00	4.30	4.30	3.00	3.90	3.00	3.90	3.90
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.00	2.30	2.30	1.00	2.30	2.30	1.00	1.90	1.00	1.90	1.90
g_i, Effective Green Time [s]	3	71	71	13	82	82	4	12	19	27	27
g / C, Green / Cycle	0.02	0.55	0.55	0.10	0.63	0.63	0.03	0.09	0.15	0.21	0.21
(v / s)_i Volume / Saturation Flow Rate	0.02	0.27	0.27	0.09	0.21	0.21	0.03	0.07	0.13	0.07	0.14
s, saturation flow rate [veh/h]	1774	1863	1645	1774	1863	1831	1774	1735	1774	1863	1561
c, Capacity [veh/h]	37	1016	897	184	1170	1150	59	160	265	389	326
d1, Uniform Delay [s]	63.38	18.35	18.46	57.34	11.33	11.33	62.41	57.87	54.36	43.72	47.25
k, delay calibration	0.04	0.50	0.50	0.04	0.50	0.50	0.04	0.04	0.04	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	12.15	1.69	1.98	4.41	0.75	0.77	7.65	3.47	4.39	0.18	0.86
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.78	0.49	0.50	0.86	0.33	0.33	0.77	0.80	0.90	0.33	0.66
d, Delay for Lane Group [s/veh]	75.53	20.04	20.44	61.75	12.09	12.10	70.05	61.34	58.75	43.90	48.11
Lane Group LOS	E	C	C	E	B	B	E	E	E	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.06	9.20	8.37	5.22	5.02	4.94	1.58	4.23	7.85	3.46	6.38
50th-Percentile Queue Length [ft/ln]	26.59	230.03	209.35	130.56	125.59	123.58	39.58	105.65	196.37	86.57	159.42
95th-Percentile Queue Length [veh/ln]	1.91	14.18	13.12	8.97	8.70	8.59	2.85	7.60	12.45	6.23	10.52
95th-Percentile Queue Length [ft/ln]	47.86	354.39	328.00	224.26	217.49	214.73	71.25	189.94	311.28	155.82	262.96

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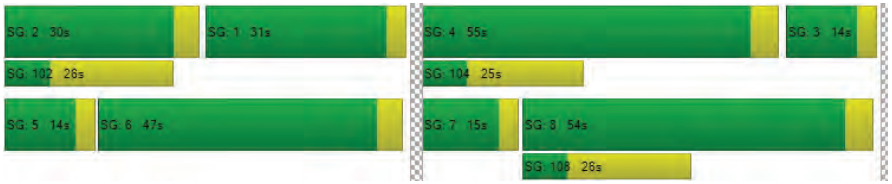
Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	75.53	20.14	20.44	61.75	12.09	12.10	70.05	61.34	61.34	58.75	43.90	48.11
Movement LOS	E	C	C	E	B	B	E	E	E	E	D	D
d_A, Approach Delay [s/veh]	21.87			20.60			63.61			51.55		
Approach LOS	C			C			E			D		
d_I, Intersection Delay [s/veh]	30.66											
Intersection LOS	C											
Intersection V/C	0.569											

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



2220 Fulton Road Project TIS
PM Baseline Conditions
W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 8: Peterson Ln/Piner Rd

Control Type:	Signalized	Delay (sec / veh):	9.1
Analysis Method:	HCM 2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.346

Intersection Setup

Name	Peterson Ln			Peterson Ln			Piner Rd			Piner Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	1	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	80.00	100.00	180.00	80.00	100.00	100.00
Speed [mph]	30.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Peterson Ln			Peterson Ln			Piner Rd			Piner Rd		
Base Volume Input [veh/h]	23	10	51	48	19	23	32	496	37	87	602	70
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	1	0	5	1	0	0	14	0	0	30	9
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	23	11	51	53	20	23	32	510	37	87	632	79
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	3	13	13	5	6	8	128	9	22	158	20
Total Analysis Volume [veh/h]	23	11	51	53	20	23	32	510	37	87	632	79
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	5			1			16			6		
Bicycle Volume [bicycles/h]	2			2			4			3		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	ProtPer	Permis	Permis	ProtPer	Permis	Permis
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lag	-	-
Minimum Green [s]	0	7	0	0	7	0	5	5	0	5	5	0
Maximum Green [s]	0	20	0	0	20	0	15	40	0	15	40	0
Amber [s]	0.0	3.6	0.0	0.0	3.6	0.0	4.3	4.3	0.0	4.3	4.3	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	35	0	0	35	0	14	45	0	10	41	0
Vehicle Extension [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	24	0	0	24	0	0	14	0	0	14	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	1.6	0.0	0.0	1.6	0.0	2.3	2.3	0.0	2.3	2.3	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

2220 Fulton Road Project TIS
PM Baseline Conditions
W-Trans
6/26/2019

Lane Group Calculations

Lane Group	C	C	L	C	R	L	C	C
C, Cycle Length [s]	31	31	31	31	31	31	31	31
L, Total Lost Time per Cycle [s]	3.60	3.60	4.30	4.30	4.30	4.30	4.30	4.30
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	1.60	1.60	0.00	2.30	2.30	0.00	2.30	2.30
g_i, Effective Green Time [s]	6	6	17	11	11	17	11	11
g / C, Green / Cycle	0.19	0.19	0.56	0.34	0.34	0.56	0.36	0.36
(v / s)_i Volume / Saturation Flow Rate	0.05	0.06	0.03	0.27	0.02	0.06	0.19	0.20
s, saturation flow rate [veh/h]	1625	1662	1214	1863	1533	1341	1863	1780
c, Capacity [veh/h]	450	490	640	628	517	626	682	651
d1, Uniform Delay [s]	10.90	10.93	6.97	9.45	7.03	7.95	7.80	7.82
k, delay calibration	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.07	0.07	0.01	0.98	0.02	0.04	0.24	0.26
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.19	0.20	0.05	0.81	0.07	0.14	0.53	0.54
d, Delay for Lane Group [s/veh]	10.97	11.00	6.98	10.43	7.06	7.99	8.04	8.07
Lane Group LOS	B	B	A	B	A	A	A	A
Critical Lane Group	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.38	0.43	0.02	1.86	0.09	0.05	1.02	0.99
50th-Percentile Queue Length [ft/ln]	9.57	10.82	0.44	46.57	2.36	1.25	25.56	24.71
95th-Percentile Queue Length [veh/ln]	0.69	0.78	0.03	3.35	0.17	0.09	1.84	1.78
95th-Percentile Queue Length [ft/ln]	17.22	19.47	0.79	83.83	4.25	2.25	46.01	44.49

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	10.97	10.97	10.97	11.00	11.00	11.00	6.98	10.43	7.06	7.99	8.05	8.07
Movement LOS	B	B	B	B	B	B	A	B	A	A	A	A
d_A, Approach Delay [s/veh]	10.97			11.00			10.02			8.05		
Approach LOS	B			B			B			A		
d_I, Intersection Delay [s/veh]	9.12											
Intersection LOS	A											
Intersection V/C	0.346											

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

2220 Fulton Road Project TIS
PM Baseline Conditions
W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 9: Waltzer Rd/Piner Rd

Control Type:	Two-way stop	Delay (sec / veh):	422.4
Analysis Method:	HCM 2010	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.310

Intersection Setup

Name	Waltzer Rd			Waltzer Rd			Piner Rd			Piner Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	1	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	50.00	100.00	100.00	100.00	95.00	100.00	100.00
Speed [mph]	25.00			25.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			No		

Volumes

Name	Waltzer Rd			Waltzer Rd			Piner Rd			Piner Rd		
Base Volume Input [veh/h]	4	1	3	40	2	38	25	591	6	8	783	44
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	19	0	0	39	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	1	4	53	3	51	33	805	8	11	1080	59
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	0	1	13	1	13	8	201	2	3	270	15
Total Analysis Volume [veh/h]	5	1	4	53	3	51	33	805	8	11	1080	59
Pedestrian Volume [ped/h]	1			2			0			0		

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Intersection Settings

Priority Scheme	Stop		Stop		Free		Free	
Flared Lane	Yes							
Storage Area [veh]	1		0		0		0	
Two-Stage Gap Acceptance	No		No					
Number of Storage Spaces in Median	0		0		0		0	

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.16	0.02	0.01	1.31	0.05	0.20	0.05	0.01	0.00	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	130.88	86.44	27.52	422.36	399.31	22.73	11.23	0.00	0.00	9.49	0.00	0.00
Movement LOS	F	F	D	F	F	C	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.58	0.58	0.58	5.61	5.61	0.73	0.17	0.00	0.00	0.04	0.00	0.00
95th-Percentile Queue Length [ft/ln]	14.55	14.55	14.55	140.33	140.33	18.35	4.27	0.00	0.00	1.03	0.00	0.00
d_A, Approach Delay [s/veh]	85.09			231.24			0.44			0.09		
Approach LOS	F			F			A			A		
d_I, Intersection Delay [s/veh]	12.34											
Intersection LOS	F											

2220 Fulton Road Project TIS
PM Baseline Conditions
W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 1: Fulton Rd/Tedeschi Dr

Control Type:	Two-way stop	Delay (sec / veh):	118.3
Analysis Method:	HCM 2010	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.771

Intersection Setup

Name	Fulton Rd		Fulton Rd		Tedeschi Dr	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	50.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name	Fulton Rd		Fulton Rd		Tedeschi Dr	
Base Volume Input [veh/h]	881	23	8	600	54	14
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	0	0	1	0	1
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1174	31	11	799	72	20
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	294	8	3	200	18	5
Total Analysis Volume [veh/h]	1174	31	11	799	72	20
Pedestrian Volume [ped/h]	0		0		0	

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Intersection Settings

Priority Scheme	Free		Free		Stop	
Flared Lane					No	
Storage Area [veh]	0		0		0	
Two-Stage Gap Acceptance					No	
Number of Storage Spaces in Median	0		0		0	

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.02	0.01	0.77	0.05
d_M, Delay for Movement [s/veh]	0.00	0.00	11.38	0.00	118.25	87.82
Movement LOS	A	A	B	A	F	F
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.06	0.00	4.72	4.72
95th-Percentile Queue Length [ft/ln]	0.00	0.00	1.46	0.00	118.06	118.06
d_A, Approach Delay [s/veh]	0.00		0.15		111.64	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	4.93					
Intersection LOS	F					

2220 Fulton Road Project TIS
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W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 2: Fulton Rd/New Project Rd

Control Type:	Two-way stop	Delay (sec / veh):	83.7
Analysis Method:	HCM 2010	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.478

Intersection Setup

Name	Fulton Rd		Fulton Rd		New Project Rd	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Fulton Rd		Fulton Rd		New Project Rd	
Base Volume Input [veh/h]	943	0	0	672	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	14	1	0	39	2
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1254	14	1	894	39	2
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	314	4	0	224	10	1
Total Analysis Volume [veh/h]	1254	14	1	894	39	2
Pedestrian Volume [ped/h]	0		0		0	

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Intersection Settings

Priority Scheme	Free		Free		Stop	
Flared Lane					No	
Storage Area [veh]	0		0		0	
Two-Stage Gap Acceptance					No	
Number of Storage Spaces in Median	0		0		0	

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.01	0.48	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	11.63	0.00	83.69	48.06
Movement LOS	A	A	B	A	F	E
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.01	0.00	2.04	2.04
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.14	0.07	51.07	51.07
d_A, Approach Delay [s/veh]	0.00		0.01		81.95	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	1.53					
Intersection LOS	F					

2220 Fulton Road Project TIS
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W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 3: Fulton Rd/San Miguel Ave

Control Type:	Signalized	Delay (sec / veh):	13.9
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.505

Intersection Setup

Name	Fulton Rd			Fulton Rd						San Miguel Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	11.00	12.00	11.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	1	0	0
Pocket Length [ft]	50.00	100.00	100.00	50.00	100.00	100.00	100.00	100.00	100.00	60.00	100.00	100.00
Speed [mph]	45.00			45.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	Fulton Rd			Fulton Rd						San Miguel Ave		
Base Volume Input [veh/h]	0	814	93	73	589	0	0	0	0	105	0	135
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.0000	1.3300	1.3300	1.3300	1.3300	1.0000	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	14	0	0	39	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1097	124	97	822	0	0	0	0	140	0	180
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	274	31	24	206	0	0	0	0	35	0	45
Total Analysis Volume [veh/h]	0	1097	124	97	822	0	0	0	0	140	0	180
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	9			13			8			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Split	Split	Split	Split	Permis	Split
Signal Group	3	8	0	7	4	0	5	2	0	6	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	7	0	4	7	0	0	7	0	9	0	0
Maximum Green [s]	7	35	0	25	35	0	0	7	0	30	0	0
Amber [s]	4.7	4.7	0.0	4.7	4.7	0.0	0.0	3.0	0.0	3.6	0.0	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	43	28	0	35	20	0	0	27	0	27	0	0
Vehicle Extension [s]	1.0	3.0	0.0	3.0	3.0	0.0	0.0	1.0	0.0	2.0	0.0	0.0
Walk [s]	0	5	0	0	0	0	0	0	0	5	0	0
Pedestrian Clearance [s]	0	8	0	0	0	0	0	0	0	18	0	0
Rest In Walk		No			No			No		No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	2.7	2.7	0.0	2.7	2.7	0.0	0.0	1.0	0.0	1.6	0.0	0.0
Minimum Recall	No	Yes		No	Yes			No		No		
Maximum Recall	No	No		No	No			No		No		
Pedestrian Recall	No	No		No	No			No		No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

2220 Fulton Road Project TIS
AM Existing plus Project Conditions
W-Trans
6/26/2019

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	R
C, Cycle Length [s]	48	48	48	48	48	48	48	48
L, Total Lost Time per Cycle [s]	4.70	4.70	4.70	4.70	4.70	3.00	3.60	3.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.70	2.70	2.70	2.70	2.70	1.00	1.60	1.60
g_i, Effective Green Time [s]	0	20	20	3	23	0	9	9
g / C, Green / Cycle	0.00	0.41	0.41	0.07	0.48	0.00	0.19	0.19
(v / s)_i Volume / Saturation Flow Rate	0.00	0.33	0.34	0.05	0.23	0.00	0.08	0.11
s, saturation flow rate [veh/h]	1774	1863	1785	1774	3547	1863	1774	1583
c, Capacity [veh/h]	0	761	729	129	1706	0	329	293
d1, Uniform Delay [s]	0.00	12.58	12.63	21.82	8.41	0.00	17.28	17.96
k, delay calibration	0.04	0.11	0.11	0.11	0.11	0.04	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00	2.20	2.40	8.64	0.21	0.00	0.33	0.78
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.82	0.82	0.75	0.48	0.00	0.43	0.61
d, Delay for Lane Group [s/veh]	0.00	14.78	15.04	30.46	8.62	0.00	17.60	18.74
Lane Group LOS	A	B	B	C	A	A	B	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.00	4.47	4.38	1.21	1.84	0.00	1.27	1.72
50th-Percentile Queue Length [ft/ln]	0.00	111.82	109.52	30.22	46.00	0.00	31.81	43.09
95th-Percentile Queue Length [veh/ln]	0.00	7.94	7.81	2.18	3.31	0.00	2.29	3.10
95th-Percentile Queue Length [ft/ln]	0.00	198.54	195.33	54.40	82.81	0.00	57.25	77.56

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	14.89	15.04	30.46	8.62	0.00	0.00	0.00	0.00	17.60	0.00	18.74
Movement LOS	A	B	B	C	A		A	A	A	B		B
d_A, Approach Delay [s/veh]	14.90			10.92			0.00			18.24		
Approach LOS	B			B			A			B		
d_I, Intersection Delay [s/veh]	13.85											
Intersection LOS	B											
Intersection V/C	0.505											

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 4: Peterson Ln/San Miguel Ave

Control Type:	All-way stop	Delay (sec / veh):	9.1
Analysis Method:	HCM 2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.299

Intersection Setup

Name	Peterson Ln			Peterson Ln			San Miguel Ave			San Miguel Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Peterson Ln			Peterson Ln			San Miguel Ave			San Miguel Ave		
Base Volume Input [veh/h]	42	2	12	8	4	4	1	135	28	5	173	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	0	0	0	0	0	0	10	14	0	3	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	60	3	16	11	5	5	1	190	51	7	233	1
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	1	4	3	1	1	0	48	13	2	58	0
Total Analysis Volume [veh/h]	60	3	16	11	5	5	1	190	51	7	233	1
Pedestrian Volume [ped/h]	0			2			0			3		

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Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	708	705	830	806
Degree of Utilization, x	0.11	0.03	0.29	0.30

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.37	0.09	1.22	1.26
95th-Percentile Queue Length [ft]	9.37	2.30	30.41	31.42
Approach Delay [s/veh]	8.72	8.26	9.12	9.36
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	9.13			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 5: Peterson Ln/Pinercrest Dr

Control Type:	All-way stop	Delay (sec / veh):	7.8
Analysis Method:	HCM 2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.132

Intersection Setup

Name	Peterson Ln			Peterson Ln			Pinercrest Dr			Pinercrest Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Peterson Ln			Peterson Ln			Pinercrest Dr			Pinercrest Dr		
Base Volume Input [veh/h]	2	26	60	8	47	3	5	15	15	39	12	14
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	2	0	7	7	0	0	0	0	0	0	2
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	37	80	18	70	4	7	20	20	52	16	21
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	9	20	5	18	1	2	5	5	13	4	5
Total Analysis Volume [veh/h]	3	37	80	18	70	4	7	20	20	52	16	21
Pedestrian Volume [ped/h]	2			4			0			3		

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Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	910	822	843	814
Degree of Utilization, x	0.13	0.11	0.06	0.11

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.45	0.38	0.18	0.37
95th-Percentile Queue Length [ft]	11.33	9.42	4.42	9.17
Approach Delay [s/veh]	7.55	7.93	7.52	7.97
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	7.75			
Intersection LOS	A			

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6/26/2019

Intersection Level Of Service Report
Intersection 6: Waltzer Rd/Pinercrest Dr

Control Type:	All-way stop	Delay (sec / veh):	12.4
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.450

Intersection Setup

Name	Waltzer Rd			Waltzer Rd			Pinercrest Dr					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name	Waltzer Rd			Waltzer Rd			Pinercrest Dr					
Base Volume Input [veh/h]	8	69	17	147	57	5	11	174	12	1	96	108
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	7	0	0	2	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	92	23	196	76	7	15	238	16	1	130	144
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	23	6	49	19	2	4	60	4	0	33	36
Total Analysis Volume [veh/h]	11	92	23	196	76	7	15	238	16	1	130	144
Pedestrian Volume [ped/h]	4			0			5			0		

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Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	609	620	644	678
Degree of Utilization, x	0.21	0.45	0.42	0.41

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.77	2.33	2.06	1.97
95th-Percentile Queue Length [ft]	19.34	58.24	51.61	49.35
Approach Delay [s/veh]	10.45	13.48	12.56	11.90
Approach LOS	B	B	B	B
Intersection Delay [s/veh]	12.36			
Intersection LOS	B			

Intersection Level Of Service Report
Intersection 7: Fulton Rd/Piner Rd

Control Type:	Signalized	Delay (sec / veh):	34.1
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.613

Intersection Setup

Name	Fulton Rd			Fulton Rd			Piner Rd			Piner Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	1
Pocket Length [ft]	110.00	100.00	100.00	90.00	100.00	100.00	70.00	100.00	100.00	245.00	100.00	110.00
Speed [mph]	45.00			45.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Fulton Rd			Fulton Rd			Piner Rd			Piner Rd		
Base Volume Input [veh/h]	52	601	360	132	563	89	46	132	54	247	145	232
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	4	0	26	13	0	0	0	0	0	0	10
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	52	605	360	158	576	89	46	132	54	247	145	242
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	151	90	40	144	22	12	33	14	62	36	61
Total Analysis Volume [veh/h]	52	605	360	158	576	89	46	132	54	247	145	242
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	6			0			0			10		
Bicycle Volume [bicycles/h]	0			0			1			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	85.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lag	-	-	Lead	-	-	Lead	-	-	Lag	-	-
Minimum Green [s]	4	8	0	4	8	0	4	8	0	4	8	0
Maximum Green [s]	20	50	0	25	50	0	20	50	0	35	70	0
Amber [s]	3.0	4.3	0.0	3.0	4.3	0.0	3.0	3.9	0.0	3.0	3.9	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	14	54	0	15	55	0	14	30	0	31	47	0
Vehicle Extension [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	0	0
Pedestrian Clearance [s]	0	19	0	0	18	0	0	19	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	1.0	2.3	0.0	1.0	2.3	0.0	1.0	1.9	0.0	1.0	1.9	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

2220 Fulton Road Project TIS
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6/26/2019

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	3.00	4.30	4.30	3.00	4.30	4.30	3.00	3.90	3.00	3.90	3.90
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.00	2.30	2.30	1.00	2.30	2.30	1.00	1.90	1.00	1.90	1.90
g_i, Effective Green Time [s]	5	66	66	13	74	74	4	17	20	32	32
g / C, Green / Cycle	0.04	0.50	0.50	0.10	0.57	0.57	0.03	0.13	0.15	0.25	0.25
(v / s)_i Volume / Saturation Flow Rate	0.03	0.28	0.28	0.09	0.18	0.18	0.03	0.11	0.14	0.08	0.15
s, saturation flow rate [veh/h]	1774	1863	1619	1774	1863	1777	1774	1756	1774	1863	1583
c, Capacity [veh/h]	68	939	817	184	1062	1013	60	226	274	464	394
d1, Uniform Delay [s]	62.00	22.08	22.16	57.36	14.72	14.73	62.35	55.25	54.05	39.77	43.29
k, delay calibration	0.04	0.50	0.50	0.04	0.50	0.50	0.04	0.04	0.04	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.66	2.29	2.68	4.44	0.80	0.84	7.49	2.89	4.43	0.14	0.58
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.77	0.55	0.55	0.86	0.32	0.32	0.77	0.82	0.90	0.31	0.61
d, Delay for Lane Group [s/veh]	68.66	24.38	24.84	61.80	15.52	15.56	69.84	58.15	58.47	39.91	43.87
Lane Group LOS	E	C	C	E	B	B	E	E	E	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.80	10.77	9.56	5.22	5.21	4.99	1.62	6.04	8.15	3.76	6.86
50th-Percentile Queue Length [ft/ln]	44.90	269.33	238.95	130.62	130.21	124.64	40.39	150.96	203.68	94.01	171.55
95th-Percentile Queue Length [veh/ln]	3.23	16.16	14.63	8.97	8.95	8.65	2.91	10.07	12.83	6.77	11.16
95th-Percentile Queue Length [ft/ln]	80.82	403.91	365.70	224.33	223.78	216.19	72.70	251.71	320.71	169.22	278.95

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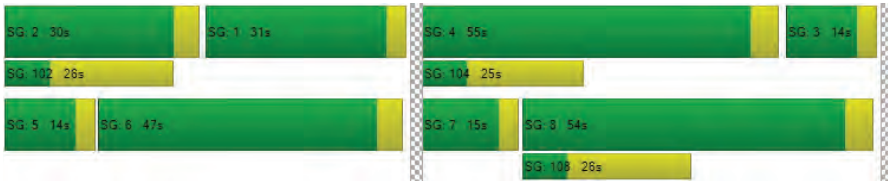
Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	68.66	24.45	24.84	61.80	15.54	15.56	69.84	58.15	58.15	58.47	39.91	43.87
Movement LOS	E	C	C	E	B	B	E	E	E	E	D	D
d_A, Approach Delay [s/veh]	26.85			24.42			60.47			48.65		
Approach LOS	C			C			E			D		
d_I, Intersection Delay [s/veh]	34.10											
Intersection LOS	C											
Intersection V/C	0.613											

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 8: Peterson Ln/Piner Rd

Control Type:	Signalized	Delay (sec / veh):	10.4
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.457

Intersection Setup

Name	Peterson Ln			Peterson Ln			Piner Rd			Piner Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	1	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	80.00	100.00	180.00	80.00	100.00	100.00
Speed [mph]	30.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Peterson Ln			Peterson Ln			Piner Rd			Piner Rd		
Base Volume Input [veh/h]	62	54	107	79	34	45	22	564	31	36	501	17
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	7	0	0	0	26	0	0	10	2
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	62	54	107	86	34	45	22	590	31	36	511	19
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	14	27	22	9	11	6	148	8	9	128	5
Total Analysis Volume [veh/h]	62	54	107	86	34	45	22	590	31	36	511	19
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	5			1			3			5		
Bicycle Volume [bicycles/h]	0			2			1			1		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	ProtPer	Permis	Permis	ProtPer	Permis	Permis
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lag	-	-
Minimum Green [s]	0	7	0	0	7	0	5	5	0	5	5	0
Maximum Green [s]	0	20	0	0	20	0	15	40	0	15	40	0
Amber [s]	0.0	3.6	0.0	0.0	3.6	0.0	4.3	4.3	0.0	4.3	4.3	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	35	0	0	35	0	14	45	0	10	41	0
Vehicle Extension [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	24	0	0	24	0	0	14	0	0	14	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	1.6	0.0	0.0	1.6	0.0	2.3	2.3	0.0	2.3	2.3	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

2220 Fulton Road Project TIS
AM Existing plus Project Conditions
W-Trans
6/26/2019

Lane Group Calculations

Lane Group	C	C	L	C	R	L	C	C
C, Cycle Length [s]	33	33	33	33	33	33	33	33
L, Total Lost Time per Cycle [s]	3.60	3.60	4.30	4.30	4.30	4.30	4.30	4.30
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	1.60	1.60	0.00	2.30	2.30	0.00	2.30	2.30
g_i, Effective Green Time [s]	7	7	18	12	12	18	13	13
g / C, Green / Cycle	0.20	0.20	0.55	0.38	0.38	0.55	0.39	0.39
(v / s)_i Volume / Saturation Flow Rate	0.14	0.12	0.02	0.32	0.02	0.03	0.14	0.14
s, saturation flow rate [veh/h]	1648	1349	1230	1863	1540	1233	1863	1836
c, Capacity [veh/h]	477	443	656	701	580	536	735	725
d1, Uniform Delay [s]	11.93	11.58	6.12	9.30	6.48	9.47	6.99	6.99
k, delay calibration	0.04	0.04	0.04	0.13	0.04	0.04	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.27	0.19	0.01	3.40	0.01	0.02	0.11	0.11
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.47	0.37	0.03	0.84	0.05	0.07	0.36	0.36
d, Delay for Lane Group [s/veh]	12.19	11.77	6.13	12.70	6.50	9.49	7.10	7.11
Lane Group LOS	B	B	A	B	A	A	A	A
Critical Lane Group	Yes	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.14	0.82	0.02	2.65	0.08	0.03	0.69	0.69
50th-Percentile Queue Length [ft/ln]	28.60	20.46	0.43	66.36	1.88	0.72	17.31	17.15
95th-Percentile Queue Length [veh/ln]	2.06	1.47	0.03	4.78	0.14	0.05	1.25	1.23
95th-Percentile Queue Length [ft/ln]	51.48	36.83	0.77	119.46	3.39	1.30	31.15	30.87

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	12.19	12.19	12.19	11.77	11.77	11.77	6.13	12.70	6.50	9.49	7.10	7.11
Movement LOS	B	B	B	B	B	B	A	B	A	A	A	A
d_A, Approach Delay [s/veh]	12.19			11.77			12.17			7.26		
Approach LOS	B			B			B			A		
d_I, Intersection Delay [s/veh]	10.39											
Intersection LOS	B											
Intersection V/C	0.457											

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

2220 Fulton Road Project TIS
AM Existing plus Project Conditions
W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 9: Waltzer Rd/Piner Rd

Control Type:	Two-way stop	Delay (sec / veh):	424.6
Analysis Method:	HCM 2010	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.336

Intersection Setup

Name	Waltzer Rd			Waltzer Rd			Piner Rd			Piner Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	1	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	50.00	100.00	100.00	100.00	95.00	100.00	100.00
Speed [mph]	25.00			25.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			No		

Volumes

Name	Waltzer Rd			Waltzer Rd			Piner Rd			Piner Rd		
Base Volume Input [veh/h]	8	5	13	38	0	63	42	824	3	9	479	26
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	33	0	0	12	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	7	17	51	0	84	56	1129	4	12	649	35
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	2	4	13	0	21	14	282	1	3	162	9
Total Analysis Volume [veh/h]	11	7	17	51	0	84	56	1129	4	12	649	35
Pedestrian Volume [ped/h]	2			5			0			0		

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Intersection Settings

Priority Scheme	Stop		Stop		Free		Free	
Flared Lane	Yes							
Storage Area [veh]	1		0		0		0	
Two-Stage Gap Acceptance	No		No					
Number of Storage Spaces in Median	0		0		0		0	

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.29	0.12	0.07	1.34	0.00	0.19	0.06	0.01	0.00	0.02	0.01	0.00
d_M, Delay for Movement [s/veh]	132.45	99.28	51.82	424.56	390.97	14.72	9.26	0.00	0.00	10.98	0.00	0.00
Movement LOS	F	F	F	F	F	B	A	A	A	B	A	A
95th-Percentile Queue Length [veh/ln]	1.80	1.80	1.80	5.25	5.25	0.67	0.20	0.00	0.00	0.06	0.00	0.00
95th-Percentile Queue Length [ft/ln]	45.01	45.01	45.01	131.18	131.18	16.79	4.96	0.00	0.00	1.49	0.00	0.00
d_A, Approach Delay [s/veh]	86.65			169.55			0.44			0.19		
Approach LOS	F			F			A			A		
d_I, Intersection Delay [s/veh]	12.93											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 1: Fulton Rd/Tedeschi Dr

Control Type:	Two-way stop	Delay (sec / veh):	176.5
Analysis Method:	HCM 2010	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.852

Intersection Setup

Name	Fulton Rd		Fulton Rd		Tedeschi Dr	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	50.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name	Fulton Rd		Fulton Rd		Tedeschi Dr	
Base Volume Input [veh/h]	783	60	10	1138	40	9
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	0	1	3	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1043	80	14	1517	53	12
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	261	20	4	379	13	3
Total Analysis Volume [veh/h]	1043	80	14	1517	53	12
Pedestrian Volume [ped/h]	0		0		1	

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Intersection Settings

Priority Scheme	Free		Free		Stop	
Flared Lane					No	
Storage Area [veh]	0		0		0	
Two-Stage Gap Acceptance					No	
Number of Storage Spaces in Median	0		0		0	

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.02	0.02	0.85	0.03
d_M, Delay for Movement [s/veh]	0.00	0.00	10.97	0.00	176.52	126.33
Movement LOS	A	A	B	A	F	F
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.07	0.00	4.40	4.40
95th-Percentile Queue Length [ft/ln]	0.00	0.00	1.74	0.00	110.05	110.05
d_A, Approach Delay [s/veh]	0.00		0.10		167.25	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	4.05					
Intersection LOS	F					

2220 Fulton Road Project TIS
PM Existing plus Project Conditions
W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 2: Fulton Rd/New Project Rd

Control Type:	Two-way stop	Delay (sec / veh):	122.7
Analysis Method:	HCM 2010	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.498

Intersection Setup

Name	Fulton Rd		Fulton Rd		New Project Rd	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Fulton Rd		Fulton Rd		New Project Rd	
Base Volume Input [veh/h]	860	0	0	1198	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	45	3	0	27	2
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1144	45	3	1593	27	2
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	286	11	1	398	7	1
Total Analysis Volume [veh/h]	1144	45	3	1593	27	2
Pedestrian Volume [ped/h]	0		0		0	

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Intersection Settings

Priority Scheme	Free		Free		Stop	
Flared Lane					No	
Storage Area [veh]	0		0		0	
Two-Stage Gap Acceptance					No	
Number of Storage Spaces in Median	0		0		0	

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.01	0.02	0.50	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	11.21	0.00	122.74	64.35
Movement LOS	A	A	B	A	F	F
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.02	0.01	1.96	1.96
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.39	0.19	49.01	49.01
d_A, Approach Delay [s/veh]	0.00		0.02		118.72	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	1.24					
Intersection LOS	F					

2220 Fulton Road Project TIS
PM Existing plus Project Conditions
W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 3: Fulton Rd/San Miguel Ave

Control Type:	Signalized	Delay (sec / veh):	13.9
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.480

Intersection Setup

Name	Fulton Rd			Fulton Rd						San Miguel Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	11.00	12.00	11.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	1	0	0
Pocket Length [ft]	50.00	100.00	100.00	50.00	100.00	100.00	100.00	100.00	100.00	60.00	100.00	100.00
Speed [mph]	45.00			45.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	Fulton Rd			Fulton Rd						San Miguel Ave		
Base Volume Input [veh/h]	0	776	96	121	1070	0	0	0	0	46	0	68
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.0000	1.3300	1.3300	1.3300	1.3300	1.0000	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	45	0	0	27	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1077	128	161	1450	0	0	0	0	61	0	90
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	269	32	40	363	0	0	0	0	15	0	23
Total Analysis Volume [veh/h]	0	1077	128	161	1450	0	0	0	0	61	0	90
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	15			12			3			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Split	Split	Split	Split	Permis	Split
Signal Group	3	8	0	7	4	0	5	2	0	6	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	7	0	4	7	0	0	7	0	9	0	0
Maximum Green [s]	7	35	0	25	35	0	0	7	0	30	0	0
Amber [s]	4.7	4.7	0.0	4.7	4.7	0.0	0.0	3.0	0.0	3.6	0.0	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	43	28	0	35	20	0	0	27	0	27	0	0
Vehicle Extension [s]	1.0	3.0	0.0	3.0	3.0	0.0	0.0	1.0	0.0	2.0	0.0	0.0
Walk [s]	0	5	0	0	0	0	0	0	0	5	0	0
Pedestrian Clearance [s]	0	8	0	0	0	0	0	0	0	18	0	0
Rest In Walk		No			No			No		No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	2.7	2.7	0.0	2.7	2.7	0.0	0.0	1.0	0.0	1.6	0.0	0.0
Minimum Recall	No	Yes		No	Yes			No		No		
Maximum Recall	No	No		No	No			No		No		
Pedestrian Recall	No	No		No	No			No		No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

2220 Fulton Road Project TIS
PM Existing plus Project Conditions
W-Trans
6/26/2019

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	R
C, Cycle Length [s]	50	50	50	50	50	50	50	50
L, Total Lost Time per Cycle [s]	4.70	4.70	4.70	4.70	4.70	3.00	3.60	3.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.70	2.70	2.70	2.70	2.70	1.00	1.60	1.60
g_i, Effective Green Time [s]	0	20	20	6	26	0	8	8
g / C, Green / Cycle	0.00	0.40	0.40	0.12	0.52	0.00	0.16	0.16
(v / s)_i Volume / Saturation Flow Rate	0.00	0.33	0.33	0.09	0.41	0.00	0.03	0.06
s, saturation flow rate [veh/h]	1774	1863	1779	1774	3547	1863	1774	1583
c, Capacity [veh/h]	0	749	715	214	1853	0	281	251
d1, Uniform Delay [s]	0.00	13.37	13.44	21.31	9.66	0.00	18.39	18.83
k, delay calibration	0.04	0.11	0.11	0.11	0.11	0.04	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00	2.29	2.53	5.26	0.75	0.00	0.14	0.32
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.82	0.83	0.75	0.78	0.00	0.22	0.36
d, Delay for Lane Group [s/veh]	0.00	15.65	15.97	26.57	10.41	0.00	18.53	19.15
Lane Group LOS	A	B	B	C	B	A	B	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.00	4.82	4.72	1.85	3.97	0.00	0.58	0.88
50th-Percentile Queue Length [ft/ln]	0.00	120.43	117.90	46.13	99.20	0.00	14.55	22.11
95th-Percentile Queue Length [veh/ln]	0.00	8.42	8.28	3.32	7.14	0.00	1.05	1.59
95th-Percentile Queue Length [ft/ln]	0.00	210.42	206.93	83.04	178.57	0.00	26.18	39.81

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	15.79	15.97	26.57	10.41	0.00	0.00	0.00	0.00	18.53	0.00	19.15
Movement LOS	A	B	B	C	B		A	A	A	B		B
d_A, Approach Delay [s/veh]	15.81			12.03			0.00			18.90		
Approach LOS	B			B			A			B		
d_I, Intersection Delay [s/veh]	13.91											
Intersection LOS	B											
Intersection V/C	0.480											

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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6/26/2019

Intersection Level Of Service Report
Intersection 4: Peterson Ln/San Miguel Ave

Control Type:	All-way stop	Delay (sec / veh):	8.8
Analysis Method:	HCM 2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.280

Intersection Setup

Name	Peterson Ln			Peterson Ln			San Miguel Ave			San Miguel Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Peterson Ln			Peterson Ln			San Miguel Ave			San Miguel Ave		
Base Volume Input [veh/h]	37	7	10	3	7	2	8	109	51	22	107	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	14	0	0	0	0	0	0	7	8	0	11	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	63	9	13	4	9	3	11	152	76	29	153	5
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	2	3	1	2	1	3	38	19	7	38	1
Total Analysis Volume [veh/h]	63	9	13	4	9	3	11	152	76	29	153	5
Pedestrian Volume [ped/h]	3			3			4			1		

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Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	726	728	853	807
Degree of Utilization, x	0.12	0.02	0.28	0.23

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.40	0.07	1.15	0.90
95th-Percentile Queue Length [ft]	9.90	1.68	28.79	22.38
Approach Delay [s/veh]	8.62	8.06	8.86	8.81
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	8.78			
Intersection LOS	A			

2220 Fulton Road Project TIS
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W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 5: Peterson Ln/Pinercrest Dr

Control Type:	All-way stop	Delay (sec / veh):	7.9
Analysis Method:	HCM 2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.138

Intersection Setup

Name	Peterson Ln			Peterson Ln			Pinercrest Dr			Pinercrest Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Peterson Ln			Peterson Ln			Pinercrest Dr			Pinercrest Dr		
Base Volume Input [veh/h]	10	56	16	19	53	10	5	15	9	23	9	14
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	7	0	4	4	0	0	0	0	0	0	7
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	13	81	21	29	74	13	7	20	12	31	12	26
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	20	5	7	19	3	2	5	3	8	3	7
Total Analysis Volume [veh/h]	13	81	21	29	74	13	7	20	12	31	12	26
Pedestrian Volume [ped/h]	1			4			1			3		

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Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	854	840	822	827
Degree of Utilization, x	0.13	0.14	0.05	0.08

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.47	0.48	0.15	0.27
95th-Percentile Queue Length [ft]	11.63	11.96	3.73	6.82
Approach Delay [s/veh]	7.88	7.97	7.60	7.75
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	7.85			
Intersection LOS	A			

2220 Fulton Road Project TIS
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W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 6: Waltzer Rd/Pinercrest Dr

Control Type:	All-way stop	Delay (sec / veh):	11.7
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.472

Intersection Setup

Name	Waltzer Rd			Waltzer Rd			Pinercrest Dr					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name	Waltzer Rd			Waltzer Rd			Pinercrest Dr					
Base Volume Input [veh/h]	2	40	6	144	79	18	6	78	6	7	102	131
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	4	0	0	7	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	53	8	192	105	24	8	108	8	9	143	174
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	13	2	48	26	6	2	27	2	2	36	44
Total Analysis Volume [veh/h]	3	53	8	192	105	24	8	108	8	9	143	174
Pedestrian Volume [ped/h]	5			0			5			0		

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Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	644	681	658	735
Degree of Utilization, x	0.10	0.47	0.19	0.44

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.33	2.54	0.69	2.29
95th-Percentile Queue Length [ft]	8.24	63.39	17.26	57.21
Approach Delay [s/veh]	9.21	12.92	9.74	11.74
Approach LOS	A	B	A	B
Intersection Delay [s/veh]	11.70			
Intersection LOS	B			

2220 Fulton Road Project TIS
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W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 7: Fulton Rd/Piner Rd

Control Type:	Signalized	Delay (sec / veh):	30.8
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.563

Intersection Setup

Name	Fulton Rd			Fulton Rd			Piner Rd			Piner Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	1
Pocket Length [ft]	110.00	100.00	100.00	90.00	100.00	100.00	70.00	100.00	100.00	245.00	100.00	110.00
Speed [mph]	45.00			45.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Fulton Rd			Fulton Rd			Piner Rd			Piner Rd		
Base Volume Input [veh/h]	29	611	288	144	702	35	43	82	46	238	127	185
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	15	0	18	9	0	0	0	0	0	0	30
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	29	626	288	162	711	35	43	82	46	238	127	215
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	157	72	41	178	9	11	21	12	60	32	54
Total Analysis Volume [veh/h]	29	626	288	162	711	35	43	82	46	238	127	215
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	2			0			0			3		
Bicycle Volume [bicycles/h]	2			0			2			2		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	27.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lag	-	-	Lead	-	-	Lead	-	-	Lag	-	-
Minimum Green [s]	4	8	0	4	8	0	4	8	0	4	8	0
Maximum Green [s]	20	50	0	25	50	0	20	50	0	35	70	0
Amber [s]	3.0	4.3	0.0	3.0	4.3	0.0	3.0	3.9	0.0	3.0	3.9	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	15	54	0	15	55	0	14	30	0	30	46	0
Vehicle Extension [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	0	0
Pedestrian Clearance [s]	0	19	0	0	18	0	0	19	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	1.0	2.3	0.0	1.0	2.3	0.0	1.0	1.9	0.0	1.0	1.9	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

2220 Fulton Road Project TIS
PM Existing plus Project Conditions
W-Trans
6/26/2019

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	3.00	4.30	4.30	3.00	4.30	4.30	3.00	3.90	3.00	3.90	3.90
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.00	2.30	2.30	1.00	2.30	2.30	1.00	1.90	1.00	1.90	1.90
g_i, Effective Green Time [s]	3	71	71	14	82	82	4	12	19	27	27
g / C, Green / Cycle	0.02	0.54	0.54	0.11	0.63	0.63	0.03	0.09	0.15	0.21	0.21
(v / s)_i Volume / Saturation Flow Rate	0.02	0.26	0.26	0.09	0.20	0.20	0.02	0.07	0.13	0.07	0.14
s, saturation flow rate [veh/h]	1774	1863	1638	1774	1863	1832	1774	1735	1774	1863	1561
c, Capacity [veh/h]	37	1012	890	188	1170	1151	56	160	265	391	328
d1, Uniform Delay [s]	63.38	18.32	18.43	57.20	11.26	11.26	62.53	57.87	54.36	43.56	47.07
k, delay calibration	0.04	0.50	0.50	0.04	0.50	0.50	0.04	0.04	0.04	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	12.14	1.61	1.89	4.43	0.73	0.74	7.99	3.47	4.39	0.18	0.83
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.78	0.48	0.49	0.86	0.32	0.32	0.77	0.80	0.90	0.32	0.66
d, Delay for Lane Group [s/veh]	75.52	19.93	20.32	61.63	11.99	12.00	70.52	61.34	58.76	43.74	47.91
Lane Group LOS	E	B	C	E	B	B	E	E	E	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.06	8.86	8.04	5.35	4.87	4.80	1.52	4.23	7.85	3.46	6.36
50th-Percentile Queue Length [ft/ln]	26.59	221.55	200.94	133.83	121.81	119.92	37.98	105.65	196.37	86.38	159.05
95th-Percentile Queue Length [veh/ln]	1.91	13.74	12.69	9.15	8.49	8.39	2.73	7.60	12.45	6.22	10.50
95th-Percentile Queue Length [ft/ln]	47.85	343.60	317.18	228.70	212.31	209.71	68.36	189.94	311.28	155.49	262.47

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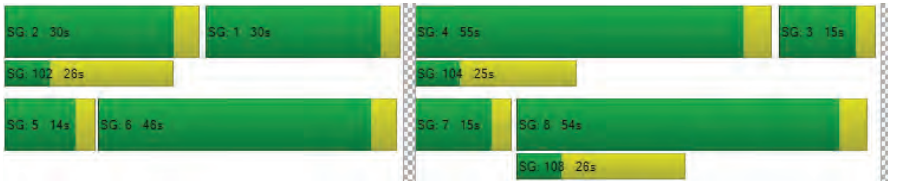
Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	75.52	20.02	20.32	61.63	11.99	12.00	70.52	61.34	61.34	58.76	43.74	47.91
Movement LOS	E	C	C	E	B	B	E	E	E	E	D	D
d_A, Approach Delay [s/veh]	21.82			20.85			63.65			51.45		
Approach LOS	C			C			E			D		
d_I, Intersection Delay [s/veh]	30.83											
Intersection LOS	C											
Intersection V/C	0.563											

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 8: Peterson Ln/Piner Rd

Control Type:	Signalized	Delay (sec / veh):	9.1
Analysis Method:	HCM 2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.347

Intersection Setup

Name	Peterson Ln			Peterson Ln			Piner Rd			Piner Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	1	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	80.00	100.00	180.00	80.00	100.00	100.00
Speed [mph]	30.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Peterson Ln			Peterson Ln			Piner Rd			Piner Rd		
Base Volume Input [veh/h]	23	10	51	48	19	23	32	496	37	87	602	70
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	4	0	0	0	18	0	0	30	7
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	23	10	51	52	19	23	32	514	37	87	632	77
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	3	13	13	5	6	8	129	9	22	158	19
Total Analysis Volume [veh/h]	23	10	51	52	19	23	32	514	37	87	632	77
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	5			1			16			6		
Bicycle Volume [bicycles/h]	2			2			4			3		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	ProtPer	Permis	Permis	ProtPer	Permis	Permis
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lag	-	-
Minimum Green [s]	0	7	0	0	7	0	5	5	0	5	5	0
Maximum Green [s]	0	20	0	0	20	0	15	40	0	15	40	0
Amber [s]	0.0	3.6	0.0	0.0	3.6	0.0	4.3	4.3	0.0	4.3	4.3	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	35	0	0	35	0	10	31	0	24	45	0
Vehicle Extension [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	24	0	0	24	0	0	14	0	0	14	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	1.6	0.0	0.0	1.6	0.0	2.3	2.3	0.0	2.3	2.3	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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W-Trans
6/26/2019

Lane Group Calculations

Lane Group	C	C	L	C	R	L	C	C
C, Cycle Length [s]	31	31	31	31	31	31	31	31
L, Total Lost Time per Cycle [s]	3.60	3.60	4.30	4.30	4.30	4.30	4.30	4.30
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	1.60	1.60	0.00	2.30	2.30	0.00	2.30	2.30
g_i, Effective Green Time [s]	6	6	18	11	11	18	11	11
g / C, Green / Cycle	0.19	0.19	0.56	0.34	0.34	0.56	0.37	0.37
(v / s)_i Volume / Saturation Flow Rate	0.05	0.06	0.03	0.28	0.02	0.07	0.19	0.20
s, saturation flow rate [veh/h]	1623	1662	1213	1863	1533	1337	1863	1782
c, Capacity [veh/h]	447	487	642	632	520	625	686	656
d1, Uniform Delay [s]	10.95	10.97	6.91	9.43	7.00	7.96	7.75	7.77
k, delay calibration	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.07	0.07	0.01	0.98	0.02	0.04	0.23	0.25
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.19	0.19	0.05	0.81	0.07	0.14	0.53	0.53
d, Delay for Lane Group [s/veh]	11.02	11.04	6.92	10.41	7.02	8.00	7.99	8.02
Lane Group LOS	B	B	A	B	A	A	A	A
Critical Lane Group	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.38	0.43	0.02	1.87	0.09	0.05	1.01	0.98
50th-Percentile Queue Length [ft/ln]	9.50	10.63	0.43	46.86	2.35	1.22	25.31	24.49
95th-Percentile Queue Length [veh/ln]	0.68	0.77	0.03	3.37	0.17	0.09	1.82	1.76
95th-Percentile Queue Length [ft/ln]	17.10	19.14	0.77	84.35	4.23	2.20	45.56	44.08

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	11.02	11.02	11.02	11.04	11.04	11.04	6.92	10.41	7.02	8.00	8.00	8.02
Movement LOS	B	B	B	B	B	B	A	B	A	A	A	A
d_A, Approach Delay [s/veh]	11.02			11.04			10.01			8.00		
Approach LOS	B			B			B			A		
d_I, Intersection Delay [s/veh]	9.10											
Intersection LOS	A											
Intersection V/C	0.347											

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

2220 Fulton Road Project TIS
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6/26/2019

Intersection Level Of Service Report
Intersection 9: Waltzer Rd/Piner Rd

Control Type:	Two-way stop	Delay (sec / veh):	423.5
Analysis Method:	HCM 2010	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.312

Intersection Setup

Name	Waltzer Rd			Waltzer Rd			Piner Rd			Piner Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	1	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	50.00	100.00	100.00	100.00	95.00	100.00	100.00
Speed [mph]	25.00			25.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			No		

Volumes

Name	Waltzer Rd			Waltzer Rd			Piner Rd			Piner Rd		
Base Volume Input [veh/h]	4	1	3	40	2	38	25	591	6	8	783	44
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	22	0	0	37	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	1	4	53	3	51	33	808	8	11	1078	59
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	0	1	13	1	13	8	202	2	3	270	15
Total Analysis Volume [veh/h]	5	1	4	53	3	51	33	808	8	11	1078	59
Pedestrian Volume [ped/h]	1			2			0			0		

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Intersection Settings

Priority Scheme	Stop		Stop		Free		Free	
Flared Lane	Yes							
Storage Area [veh]	1		0		0		0	
Two-Stage Gap Acceptance	No		No					
Number of Storage Spaces in Median	0		0		0		0	

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.16	0.02	0.01	1.31	0.06	0.20	0.05	0.01	0.00	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	131.02	86.57	27.58	423.54	400.43	22.67	11.21	0.00	0.00	9.50	0.00	0.00
Movement LOS	F	F	D	F	F	C	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.58	0.58	0.58	5.62	5.62	0.73	0.17	0.00	0.00	0.04	0.00	0.00
95th-Percentile Queue Length [ft/ln]	14.56	14.56	14.56	140.45	140.45	18.29	4.26	0.00	0.00	1.03	0.00	0.00
d_A, Approach Delay [s/veh]	85.20			231.82			0.44			0.09		
Approach LOS	F			F			A			A		
d_I, Intersection Delay [s/veh]	12.36											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 1: Fulton Rd/Tedeschi Dr

Control Type:	Two-way stop	Delay (sec / veh):	140.4
Analysis Method:	HCM 2010	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.837

Intersection Setup

Name	Fulton Rd		Fulton Rd		Tedeschi Dr	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	50.00	100.00	100.00	100.00
Speed [mph]	45.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name	Fulton Rd		Fulton Rd		Tedeschi Dr	
Base Volume Input [veh/h]	881	23	8	600	54	14
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	0.00	2.00	2.00	0.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	27	0	0	57	0	1
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1199	31	11	855	72	20
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	300	8	3	214	18	5
Total Analysis Volume [veh/h]	1199	31	11	855	72	20
Pedestrian Volume [ped/h]	0		0		0	

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Intersection Settings

Priority Scheme	Free		Free		Stop	
Flared Lane					No	
Storage Area [veh]	0		0		0	
Two-Stage Gap Acceptance					No	
Number of Storage Spaces in Median	0		0		0	

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.02	0.01	0.84	0.05
d_M, Delay for Movement [s/veh]	0.00	0.00	11.40	0.00	140.43	106.79
Movement LOS	A	A	B	A	F	F
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.06	0.00	5.16	5.16
95th-Percentile Queue Length [ft/ln]	0.00	0.00	1.47	0.00	128.93	128.93
d_A, Approach Delay [s/veh]	0.00		0.14		133.12	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	5.65					
Intersection LOS	F					

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Intersection Level Of Service Report
Intersection 2: Fulton Rd/New Project Rd

Control Type:	Two-way stop	Delay (sec / veh):	95.2
Analysis Method:	HCM 2010	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.519

Intersection Setup

Name	Fulton Rd		Fulton Rd		New Project Rd	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Fulton Rd		Fulton Rd		New Project Rd	
Base Volume Input [veh/h]	943	0	0	672	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	25	14	1	56	39	2
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1279	14	1	950	39	2
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	320	4	0	238	10	1
Total Analysis Volume [veh/h]	1279	14	1	950	39	2
Pedestrian Volume [ped/h]	0		0		0	

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Intersection Settings

Priority Scheme	Free		Free		Stop	
Flared Lane					No	
Storage Area [veh]	0		0		0	
Two-Stage Gap Acceptance					No	
Number of Storage Spaces in Median	0		0		0	

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.01	0.52	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	11.78	0.00	95.23	56.00
Movement LOS	A	A	B	A	F	F
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.01	0.00	2.23	2.23
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.14	0.07	55.81	55.81
d_A, Approach Delay [s/veh]	0.00		0.01		93.32	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	1.68					
Intersection LOS	F					

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W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 3: Fulton Rd/San Miguel Ave

Control Type:	Signalized	Delay (sec / veh):	14.1
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.523

Intersection Setup

Name	Fulton Rd			Fulton Rd						San Miguel Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	11.00	12.00	11.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	1	0	0
Pocket Length [ft]	50.00	100.00	100.00	50.00	100.00	100.00	100.00	100.00	100.00	60.00	100.00	100.00
Speed [mph]	45.00			45.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	Fulton Rd			Fulton Rd						San Miguel Ave		
Base Volume Input [veh/h]	0	814	93	73	589	0	0	0	0	105	0	135
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.0000	1.3300	1.3300	1.3300	1.3300	1.0000	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	24	9	5	90	0	0	0	0	28	0	15
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1107	133	102	873	0	0	0	0	168	0	195
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	277	33	26	218	0	0	0	0	42	0	49
Total Analysis Volume [veh/h]	0	1107	133	102	873	0	0	0	0	168	0	195
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	9			13			8			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	190
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Split	Split	Split	Split	Permis	Split
Signal Group	3	8	0	7	4	0	5	2	0	6	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	7	0	4	7	0	0	7	0	9	0	0
Maximum Green [s]	7	35	0	25	35	0	0	7	0	30	0	0
Amber [s]	4.7	4.7	0.0	4.7	4.7	0.0	0.0	3.0	0.0	3.6	0.0	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	61	120	0	25	84	0	0	45	0	45	0	0
Vehicle Extension [s]	1.0	3.0	0.0	3.0	3.0	0.0	0.0	1.0	0.0	2.0	0.0	0.0
Walk [s]	0	5	0	0	0	0	0	0	0	5	0	0
Pedestrian Clearance [s]	0	8	0	0	0	0	0	0	0	18	0	0
Rest In Walk		No			No			No		No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	2.7	2.7	0.0	2.7	2.7	0.0	0.0	1.0	0.0	1.6	0.0	0.0
Minimum Recall	No	Yes		No	Yes			No		No		
Maximum Recall	No	No		No	No			No		No		
Pedestrian Recall	No	No		No	No			No		No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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AM Baseline plus Project Conditions
W-Trans
6/26/2019

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	R
C, Cycle Length [s]	49	49	49	49	49	49	49	49
L, Total Lost Time per Cycle [s]	4.70	4.70	4.70	4.70	4.70	3.00	3.60	3.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.70	2.70	2.70	2.70	2.70	1.00	1.60	1.60
g_i, Effective Green Time [s]	0	20	20	4	24	0	9	9
g / C, Green / Cycle	0.00	0.41	0.41	0.08	0.49	0.00	0.18	0.18
(v / s)_i Volume / Saturation Flow Rate	0.00	0.34	0.34	0.06	0.25	0.00	0.09	0.12
s, saturation flow rate [veh/h]	1774	1863	1781	1774	3547	1863	1774	1583
c, Capacity [veh/h]	0	770	736	136	1736	0	325	290
d1, Uniform Delay [s]	0.00	12.72	12.79	22.12	8.44	0.00	18.02	18.60
k, delay calibration	0.04	0.11	0.11	0.11	0.11	0.04	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00	2.23	2.46	8.14	0.23	0.00	0.48	1.02
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.82	0.83	0.75	0.50	0.00	0.52	0.67
d, Delay for Lane Group [s/veh]	0.00	14.96	15.25	30.26	8.67	0.00	18.49	19.62
Lane Group LOS	A	B	B	C	A	A	B	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.00	4.67	4.57	1.28	2.00	0.00	1.60	1.95
50th-Percentile Queue Length [ft/ln]	0.00	116.73	114.28	31.89	50.04	0.00	40.10	48.82
95th-Percentile Queue Length [veh/ln]	0.00	8.21	8.08	2.30	3.60	0.00	2.89	3.52
95th-Percentile Queue Length [ft/ln]	0.00	205.32	201.94	57.41	90.07	0.00	72.19	87.88

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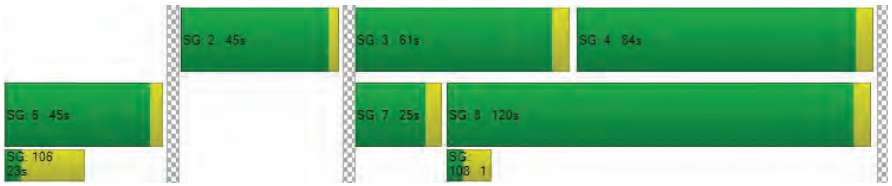
Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	15.08	15.25	30.26	8.67	0.00	0.00	0.00	0.00	18.49	0.00	19.62
Movement LOS	A	B	B	C	A		A	A	A	B		B
d_A, Approach Delay [s/veh]	15.10			10.93			0.00			19.10		
Approach LOS	B			B			A			B		
d_I, Intersection Delay [s/veh]	14.09											
Intersection LOS	B											
Intersection V/C	0.523											

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Peterson Ln/San Miguel Ave

Control Type:	All-way stop	Delay (sec / veh):	9.6
Analysis Method:	HCM 2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.364

Intersection Setup

Name	Peterson Ln			Peterson Ln			San Miguel Ave			San Miguel Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Peterson Ln			Peterson Ln			San Miguel Ave			San Miguel Ave		
Base Volume Input [veh/h]	42	2	12	8	4	4	1	135	28	5	173	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	0	2	0	0	0	0	24	14	7	46	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	60	3	18	11	5	5	1	204	51	14	276	1
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	1	5	3	1	1	0	51	13	4	69	0
Total Analysis Volume [veh/h]	60	3	18	11	5	5	1	204	51	14	276	1
Pedestrian Volume [ped/h]	0			2			0			3		

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Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	690	683	814	800
Degree of Utilization, x	0.12	0.03	0.31	0.36

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.40	0.10	1.35	1.67
95th-Percentile Queue Length [ft]	9.92	2.38	33.73	41.82
Approach Delay [s/veh]	8.91	8.44	9.43	10.06
Approach LOS	A	A	A	B
Intersection Delay [s/veh]	9.62			
Intersection LOS	A			

2220 Fulton Road Project TIS
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W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 5: Peterson Ln/Pinercrest Dr

Control Type:	All-way stop	Delay (sec / veh):	7.8
Analysis Method:	HCM 2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.135

Intersection Setup

Name	Peterson Ln			Peterson Ln			Pinercrest Dr			Pinercrest Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Peterson Ln			Peterson Ln			Pinercrest Dr			Pinercrest Dr		
Base Volume Input [veh/h]	2	26	60	8	47	3	5	15	15	39	12	14
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	4	0	7	14	0	0	0	0	0	0	2
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	39	80	18	77	4	7	20	20	52	16	21
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	10	20	5	19	1	2	5	5	13	4	5
Total Analysis Volume [veh/h]	3	39	80	18	77	4	7	20	20	52	16	21
Pedestrian Volume [ped/h]	2			4			0			3		

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Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	907	821	839	810
Degree of Utilization, x	0.13	0.12	0.06	0.11

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.46	0.41	0.18	0.37
95th-Percentile Queue Length [ft]	11.60	10.24	4.45	9.22
Approach Delay [s/veh]	7.59	7.98	7.55	7.99
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	7.79			
Intersection LOS	A			

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6/26/2019

Intersection Level Of Service Report
Intersection 6: Waltzer Rd/Pinercrest Dr

Control Type:	All-way stop	Delay (sec / veh):	12.4
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.450

Intersection Setup

Name	Waltzer Rd			Waltzer Rd			Pinercrest Dr			Pinercrest Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name	Waltzer Rd			Waltzer Rd			Pinercrest Dr			Pinercrest Dr		
Base Volume Input [veh/h]	8	69	17	147	57	5	11	174	12	1	96	108
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	7	0	0	2	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	92	23	196	76	7	15	238	16	1	130	144
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	23	6	49	19	2	4	60	4	0	33	36
Total Analysis Volume [veh/h]	11	92	23	196	76	7	15	238	16	1	130	144
Pedestrian Volume [ped/h]	4			0			5			0		

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Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	609	620	644	678
Degree of Utilization, x	0.21	0.45	0.42	0.41

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.77	2.33	2.06	1.97
95th-Percentile Queue Length [ft]	19.34	58.24	51.61	49.35
Approach Delay [s/veh]	10.45	13.48	12.56	11.90
Approach LOS	B	B	B	B
Intersection Delay [s/veh]	12.36			
Intersection LOS	B			

2220 Fulton Road Project TIS
AM Baseline plus Project Conditions
W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 7: Fulton Rd/Piner Rd

Control Type:	Signalized	Delay (sec / veh):	34.8
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.633

Intersection Setup

Name	Fulton Rd			Fulton Rd			Piner Rd			Piner Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	1
Pocket Length [ft]	110.00	100.00	100.00	90.00	100.00	100.00	70.00	100.00	100.00	245.00	100.00	110.00
Speed [mph]	45.00			45.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Fulton Rd			Fulton Rd			Piner Rd			Piner Rd		
Base Volume Input [veh/h]	52	601	360	132	563	89	46	132	54	247	145	232
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	17	0	56	60	2	0	0	0	0	0	16
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	52	618	360	188	623	91	46	132	54	247	145	248
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	155	90	47	156	23	12	33	14	62	36	62
Total Analysis Volume [veh/h]	52	618	360	188	623	91	46	132	54	247	145	248
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	6			0			0			10		
Bicycle Volume [bicycles/h]	0			0			1			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	85.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lag	-	-	Lead	-	-	Lead	-	-	Lag	-	-
Minimum Green [s]	4	8	0	4	8	0	4	8	0	4	8	0
Maximum Green [s]	20	50	0	25	50	0	20	50	0	35	70	0
Amber [s]	3.0	4.3	0.0	3.0	4.3	0.0	3.0	3.9	0.0	3.0	3.9	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	14	54	0	15	55	0	14	30	0	31	47	0
Vehicle Extension [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	0	0
Pedestrian Clearance [s]	0	19	0	0	18	0	0	19	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	1.0	2.3	0.0	1.0	2.3	0.0	1.0	1.9	0.0	1.0	1.9	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	3.00	4.30	4.30	3.00	4.30	4.30	3.00	3.90	3.00	3.90	3.90
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.00	2.30	2.30	1.00	2.30	2.30	1.00	1.90	1.00	1.90	1.90
g_i, Effective Green Time [s]	5	63	63	16	74	74	4	17	20	32	32
g / C, Green / Cycle	0.04	0.49	0.49	0.12	0.57	0.57	0.03	0.13	0.15	0.25	0.25
(v / s)_i Volume / Saturation Flow Rate	0.03	0.28	0.28	0.11	0.20	0.20	0.03	0.11	0.14	0.08	0.16
s, saturation flow rate [veh/h]	1774	1863	1622	1774	1863	1781	1774	1756	1774	1863	1583
c, Capacity [veh/h]	68	908	791	214	1062	1015	60	226	274	464	394
d1, Uniform Delay [s]	62.00	23.70	23.78	56.30	14.97	14.97	62.35	55.25	54.05	39.77	43.49
k, delay calibration	0.04	0.50	0.50	0.04	0.50	0.50	0.04	0.04	0.04	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.66	2.63	3.07	4.59	0.89	0.93	7.49	2.89	4.42	0.14	0.62
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.77	0.57	0.58	0.88	0.34	0.34	0.77	0.82	0.90	0.31	0.63
d, Delay for Lane Group [s/veh]	68.66	26.33	26.85	60.89	15.85	15.90	69.84	58.15	58.47	39.91	44.10
Lane Group LOS	E	C	C	E	B	B	E	E	E	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.80	11.45	10.19	6.20	5.69	5.45	1.62	6.04	8.15	3.76	7.07
50th-Percentile Queue Length [ft/ln]	44.90	286.34	254.66	155.09	142.14	136.22	40.39	150.96	203.68	94.01	176.65
95th-Percentile Queue Length [veh/ln]	3.23	17.00	15.42	10.29	9.60	9.28	2.91	10.07	12.83	6.77	11.43
95th-Percentile Queue Length [ft/ln]	80.82	425.10	385.51	257.21	239.91	231.92	72.70	251.71	320.71	169.21	285.63

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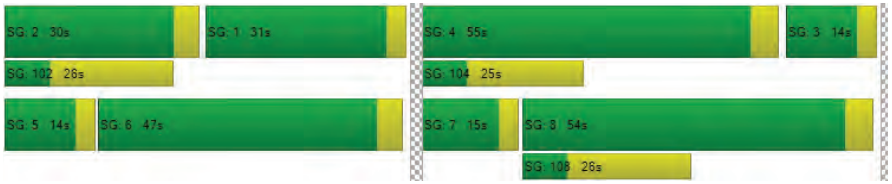
Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	68.66	26.41	26.85	60.89	15.87	15.90	69.84	58.15	58.15	58.47	39.91	44.10
Movement LOS	E	C	C	E	B	B	E	E	E	E	D	D
d_A, Approach Delay [s/veh]	28.70			25.26			60.47			48.70		
Approach LOS	C			C			E			D		
d_I, Intersection Delay [s/veh]	34.78											
Intersection LOS	C											
Intersection V/C	0.633											

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 8: Peterson Ln/Piner Rd

Control Type:	Signalized	Delay (sec / veh):	11.0
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.474

Intersection Setup

Name	Peterson Ln			Peterson Ln			Piner Rd			Piner Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	1	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	80.00	100.00	180.00	80.00	100.00	100.00
Speed [mph]	30.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Peterson Ln			Peterson Ln			Piner Rd			Piner Rd		
Base Volume Input [veh/h]	62	54	107	79	34	45	22	564	31	36	501	17
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	13	1	0	0	56	0	0	16	4
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	62	54	107	92	35	45	22	620	31	36	517	21
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	14	27	23	9	11	6	155	8	9	129	5
Total Analysis Volume [veh/h]	62	54	107	92	35	45	22	620	31	36	517	21
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	5			1			3			5		
Bicycle Volume [bicycles/h]	0			2			1			1		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	ProtPer	Permis	Permis	ProtPer	Permis	Permis
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lag	-	-
Minimum Green [s]	0	7	0	0	7	0	5	5	0	5	5	0
Maximum Green [s]	0	20	0	0	20	0	15	40	0	15	40	0
Amber [s]	0.0	3.6	0.0	0.0	3.6	0.0	4.3	4.3	0.0	4.3	4.3	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	35	0	0	35	0	14	45	0	10	41	0
Vehicle Extension [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	24	0	0	24	0	0	14	0	0	14	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	1.6	0.0	0.0	1.6	0.0	2.3	2.3	0.0	2.3	2.3	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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6/26/2019

Lane Group Calculations

Lane Group	C	C	L	C	R	L	C	C
C, Cycle Length [s]	33	33	33	33	33	33	33	33
L, Total Lost Time per Cycle [s]	3.60	3.60	4.30	4.30	4.30	4.30	4.30	4.30
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	1.60	1.60	0.00	2.30	2.30	0.00	2.30	2.30
g_i, Effective Green Time [s]	7	7	19	13	13	19	14	14
g / C, Green / Cycle	0.20	0.20	0.56	0.39	0.39	0.56	0.41	0.41
(v / s)_i Volume / Saturation Flow Rate	0.14	0.13	0.02	0.33	0.02	0.03	0.15	0.15
s, saturation flow rate [veh/h]	1639	1304	1211	1863	1540	1203	1863	1834
c, Capacity [veh/h]	466	426	657	727	601	523	761	749
d1, Uniform Delay [s]	12.38	12.14	6.05	9.36	6.37	9.86	6.88	6.88
k, delay calibration	0.04	0.04	0.04	0.17	0.04	0.04	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.28	0.23	0.01	4.68	0.01	0.02	0.10	0.11
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.48	0.40	0.03	0.85	0.05	0.07	0.36	0.36
d, Delay for Lane Group [s/veh]	12.66	12.37	6.05	14.04	6.38	9.88	6.98	6.99
Lane Group LOS	B	B	A	B	A	A	A	A
Critical Lane Group	Yes	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.21	0.91	0.02	3.12	0.08	0.03	0.71	0.70
50th-Percentile Queue Length [ft/ln]	30.16	22.80	0.44	77.90	1.90	0.74	17.78	17.60
95th-Percentile Queue Length [veh/ln]	2.17	1.64	0.03	5.61	0.14	0.05	1.28	1.27
95th-Percentile Queue Length [ft/ln]	54.29	41.04	0.79	140.23	3.42	1.33	32.01	31.69

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	12.66	12.66	12.66	12.37	12.37	12.37	6.05	14.04	6.38	9.88	6.99	6.99
Movement LOS	B	B	B	B	B	B	A	B	A	A	A	A
d_A, Approach Delay [s/veh]	12.66			12.37			13.43			7.17		
Approach LOS	B			B			B			A		
d_I, Intersection Delay [s/veh]	11.02											
Intersection LOS	B											
Intersection V/C	0.474											

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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6/26/2019

Intersection Level Of Service Report
Intersection 9: Waltzer Rd/Piner Rd

Control Type:	Two-way stop	Delay (sec / veh):	487.4
Analysis Method:	HCM 2010	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.452

Intersection Setup

Name	Waltzer Rd			Waltzer Rd			Piner Rd			Piner Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	1	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	50.00	100.00	100.00	100.00	95.00	100.00	100.00
Speed [mph]	25.00			25.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			No		

Volumes

Name	Waltzer Rd			Waltzer Rd			Piner Rd			Piner Rd		
Base Volume Input [veh/h]	8	5	13	38	0	63	42	824	3	9	479	26
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	69	0	0	20	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	7	17	51	0	84	56	1165	4	12	657	35
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	2	4	13	0	21	14	291	1	3	164	9
Total Analysis Volume [veh/h]	11	7	17	51	0	84	56	1165	4	12	657	35
Pedestrian Volume [ped/h]	2			5			0			0		

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Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	Yes			
Storage Area [veh]	1	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.31	0.13	0.07	1.45	0.00	0.19	0.06	0.01	0.00	0.02	0.01	0.00
d_M, Delay for Movement [s/veh]	146.00	109.52	58.62	487.39	449.64	14.85	9.29	0.00	0.00	11.17	0.00	0.00
Movement LOS	F	F	F	F	F	B	A	A	A	B	A	A
95th-Percentile Queue Length [veh/ln]	1.94	1.94	1.94	5.48	5.48	0.68	0.20	0.00	0.00	0.06	0.00	0.00
95th-Percentile Queue Length [ft/ln]	48.56	48.56	48.56	136.93	136.93	17.00	5.00	0.00	0.00	1.54	0.00	0.00
d_A, Approach Delay [s/veh]	96.26			193.36			0.42			0.19		
Approach LOS	F			F			A			A		
d_I, Intersection Delay [s/veh]	14.35											
Intersection LOS	F											

2220 Fulton Road Project TIS
AM Baseline plus Project Conditions
W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 1: Fulton Rd/Tedeschi Dr

Control Type:	Two-way stop	Delay (sec / veh):	228.2
Analysis Method:	HCM 2010	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.972

Intersection Setup

Name	Fulton Rd		Fulton Rd		Tedeschi Dr	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	50.00	100.00	100.00	100.00
Speed [mph]	45.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name	Fulton Rd		Fulton Rd		Tedeschi Dr	
Base Volume Input [veh/h]	783	60	10	1138	40	9
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	0.00	2.00	2.00	0.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	64	0	1	47	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1105	80	14	1561	53	12
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	276	20	4	390	13	3
Total Analysis Volume [veh/h]	1105	80	14	1561	53	12
Pedestrian Volume [ped/h]	0		0		1	

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Intersection Settings

Priority Scheme	Free		Free		Stop	
Flared Lane					No	
Storage Area [veh]	0		0		0	
Two-Stage Gap Acceptance					No	
Number of Storage Spaces in Median	0		0		0	

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.02	0.02	0.97	0.03
d_M, Delay for Movement [s/veh]	0.00	0.00	11.19	0.00	228.15	170.10
Movement LOS	A	A	B	A	F	F
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.07	0.00	4.93	4.93
95th-Percentile Queue Length [ft/ln]	0.00	0.00	1.80	0.00	123.24	123.24
d_A, Approach Delay [s/veh]	0.00		0.10		217.43	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	5.06					
Intersection LOS	F					

2220 Fulton Road Project TIS
PM Baseline plus Project Conditions
W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 2: Fulton Rd/New Project Rd

Control Type:	Two-way stop	Delay (sec / veh):	150.8
Analysis Method:	HCM 2010	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.568

Intersection Setup

Name	Fulton Rd		Fulton Rd		New Project Rd	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Fulton Rd		Fulton Rd		New Project Rd	
Base Volume Input [veh/h]	860	0	0	1198	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	62	45	3	44	27	2
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1206	45	3	1637	27	2
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	302	11	1	409	7	1
Total Analysis Volume [veh/h]	1206	45	3	1637	27	2
Pedestrian Volume [ped/h]	0		0		0	

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Intersection Settings

Priority Scheme	Free		Free		Stop	
Flared Lane					No	
Storage Area [veh]	0		0		0	
Two-Stage Gap Acceptance					No	
Number of Storage Spaces in Median	0		0		0	

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.01	0.02	0.57	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	11.56	0.00	150.82	83.45
Movement LOS	A	A	B	A	F	F
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.02	0.01	2.21	2.21
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.41	0.20	55.34	55.34
d_A, Approach Delay [s/veh]	0.00		0.02		146.17	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	1.46					
Intersection LOS	F					

2220 Fulton Road Project TIS
PM Baseline plus Project Conditions
W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 3: Fulton Rd/San Miguel Ave

Control Type:	Signalized	Delay (sec / veh):	14.6
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.521

Intersection Setup

Name	Fulton Rd			Fulton Rd						San Miguel Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	11.00	12.00	11.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	1	0	0
Pocket Length [ft]	50.00	100.00	100.00	50.00	100.00	100.00	100.00	100.00	100.00	60.00	100.00	100.00
Speed [mph]	45.00			45.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	Fulton Rd			Fulton Rd						San Miguel Ave		
Base Volume Input [veh/h]	0	776	96	121	1070	0	0	0	0	46	0	68
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.0000	1.3300	1.3300	1.3300	1.3300	1.0000	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	96	27	19	52	0	0	0	0	16	0	11
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1128	155	180	1475	0	0	0	0	77	0	101
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	282	39	45	369	0	0	0	0	19	0	25
Total Analysis Volume [veh/h]	0	1128	155	180	1475	0	0	0	0	77	0	101
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	15			12			3			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Split	Split	Split	Split	Permis	Split
Signal Group	3	8	0	7	4	0	5	2	0	6	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	7	0	4	7	0	0	7	0	9	0	0
Maximum Green [s]	7	35	0	25	35	0	0	7	0	30	0	0
Amber [s]	4.7	4.7	0.0	4.7	4.7	0.0	0.0	3.0	0.0	3.6	0.0	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	43	28	0	35	20	0	0	27	0	27	0	0
Vehicle Extension [s]	1.0	3.0	0.0	3.0	3.0	0.0	0.0	1.0	0.0	2.0	0.0	0.0
Walk [s]	0	5	0	0	0	0	0	0	0	5	0	0
Pedestrian Clearance [s]	0	8	0	0	0	0	0	0	0	18	0	0
Rest In Walk		No			No			No		No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	2.7	2.7	0.0	2.7	2.7	0.0	0.0	1.0	0.0	1.6	0.0	0.0
Minimum Recall	No	Yes		No	Yes			No		No		
Maximum Recall	No	No		No	No			No		No		
Pedestrian Recall	No	No		No	No			No		No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

2220 Fulton Road Project TIS
PM Baseline plus Project Conditions
W-Trans
6/26/2019

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	R
C, Cycle Length [s]	54	54	54	54	54	54	54	54
L, Total Lost Time per Cycle [s]	4.70	4.70	4.70	4.70	4.70	3.00	3.60	3.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.70	2.70	2.70	2.70	2.70	1.00	1.60	1.60
g_i, Effective Green Time [s]	0	23	23	7	30	0	8	8
g / C, Green / Cycle	0.00	0.42	0.42	0.13	0.55	0.00	0.15	0.15
(v / s)_i Volume / Saturation Flow Rate	0.00	0.35	0.36	0.10	0.42	0.00	0.04	0.06
s, saturation flow rate [veh/h]	1774	1863	1768	1774	3547	1863	1774	1583
c, Capacity [veh/h]	0	781	741	235	1958	0	274	244
d1, Uniform Delay [s]	0.00	14.16	14.26	22.81	9.36	0.00	20.37	20.81
k, delay calibration	0.04	0.11	0.12	0.11	0.11	0.04	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00	2.60	3.11	5.12	0.60	0.00	0.21	0.42
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.84	0.85	0.76	0.75	0.00	0.28	0.41
d, Delay for Lane Group [s/veh]	0.00	16.76	17.37	27.92	9.97	0.00	20.58	21.23
Lane Group LOS	A	B	B	C	A	A	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.00	5.82	5.73	2.25	4.22	0.00	0.83	1.12
50th-Percentile Queue Length [ft/ln]	0.00	145.41	143.31	56.15	105.53	0.00	20.75	27.99
95th-Percentile Queue Length [veh/ln]	0.00	9.77	9.66	4.04	7.59	0.00	1.49	2.02
95th-Percentile Queue Length [ft/ln]	0.00	244.29	241.47	101.08	189.77	0.00	37.35	50.38

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	17.02	17.37	27.92	9.97	0.00	0.00	0.00	0.00	20.58	0.00	21.23
Movement LOS	A	B	B	C	A		A	A	A	C		C
d_A, Approach Delay [s/veh]	17.06			11.92			0.00			20.95		
Approach LOS	B			B			A			C		
d_I, Intersection Delay [s/veh]	14.55											
Intersection LOS	B											
Intersection V/C	0.521											

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

2220 Fulton Road Project TIS
PM Baseline plus Project Conditions
W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 4: Peterson Ln/San Miguel Ave

Control Type:	All-way stop	Delay (sec / veh):	9.3
Analysis Method:	HCM 2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.343

Intersection Setup

Name	Peterson Ln			Peterson Ln			San Miguel Ave					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Peterson Ln			Peterson Ln			San Miguel Ave					
Base Volume Input [veh/h]	37	7	10	3	7	2	8	109	51	22	107	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	14	0	10	0	0	0	0	53	8	6	38	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	63	9	23	4	9	3	11	198	76	35	180	5
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	2	6	1	2	1	3	50	19	9	45	1
Total Analysis Volume [veh/h]	63	9	23	4	9	3	11	198	76	35	180	5
Pedestrian Volume [ped/h]	3			3			4			1		

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Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	709	697	832	790
Degree of Utilization, x	0.13	0.02	0.34	0.28

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.46	0.07	1.53	1.14
95th-Percentile Queue Length [ft]	11.55	1.76	38.25	28.50
Approach Delay [s/veh]	8.87	8.29	9.57	9.31
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	9.33			
Intersection LOS	A			

2220 Fulton Road Project TIS
PM Baseline plus Project Conditions
W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 5: Peterson Ln/Pinercrest Dr

Control Type:	All-way stop	Delay (sec / veh):	7.9
Analysis Method:	HCM 2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.147

Intersection Setup

Name	Peterson Ln			Peterson Ln			Pinercrest Dr			Pinercrest Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Peterson Ln			Peterson Ln			Pinercrest Dr			Pinercrest Dr		
Base Volume Input [veh/h]	10	56	16	19	53	10	5	15	9	23	9	14
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	17	0	4	10	0	0	0	0	0	0	7
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	13	91	21	29	80	13	7	20	12	31	12	26
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	23	5	7	20	3	2	5	3	8	3	7
Total Analysis Volume [veh/h]	13	91	21	29	80	13	7	20	12	31	12	26
Pedestrian Volume [ped/h]	1			4			1			3		

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Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	850	837	815	819
Degree of Utilization, x	0.15	0.15	0.05	0.08

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.51	0.51	0.15	0.28
95th-Percentile Queue Length [ft]	12.86	12.72	3.76	6.88
Approach Delay [s/veh]	7.96	8.03	7.64	7.80
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	7.92			
Intersection LOS	A			

2220 Fulton Road Project TIS
PM Baseline plus Project Conditions
W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 6: Waltzer Rd/Pinercrest Dr

Control Type:	All-way stop	Delay (sec / veh):	11.7
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.472

Intersection Setup

Name	Waltzer Rd			Waltzer Rd			Pinercrest Dr			Pinercrest Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name	Waltzer Rd			Waltzer Rd			Pinercrest Dr			Pinercrest Dr		
Base Volume Input [veh/h]	2	40	6	144	79	18	6	78	6	7	102	131
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	4	0	0	7	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	53	8	192	105	24	8	108	8	9	143	174
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	13	2	48	26	6	2	27	2	2	36	44
Total Analysis Volume [veh/h]	3	53	8	192	105	24	8	108	8	9	143	174
Pedestrian Volume [ped/h]	5			0			5			0		

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Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	644	681	658	735
Degree of Utilization, x	0.10	0.47	0.19	0.44

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.33	2.54	0.69	2.29
95th-Percentile Queue Length [ft]	8.24	63.39	17.26	57.21
Approach Delay [s/veh]	9.21	12.92	9.74	11.74
Approach LOS	A	B	A	B
Intersection Delay [s/veh]	11.70			
Intersection LOS	B			

2220 Fulton Road Project TIS
PM Baseline plus Project Conditions
W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 7: Fulton Rd/Piner Rd

Control Type:	Signalized	Delay (sec / veh):	31.4
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.583

Intersection Setup

Name	Fulton Rd			Fulton Rd			Piner Rd			Piner Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	1
Pocket Length [ft]	110.00	100.00	100.00	90.00	100.00	100.00	70.00	100.00	100.00	245.00	100.00	110.00
Speed [mph]	45.00			45.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Fulton Rd			Fulton Rd			Piner Rd			Piner Rd		
Base Volume Input [veh/h]	29	611	288	144	702	35	43	82	46	238	127	185
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	61	0	32	34	2	2	0	0	0	0	60
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	29	672	288	176	736	37	45	82	46	238	127	245
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	168	72	44	184	9	11	21	12	60	32	61
Total Analysis Volume [veh/h]	29	672	288	176	736	37	45	82	46	238	127	245
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	2			0			0			3		
Bicycle Volume [bicycles/h]	2			0			2			2		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	85.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lag	-	-	Lead	-	-	Lead	-	-	Lag	-	-
Minimum Green [s]	4	8	0	4	8	0	4	8	0	4	8	0
Maximum Green [s]	20	50	0	25	50	0	20	50	0	35	70	0
Amber [s]	3.0	4.3	0.0	3.0	4.3	0.0	3.0	3.9	0.0	3.0	3.9	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	14	54	0	15	55	0	14	30	0	31	47	0
Vehicle Extension [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	0	0
Pedestrian Clearance [s]	0	19	0	0	18	0	0	19	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	1.0	2.3	0.0	1.0	2.3	0.0	1.0	1.9	0.0	1.0	1.9	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

2220 Fulton Road Project TIS
PM Baseline plus Project Conditions
W-Trans
6/26/2019

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	3.00	4.30	4.30	3.00	4.30	4.30	3.00	3.90	3.00	3.90	3.90
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.00	2.30	2.30	1.00	2.30	2.30	1.00	1.90	1.00	1.90	1.90
g_i, Effective Green Time [s]	3	70	70	15	82	82	4	12	19	27	27
g / C, Green / Cycle	0.02	0.54	0.54	0.11	0.63	0.63	0.03	0.09	0.15	0.21	0.21
(v / s)_i Volume / Saturation Flow Rate	0.02	0.27	0.28	0.10	0.21	0.21	0.03	0.07	0.13	0.07	0.16
s, saturation flow rate [veh/h]	1774	1863	1648	1774	1863	1832	1774	1735	1774	1863	1561
c, Capacity [veh/h]	37	997	882	202	1170	1151	59	160	265	389	326
d1, Uniform Delay [s]	63.38	19.27	19.39	56.70	11.37	11.37	62.41	57.87	54.36	43.72	48.32
k, delay calibration	0.04	0.50	0.50	0.04	0.50	0.50	0.04	0.04	0.04	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	12.15	1.84	2.15	4.47	0.77	0.78	7.65	3.47	4.39	0.18	1.33
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.78	0.51	0.52	0.87	0.33	0.33	0.77	0.80	0.90	0.33	0.75
d, Delay for Lane Group [s/veh]	75.53	21.11	21.54	61.17	12.13	12.15	70.05	61.34	58.75	43.90	49.66
Lane Group LOS	E	C	C	E	B	B	E	E	E	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.06	9.67	8.82	5.81	5.10	5.02	1.58	4.23	7.85	3.46	7.46
50th-Percentile Queue Length [ft/ln]	26.59	241.70	220.38	145.21	127.47	125.44	39.58	105.65	196.36	86.57	186.56
95th-Percentile Queue Length [veh/ln]	1.91	14.77	13.68	9.76	8.80	8.69	2.85	7.60	12.45	6.23	11.94
95th-Percentile Queue Length [ft/ln]	47.86	369.18	342.11	244.03	220.05	217.28	71.25	189.94	311.27	155.82	298.56

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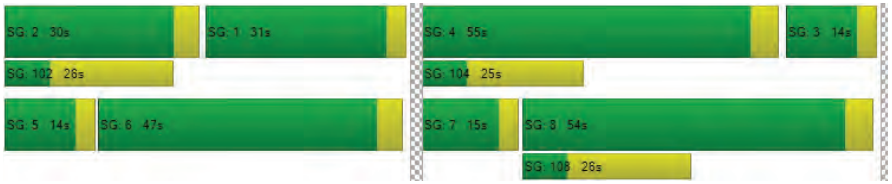
Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	75.53	21.22	21.54	61.17	12.14	12.15	70.05	61.34	61.34	58.75	43.90	49.66
Movement LOS	E	C	C	E	B	B	E	E	E	E	D	D
d_A, Approach Delay [s/veh]	22.91			21.23			63.61			52.01		
Approach LOS	C			C			E			D		
d_I, Intersection Delay [s/veh]	31.43											
Intersection LOS	C											
Intersection V/C	0.583											

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



2220 Fulton Road Project TIS
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W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 8: Peterson Ln/Piner Rd

Control Type:	Signalized	Delay (sec / veh):	9.4
Analysis Method:	HCM 2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.358

Intersection Setup

Name	Peterson Ln			Peterson Ln			Piner Rd			Piner Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	1	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	80.00	100.00	180.00	80.00	100.00	100.00
Speed [mph]	30.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Peterson Ln			Peterson Ln			Piner Rd			Piner Rd		
Base Volume Input [veh/h]	23	10	51	48	19	23	32	496	37	87	602	70
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	1	0	9	1	0	0	32	0	0	60	16
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	23	11	51	57	20	23	32	528	37	87	662	86
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	3	13	14	5	6	8	132	9	22	166	22
Total Analysis Volume [veh/h]	23	11	51	57	20	23	32	528	37	87	662	86
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	5			1			16			6		
Bicycle Volume [bicycles/h]	2			2			4			3		

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Version 7.00-05

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	ProtPer	Permis	Permis	ProtPer	Permis	Permis
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lag	-	-
Minimum Green [s]	0	7	0	0	7	0	5	5	0	5	5	0
Maximum Green [s]	0	20	0	0	20	0	15	40	0	15	40	0
Amber [s]	0.0	3.6	0.0	0.0	3.6	0.0	4.3	4.3	0.0	4.3	4.3	0.0
All red [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	35	0	0	35	0	14	45	0	10	41	0
Vehicle Extension [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	24	0	0	24	0	0	14	0	0	14	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	1.6	0.0	0.0	1.6	0.0	2.3	2.3	0.0	2.3	2.3	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

2220 Fulton Road Project TIS
PM Baseline plus Project Conditions
W-Trans
6/26/2019

Lane Group Calculations

Lane Group	C	C	L	C	R	L	C	C
C, Cycle Length [s]	32	32	32	32	32	32	32	32
L, Total Lost Time per Cycle [s]	3.60	3.60	4.30	4.30	4.30	4.30	4.30	4.30
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	1.60	1.60	0.00	2.30	2.30	0.00	2.30	2.30
g_i, Effective Green Time [s]	6	6	18	11	11	18	12	12
g / C, Green / Cycle	0.19	0.19	0.56	0.35	0.35	0.56	0.37	0.37
(v / s)_i Volume / Saturation Flow Rate	0.05	0.06	0.03	0.28	0.02	0.07	0.20	0.21
s, saturation flow rate [veh/h]	1622	1656	1185	1863	1534	1321	1863	1777
c, Capacity [veh/h]	449	489	627	644	530	613	699	667
d1, Uniform Delay [s]	11.11	11.17	7.19	9.57	7.03	8.27	7.86	7.87
k, delay calibration	0.04	0.04	0.04	0.06	0.04	0.04	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.08	0.08	0.01	1.58	0.02	0.04	0.25	0.26
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.19	0.20	0.05	0.82	0.07	0.14	0.55	0.55
d, Delay for Lane Group [s/veh]	11.19	11.25	7.20	11.15	7.05	8.31	8.11	8.14
Lane Group LOS	B	B	A	B	A	A	A	A
Critical Lane Group	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.40	0.47	0.02	2.11	0.10	0.06	1.12	1.08
50th-Percentile Queue Length [ft/ln]	9.92	11.71	0.49	52.68	2.42	1.38	27.88	26.90
95th-Percentile Queue Length [veh/ln]	0.71	0.84	0.04	3.79	0.17	0.10	2.01	1.94
95th-Percentile Queue Length [ft/ln]	17.85	21.07	0.88	94.83	4.36	2.49	50.18	48.43

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	11.19	11.19	11.19	11.25	11.25	11.25	7.20	11.15	7.05	8.31	8.12	8.14
Movement LOS	B	B	B	B	B	B	A	B	A	A	A	A
d_A, Approach Delay [s/veh]	11.19			11.25			10.69			8.14		
Approach LOS	B			B			B			A		
d_I, Intersection Delay [s/veh]	9.43											
Intersection LOS	A											
Intersection V/C	0.358											

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

2220 Fulton Road Project TIS
PM Baseline plus Project Conditions
W-Trans
6/26/2019

Intersection Level Of Service Report
Intersection 9: Waltzer Rd/Piner Rd

Control Type:	Two-way stop	Delay (sec / veh):	498.5
Analysis Method:	HCM 2010	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.448

Intersection Setup

Name	Waltzer Rd			Waltzer Rd			Piner Rd			Piner Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	1	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	50.00	100.00	100.00	100.00	95.00	100.00	100.00
Speed [mph]	25.00			25.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			No		

Volumes

Name	Waltzer Rd			Waltzer Rd			Piner Rd			Piner Rd		
Base Volume Input [veh/h]	4	1	3	40	2	38	25	591	6	8	783	44
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300	1.3300
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	41	0	0	76	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	1	4	53	3	51	33	827	8	11	1117	59
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	0	1	13	1	13	8	207	2	3	279	15
Total Analysis Volume [veh/h]	5	1	4	53	3	51	33	827	8	11	1117	59
Pedestrian Volume [ped/h]	1			2			0			0		

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Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	Yes			
Storage Area [veh]	1	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.18	0.02	0.01	1.45	0.06	0.21	0.06	0.01	0.00	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	148.24	96.27	31.34	498.53	472.15	23.87	11.44	0.00	0.00	9.58	0.00	0.00
Movement LOS	F	F	D	F	F	C	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.65	0.65	0.65	5.91	5.91	0.78	0.18	0.00	0.00	0.04	0.00	0.00
95th-Percentile Queue Length [ft/ln]	16.28	16.28	16.28	147.78	147.78	19.46	4.42	0.00	0.00	1.05	0.00	0.00
d_A, Approach Delay [s/veh]	96.28			271.55			0.44			0.09		
Approach LOS	F			F			A			A		
d_I, Intersection Delay [s/veh]	14.04											
Intersection LOS	F											

2220 Fulton Road Project TIS
PM Baseline plus Project Conditions
W-Trans
6/26/2019

Appendix C

Signal Warrant Spreadsheets

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Warrant 3: Peak-Hour Volumes and Delay

Fulton Road & New Project Street
Santa Rosa

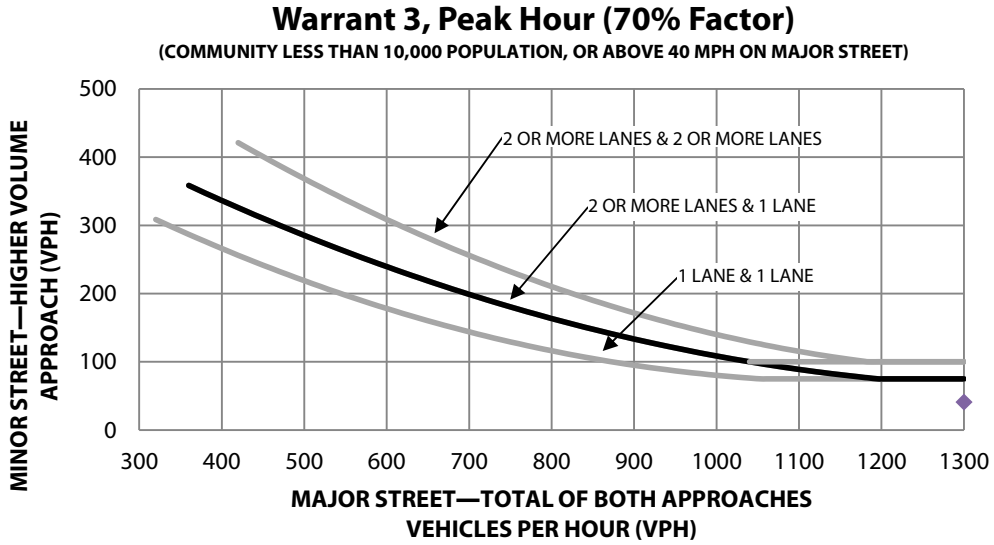
Project Name: 2220 Fulton Road Project TIS

Intersection: 2

	Major Street	Minor Street
Street Name	Fulton Road	New Project Street
Direction	N-S	E-W
Number of Lanes	2	1
Approach Speed	45	25

Population less than 10,000? No
Date of Count: Tuesday, June 19, 2018
Scenario: AM Existing plus Project

Warrant 3 Met?: Met when either Condition A or B is met	**No**
Condition A: Met when conditions A1, A2, and A3 are met	Not Met
Condition A1	Not Met
The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one lane approach, or five vehicle-hours for a two-lane approach	
Minor Approach Delay: 0.93 vehicle-hours	
Condition A2	Not Met
The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic of 150 vph for two moving lanes	
Minor Approach Volume: 41 vph	
Condition A3	Met
The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more appraches or 650 vph for intersections with three approaches	
Total Entering Volume: 2204 vph	
Condition B	Not Met
The plotted point falls above the curve	



Warrant 3: Peak-Hour Volumes and Delay

Fulton Road & New Project Street
Santa Rosa

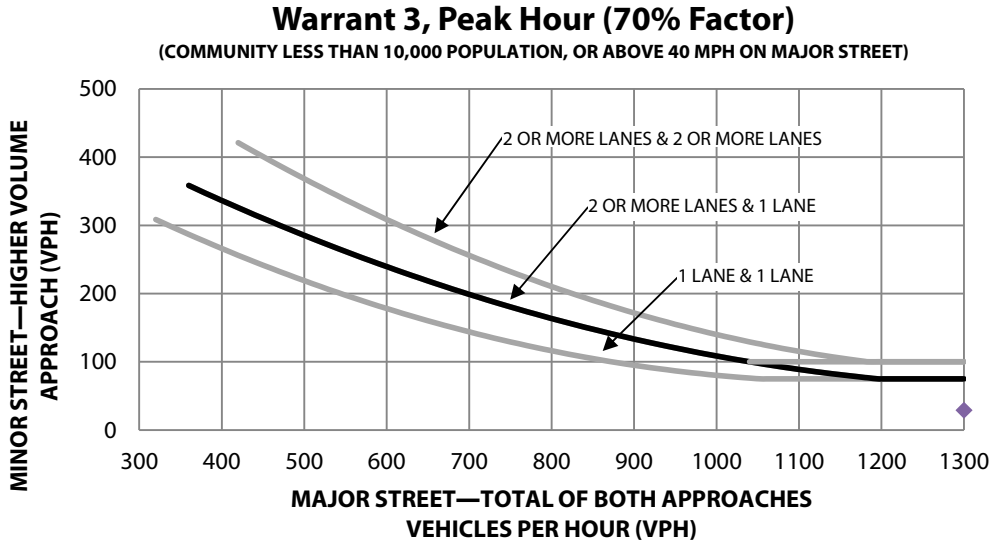
Project Name: 2220 Fulton Road Project TIS

Intersection: 2

	Major Street	Minor Street
Street Name	Fulton Road	New Project Street
Direction	N-S	E-W
Number of Lanes	2	1
Approach Speed	45	25

Population less than 10,000? No
Date of Count: Tuesday, June 19, 2018
Scenario: PM Existing plus Project

Warrant 3 Met?: Met when either Condition A or B is met	**No**
Condition A: Met when conditions A1, A2, and A3 are met	Not Met
Condition A1	Not Met
The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one lane approach, or five vehicle-hours for a two-lane approach	
Minor Approach Delay: 0.96 vehicle-hours	
Condition A2	Not Met
The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic of 150 vph for two moving lanes	
Minor Approach Volume: 29 vph	
Condition A3	Met
The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more appraches or 650 vph for intersections with three approaches	
Total Entering Volume: 2814 vph	
Condition B	Not Met
The plotted point falls above the curve	



Warrant 3: Peak-Hour Volumes and Delay

Fulton Road & New Project Street
Santa Rosa

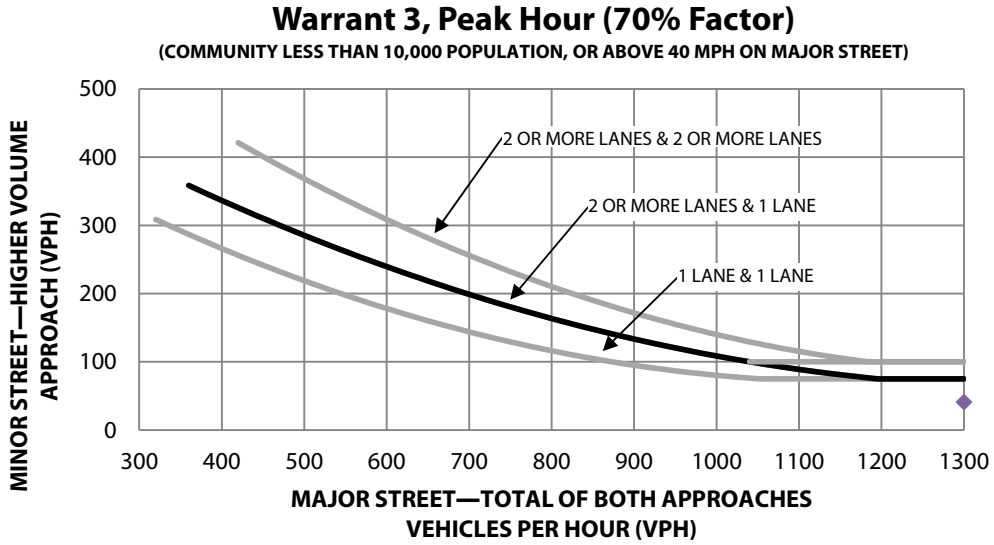
Project Name: 2220 Fulton Road Project TIS

Intersection: 2

	Major Street	Minor Street
Street Name	Fulton Road	New Project Street
Direction	N-S	E-W
Number of Lanes	2	1
Approach Speed	45	25

Population less than 10,000? No
Date of Count: Tuesday, June 19, 2018
Scenario: AM Baseline plus Project

Warrant 3 Met?: Met when either Condition A or B is met	**No**
Condition A: Met when conditions A1, A2, and A3 are met	Not Met
Condition A1	Not Met
The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one lane approach, or five vehicle-hours for a two-lane approach	
Minor Approach Delay: 1.06 vehicle-hours	
Condition A2	Not Met
The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic of 150 vph for two moving lanes	
Minor Approach Volume: 41 vph	
Condition A3	Met
The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more appraches or 650 vph for intersections with three approaches	
Total Entering Volume: 2285 vph	
Condition B	Not Met
The plotted point falls above the curve	



Warrant 3: Peak-Hour Volumes and Delay

Fulton Road & New Project Street
Santa Rosa

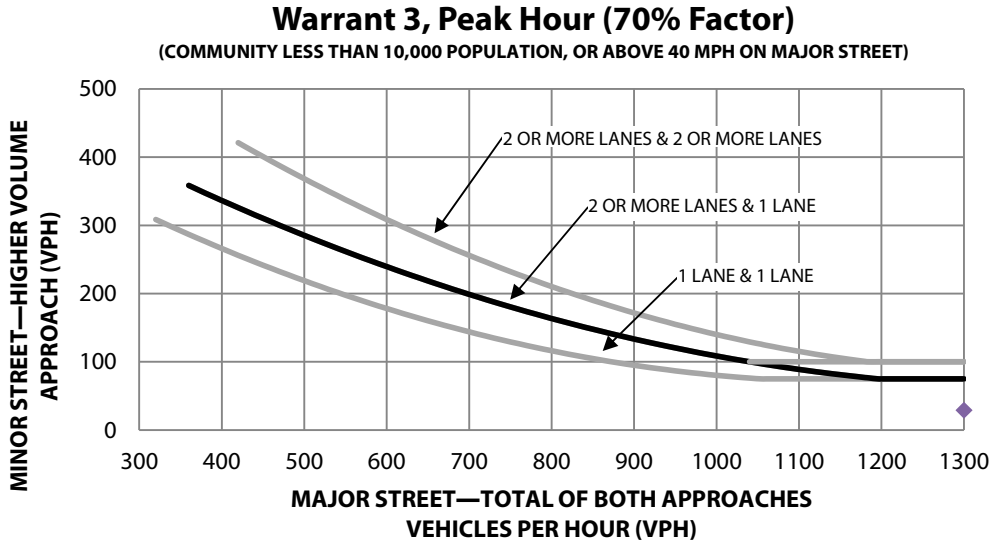
Project Name: 2220 Fulton Road Project TIS

Intersection: 2

	Major Street	Minor Street
Street Name	Fulton Road	New Project Street
Direction	N-S	E-W
Number of Lanes	2	1
Approach Speed	45	25

Population less than 10,000? No
Date of Count: Tuesday, June 19, 2018
Scenario: PM Baseline plus Project

Warrant 3 Met?: Met when either Condition A or B is met	**No**
Condition A: Met when conditions A1, A2, and A3 are met	Not Met
Condition A1	Not Met
The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one lane approach, or five vehicle-hours for a two-lane approach	
Minor Approach Delay: 1.18 vehicle-hours	
Condition A2	Not Met
The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic of 150 vph for two moving lanes	
Minor Approach Volume: 29 vph	
Condition A3	Met
The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more appraches or 650 vph for intersections with three approaches	
Total Entering Volume: 2920 vph	
Condition B	Not Met
The plotted point falls above the curve	



Appendix D

Auto-Turn Emergency Access

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PETFIRE

	feet
Width	: 8.00
Track	: 7.00
Lock to Lock Time	: 6.0
Steering Angle	: 25.4

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